EADP

European Association of Developmental Psychology

HELLENIC REPUBLIC
National and Kapodistrian University of Athens
Department of Psychology
School of Philosophy

www.ecdp2019.gr

19th

European Conference on
Developmental
Psychology

29-1 2019
August   September
Divani Caravel Hotel
Athens / Greece

Abstract Book

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19th European Conference on Developmental Psychology

29 August - 1 September 2019 Divani Caravel Hotel Athens/Greece

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Welcome Address of the Chair of the Conference

On behalf of the European Association for Developmental Psychology (EADP), it is my pleasure to welcome you all to the 1**9th European Conference on Developmental Psychology**, which takes place in **Athens**, **Greece**, **August 29th** to **September 1st**, **2019**. The Organizing Committee of the Conference is comprised of members of the Department of Psychology of the National & Kapodistrian University of Athens, as well as of members of other Psychology Departments in the country.

The Scientific Committee consists of both national and international scholars. We have prepared an exciting program and distinguished speakers have been invited to share with us their valuable knowledge and experience. As with previous conferences of the Association, the scientific program also consists of scientific activities, invited symposia, symposia, oral sessions and poster presentations. Our aim is to offer a chance to all participants to exchange research interests, ideas, and experience in Developmental Psychology, as well as the latest developments in the field.

You can also count on an exciting social program, which will include the Opening Reception, and other leisure activities, as well as possible visits to archaeological sites such as Cape Sounio, Delphi, Mycenae and Epidaurus, and a one day cruise to the Saronic Gulf. Athens is connected to most European cities with direct flights.

We hope that you will enjoy the Conference as well as your stay in Greece.

Professor Spyridon Tantaros

Chair of the Conference

Welcome address of the President of the European Association of Developmental Psychology to the EADP members

As president of the European Association of Developmental Psychology, I am honoured to welcome you at the **19th ECDP Conference in Athens - Greece**, which will take place from **August 29th** to **September 1st, 2019**.

The chair of the conference, Prof. Spyridon Tantaros, National and Kapodistrian University of Athens, the Organizing Committee and the Scientific Committee have worked extremely hard to prepare an outstanding conference.

The program will include three special events related to new directions in research and science. One will continue our tradition on science and policy with a Discussion between Researchers and Stakeholders - promoted by Professor Frosso Motti-Stefanidi, National and Kapodistrian University of Athens, the other two will bring us towards exploring the potential of big data in developmental research (Prof. Sabine Walper from Ludwig-Maximilians-University in Munich) and towards deepening the implication and the impact of Open Science in Developmental Psychology (Prof. Marcel Van Aken - Utrecht University).

Besides these innovative events, an impressive roster of distinguished speakers will be present for the plenary sessions. Specifically five keynote speakers and six invited symposia will address cutting-edge issues in developmental science from new areas of Developmental Psychology to methodological issues and translational implications. The scientific program will be further enriched by the presentations of the awardees of the William Thierry Preyer Award for Excellence in Research on Human Development and of the George Butterworth Young Scientist Award.

The program is presenting more than 60 symposia and a large number of individual papers and posters.

A rich preconference program on statistical and methodological challenges is planned in collaboration with other colleagues and with the Early Research Union.

I believe that this excellent program will give us the opportunity of a productive and inspiring participation.

I thank you for joining and I wish you to have a wonderful time in Athens.

Professor Ersilia Menesini
President of the EADP

EADP Conference Organization

INITIATOR
European Association of Developmental Psychology (EADP)

Local Organizing Committee

Chair: **Spyridon Tantaros**   National and Kapodistrian University of Athens

Honorary Chair: **Elias Besevegis**   National and Kapodistrian University of Athens

Members:
Chryse Hatzichristou   National and Kapodistrian University of Athens
Vassilis Pavlopoulos   National and Kapodistrian University of Athens
Petros Roussos   National and Kapodistrian University of Athens
Asimina Ralli   National and Kapodistrian University of Athens
Foteini Polychroni   National and Kapodistrian University of Athens
Alexandra Oikonomou   National and Kapodistrian University of Athens
Georgios Georgouleas   National and Kapodistrian University of Athens

Scientific Committee

Chair: **Frosso Motti – Stefanidi**   National and Kapodistrian University of Athens, Greece

International Scientific Committee

Ersilia Menesini   University of Florence, Italy
Marcel van Aken   Utrecht University, The Netherlands
Katariina Salmela-Aro   University of Helsinki, Finland
Rosario (Charo) Rueda   University of Granada, Spain
Sevgi Bayram Özdemir   Örebro University, Sweden
Burkhard Gniewosz   Paris – Lodron – University Salzburg, Austria
Willem Koops   Utrecht University, The Netherlands
Pasquale Musso   University of Palermo, Italy
Cintia Rodríguez   Universidad Autónoma de Madrid – Spain
Peter F. Titzmann   Leibniz University Hanover, Germany
Jana Nikitin   University of Basel, Switzerland
Aysun Doğan   Ege University, İzmir, Turkey

Local Scientific Committee

Fotini Bonoti	University of Thessaly, Greece
Kleopatra Diakogiorgi	University of Patras, Greece
Evangelia Galanaki	National and Kapodistrian University of Athens, Greece
Stelios Georgiou	University of Cyprus, Cyprus
Sofia-Eleftheria Gonida	Aristotle University of Thessaloniki, Greece
Smaragda Kazi	Panteion University, Greece
Theano Kokkinaki	University of Crete, Greece
Aikaterini Kornilaki	University of Crete, Greece
Nikolaos Makris	Democritus University of Thrace, Greece
Konstantinos Petrogiannis	Hellenic Open University, Greece
Maria Platsidou	University of Macedonia, Greece
Dimitris Pnevmatikos	University of Western Macedonia, Greece
Stavroula Samartzi	Panteion University, Greece
Olga Solomontos-Kountouri	Theological School of the Church of Cyprus, Cyprus
Panayiotis Stavrinides	University of Cyprus, Cyprus
Spyridon Tantaros	National and Kapodistrian University of Athens, Greece

Reviewers

Sevgi Bayram	Örebro University, Sweden
Ilias Bezevegis	National & Kapodistrian University of Athens
Fotini Bonoti	University of Thessaly
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Kleopatra Diakogiorgi	University of Patras
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Paul Harris	Harvard Graduate School of Education, Harvard University
Smaragda Kazi	Panteion University of Social and Political Sciences
Theano Kokkinaki	University of Crete
Willem Koops	Utrecht University, The Netherlands
Aikaterini Kornilaki	University of Crete
Nikolaos Makris	University of Thrace
Ersilia Menesini	University of Florence, Italy
Frosso Motti	National & Kapodistrian University of Athens
Pasquale Musso	University of Palermo, Italy
Vassilis Pavlopoulos	National & Kapodistrian University of Athens
Konstantinos Petrogiannis	Hellenic Open University
Maria Platsidou	University of Macedonia
Dimitris Pnevmatikos	University of Western Macedonia
Fotini Polychroni	National & Kapodistrian University of Athens
Asimina Ralli	National & Kapodistrian University of Athens
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Petros Roussos	National & Kapodistrian University of Athens
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Katariina Salmela-Aro	University of Helsinki
Stavroula Samartzi	Panteion University of Social and Political Sciences
Olga Solomontos-Kountouri	University of Cyprus
Panayiotis Stavrinides	University of Cyprus
SpyridonTantaros	National & Kapodistrian University of Athens
Peter F. Titzmann	Leibniz University Hanover, Germany
Marcel van Aken	Utrecht University, The Netherlands

Sponsors and Exhibitors

The Organizing Committee of the Conference would like to thank the following companies for their contribution:

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TZIOLA PUBLICATIONS

European Association of Developmental Psychology

The European Association for Developmental Psychology (formerly EDSP) was founded in 1994, under the initiative of G. Butterworth and S. Jackson. EADP organizes biennially the European Conference on Developmental Psychology, publishes the European Journal of Developmental Psychology, and has instituted two awards: The William Thierry Preyer Award for Excellence in Research on Human Development and The Butterworth Young Scientist Award.

To promote the networking, collaboration and knowledge exchange of young scholars, EADP has established the Early Researchers Union (ERU).

Biennial European Conferences on Developmental Psychology as regional conferences of the ISSBD have been held since 1983, in Groningen (1984), Rome (1986), Budapest (1988), Stirling (1990), Sevilla (1992), Bonn (1993) and Krakov (1995). Since the 8th conference in Rennes (1997), European Conferences on Developmental Psychology were held under the official auspices of the ESDP/EADP, in Spetses (1999), Uppsala (2001), Milan (2003), Tenerife (2005), Jena (2007), Vilnius (2009), Bergen (2011), Lausanne (2013), Braga (2015) and Utrecht (2017).

EADP Council Members

Ersilia Menesini, President — University of Florence, Italy
Marcel van Aken, President-elect — Utrecht University
Katariina Salmela-Aro, Past-President — University of Jyvaskyla and University of Helsinki
Rosario (Charo) Rueda, Secretary — University of Granada, Spain
Sevgi Bayram Özdemir, Treasurer — Örebro University, Sweden
Burkhard Gniewosz, Membership Officer — University Salzburg, Austria
Willem Koops, Editor of the European Journal of Developmental Psychology — Utrecht University, The Netherlands
Paquale Musso, President of the Early Researchers Union — University of Palermo, Palermo, Italy
Cintia Rodríguez, Newsletter Editor — Universidad Autónoma de Madrid - Spain
Peter F. Titzmann, Website Administrator — Leibniz University Hanover, Germany
Jana Nikitin, Newsletter Editor — University of Basel, Switzerland
Aysun Doğan, Newsletter Editor — Ege University, İzmir, Turkey

Early Researchers UNION (ERU)

The Early Researchers Union (ERU) at the European Association of Developmental Psychology (EADP) was established in 2008 in order to increase the opportunity for network, collaboration and knowledge exchange of student and young members of the EADP at the early stages of their career. The Early Researchers Union is meant for undergraduate students, graduate/PhD students, researchers, postdocs, or junior faculty members (up to assistant professorship) primarily interested in developmental psychology and/or an area relevant to the study of human development.

ERU COUNCIL MEMBERS

Pasquale Musso (President) — University of Palermo, Italy
Maja Schachner (President Elect) — Friedrich Schiller University Jena, Germany
Loes Keijsers (Past President) — Tilburg University, Germany
Francesca Lionetti (Secretary) — University of Pavia, Italy
Stefanos Mastrotheodoros, (Communications Officer) — National & Kapodistrian University of Athens
Marta Miklikowska, (Communications Officer) — bo Akademi University, Finland
Mette Ranta (Board Member) — University of Jyväskylä, Finland.

The William Thierry Preyer & George Butterworth Awards

Evaluation for the William Thierry Preyer Award for Excellence in Research on Human Development

The committee consisted of:

1) **Ersilia Menesini** – President EADP

2) **Katariina Salmela Aro** – Past President EADP

3) **Frosso Motti Stefanidi** – Previous President of EADP

4) **Charo Rueda** – Secretary of EADP

5) **Paul Harris** – Previous Awardee

6) **Peter Smith** – Previous Awardee

The 2019 Preyer Award Committee of the European Association of Developmental Psychology (EADP) decided to offer the William Thierry Preyer Award for Excellence in Research on Human Development to Wim Meeus for his original and outstanding contribution in the area of developmental science.

Wim Meeus is emeritus professor of Adolescent Development at Utrecht University and of Developmental Psychology at Tilburg University. He served with several roles of responsibility at Utrecht University and was President of the European Association for Research on Adolescence (EARA) from 2012 to 2014.

He was one of the initiators and member of the steering committee (2012-2018) of the Consortium of Individual Development (CID), the gravitation program awarded in 2012 to Utrecht University in conjoint with other Dutch Universities (grant amount € 27.600.000,-).

In 2016 he received the Life time achievement award for his research in adolescence from EARA. He has published over 470 scholarly journal papers or (contributions to) books.

His scientific work includes theoretical psychological papers, experimental research into obedience to authority, and numerous longitudinal studies on various aspects of adolescent development.

The committee fully recognize the caliber of Prof. Meeus' work particularly in the area of adolescent development, including personality, identity, psychopathology, and adolescents' relationships with parents and peers.

The 2017 George Butterworth Young Scientist Award

The 2019 George Butterworth Young Scientist award goes to Milica Nikolic, University of Amsterdam.

George Butterworth was one of the two founding fathers of the European Society for Developmental Psychology. He died on February 12th 2000. George Butterworth was an internationally respected authority on infant development. After completing his D.Phil. at Oxford, his professional stations were at Southampton University, at the University of Stirling, and ultimately at the University of Sussex. He was appointed Honorary Professor at the University of East London in 1996. His contributions to the discipline include founding both the British Infancy Research Group and the Journal of Developmental Science. The European Association of Developmental Psychology (previously European Society for Developmental Psychology) established the George Butterworth Young Scientist Award in his honour. The Award is given every two years, and it will be presented for the fifth time at the 18th European Conference on Developmental Psychology.

The awardee will receive EUR 500 and will present the research of the dissertation as an invited address on Friday, August 30th at 11:30. The awardee is invited and supported to publish his address in the European Journal of Developmental Psychology. She is also invited to join the next award committee.

EADP Travel Fellowships

A committee consisting of Sevgi Bayram Özdemir, Maja Schachner (ERU-president elect), and Cintia Rodriguez were happy to rate applicants from early career scholars around the world. The EADP fellows are:

1. Daniel Graf
2. Arjun Iyer
3. Antonia Zachariou
4. Samuel McKay
5. Pingping Ni.
6. Marija Živković
7. Rukiye Kiziltepe
8. Sebastián Moyano
9. Jennifer Lavoie
10. Ángela Hoyo
11. Oriola Hamzallari
12. Ebru Boynuegri
13. Zeynep Ertekin
14. Beatrice Hayes
15. Kasia Kostyrka-Allchorne
16. Aybegum Memisoglu Sanlı
17. Hye-Sung Kim
18. Duygu Eslek
19. Sevgi Tunay Aytekin
20. Ayşe Büşra İplikçi

General Information

Conference Dates

August 29th, 2019 - September 1st , 2019

Congress Venue

Divani Caravel Hotel
32, Vassileos Alexandrou str. GR 115 28 Athens, Greece
Tel: +30 210 7207000, Fax: +30 210 7236683
https://divanicaravelhotel.com

Registration Desk	Ilissos Hall	Level -1
Exhibition Area	Foyer Olympia	Level -1
Speakers Ready Corner	Foyer Olympia	Level -2
Poster Area	Foyer Olympia	Level -2
Meeting Rooms	Olympia A	Level -2
	Olympia B	Level -2
	Vergina	Level -2
	Ilissos	Level -1
	Naoussa	Mezzanine
	Edessa	Mezzanine
	Kozani	Mezzanine
	Pella	Mezzanine
	Mycenae	Mezzanine
	Makedonia A	Mezzanine
	Makedonia B	Mezzanine
	Florina	Lobby Level Ground Floor

Official Language

The official language of the Congress is English.

Dates and Working Hours of the Registration Desk

During the congress the secretariat will remain open as follows:

Thursday, August 29th, 2019	09:00 – 18:30
Friday, August 30th, 2019	08:00 – 19:00
Saturday, December 13th, 2014	08:00 – 19:00
Sunday, December 14th, 2014	09.00 – 17:30

General Information

Registration fees

Registration Types	Cost
EADP Members	€ 380
EADP non Members	€ 490
Student EADP Members	€ 285
Student EADP non Members	€ 350

PRE- CONGRESS COURCES*	Cost
1 R computing for the novice user; a statistical approach.*	€ 50
2 Experience Sampling Methods in Developmental Psychology: Promises and Pitfalls (EACP 2019)	€ 50
3 Designing School based Comprehensive Mental Health Services*	€ 50
4 Special ERU pre-conference workshop	

 * Maximum participation for each course is 50 pax.

Name Badges

Your personal Congress badge is your passport to the scientific sessions and exhibition. Please wear your badge visibly at all times. Entrance to any area of the Congress will be permitted only to guests wearing the badges issued specifically for the occasion.

Visual Equipment

All meeting halls will be equipped with overhead and data projectors as well as PC for speaker's needs. All speakers are kindly requested to check and deliver their presentations to the visual reception at least one hour prior to their presentation. Due to changes in computer configuration, laptops will not be accommodated.

Certificate of Attendance

Each registered participant will receive an official certificate of attendance after the Conference by e-mail.

Conference Venue and Maps
Level -2

Vergina
Hall

Foyer
Olympia
Poster Area

Olympia Hall A

Olympia Hall B

LIFTS

EXIT

SAFETY EXIT
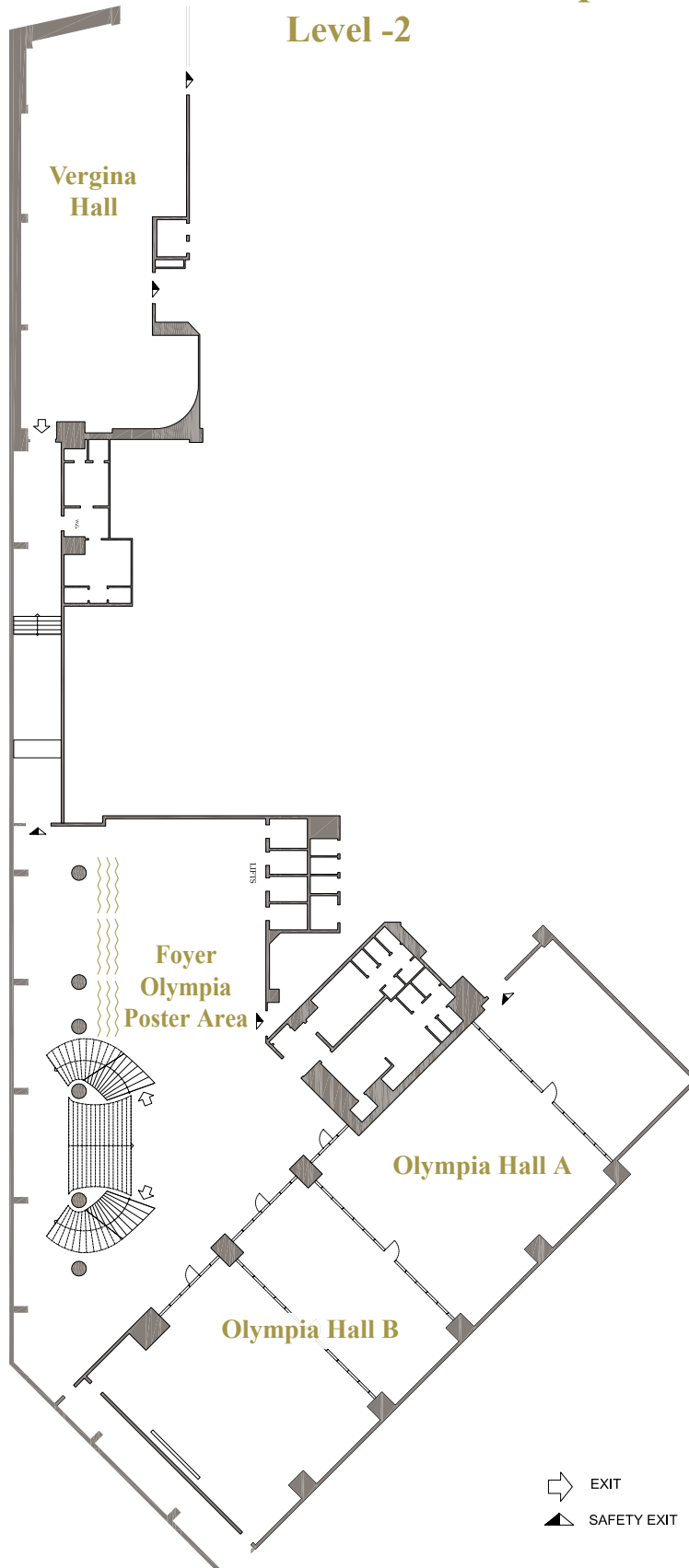
Conference Venue and Maps
Level -1

To Florina Hall
Ground Level

Florina
Hall

LIFTS

LOBBY

Foyer
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Registration
Desk

Ilissos
Hall

EXIT

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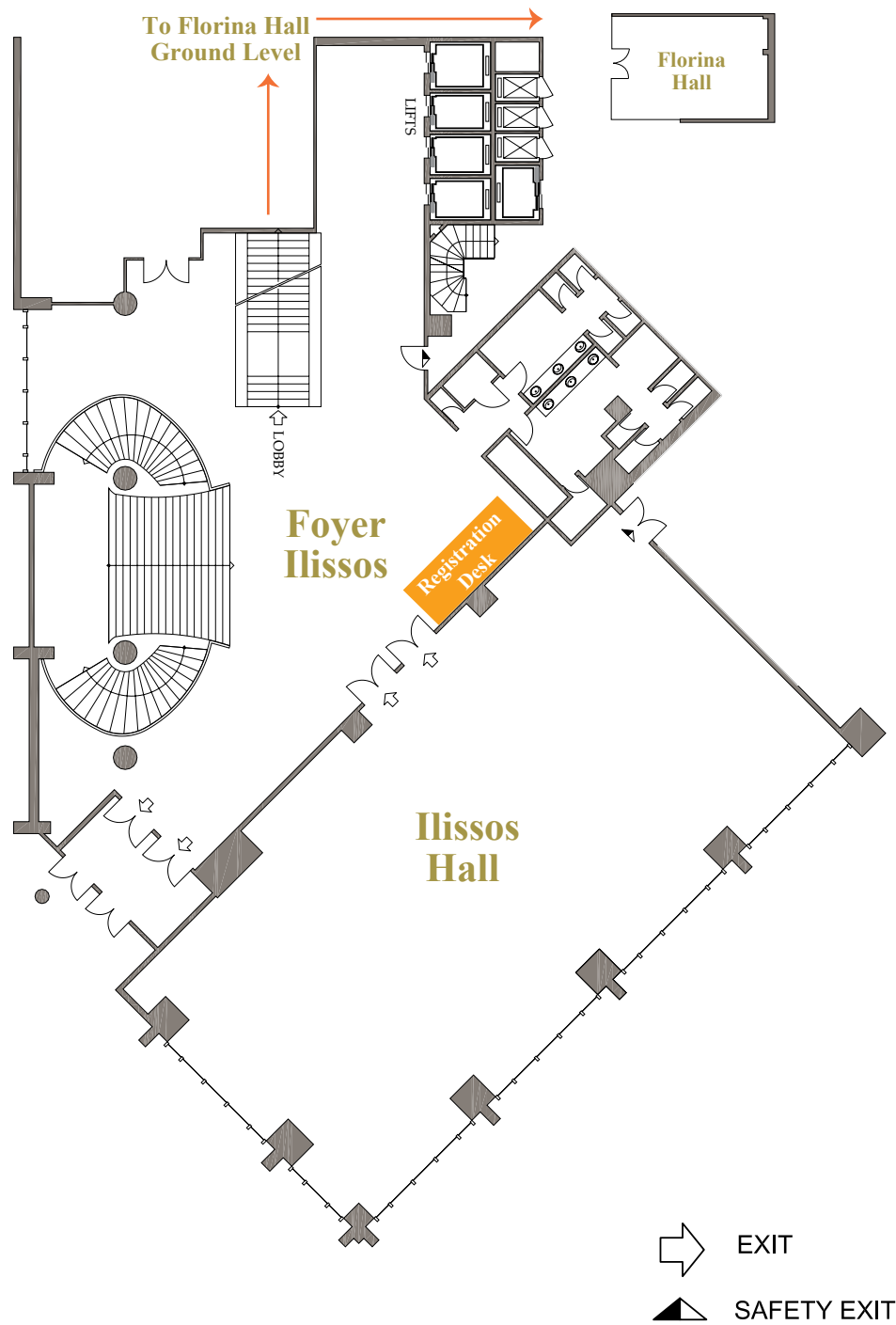
Conference Venue and Maps
Mezzanine Level
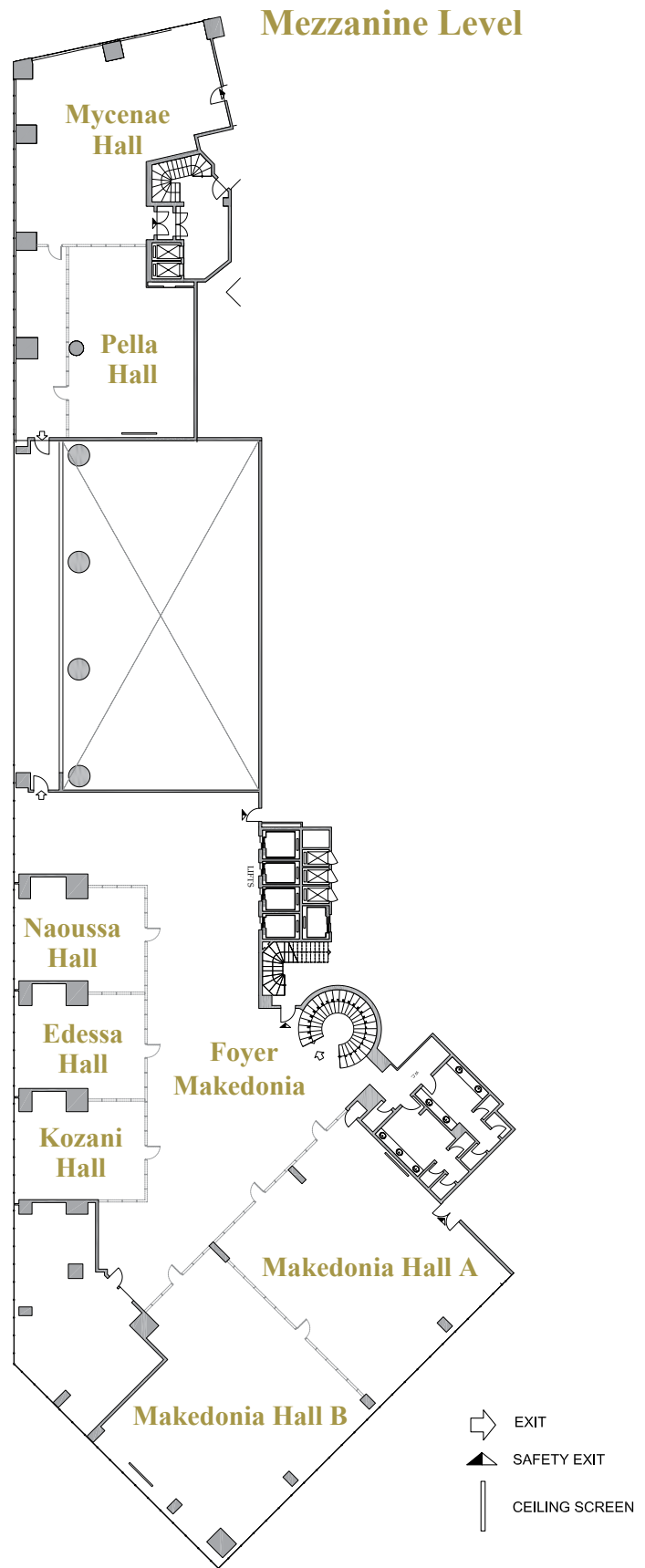
Mycenae
Hall

Pella
Hall

Naoussa
Hall

Edessa
Hall

Foyer
Makedonia

Kozani
Hall

LIFTS

Makedonia Hall A

Makedonia Hall B

EXIT

SAFETY EXIT

CEILING SCREEN

Program Overview

THURSDAY, AUGUST 29th, 2019					
	OLYMPIA HALL A & B	**KOZANI HALL**	**EDESSA HALL**	**NAOUSSA HALL**	**MYCENAE HALL**
TIME					
10:00–10:15	REGISTRATION	**Pre – Conference WORKSHOP 1** R computing for the novice user: A statistical approach	**Pre – Conference WORKSHOP 2** Experience Sampling Methods in Developmental Psychology: Promises and Pitfalls (EACP 2019)	**Pre – Conference WORKSHOP 3** Designing School based Comprehensive Mental Health Services	**Pre – Conference WORKSHOP 4** Special ERU Event
10:15–10:30					
10:30–10:45					
10:45–11:00					
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17:00–17:30					
17:30–18:00					
18:00–18:30	Opening Ceremony				
18:30–19:00	The William Thierry Preyer Award				
19:00–19:30					
19:30–20:00	WELCOME RECEPTION				

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Program Overview

FRIDAY, AUGUST 30th, 2019

TIME	OLYMPIA HALL A & B	OLYMPIA HALL A	OLYMPIA HALL B	ILISSOS HALL	VERGINA HALL	MAKEDONIA HALL A	MAKEDONIA HALL B	MYCENAE HALL	PELLA HALL	FLORINA HALL	KOZANI HALL	EDESSA HALL	NAOUSSA HALL
08:30–08:45 08:45–09:00 09:00–09:15 09:15–09:30	Keynote Lecture 1 Koen Luyckx												
09:30–09:45 09:45–10:00 10:00–10:15 10:15–10:30 10:30–10:45 10:45–11:00	SPECIAL EVENT 1 OPEN SCIENCE			INVITED SYMPOSIUM 1 A good time to be alone? New directions in the study of social withdrawal in adolescence and emerging adulthood	SYMPOSIUM 01 The expressions of positive shyness in infancy, childhood and late childhood: determinants, contexts, and psychophysiological markers	SYMPOSIUM 02 Cognitive-Emotional Factors Underlying Processes of Social Inclusion and Exclusion	SYMPOSIUM 03 Aggression directed towards peers and parents during childhood and adolescence	SYMPOSIUM 04 LOGOMETRO: A new digital standardized battery for the assessment of language skills	PAPERS 1 METHODS OP 001 – OP 006	PAPERS 2 NEUROSCIENCE AND PSYCHOPHYSIOLOGY OP 008 – OP 012	PAPERS 3 COGNITIVE DEVELOPMENT OP 013 – OP 018	PAPERS 4 INDIVIDUAL AND SOCIAL CORRELATES OF DEVIANT BEHAVIORS OP 019 – OP 024	PAPERS 5 MORAL DEVELOPMENT I OP 025 – OP 030
11:00–11:15 11:15–11:30	POSTER SESSION 1 (PP 001 – PP 069) & COFFEE BREAK												
11:30–11:45 11:45–12:00 12:00–12:15	2019 Butterworth Award Keynote lecture												
12:15–12:30 12:30–12:45 12:45–13:00 13:00–13:15	LUNCH BREAK												
13:15–13:30 13:30–13:45 13:45–14:00	Keynote Lecture 2 Berna Güroğlu												
14:00–14:15 14:15–14:30 14:30–14:45 14:45–15:00 15:00–15:15 15:15–15:30	SPECIAL EVENT 2 FROM DEVELOPMENTAL SCIENCE TO POLICY: A DISCUSSION BETWEEN RESEARCHERS AND STAKEHOLDERS			INVITED SYMPOSIUM 2 The wider benefits of education and employment participation: Experiences of students on a vocational versus academic track	SYMPOSIUM 05 Adolescents' Intrinsic and Extrinsic Emotion regulation Across Different Time-Frames and Contexts	SYMPOSIUM 06 The Child Outdoors	SYMPOSIUM 07 Loneliness in Childhood and Adolescence: Developmental Changes and Interventions	SYMPOSIUM 08 Exploring new grounds with the Experience Sampling Method	SYMPOSIUM 09 New perspectives to understand, assess and prevent cyberbullying	PAPERS 6 ATTENTION, LEARNING, MEMORY OP 031 – OP 036	PAPERS 7 LANGUAGE DEVELOPMENT II OP 037 – OP 042	PAPERS 8 EDUCATION AND SCHOOLING I OP 043 – OP 048	PAPERS 9 AUTISM SPECTRUM DISORDER OP 049 – OP 054
15:30–15:45 15:45–16:00 16:00–16:15 16:15–16:30 16:30–16:45 16:45–17:00				SYMPOSIUM 10 New Models of Acculturation and Adaptation	SYMPOSIUM 11 Social learning in development: Behavioural, cognitive, and affective processes	SYMPOSIUM 12 Other, Object and Tool uses: First manifestations of EFs and controlled actions in an experimental setting and in early years school	SYMPOSIUM 13 The Role of School Context for the Positive Development of Majority and Minority Youth	SYMPOSIUM 14 Adolescent Psychosocial Adaptation in Plural Europe: A Mixed Method Perspective	SYMPOSIUM 15 A developmental framework for understanding sexual interpersonal behavior in young adulthood	PAPERS 10 DEVELOPMENTAL DISABILITIES I OP 055 – OP 060	PAPERS 11 PARENTING STYLES OP 061 – OP 066	PAPERS 12 DEVELOPMENTAL PSYCHOPATHOLOGY I OP 067 – OP 071 & OP 333	PAPERS 13 PARENTING, PSYCHOLOGICAL CONTROL, AND SELF-REGULATION OP 072 – OP 077

Program Overview

FRIDAY, AUGUST 30th, 2019													
OLYMPIA HALL A & B	OLYMPIA HALL A	OLYMPIA HALL B	ILISSOS HALL	VERGINA HALL	MAKEDONIA HALL A	MAKEDONIA HALL B	MYCENAE HALL	PELLA HALL	FLORINA HALL	KOZANI HALL	EDESSA HALL	NAOUSSA HALL	
TIME													
17:00–17:15	POSTER SESSION 2 (PP 071 – PP 141) & COFFEE BREAK												
17:15–17:30													
17:30–17:45		SYMPOSIUM 16 Globalism, intersectionality, and identity development among ethnic and racial minority youth and young adults: Conceptual and measurement approaches	SYMPOSIUM 17 Trust In Relationship: From Human to Robot	SYMPOSIUM 18 Mother – child with serious illness: distress and resources	SYMPOSIUM 19 Going through Puberty: The Role of Proximal and Distal Developmental Contexts	SYMPOSIUM 20 Intergenerational patterns of self–regulation within families: Evidence of mechanisms from three large longitudinal birth cohorts	SYMPOSIUM 21 Early Researchers Union Symposium – Family– and Parent–Related Processes in Adolescent Development	SYMPOSIUM 22 Applying emotion socialisation theory to intervention: Use of the Tuning in to Kids parenting program in Norway and Australia	SYMPOSIUM 23 From Cognition to Behavior in Preadolescence and Adolescence: A Multifaceted Approach	PAPERS 14 COGNITIVE AND EMOTIONAL DEVELOPMENT OP 078 – OP 083	PAPERS 15 TYPICAL AND ATYPICAL LANGUAGE DEVELOPMENT OP 084 – OP 089	PAPERS 16 ADHD AND DYSLEXIA OP 090 – OP 095	PAPERS 17 SOCIAL COGNITION I OP 096 – OP101
17:45–18:00													
18:00–18:15													
18:15–18:30													
18:30–18:45													
18:45–19:00													
19:00–19:15	ERU Poster Awards			ECDP 2021 Reception									
19:15–19:30													
19:30–19:45	ERU Meeting												
19:45–20:00													
20:00– late	ERU Event												

19th European Conference on Developmental Psychology

29 August - 1 September 2019
Divani Caravel Hotel   Athens/Greece

Program Overview

SATURDAY, AUGUST 31st, 2019

TIME	OLYMPIA HALL A & B	OLYMPIA HALL A	OLYMPIA HALL B	ILISSOS HALL	VERGINA HALL	MAKEDONIA HALL A	MAKEDONIA HALL B	MYCENAE HALL	PELLA HALL	FLORINA HALL	KOZANI HALL	EDESSA HALL	NAOUSSA HALL
08:30–08:45	Keynote Lecture 3 Ellen Hamaker												
08:45–09:00													
09:00–09:15													
09:15–09:30													
09:30–09:45	SPECIAL EVENT 3 BIG DATA			INVITED SYMPOSIUM 3 Integration and differentiation of mental processes through the life span	SYMPOSIUM 24 Prenatal Risks, Parental Functioning and Child Development	SYMPOSIUM 25 Self- and Observer-Rated Environmental Sensitivity as a Measure of Differential Susceptibility across Countries	SYMPOSIUM 26 A developmentally-informed approach on revisiting risk models for aggressive behavior at schools	SYMPOSIUM 27 Early Childhood Development of Theory of Mind in Typical and Atypical Samples: Associations with Language and Social Abilities	PAPERS 18 SOCIAL COGNITION II OP 102 – OP 107	PAPERS 19 SELF-CONCEPT AND SELF-ESTEEM IN CHILDREN AND ADOLESCENTS OP 108 – OP 113	PAPERS 20 ADOLESCENT ADJUSTMENT IN CONTEXT OP 114 – OP 119 & OP 282	PAPERS 21 COGNITIVE PROCESSES I OP 120 – OP 125	PAPERS 22 CYBERBULLYING OP 126 – OP 131
09:45–10:00													
10:00–10:15													
10:15–10:30													
10:30–10:45													
10:45–11:00													
11:00–11:15	POSTER SESSION 3 (PP 142 – PP 214 & PP 341 & PP 350) & COFFEE BREAK												
11:15–11:30													
11:30–11:45	Keynote Lecture 4 Tina Malti												
11:45–12:00													
12:00–12:15													
12:15–12:30	LUNCH BREAK												
12:30–12:45													
12:45–13:00													
13:00–13:15													
13:15–13:30		SPECIAL EVENT 4 MEET THE EDITORS OF THE EUROPEAN JOURNAL OF DEVELOPMENTAL PSYCHOLOGY	INVITED SYMPOSIUM 4 Does developmental psychology have a future?	SYMPOSIUM 28 School-aged Children's Internet Use within an Ecological Systems Framework: Cross-Cultural Comparison from Latvia, Lithuania and Taiwan	SYMPOSIUM 29 Bullying and Cyberbullying: Links to Morality and New Intervention Perspectives	SYMPOSIUM 30 Peers, Parents, Siblings and School: The role of contexts in the development of academic and non-academic values and attitudes during adolescence	SYMPOSIUM 31 Social-emotional Competence in Early Childhood: The Role of Social Interactions and Play in Early Education and Care Settings	SYMPOSIUM 32 Voices of children on the move	PAPERS 23 HEALTH, INJURY, AND GROWTH OP 132 – OP 136	PAPERS 24 SOCIAL RELATIONSHIPS OP 138 – OP 143	PAPERS 25 EARLY PARENTING OP 144 – OP 149	PAPERS 26 PERSONALITY OP 150 – OP155	PAPERS 27 ADVERSITY AND RESILIENCE OP156 – OP161
13:30–13:45													
13:45–14:00													
14:00–14:15													
14:15–14:30													
14:30–14:45													
14:45–15:00		SYMPOSIUM 33 Daily Physiological and Relational Processes in Parent-Child Relationships during Adolescence	SYMPOSIUM 34 Identifying and Evaluating Chaos in Early Home Environments	SYMPOSIUM 35 The Common Core of Oral and Written Language Development	SYMPOSIUM 36 School Diversity Context and Students' Academic, Social and Intergroup Outcomes – Insights from Six European Countries Part 1	SYMPOSIUM 37 Children's perspectives on group-based peer exclusion and bullying	SYMPOSIUM 38 Promotion of Positive Development, Health, and Wellbeing across the Life Span	SYMPOSIUM 39 Early Researchers Union Symposium – The Role of Peer Relations in Adolescent Development	PAPERS 28 PARENTING ACROSS CULTURES OP 162 – OP 167	PAPERS 29 MATH AND SCIENCE OP 168 – OP 172	PAPERS 30 DEVELOPMENTAL DISABILITIES II OP 173 – OP 178	PAPERS 31 PREVENTION AND INTERVENTIONS II OP 179 – OP 184	PAPERS 32 DEVELOPMENTAL PSYCHOPATHOLOGY II OP 185 – OP 190
15:00–15:15													
15:15–15:30													
15:30–15:45													
15:45–16:00													
16:00–16:15													
16:15–16:30	POSTER SESSION 4 (PP 215 – PP 283) & COFFEE BREAK												
16:30–16:45													

19th European Conference on Developmental Psychology

29 August - 1 September 2019
Divani Caravel Hotel   Athens / Greece

Program Overview

SATURDAY, AUGUST 31st, 2019

TIME	OLYMPIA HALL A & B	OLYMPIA HALL A	OLYMPIA HALL B	ILISSOS HALL	VERGINA HALL	MAKEDONIA HALL A	MAKEDONIA HALL B	MYCENAE HALL	PELLA HALL	FLORINA HALL	KOZANI HALL	EDESSA HALL	NAOUSSA HALL
16:45-17:00 17:00-17:15 17:15-17:30 17:30-17:45 17:45-18:00 18:00-18:15		SYMPOSIUM 40 Innovative Approaches to "Whole Child" Development in Education and Schools	SYMPOSIUM 41 New insights in the development of analogical reasoning: Investigations into the role of concepts, working memory and inhibitory control	SYMPOSIUM 42 Intervening in Violence Against Children: Forensic Interviewing Approaches to Invite Disclosures	SYMPOSIUM 43 School Diversity Context and Students' Academic, Social and Intergroup Outcomes – Insights from Six European Countries Part 2	SYMPOSIUM 44 Current developments in the study of parental mentalization; From normative to adverse family contexts	SYMPOSIUM 45 Social inequality and children's evaluations of peers from disadvantaged groups within diverse intergroup contexts	SYMPOSIUM 46 Romantic Relationships in Emerging and Young Adulthood: Precursors and Future Adaptation	PAPERS 33 MOTHER-CHILD INTERACTION OP 191 – OP 196	PAPERS 34 FATHER – CHILD INTERACTION OP197 – OP 202	PAPERS 35 SOCIOCULTURAL ASPECTS OF PARENTING OP 203 – OP 208	PAPERS 36 EMOTION REGULATION AND SELF-REGULATED LEARNING OP 209 – OP 214 & OP 249	PAPERS 37 FAMILY ADVERSITY OP 215 – OP 219 & OP 313 & OP 336
18:15-18:30 18:30-18:45 18:45-19:00	Presidential Address												
19:00-19:15 19:15-19:30 19:30-19:45 19.45-20.00	EADP Business Meeting												
21.00-Late	GALA DINNER												

19th European Conference on Developmental Psychology

29 August - 1 September 2019
Divani Caravel Hotel   Athens/Greece

Program Overview

SUNDAY, SEPTEMBER 1st, 2019

TIME	OLYMPIA HALL A & B	OLYMPIA HALL A	OLYMPIA HALL B	ILISSOS HALL	VERGINA HALL	MAKEDONIA HALL A	MAKEDONIA HALL B	MYCENAE HALL	PELLA HALL	FLORINA HALL	KOZANI HALL	EDESSA HALL	NAOUSSA HALL
08:30–08:45													
08:45–09:00													
09:00–09:15 to 10:15–10:30	INVITED SYMPOSIUM 5 Evidence-based bullying prevention in low - and middle income countries			SYMPOSIUM 47 The assessment of developmental disabilities and impairment in sub-Saharan Africa	SYMPOSIUM 48 The longitudinal interplay of maternal and infant factors in preterm children emotional development	SYMPOSIUM 49 From children to robots: role of joint attention in social interactions. Evidence from different linguistic and cultural environments	SYMPOSIUM 50 What does it take to stop school bullying? The complex interplay between individual, dyadic and contextual factors in understanding prosocial and antisocial behavior of youth	SYMPOSIUM 51 Challenges for health-related quality of life and mental health problems in adolescence and young adulthood	PAPERS 38 FAMILY PROCESSES OP 220 – OP 225	PAPERS 39 EARLY YEARS OP 226 – OP 231	PAPERS 40 TEACHERS' AND STUDENTS' STRESS, BURNOUT AND COPING OP 233 – OP 237	PAPERS 41 LANGUAGE DEVELOPMENT I OP 238 – OP 243	PAPERS 42 COGNITIVE PROCESSES II OP 244 – OP 248
10:30–10:45 / 10:45–11:00	POSTER SESSION 5 (PP 284 – PP 349) & COFFEE BREAK												
11:00–11:15 to 11:30–11:45	Keynote Lecture 5 Louise Arseneault												
11:45–12:00 to 13:00–13:15	INVITED SYMPOSIUM 6 Interactive dynamics of neural and cognitive development across childhood			SYMPOSIUM 52 Caregiving of Turkish mothers and emotion regulation in early childhood	SYMPOSIUM 53 Parenting Cognitions: Underlying Processes and Cultural Differences	SYMPOSIUM 54 Prosocial Child: Contextual and cultural factors that influence children's prosocial and moral behavior	SYMPOSIUM 55 Cognitive trajectories in low- and high-risk preterm populations from infancy to adulthood	SYMPOSIUM 56 Neuroscientific insights on attention development	PAPERS 43 EDUCATION AND SCHOOLING II OP 250 – OP 254	PAPERS 44 HAPPINNESS AND WELL-BEING IN THE SCHOOL CONTEXT OP 255 – OP 260	PAPERS 45 TEACHERS' PERCEPTIONS OP 261 – OP 266	PAPERS 46 BULLYING AND VICTIMIZATION OP 267 – OP 272	PAPERS 47 PARENTING OP 273 – OP 278
13:15–13:30 to 14:00–14:15	LUNCH BREAK												
14:15–14:30 to 15:30–15:45		SYMPOSIUM 57 Early Exposures and Developmental Trajectories: Epigenetic Signatures as a Potential Bridge	SYMPOSIUM 58 Effectiveness of Applied Behavior Analytic Interventions for People with Autism Spectrum Disorder	SYMPOSIUM 59 Intergenerational value transmission: the role of motives, transitions and context	SYMPOSIUM 60 Overprotective and Controlling Parenting during Adolescence and Young Adulthood: Implications for Psychosocial Functioning and Identity Formation	SYMPOSIUM 61 Caregivers' Mind-mindedness in Family and Out-of-home Contexts: Methodological Perspectives	SYMPOSIUM 62 Development Prevention of Problem Behaviors for High Risk Youth in Adolescence: Evidence from Three Randomized Controlled Trials	SYMPOSIUM 63 Hearing and Cognition	PAPERS 48 IDENTITY OP 279 – OP 283	PAPERS 49 PARENTING IN ADOLESCENCE OP 284 – OP 289	PAPERS 50 MORAL DEVELOPMENT II OP 290 – OP 294	PAPERS 51 OUTCOMES OF PARENT CHILD INTERACTION OP 295 – OP 300	PAPERS 52 EMERGING ADULTHOOD OP 302 – OP 306
15:45–16:00 to 17:00–17:15						PAPERS 53 DIVERSITY, EQUITY, AND SOCIAL JUSTICE OP 307 – OP 312	PAPERS 54 THE ROLE OF CULTURE IN DEVELOPMENT AND SOCIALIZATION OP 314 – OP 318	PAPERS 55 ACCULTURATION, IMMIGRATION AND BIOCULTURALISM OP 319 – OP 323	PAPERS 56 SOCIAL MEDIA AND THE INTERNET OP 324 – OP 329	PAPERS 57 TECHNOLOGY, MEDIA AND CHILD DEVELOPMENT OP 330 – OP 335	PAPERS 58 PREVENTION AND INTERVENTIONS I OP 337 – OP 341	PAPERS 59 PARENTING, PARENTAL ACCEPTANCE/REJECTION AND PSYCHOLOGICAL DISTRESS OP 342 – OP 347	PAPERS 60 EARLY INTERVENTIONS OP 348 – OP 353

Special Events

Friday, August 30th, 2019

Special Event 1

Olympia Hall A & B 09:30 – 11:00

Open Science and developmental Psychology: a roundtable and plenary discussion

Convenor: van Aken M.

Participants: Schoon I., Lee R., Mastrotheodoros S.

The idea of Open Science represents changes in the way we do our science, in the way we develop our hypotheses, design our studies, conduct our analyses, and report our results. But also in the way we share our data, for replication and further studies. It also has consequences for the rewards and incentives we have built in our system, including decisions on grants and tenure. As such, it comprises fundamental challenges (and opportunities) to our field.

In a thematic session, the implications of Open Science for our work in developmental psychology will be discussed. After an introduction by Marcel van Aken, four scholars will give a short reflection. After that, the floor is open for a plenary discussion on the topic.

Friday, August 30th, 2019

Special Event 2

Olympia Hall A & B 14:00 – 15:30

From Developmental Science to Policy: A Discussion between Researchers and Stakeholders

Chair: Professor Motti-Stefanidi F., *National and Kapodistrian University of Athens, Greece*
Panel members:
Professor Menesini E., *University of Florence, Italy*
Professor Rodríguez C., *Universidad Autónoma de Madrid, Spain*
Professor Espinosa M.A., *University Autónoma of Madrid / UNICEF-Spain*
Dr. Subrahmanian R., *Chief of Child Rights and Protection at UNICEF-Innocenti*

In recent years, growing attention has been paid to translational research in psychology. The European Association of Developmental Psychology has been working intensively on the dissemination of research-based results and projects to inform European policy makers, professionals, psychologists, educators, and other stakeholders on the relevant findings of developmental research studies. The decision to hold a policy-relevant meeting in each biennial conference starting from 2015 has been a great appointment for every conference. This year the special event will take the form of a debate between researchers and stakeholders trying to address three main challenges in children development: (1) How can developmental science findings help improve early childhood education? (2) How can we map and prevent violence towards children within a global approach? (3) How can we promote the integration and resilience of migrant and refugee children and youth? Panel members will give a 5-minute presentation of the implications of research findings or of applications of developmental science research in the field (from preschool to high school, families, government). These presentations will form the basis of a discussion between researchers, stakeholders and the wider audience. Have we succeeded in disseminating scientific evidence to influence public and educational policy and practice? What are some good practices that will allow us to better achieve this goal? If not, why have we not succeeded? The special event of science and policy is directed to a larger audience, involving discussion with practitioners, journalists, politicians and policy makers.

Saturday, August 31st, 2019

Special Event 3

Olympia Hall A & B 09:30 – 11:00

Big Data

Prof. Dr. Sabine Walper is Professor of Education and Youth Research at the Ludwig-Maximilians-University in Munich and Research Director at the German Youth Institute (DJI) in Munich, Germany. She received her academic training in Psychology and Educational Science at the Heinrich-Heine University Duesseldorf, the Technical University Berlin (Germany), and at the University of California at Berkeley (USA).

Her research addresses a variety of family issues and their links to child well-being, in particular developmental conditions of children and youth in separated and stepfamilies as well as families in poverty and other risk conditions. She is Co-Principle Investigator of the German Family Panel pairfam, a large interdisciplinary multi-cohort and multi-actor longitudinal study on intimate relationships and family life in Germany (http://www.pairfam.de/en/). Since 2008/2009 pairfam provides data from annual assessments to the scientific community.

As Research Director of the German Youth Institute, Sabine Walper is also involved in large replicative survey studies on families, children and youth aiming to provide insight in changing developmental conditions for young people in Germany (e.g., AID:A - Growing Up in Germany), including studies targeting early childhood and governmental programs of Early Prevention (KiD 0-3). Sabine Walper is member of the Scientific Council for Family Issues of the Federal Ministry for Family, Seniors, Women and Youth. She is Chair of the Scientific Council at the State Institute for Early Education, a member of the Commission for the Rights of Children at the Family Law Court of Germany and President of the German League for the Child. She serves on several editorial and review boards.

The Potential of Big Data in Developmental Research

Convenor: Walper S.

German Youth Institute and Ludwig-Maximilians-University Munich, Germany

Big Data have gained increasing relevance for research in many domains of behavioral research including developmental psychology. This session will present examples of two kinds of big data relevant for developmental research. First, we will present large-scale longitudinal studies which provide a broad, open-source data base for interested researchers. Second, we will illustrate the use of Big Data generated in the course of online-activities, be it in web-based social networks or when using mobile devices. The first three papers focus large-scale longitudinal studies and describe their potential for analyzing a broad range of developmental issues. Given the strong tradition of cohort studies in the UK, the first presentation (by Praveetha Patalay) gives an overview of four British cohort studies and describes the diverse methods used to inform about the developmental trajectories and life course of their participants. The second paper (by Sabine Walper) illustrates the research potential of the German Family Panel pairfam which comprises adolescent and adult cohorts, but also includes the target participants partner and children. Both presenters will describe how to access and use the data. The third paper (by Katariina Salmela-Aro) introduces a currently planned European cohort study. While being still at a preliminary stage this study may be a future source of research data. The last two papers focus online-generated Big Data. Paul Plener presents research on social reinforcement in web-based social networks and illustrates their role with findings on adolescents' non-suicidal self-injuries. Finally, Clemens Stachl informs about smartphone-sensing as a novel method of data collection which gives access to large-scale behavioral and situational data. While most of these data are non-reactive and generated in the course of online-activities, they may also be complemented by self-report data assessed with the online-devices. The discussion will leave room for questions from the audience.

Special Event 3

Olympia Hall A & B 09:30 - 11:00

The British birth cohort studies

Patalay P.

University College London, UK

The UK has the longest running series of national birth cohort studies. In this presentation I will present an overview of four UK birth cohorts: the 1946, 1958, 1970 and Millennium birth cohort studies. The studies contain data at each assessment across multiple domains of health and development, making the data valuable for researchers in a large range of disciplines. Data are collected from a range of sources including cohort members, parents, cognitive assessments, physical health assessments, data linkage to administrative records, biological samples, devices etc. In this talk I will describe the range of health, cognitive, social measures in each study at each assessment from birth. Examples of developmental research questions that the cohorts can be used to answer will be illustrated, alongside examples of how the cohorts can also be used in combination to answer questions related to cohort differences over these decades. The data can be accessed free of cost for researcher and I will present an overview of the process for using these data in your research (https://www.ukdataservice.ac.uk/)

The German Family Panel pairfam and its potential for developmental research

Walper S.

German Youth Institute and Ludwig-Maximilians-University Munich, Germany

Family research in Germany has long suffered from a lack of large-scale longitudinal data which allow addressing issues of family formation, family development, and the role of family resources for young people's development. To fill this gap and strengthen the data infrastructure for interdisciplinary family research, the German Family Panel pairfam has been launched in 2008/2009. Funded by the German Research Foundation, pairfam provides annually collected longitudinal data which are open to the scientific use of researchers across the world (see https://www.pairfam.de/en/). This presentation provides an overview of the sample, content, and research potential of pairfam.

Pairfam started with a nation-wide representative sample of three age cohorts and a total of 12,000 anchor participants (4,000 per cohort) drawn from register data. In wave 1, anchor participants were adolescents (age 15-17 years), young adults (25-27 years), and middle adults (35-37 years). Employing a multi-actor design, assessments are not restricted to the anchor participants but also include their partners, parents, and children (starting at age 8) thus allowing dyadic and multi-informant analyses. Data are collected in personal interviews and by written questionnaires. The annual assessments in the pairfam program provide a rich data base for studying four broad domains: (a) fertility and family formation, (b) partnership formation, quality, and dissolution, (c) intergenerational relationships in adulthood and grandparenting, and (d) parenting and child development. Biographical information and indicators of SES, personality, values, attitudes and expectations, work-life balance, health and well-being complement the rich indicators of relationship quality and parenting. Developmental issues can be addressed not only for the adolescent and (young) adult cohorts, e.g. regarding romantic relationship and partnership trajectories or educational careers, but also for children of various ages, e.g. from birth into elementary school age or across the transition to secondary school. Sample analyses will illustrate various research options.

Saturday, August 31st, 2019

Special Event 3

Olympia Hall A & B 09:30 - 11:00

EuroCohort: Europe's first harmonized birth cohort survey

Salmela-Aro K.

University of Helsinki, Finland

At present there is no data source available to scientists to comparatively analyse the lives of children across Europe as they grow up and therefor to develop policies at an European level to improve their well-being. The European Cohort Development Project (ECDP) is an EU funded Design Study which is developing an Europe-wide Research Infrastructure that will provide comparative longitudinal survey data on children and young adults from birth onwards. The EuroCohort survey infrastructure developed by ECDP will facilitate a better understanding of life-span and life-course patterns and a predictive analysis of the next generation of European children. Through a common survey design, EuroCohort will collect truly comparable data without the need for post-hoc harmonization of items nor adjustment to do with different fieldwork periods. It will offer insights into topics such as wellbeing, health, poverty, education, employment and leisure as never before. Building the case for EuroCohort is achieved through the following three objectives: 1. Gaining support from key political policy makers with a brief which covers child wellbeing as well as national funding agencies tasked with infrastructural spending on science and survey data collection. 2. Developing a scientifically excellent research design. 3. Establishing a robust operational framework that will ensure logistic integrity of the survey. A central challenge for EuroCohort is to maximize the number of countries who participate in this survey from the outset given the importance of being present in the initial data collection rounds. To this end it is essential that the value of comparative longitudinal survey data to society as a whole is made clear to funders and policy makers in order to make a compelling argument for support.

Using Big Data to investigate social contagion: Nonsuicidal Self-Injury and (social) media

Plener P.L.

University of Vienna, Austria

Social media facilitate the large-scale spreading of information and thus provide a tool to investigate processes of web-based social mechanism. This paper presents an example of how Big Data from social media networks can be used to study processes of web-based exchange about health-related problem behavior and mechanisms through which such behavior is reinforced in social networks. The focus is on Nonsuicidal Self-Injury (NSSI) which is quite common among adolescents. Social contagion has been discussed as one of the mechanisms that lead to spreading and distribution of NSSI in this age group. Among the functions of NSSI, both intrapersonal as well as interpersonal reinforcement mechanisms have been discussed. However, it is less clear whether theses mechanisms are of significance for the online exchange about NSSI.

We conducted a real-time download of the 14 most common German hashtags from the social media network Instagram for one month. Pictures as well as comments were rated. In a qualitative follow-up study, reasons for posting NSSI content were evaluated. We collected n=32,182 pictures from n=6,721 user accounts, out of which n=2,826 (from n=1,154 accounts) directly depicted wounds. Higher wound grade was associated with more comments. Adding to evidence on offline social processes, the findings suggest that mechanisms of reinforcement seem to be present in social media as well. Most users, who post NSSI pictures report positive experiences online. The discussion will take a wider perspective on the potential of Big Data for studying social mechanisms in social media networks.

Saturday, August 31st, 2019

Special Event 3

Olympia Hall A & B 09:30 – 11:00

Smartphone-sensing as a novel method for the efficient collection of large-scale behavioral and situational data

Stachl C.

Ludwig-Maximilians- University Munich, Germany

The last decades of psychological and social science research have been highly dominated by the use of self-report questionnaires as the primary method of data collection. While being convenient, questionnaire data is known to be subject to a series of biases such as response styles, social desirability, ecological invalidity and memory. We argue that the ongoing evolution of mobile-computing- and sensor-technology enable the development of new methodologies for the measurement of human behavior in a more objective, reliable and valid way. Due to their pervasiveness and diverse functionalities, smartphones in particular, are suitable as a research instrument. In this talk, I will present the current state of the ongoing PhoneStudy mobile sensing project at Ludwig-Maximilians-Universität München. The aim of this project is the development of a scientific tool to collect and to analyze data about behavior and situations in an unobtrusive objective and ecologically-valid way. First, I will introduce the current functionalities of the application and provide insights into the collected data. Second, I will talk about challenges of this and similar projects and provide recommendations for other researchers. Third, I will present research that has been conducted using the PhoneStudy application. This part will particularly focus on personality and behavior and will feature our latest study about the prediction of personality traits from a variety of behaviors. In this study we collected more than 10.000 behavioral variables from 624 participants over the course of 30 days and used machine learning models to predict big-five personality traits on factor and facet level. I will present both, the accuracy of personality predictions as well as a more detailed look at the most influential variables of the respective models. Finally, I will conclude with a short outlook on current developments in the field of mobile sensing.

Saturday, August 31st, 2019

Special Event 4

Olympia Hall A 13:15 – 14:45

Meet the Editors of the European Journal of Developmental Psychology

Organizer: Koops W.

In this meeting The Editor of the flagship journal of EADP, together with the co-editors will give an Introduction about the plans for the future of the journal, and will describe their intentions and policies.

There will be ample opportunity to discuss and to make suggestions. Members as well as non- members of the Association are most welcome.

Social Events

Thursday, August 29th, 2019 at 19.30

Welcome Reception

Welcome Reception will be held at the Divani Caravel Hotel. All registered participants are entitled to participate. Please note that it is essential to wear your name badge as a valid entry ticket to the event.
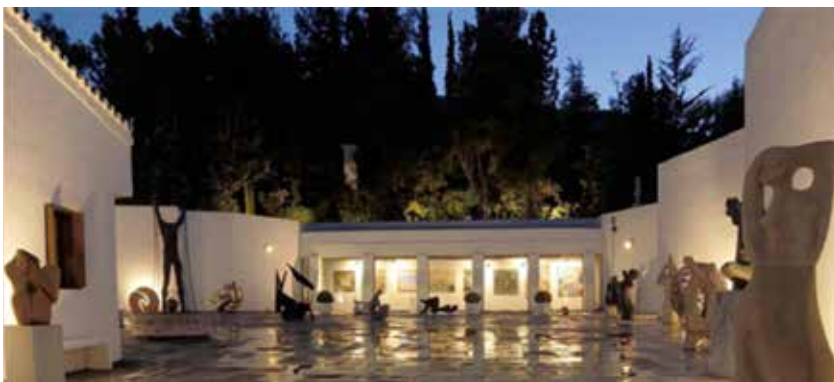

Saturday, August 31st, 2019

Gala Dinner

Gala Dinner will take place at Vorres Museum

Cost per person is Euro 55

ECDP Conference 2021

Dear colleagues,

On behalf of the European Association for Developmental Psychology (EADP), it is our great pleasure to invite you to Saint-Petersburg, cultural capital of Russia, for the 20th European Conference on Developmental psychology, 1-5 September 2021! Saint-Petersburg State University and Saint-Petersburg Psychological Society are proud to host the major European event in Developmental Psychology.

Russian traditions in Developmental psychology started with outstanding works of L.S. Vygotsky and were developed all over the country. We are preparing exciting scientific program that will incorporate world-known speakers and will introduce Russian developmental tradition to the international audience. Following previous conferences of the Association, the scientific program will include various scientific activities, invited symposia, symposia, oral sessions and poster presentations.

Saint-Petersburg is the second largest city in Russia after Moscow. It was founded as a capital in 1703 by Peter the Great and remained capital for two centuries. After its foundation it accommodated the brightest minds from all over the Europe that built a strong scientific and cultural tradition. The best architects from Italy, Germany, UK and France were designing its unbelievable beauty, and many sites of the city and suburbs were named UNESCO world heritage.

Saint-Petersburg is easily connected from most European destinations by plane, train or ferry. Most European major airlines have direct flights from capitals to Saint-Petersburg (Lufthansa, Swiss Air, KLM, British Airways, Allitalia, Air France, Vueling etc.). City center is just 30 minutes from the airport. The airport is connected with the city by express bus line. Main train stations are situated in the city center. **IMPORTANT!** In 2019 most foreigners need VISA to enter Russian Federation. The Organizing committee will provide all the necessary information and support for the participants.

More information can be found at **ecdp2021.spbu.ru.**

We look forward to welcoming you in Saint-Petersburg!

Olga Strizhitskaya

Professor of Psychology Department

Saint-Petersburg State University

Thursday, August 29th, 2019

Pre – Conference Workshop 1

Kozani Hall 10:00 – 16:00

R computing for the novice user; a statistical approach.

Convenor: Mylonas K.

Professor in Research Methods and Statistics in Psychology

No, this is not a hands-on workshop; it is specifically designed mainly to introduce novice users of "R graphic user interface" to the basics of data handling, the basics of computation through R along with and simple programming through this package -all through a theoretical statistical approach covering an extensive array of descriptive and inferential statistical analysis. Getting acquainted with R is the first step towards using it wisely and effectively.

R is a powerful computing machine really. First it makes its entrance as the "new" and handy tool, free and open-source, proclaiming its availability to all -all this are very nice features indeed. It then lures us into a superficially cumbersome but actually routine-like and never-ending software installation, allowing access to endless libraries-packages organized by the user around a central "command center". It then opens up its doors to invite us to a wide-range of mathematical and statistical calculations, which are activated by the user-researcher on demand and may be further tailored to ones aims and needs. With a little help of command language and by having mastered the above, one can first manage research data and then start calculating from basic statistics to inferential outcomes, from graphs to distributional functions, and many more, always holding an upper hand. It can certainly get very complicated and advanced, as one moves to the "real stuff", depending on the user's statistical needs and research design.

Thursday, August 29th, 2019

Pre – Conference Workshop 2

Edessa Hall 10:00 – 16:00

Experience Sampling Methods in Developmental Psychology: Promises and Pitfalls (EACP 2019)

Convenors: Keijsers L. & Boele S.

Tilburg University, Developmental Psychology & Tilburg Experience Sampling Center

The Experience Sampling Method (ESM) have increased in popularity lately (Van Roekel et al in press). With mobile phone apps, adolescents can indicate at several random times a day how they feel, with whom they are interacting, and what they are doing. Capitalizing on this new technological development thus offers the unique possibility to examine the daily mechanisms of development, as they occur in real time. Moreover, when the resulting data are long enough (e.g., more than 50 assessments per persons) it can helpD to determine per individual what the daily ingredients are for health and well-being (see Keijsers & Van Roekel, 2018). This requires a careful consideration of the study design and analyses. This workshop is intended to get started in designing a study and analyzing the Experience Sampling data.

In this introductory workshop, you will learn:

In the morning:
- The conceptual rationale for conducting an Experience Sampling study
- The basic design choices to make with setting up an ESM study (including instruments, scales, sampling scheme, and power issues)
- The pitfalls to prevent in setting up a study
- An example of ESM studies in parenting research
- Assignment. Designing your own ESM study

In the afternoon (two choices):
- If you are familiar with the basics of R
- Introduction into multilevel analysis
- How to analyze your own ESM data using multilevel models in R
- Setting up your first ESM study in EthicaData Software
- Introduction into the software
- Setting up your own questions
- Learning how to use branching and decision trees
- Programming a sampling scheme
- Monitoring the data collection

It is intended for everyone with an interest in setting up or analyzing Experience Sampling studies. We will ask participants to take part in an ESM study in the week before the workshop, so you can analyze your own data and learn more about your own emotional dynamics.

Thursday, August 29th, 2019

Pre – Conference Workshop 3

Naoussa Hall 10:00 – 18:00

Designing School based Comprehensive Mental Health Services

Bardos A.N.

University of Northern Colorado, USA
School Psychology Programs

Recognizing the connection between mental health and academic performance and the need to address its students' academic and behavioral health needs several schools in the United States have successfully developed comprehensive behavioral health models to guide the implementation of what is now termed Multi-Tier Systems of Support (MTSS). These models recognize the need and require the accumulation of data for the decision making process starting from (a) staff buying out and removal of barriers to implementation of MTSS, (b) exploring staff needs through needs assessment surveys (d) gathering screening data about students and identifying those at risk and (e) forming school based teams to translate behavioral screening data to evidence-based interventions.

This workshop will present the various steps and challenges one might encounter when integrating all behavioral data available to identify at-risk students and how to proceed with the design of interventions. For example, universal screening data along with behavioral outcome measures will be discussed along with the strengths and weaknesses of both and how they can inform and facilitate the process of progress monitoring of interventions. The use of universal screening tools (i.e the Behavior Intervention Monitoring Assessment System -BIMAS; McDougal, J., Bardos, A., & Meier, S. (2011) at the district, school, grade/class, and individual level will be discussed, with a review of technology related challenges, and successes. Implementation rate of universal screenings for behavior among schools across the USA have been low (about 2%) despite the recognition of the importance of social emotional leaning for students. This workshop will share what has been learned from some schools who implemented the behavior health model services the last four years along with a review of the relevant literature. For example, within the MTSS for behavior framework, other data are accessed (e.g., office disciplinary referrals, attendance records, suspensions, teacher informal ratings, academic performance. This data allow school personnel to match and determine the level of need, select appropriate interventions and discuss plans for monitoring the progress and outcomes of the interventions.

School based team conversations lead to interventions across the three MTSS Tiers of services elaborating on the roles and functions of school and community personnel. MTSS typically involves three tiers. At Tier 1 for example, an important first step to address before moving toward student-level interventions is whether the core features of a primary prevention plan is in place (Lane, Oakes, Ennis, & Hirsch (2014), including the connection to academic data and whether primary preventions efforts are leading to expected outcomes. If a universal prevention curriculum is in place do students respond as expected (about 80%)? Next, are the Tier 2 and 3 supports and efforts lead to desirable outcomes? Which interventions should be employed based on the comprehensive data collected and the entire progress monitoring efforts, etc.? Many interventions vary in scope and intensity. Traditionally they include small group interventions, low-intensity supports such as behavioral contracts and self-monitoring, or it may be necessary to build specific skill sets through individual interventions.

The workshop will review various decision making points and how they inform our practice from the early universal screening efforts to the design and monitoring of prevention and intervention efforts. The workshop will allow participants to see how such a system is gradually built throughout each tier and for all grade levels and how to best engage families and mental health partners around tiered levels of intervention.

Workshop Objectives:

Participants will gain knowledge of the core components of comprehensive behavior health models and how to engage staff, students and families in the process of incorporating the model.

Participants will learn about universal screening and analyzing data to inform decisions for prevention and interventions at the Tier 1, 2 and 3 levels.

Participants will learn about tiered levels of interventions and their alignment to various sources of behavioral data.

Thursday, August 29th, 2019

Pre – Conference Workshop 4

Mycenae Hall 10:00 – 18:00

Special ERU pre-conference workshop

How to be productive in terms of scientific writing: practices and techniques

by ERU Board

Lionetti F., Miklikowska M., Mastrotheodoros S., Musso P. & Schachner M.

The workshop is aimed at supporting the skills necessary to be productive, effective and efficient in terms of scientific writing as well as able to research and obtain research funding. Both writing a paper and a grant proposal are creative and complex adventures, but they cannot be realized without a series of abilities that need to be developed over time even with the support of more experienced colleagues. Therefore, the workshop wants to provide an opportunity for all those who are at the beginning of their careers to grow and want to experiment with the fascination of modern scientific production.

Important information

• The workshop is mainly aimed at early-stage researchers and younger people will be given priority.

• The registration is made by sending an e-mail to the address of both the ERU president and secretary (pasquale.musso@uniba.it and f.lionetti@qmul.ac.uk) by 31st July 2019.

• Registration is free, but it is mandatory to certify the registration to the congress while sending the emails.

• A minimum of 15 participants is required for the workshop to be activated.

• A maximum of 20 participants are allowed.

• Attending students are strongly advised to bring with them a draft manuscript or a paper outline on which they will work in the second part of the workshop.

Thursday, August 29th, 2019

Pre – Conference Workshop 4

Mycenae Hall 10:00 – 18:00

Program

10.00-11.00 (Musso P.)

• Introduction.

• The importance of the Unions among early career researchers at European level: ERU experiences.

• Tips for networking and collaboration in an international panel.

11.00-12.15 (Schachner M.)

• How to be productive as an early career researcher.

• Navigating the publication process in an international field.

12.15-13.00

• Lunch break (light lunch included).

13.00-14.15 (Mastrotheodoros S.)

• Writing a research paper in the psychological and social science.

• Practical examples.

14.15-15.15 (Lionetti F.)

• How to search for funding.

• Writing a grant proposal.

• Practical examples.

15.15-15.45

• Coffee break.

15.45-17.45 (Miklikowska M., Mastrotheodoros S., Musso P.)

• Work with participants on academic writing: Practical suggestions in the writing of a research paper.

Thursday, August 29th, 2019

The William Thierry Preyer Award

Olympia Hall A & B 18.30 – 19:30

ON PATTERNS AND RULES OF ADOLESCENT DEVELOPMENT

Meeus W. H.J.

Utrecht University

Friday, August 30th, 2019

Keynote Lecture 1

Olympia Hall A & B 08:30 – 09:15

Chair: Tantaros S.

KL 1
PERSONAL IDENTITY THROUGH ADOLESCENCE AND YOUNG ADULTHOOD: A DEVELOPMENTAL PERSPECTIVE ON CLINICAL APPLICATIONS

Luyckx K.

KULeuven / University of Leuven, Belgium

Identity development constitutes a core psychosocial task throughout one's life and much research has demonstrated the important psychosocial implications of identity formation for daily functioning. As identity research largely emerged from clinical observations, there has been a long tradition of research focusing on identity and psychosocial functioning. Recently, there has been increasing research and theorizing again focusing on the link between identity and psychopathology: do certain identity processes make individuals vulnerable for displaying psychopathology? Or, conversely, can one's identity also protect against experiencing pathological symptoms and behaviors? The present lecture focuses on the link between identity and psychopathology using recently developed identity models. First, attention will be paid to describing recent theorizing on identity development from a neo-Eriksonian perspective. Second, recent research conducted at the research center of K. Luyckx will be discussed as a sample case of how developmental theorizing on identity (mainly focusing again on neo-Eriksonian process-oriented identity research) can yield insights with respect to the emergence and development of psychopathological behavior. With respect to psychopathology, the main focus will be on non-suicidal self-injury and disturbed eating behaviors.

Friday, August 30th, 2019

Invited Symposium 1

Ilissos Hall 09:30 – 11:00

IS 01

A GOOD TIME TO BE ALONE? NEW DIRECTIONS IN THE STUDY OF SOCIAL WITHDRAWAL IN ADOLESCENCE AND EMERGING ADULTHOOD

Coplan R.J.

Chair, Discussant, Carleton University, Department of Psychology, Ottawa, Ontario, Canada

Socially withdrawn children remove themselves from opportunities for peer interaction and display solitary behaviors in the presence of peers. Contemporary researchers in this area now acknowledge that social withdrawal in a broad and heterogenous construct, with differing motivational, emotional, and cognitive substrates. Notwithstanding the increased interest in this phenomenon in recent years, most of what we know about social withdrawal comes from studies of children. In this symposium, we focus on new trends in the study of the meaning and implications of social withdrawal in adolescence and emerging adulthood. In the first presentation, Santos and colleagues explore links between social withdrawal and different types of loneliness in a sample of early adolescents from Spain. In the second presentation, Goossens and Claes examine associations between affinity vs. aversion for aloneness and symptoms of borderline personality disorder in two samples of Belgian adolescents. Next, Coplan and colleagues explore the implications for well-being of engaging in different activities while alone in a sample of Canadian adolescents. Finally, a Galanaki and Antoniou examine links between different forms of social withdrawal and existential well-being in a sample of Greek emerging adults.

IS 01 – 1

TIME ALONE WELL SPENT? A LATENT CLASS ANALYSIS OF ADOLESCENTS' SOLITARY ACTIVITIES

<u>Coplan R.J.</u>[1], Hipson W.E.[1], Dufour M.[1], Watanabe L.K.[1], Wood K.R.[1], Baldwin D.[1], Bowker J.C.[2]

[1] *Carleton University, Department of Psychology, Ottawa, Ontario, Canada*
[2] *University at Buffalo The State University of New York, Department of Psychology, Buffalo, USA*

Background and aims. Adolescents spend a significant portion of waking time alone. Although it has been suggested that solitude in adolescence can afford benefits in the form of increased opportunities for self-discovery and personal growth, research suggests that excessive solitude also carries psychological and health risks. This apparent *solitude paradox* may stem from a paucity of research on the types of activities that adolescents do while they are alone. Accordingly, the purpose of this study was to identify subgroups of adolescents who differed based on *what* they did (i.e., their predominant activities) while alone. It was hypothesized that these groups would differ systematically in terms of indices of socio-emotional functioning.

Methods. Participants were N=416 grade 11 students (M_{age}=16. 14 years, SD=.50) from high schools in Ontario, Canada. Assessments include self-reports of time alone, activities while alone, preference for solitude, and indices of socio-emotional functioning. The content of solitary activities was coded as hobbies (e.g., reading for pleasure), *screen time; music listening; productive* (e.g., homework), *positive thinking* (e.g., daydreaming), *negative thinking* (e.g., ruminating); or *routine* (e.g., cooking). Results from latent-class analyses suggested a three-class solution, with groups labelled: *Screen Time* (64%), *Cognitive* (15%), and *Leisure* (21%).

Results. Among the results, significant differences between the three groups were found for time alone, $F(2, 413)$=41.19, p<.001, with the *Screen Time* group spending the most time alone, followed by the *Leisure* and *Cognitive* groups. The *Cognitive* groups also reported the lowest preference for solitude, whereas the *Leisure* group reported (marginally) higher positive affect than the *Screen Time* group. Subsequent analyses will compare groups on additional outcome variables.

Conclusions. Initial results highlight the heterogeneity of adolescents' activities while alone. Of note, adolescents who spent the most time alone were engaged in predominantly productive activities and did not evidence signs of substantive maladjustment.

IS 01 – 2

SOLITUDE AND EXISTENTIAL WELL-BEING IN EMERGING ADULTHOOD

Galanaki E.P.[1], Antoniou F.[2]

[1] Department of Primary Education, National and Kapodistrian University of Athens, Athens, Greece
[2] Department of Philosophy, Pedagogy and Psychology, National and Kapodistrian University of Athens

Background and aims. The aim of this research was to investigate the links between several types of solitude and facets of existential well-being in emerging adulthood. The capacity to use solitude in a constructive, personally enhancing way is expected to predict more authenticity and advancement in meaning making, as well as less existential anxiety and existential loneliness among youth. On the contrary, less benign forms of social withdrawal may be linked with less existential well-being. However, this important issue has been highly neglected by researchers.

Methods. Participants were 774 university students (50.4% males) aged 18-25 (M = 20.51) from Athens, Greece. The following measures were used: adaptation for emerging adults (Nelson, 2013) of the Child Social Preference Scale (Coplan, Prakash, O'Neil, & Palmer, 2004; Bowker & Raja, 2011), 20 Types of Solitude Experiences (Averill & Sundararajan, 2014), Authenticity Scale (Wood, Maltby, Baliousis, Linley, & Joseph, 2008), Meaning in Life Questionnaire (Steger, Frazier, Oishi, & Kaler, 2006), Existential Anxiety Questionnaire (Weems, Costa, Dehon, & Berman, 2004), and Existential Loneliness Questionnaire (Mayer, Khoo, & Svartberg, 2002). Participants also provided background information and answered two questions on the place and daily amount of time alone.

Results. Confirmatory factor analyses were conducted on the Greek versions of the measures, which also showed adequate internal consistency. Data were analyzed by use of Latent Variable Modeling (LVM) and in some instances Exploratory Structural Equation Modeling (ESEM). The moderating role of age, gender, romantic relationship status, living arrangement, job experience, and parents' education was also examined. Conclusions. Findings have implications for both measurement and structural models, and provide insight into the role that various subtypes of solitude play in major existential issues during the transition to adulthood.

IS 01 – 3

AFFINITY FOR ALONENESS AND AVERSION TO ALONENESS: ASSOCIATIONS WITH BORDERLINE SYMPTOMS IN TWO COMMUNITY SAMPLES OF ADOLESCENTS

Goossens L.[1], Claes L.[2]

[1] *KU Leuven - University of Leuven, School Psychology and Development in Context, Leuven, Belgium*
[2] *KU Leuven - University of Leuven, Clinical Psychology, Leuven, Belgium*

Background and aims. The correlates and meaning of adolescents' affinity for aloneness and its counterpart, that is, aversion to aloneness, are still poorly understood. The present study examined how both of these constructs are related to borderline symptoms. Because inability to be alone is a key symptom of borderline disorder in adults, we expected aversion to being alone to show a significant positive association with borderline symptoms. Affinity for aloneness, by contrast, would be unrelated to these symptoms. We also examined whether aversion to aloneness, but not affinity to aloneness, would predict borderline symptoms when controlling for other well-known risk factors such as depressive symptoms and identity confusion and synthesis.

Methods. Both Sample 1 (N = 401) and Sample (N = 290) comprised Belgian adolescents from Grades 10 through 12. Participants completed measures of loneliness and aloneness (Loneliness and Aloneness Scale for Children and Adolescents), depressive symptoms (Beck Depression Inventory), identity confusion and identity synthesis (Erikson Psychosocial Stage Inventory) and borderline symptomatology (Assessment of DSM-IV Personality Disorders scale).

Results. Contrary to expectations, both aversion to aloneness and affinity for aloneness showed significant positive correlations with borderline symptoms (e.g., $r = .18$ and $r = .32$, respectively, both $ps < .001$, in Sample 1). In a hierarchical regression analysis, both aversion to aloneness and affinity for aloneness were significant predictors of these symptoms (e.g., both ß = .08, $p < .05$, in Sample 1) when controlling for the other risk factors.

Conclusions. Borderline symptomatology seems to be associated with ambivalence to being alone during adolescence. These findings imply that affinity for aloneness, in addition to its benefits (e.g., increased self-reflection), may also carry risks for personality dysfunctions. Implications for current understanding of both affinity for aloneness and aversion to aloneness during adolescence are discussed.

IS 01 – 4

LONELINESS PROFILES AND SOCIAL ADJUSTMENT TO THE PEER GROUP IN PORTUGUESE YOUNG ADOLESCENTS

Santos A.J.[1], Ribeiro O.[1], Freitas M.[1], Rubin K.H.[2]

[1] William James Center for Research, ISPA-Instituto Universitário, Portugal
[2] Department of Human Development & Quantitative Methodology, University of Maryland, USA

Background and aims. Loneliness occurs when one subjectively perceives a discrepancy between desired and achieved levels of social relationships, providing a global indicator of dissatisfaction about the quality/quantity of social relationships. This study adopts first a person-centered approach to identify distinct profiles of young adolescents with similar patterns of social and emotional loneliness in both family and peer contexts, and subsequently a variable-centered approach to analyze the differential vulnerability of these profiles to maladjustment within the peer group.

Methods. To achieve such goal, 674 participants (323 boys) enrolled in 7th to 9th grades (M_{age}=13.14) were recruited from Portuguese schools in Lisbon to complete adapted versions of the Relational Provision Loneliness Questionnaire (RPLQ, Hayden-Thomson, 1989) and the Extended Class Play (ECP, Burgess et al., 2006).

Results. The integration and intimacy RPLQ dimensions for family and peers were submitted to hierarchical and additional k-means cluster analyses using Euclidian distances. First, MANCOVA was used to analyze differences between clusters after controlling for solitude preference. Four distinct profiles were identified: family-related loneliness profile (FLP, N=121), peer-related loneliness profile (PLP, N=163), family and peer-related loneliness profile (FPLP, N=32), and no loneliness profile (NLP, N=358). All profiles were statistically different from each other regarding the RPLQ dimensions. FPLP adolescents had the highest scores in integration and intimacy difficulties with family and peers. In a second MANCOVA, the ECP five dimensions were analyzed by profile and sex controlling for solitude preference. Significant differences in ECP dimensions between profiles were found, except for aggression and popularity/sociability. FPLP and PLP scored higher in shy/anxious withdrawal, peer exclusion and victimization, and lower on prosocial. FPLP and FLP had the lowest scores on prosocial.

Conclusions. The heuristic role of distinct profiles of social and emotional loneliness for further studying resilience and risk in young adolescents' social developmental trajectories will be discussed

Friday, August 30th, 2019

Symposium 1

Vergina Hall 09:30 – 11:00

S 01
THE EXPRESSIONS OF POSITIVE SHYNESS IN INFANCY, CHILDHOOD AND LATE CHILDHOOD: DETERMINANTS, CONTEXTS, AND PSYCHOPHYSIOLOGICAL MARKERS

Colonnesi C.
Chair, Research Institute of Child Development and Education, the Netherlands

Reddy V.
Discussant, Department of Psychology, University of Portsmouth, Portsmouth, United Kingdom

Shyness is a ubiquitous emotional reaction reflecting the approach-avoidance feeling and motivation during social situations. For a long time, shyness has been viewed only as a maladaptive emotion and personal characteristics and it has been associated with social inhibition, anxiety, and solitude. Only recently there is increasing attention for the positive and socially adaptive aspects of shyness and its determinants. This symposium brings together a group of five international researchers on the expressions of shyness under one forum to discuss the positive aspects of these expressions from infancy to childhood, from diverse perspectives and using different methods.

The first presenter describes her naturalistic study on infants' expressions of positive shyness in different social contexts. The second presenter examines the physiological markers (i.e., face temperature) that accompany the expressions of shyness in infancy. The third presenter discusses positive expressions of shyness in relation to temperament, cognition, and attention biases in early childhood. The fourth presenter rounds out the symposium illustrating the associations between positive expressions of shyness, social anxiety, and Theory of Mind using simulated online peer interaction in late childhood.

S 01 – 1
THE CONTEXTS OF POSITIVE SHYNESS FROM 4 TO 10 MONTHS OF AGE

Miskou A.[1], Tsourtou V.[1], Reddy V.[2]

[1] Department of Philosophy and Social Studies, University of Crete, Greece
[2] Department of Psychology, University of Portsmouth, UK

Positive shyness as a self-conscious emotion has been shown to be elicited when the adult or infant becomes aware of being looked at by another person. However, previous research leaves two questions in need of clarification: i) the contexts in which positive shyness occurs, and ii) the relation between expressions of shyness and immediately preceding and following infant behavior.

In the present naturalistic study forty infants at ages 4, 6, 8, 10 months were visited at home and filmed in interactions with a stranger in two situations: a) Greeting: the stranger enters the house, while the mother opens the door holding the infant in her arms, and b) Conversing: a few minutes later mother, infant and the stranger sit comfortably and communicate spontaneously. In all cases the researcher played the role of the stranger. Positive expressions of shyness were coded based on the coy smile, the smile when infants' cheek and sides of the mouth raise, co-occurring with a simultaneous gaze and/or head aversion prior to the decline of the peak of the smile.

Preliminary results of microanalysis of infant behaviors show three main findings. First, the Greeting situation elicited higher frequency of shy expressions compared to the Conversing situation at all ages. Second, four and six month old infants expressed more simple forms of shyness, while eight and ten month old infants expressed more complex forms of shyness. Third, the behaviors preceding and following shy expressions showed that both preceding and subsequent behaviors were positive.

These results suggest that such shyness is fundamentally a positive emotional expression. The ambivalence expressed here by the infant appears to be accompanied by pleasure rather than by mere curiosity and seems to be more a response to being positively overwhelmed by the other, rather than a fearful reaction or wariness towards the other.

S 01 – 2
DISTINGUISHING THE MOTHER FROM "THE OTHER" IN EARLY INFANCY: A PRELIMINARY PHYSIOLOGICAL PERSPECTIVE ON SOCIAL DEVELOPMENT

Ioannou S.[1], Morris P.[2], Hassanain S.H.[1], Latif Z.[1], Baker M.[2], Almakadma A.H.[1], Raddaoui L.[1], Reddy V.[2]

[1] Department of Physiological Sciences, College of Medicine, Al Faisal University, Riyadh, Saudi Arabia
[2] Department of Psychology, University of Portsmouth, Portsmouth, United Kingdom

Displays of shyness arise as early as 3 months old. Nevertheless, little or no research has addressed the physiological markers that accompany these manifestations of social awareness from a physiological perspective.

With the use of thermal imaging, the current study was set to examine the arousal markers that accompany the distinction between a familiar and an unfamiliar person while grounding findings on behavioral analyses on 2-3 months old infants ($N = 10$). To elucidate the current research question, the mother and a complete stranger interacted with the infant in three different situations, which we have labeled as *neutral, playing*, as well as *compliment*.

Behavioral results showed that the child was more active during the stranger condition compared to the familiar person with the most behavioral activity observed during the compliment phase. Coded behaviors that arose as having a more distinct significant change than the cumulative recorded behaviors $\chi^2 (5) = 15.06$, displays of positive shyness $\chi^2 (5) = 15.29$, head aversions $\chi^2 (5) = 14.23$, as well as smiles $\chi^2 (5) = 16.06$. These changes were independent of condition. Overall gaze was longer in the stranger condition compared to the mother independent of condition $F(1,9) = 9.67$ however no gaze difference was found in the stranger phase between the object and the stranger. Physiological findings showed that temperature was significantly higher during the stranger condition independent of situation. Regions of the face that passed the significance threshold ($p = .05$) included the maxillary area $F(1,9) = 5.96$, the nose $F(1,9) = 9.30$, and as the forehead $F(1,9) = 6.25$.

Both behavioral and physiological findings emphasize the ability of the child to distinguish between a familiar and an unfamiliar person. Most importantly however, both behavioral and physiological findings portray a reaction by the infant that it is not fearful nor aversive but rather supportive of a healthy social interaction, potentially depicting an early premonition of shyness.

S 01 – 03
TEMPERAMENTAL AND COGNITIVE CORRELATES OF POSITIVE SHYNESS DURING EARLY CHILDHOOD

Susa-Erdogan G.[1], Benga O.[1], Colonnesi C.[2], Urian G.[1], Marină C.[1]

[1] Developmental Psychology Lab, Babeș-Bolyai University, Cluj-Napoca, Romania
[2] Research Institute of Child Development and Education, the Netherlands

The present study was grounded in the theoretical idea of heterogeneity in the experience and expression of shyness and in recent observational studies conducted during early childhood, that distinguished between positive and negative facial expressions of shyness. The aim of the present study was to investigate temperamental (reactive and regulative traits) and cognitive correlates (attentional orientation towards social relevant stimuli, such as emotional facial expressions) of positive shyness in preschoolers. We predicted that children's positive expression of shyness will be positively related to both reactive and regulative temperamental traits. Also, we expect positive shyness to be associated with higher vigilance towards emotional faces.

Children's expressions of shyness ($N = 30$, M age = 51.76) were observed and coded using a performance task (Colonnesi et al., 2014). Attentional orientation towards emotional facial expressions was assessed with the Dot-probe task (Bradley et al., 1998), while child reactive and regulative temperamental traits were assessed using the Children's Behavior Questionnaire (Rothbart et al., 2001).

Our preliminary results showed that positive shyness was positively associated with Smiling ($r = .36$, $p < .05$) and Approach ($r = .35$, $p < .05$), as subfactors of temperamental Surgency. From the temperamental dimension of Negative Affect, only Fear subfactor was positively associated with positive shyness ($r = .44$, $p < .05$). Also, we found that children who more frequently expressed positive shyness during the performance task, oriented more their attention towards all emotional faces (angry, $r = .49$, $p < .05$ happy, $r = .44$, $p < .05$ and fearful, $r = .58$, $p < .05$) in the Dot-probe task. Our results indicate that these children are hypervigilant when processing social relevant information and they do not avoid this information later on, as compared to the hypervigilant-avoidant attentional pattern - a cognitive marker previously linked to anxiety, especially social anxiety.

S 01 - 4

BEING SHY WHEN SKYPING WITH A PEER: THE LINK AMONG THE EXPRESSIONS OF SHYNESS, THEORY OF MIND AND SOCIAL ANXIETY

Colonnesi C., de Vente W., Nikolic M., Majdandzic M., Bögels S.M.

Research Institute of Child Development and Education, the Netherlands

Children's shy reactions have usually been investigated during performance situations in the presence of familiar and non-familiar adults and during peer interactions. Previous studies already reported empirical evidence on the associations between children's Theory of mind (ToM), social anxiety and their expressions of shyness during performance tasks. Less is known about how children's shy behavior during social interactions with peers relates to their social understanding and social anxiety. We investigated whether children's positive and non-positive expressions of shyness and verbal shyness during a simulated peer interaction relate to their level of ToM, and social anxiety.

Eighty-three 7.5-years-old children participated in the study. Each child took part in an online meeting with a (simulated) peer. Children's positive and non-positive expressions of shyness were coded as the duration of gaze aversions during positive and non-positive facial expressions respectively. Verbal shyness included the latency to respond to questions of the peer and the mean duration of the verbal reactions. Children's ToM was assessed with the TOM-test-R. Children's level of social anxiety was measured with the Picture Anxiety Test.

Preliminary multiple regressions show that: a) positive expressions of shyness were predicted by high desire-emotion understanding, $\beta = .27$, $p = .028$; b) non-positive expressions of shyness were predicted by low desire-emotion understanding, $\beta = -.36$, $p = .004$; c) children's duration of verbal reactions was predicted by high false-belief understanding, $\beta = .38$, $p = .003$, and by low social anxiety, $\beta = .27$, $p = .020$; and d) latency was predicted by lower levels of social anxiety, $\beta = -.27$, $p = .031$.

In conclusion, children's non-verbal and verbal shyness were found to be related to their levels of ToM and social anxiety. During the presentation, we will discuss the relevance of non-verbal and verbal shyness during social interactions with peers.

Friday, August 30th, 2019

Symposium 2

Makedonia Hall A 09:30 - 11:00

S 02
COGNITIVE-EMOTIONAL FACTORS UNDERLYING PROCESSES OF SOCIAL INCLUSION AND EXCLUSION

Eichengreen A.
Chair, Leiden University, Tel Aviv University

de Bower A.
Discussant, University of Groningen, the Netherlands

While children with disabilities are increasingly integrated into mainstream educational settings, many of them suffer from poor social inclusion, bullying or other forms of exclusion (Koller et al. 2018). Just attending regular classes does not guarantee peer acceptance, mutual positive relationships or full social participation. This symposium brings together perspectives on cognitive-emotional factors that may facilitate or hinder inclusive and exclusive behaviors and attitudes in children with and without disabilities. Based on the bio-psycho-social model of disability (Shakespeare, 2006), we focus both on impairment-related factors, such as communication barriers experienced by children with hearing loss, and on factors in classmates which contribute to inclusive/exclusive social environments.

Florianne Rademaker and Anke de Boer will present a research on kindergarten children's anxiety, empathy, and attitudes towards different types of disabilities. Their cross-sectional design shows that already at this young age students experience anxiety, especially towards auditory and intellectual disabilities. Their findings were not affected by direct contact with students with disabilities, thus calling for future exploration of the quality of these contacts.

Marina Camodeca's presentation addresses factors associated with young children's roles in social exclusion (bullying, victimization, outsider and pro-social defending behavior). In both cross-sectional and longitudinal designs, her data suggest that social anxiety contributes significantly to socially excluding behaviors, while feeling connected with peers can protect against victimization and contribute to pro-social behavior.

Boya Li's presentation focuses on factors underlying aggressive behaviors in adolescents with and without hearing loss. Her longitudinal data highlight the role of social emotions (shame, guilt) in the development of aggression in both groups. Her findings also posit DHH adolescents as a risk group in their development of moral emotions and aggressive behavior, which may expose them to further social rejection.

Finally, Adva Eichengreen will present accounts of DHH young adults on resilience factors which contributed to their well-being in childhood mainstream educational settings. Her qualitative data highlight diverse and multilevel retrospective perspectives on resilience factors, discussed in relation to developmental and contextual changes.

Taken together, this symposium sheds new insight into factors underlying inclusive and exclusive attitudes, behaviours and experiences across a wide developmental span and based on diverse methodologies.

S 02 – 1

KINDERGARTEN STUDENT'S INTERGROUP ANXIETY, EMPATHY AND ATTITUDES TOWARD PEERS WITH A DISABILITY

Rademaker F., de Boer A., Kupers E., Minnaert A.

University of Groningen, Special Needs Education and Youth Care, Groningen, the Netherlands

Background and aims. Young students predominantly have a negative attitude towards peers with a disability (De Boer, Pijl, Minnaert & Post, 2014; Dyson, 2005), which can be problematic. Negative peer attitudes are seen as a barrier for successful social participation of students with a disability. Students' attitudes are associated with their direct contact with people with a disability, their intergroup anxiety and empathy (Armstrong, Morris, Abraham, Ukoumunne & Tarrant, 2015; MacMillan, Tarrant, Abraham & Morris, 2013). However, no data is yet available on young students. The aim of this cross-sectional study was therefore to assess the attitudes, intergroup anxiety and empathy of kindergarten students towards students with a disability.

Methods. 272 kindergarten students completed the Acceptance Scale for Kindergarteners Revised (Favazza & Odom, 1997), and a survey on anxiety and empathy towards students with an intellectual, physical or auditory disability. Three two-way ANOVA's were conducted to compare differences among the types of disability as well as the influence of having a classmate with a disability.

Results. Participants experienced moderate intergroup anxiety (M=10.54, S =7.56), were moderately emphatic (M=9.05, SD=3.59), and held a neutral attitude toward students with a disability (M=22.56, SD=9.46). With regard to disability type, the ANOVA's indicated a significant difference for intergroup anxiety, F(2,269)=3.49, p=.03 (students experienced less anxiety towards students with a physical disability, than toward the other types of disability), but not for empathy, or attitude. Also no significant differences were found for students with a classmate with a disability and those without.

Conclusions. Young students experience some anxiety in interacting with peers with a disability. It is recommended that future research will investigate the quality of contact, as this may provide better possibilities in reducing anxiety, increasing empathy and thereby also improving peers' attitudes.

S 02 – 2

THE ROLE OF PEER RELATEDNESS IN THE RELATIONSHIP BETWEEN SOCIAL ANXIETY AND BULLYING-RELATED BEHAVIORS

Camodeca M.[1], Maierna M.S.[2]

[1]University of Udine, Department of Languages and Literatures, Communication, Education, and Society, Udine, Italy
[2]University of Milano Bicocca, Department of Psychology, Milan, Italy

Background and aims. Relationships with peers protect from victimization and foster socio-emotional adjustment (Alivernini & Manganelli, 2015; Hodges et al., 1997). In contrast, social exclusion and social anxiety are associated with severe difficulties, including behavioral problems, low self-esteem, and victimization (La Greca & Stone, 1993; Mazzone et al., 2017). We aim at uncovering whether being connected with classmates is associated with a prosocial attitude during bullying episodes and with a reduction of social anxiety and outsider behavior.

Methods. Participants were 96 8-years-old children (45 boys). Data after four months were collected on 47 of them. Children responded to self-report measures: a) a bullying questionnaire to assess bullying, victimization, outsider and defending behavior; b) the Students Relatedness Scale, which measures the degree of connection with classmates inside and outside school; c) the Social Anxiety Scale, which indicates fear of negative evaluation and distress in front of others.

Results. Cross-sectional analysis revealed that social anxiety was associated with bullying (Beta = .29; $p < .01$) and with outsider behavior (Beta = .24; $p < .05$), whereas peer relatedness with defending behavior (Beta = .31; $p < .01$). We found a moderation effect of school relatedness: social anxiety increased victimization in those children reporting a weak connection with their peers (Beta = -.29; $p < .01$). These direct associations remained valid also longitudinally. In addition, in presence of a high peer relatedness, a low social anxiety was associated to a reduced outsider behavior after four months (Beta = .47; $p < .001$).

Conclusions. Findings highlight the importance of relationships for wellbeing, which should be considered in interventions. If social anxiety may contribute to shape bullying and outsider behavior, also after a short-term period, feeling connected with peers seems a protective factor for escaping victimization, taking responsibilities, and developing a prosocial attitude.

S 02 – 3
SHAME AND GUILT: DO THEY PROTECT AGAINST REACTIVE AND PROACTIVE AGGRESSION IN ADOLESCENTS WITH AND WITHOUT HEARING LOSS?

Li B.[1], Broekhof E.[1], Bos M.G.N.[1], Rieffe C.[1,2]

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[2] School of Psychology and Human Development, Institute of Education, University College London, London, United Kingdom

Background and aims: Social emotions (shame and guilt) are learned in interaction with one's social environment. The development of social emotions can therefore be challenging for children and adolescents with less access to the social world, as is the case for adolescents with hearing loss (Ketelaar et al., 2015). Since social emotions are believed to be important inhibiting factors in the development of aggression and achieving peer acceptance, adolescents with hearing loss could be at risk for developing higher levels of aggression and social exclusion (Olthof, 2012; Roos, Salmivalli, Hodges, 2011). The aims of this study were to examine and compare (1) the development of social emotions and aggression in adolescents with and without hearing loss, and (2) the extent to which social emotions contribute to the development of aggression in each group.

Methods: Adolescents with ($n = 80$; Mage = 11.9) and without ($n = 227$; Mage = 11.6) hearing loss from 9-15 years old completed self-report questionnaires about guilt, shame, and reactive and proactive aggression on three separate occasions (Δ Time = 9 months).

Results: Adolescents with hearing loss reported lower levels of shame and guilt compared to their hearing peers. In addition, they reported higher levels of proactive aggression but similar levels of reactive aggression. Aggression decreased with age, whereas social emotions peaked in adolescence. However, adolescents with hearing loss showed protracted development for guilt specifically. The longitudinal relations between social emotions and aggression development were similar for adolescents with and without hearing loss: higher and increasing guilt contributed to less proactive aggression, whereas higher shame contributed to more reactive aggression.

Conclusions: Findings highlight i) the importance of access to the social world in the acquisition of social emotions, and ii) the unique role that shame and guilt play in the development of aggression.

S 02 – 4

WHAT HAS HELPED ME? RESILIENCE FACTORS IDENTIFIED RETROSPECTIVELY BY DEAF AND HARD-OF-HEARING YOUNG ADULTS WHO STUDIED IN MAINSTREAM CLASSES

Eichengreen A.[1,2], **Zaidman-Zait A.**[2], **Most T.**[2], **Golik G.**[2]

[1] Leiden University, Department of Developmental Psychology, Leiden, The Netherlands
[2] Tel Aviv University, Department of Special Education and Educational Counseling, Tel Aviv Israel

Background and aims. Deaf and hard-of-hearing (DHH) children who are integrated into mainstream educational settings are at risk of suffering from loneliness and social difficulties (Xie et al. 2014). Yet, some of them do not differ from hearing peers in their social and emotional well-being (Schorr, 2006). This in turn suggests that other factors are involved in explaining variability in adaptive functioning. More research is thus needed, in particularly from the viewpoint of DHH persons themselves. The aim of this qualitative study was to identify factors that promote successful socio-emotional adaptation of DHH children, as defined and identified from their own retrospective perspectives.

Method. Secondary analysis of twenty in in-depth interviews with 18-28 years old DHH individuals was conducted. Participants were asked about personal, social and familial aspects of their coping with having a hearing loss across their life span. Interviews were analyzed using inductive thematic analysis.

Results. Resilience factors were identified at three superordinate levels, each divided to several sub-themes: (a) At the intrapersonal level, factors related to individual characteristics and strategies; (b) At the interpersonal level, resilience factors referring to relationships with family, friends and other individuals from their social context; (c) At the social-cultural level, factors addressing the supportive role of social contexts outside of the educational system and the overall societal attitudes towards hearing loss.

Conclusions. Participants' accounts reflected upon diverge and sometimes contradicting ways of coping with hearing loss, all of which were identified as promoting their well-being. Changes within individuals in their perceptions of hearing loss and resilience factors are discussed in relation to developmental and social contexts. Recommendations for practical implications will be discussed.

Friday, August 30th, 2019

Symposium 3

Makedonia Hall B 09:30 – 11:00

S 03
AGGRESSION DIRECTED TOWARDS PEERS AND PARENTS DURING CHILDHOOD AND ADOLESCENCE

Monks C. P.
Chair, University of Greenwich, London, England

Tsermentseli S.
Chair, University of Greenwich, London, England

Lee S.
Discussant, Yeungnam University, South Korea

This symposium presents the findings of four empirical studies with contributions from authors in five countries (Spain, England, Wales, Greece and Australia). The papers all focus on furthering our understanding of aggressive behaviour among young people. Three of the papers explore peer-directed aggression at different ages, with papers presenting work with participants in early childhood, middle childhood and adolescence. The first paper (**Sánchez-Jiménez**, Ortega-Rivera & Monks) examines peer-aggression during early childhood, examining the relation with theory of mind, executive functioning and moral emotions. The study contributes to our understanding of this behaviour, noting that theory of mind and moral emotions are implicated in early childhood aggression. Our second paper (**Monks** & Maunder) examines bullying during middle childhood; focussing on peer relations and friendships. This paper noted that aggressive children do not have fewer friendships, and nor are these less likely to be reciprocated, but they are poorer in quality and characterised by more conflict. The third paper in this symposium (**Andreou**, Roussi-Vergou, Didaskalou, & Skrzypiec) examines adolescent bullying exploring the protective role of resilience. Although resilience was not a significant moderator of the effect of victimization experiences on wellbeing, it was positively associated with wellbeing. The final paper (Monks, Tsermentseli & **Papastergiou**) explores aggressive behaviour among young people but focusses on aggression towards parents. The paper describes a qualitative study, drawing on focus groups with professionals involved in supporting those involved in child-to-parent aggression. The findings highlight the varied forms of aggression, the reasons for why it may not be reported as well as proposals for ways to address this type of aggression. Taken together, the papers presented in this symposium further our understanding of aggression across childhood and adolescence including peer-directed and parent-directed aggression with implications for how we work with young people in combatting these behaviours.

S 03 – 1

THEORY OF MIND, EXECUTIVE FUNCTION, EMOTIONS OF RESPONSIBILITY AND DISENGAGEMENT AND AGGRESSIVE BEHAVIOUR IN EARLY CHILDHOOD IN SPAIN

Sánchez-Jiménez V.[1], Ortega-Rivera J.[1], Monks C.P.[2]

[1] University of Sevilla, Spain
[2] University of Greenwich, England

Background and aims: Studies about children's social competence conclude that there are cognitive and emotional abilities closely related to children's social interactions. In this respect, Cold Executive Function (EF), Theory of Mind (ToM) and moral emotion attributions are associated to aggressive behaviour in childhood but there is scarce research carried out in early childhood, and the majority of the studies have analysed these variables separately. This study aimed to analyse the contribution of cold EF, ToM and Moral Emotions attribution on early childhood aggressive behaviour.

Methods: 81(46.3% girls) Spanish children aged from 53 to 91 months old (mean age 69.78 months) and 10 teachers participated in this study. ToM, Planning Skills, inhibitory control and moral emotions attributions were assessed by means of personal interviews with children. Children's Proactive, Reactive, Physical and Relational Aggressive behaviour was measured by means of teacher ratings.

Results: Cluster analysis was performed for aggressive behaviour. Two groups were identified: one group with high levels of aggressive behaviour (above the mean in all the scales) and a second one with low levels of aggression. Logistic regression analysis was computed introducing Age, ToM, Planning, Inhibitory control and Moral Emotions Attribution in the first, second and third block. Interactions of Age and all the other variables were created and included in a fourth block. A dummy variable was the dependent variable: 0 was the low aggressive group and 1 the high aggressive. Results indicated that only Age*Moral emotion and Age*ToM were associated to Aggression. In both cases, older students -from 76 to 91 months old- who presented low ToM and attributed Moral Disengagement emotions to the protagonist of an aggressive story were associated to the high aggressive group.

Conclusions: This study confirms the role of ToM and Moral Emotions on aggressive behaviour in early childhood.

S 03 – 2
BULLYING AND FRIENDSHIPS DURING MIDDLE CHILDHOOD

Monks C.P.[1], Maunder R.[2]

[1] University of Greenwich, England
[2] University of Northampton, England

Group dynamics have been identified as being relevant to bullying during middle childhood; with research noting that children tend to associate with others who are similar to them in their behaviours within bullying scenarios. Research examining the friendships of children who are identified as bullying others has produced some inconsistent findings. The current study examined children's friendships and friendship quality in relation to their involvement in bullying.

Children aged 7-11 years were recruited from four schools (N=314; 52.5% female) to participate. Children were asked to report on their friendships in school, including nominating friends and best friends and reporting on best friendship quality (Friendship Quality Scale, Bukowski et al, 1994). Pupils were also asked to provide peer nominations for bully, assistant, defender, victim and bystander (based on descriptions by Salmivalli, 1996).

Bullies did not receive significantly fewer friendship nominations from peers. Nor were their friendships less likely to be reciprocated, indicating that bullies were just as likely to have mutual friendships as non-bullies. However, when looking at the quality of bullies' best friendships, it was found that they reported these as being higher in levels of help and higher in levels of conflict. As predicted, bullies were more likely to be in friendships with other aggressive children, but were also found to be friends with defenders. Although within-friendship bullying was reported within the sample, this was uncommon and children did not tend to behave aggressively towards best friends.

These findings suggest that during middle childhood, bullies are not socially isolated. Bullies have reciprocated friendships that are often with other aggressive children, but are also with prosocial individuals (defenders). Although bullies reported higher levels of conflict in their friendships, actual bullying behaviour within friendships was uncommon. The nature of bullies' friendships and potential these have for supporting further bullying is explored. Implications for bullying intervention focusing on the peer group will be discussed.

S 03 – 3

EXPERIENCES OF SCHOOL BULLYING AND PERCEPTIONS OF WELLBEING AMONG ADOLESCENTS: RESILIENCE AS A MODERATOR OF THEIR INTERRELATIONS

Andreou E.[1], Roussi-Vergou C.[2], Didaskalou E.[2], Skrzypiec G.[3]

[1] Department of Primary Education, University of Thessaly, Volos, Greece
[2] Department of Special Education, University of Thessaly, Volos, Greece
[3] College of Education, Psychology & Social Work, Flinders University, Adelaide, South Australia

Theories of risk, protection and resilience have gained widespread acceptance in recent years, as they seem to offer a satisfactory explanation as to why some adolescents fail to survive in a hostile environment while others cope adequately. Applying these theories to adolescent harassment could explain why certain victims of school bullying have fewer mental health issues than others. The main aim of this study was to investigate the possible moderating role of students' resilience in the link between adolescents' victimization at school and subjective wellbeing. Gender and age differences were also examined.

Initially, 558 students (291 males and 258 females from grades 6-10) participated in the study. Participants completed The Student Aggression and Victimization Questionnaire (Skrzypiec, 2015), The Mental Health Continuum (Keyes, 2006), and The Connor-Davidson Resilience Scale (Connor & Davidson 2003). One-hundred-twenty-seven students (22.8%) were excluded from the final analysis, as they did not report any victimization experience during the past three months.

Correlation coefficients and mean differences tests were calculated according to gender, age and school-year level. Results showed moderate to high correlations between the variables, along with gender and level-year effects. Boys reported higher levels of wellbeing and resilience along all year levels. No gender differences were found on victimization experiences. Resilience was entered in regression analysis to be tested as a moderator variable, moderating the effect of victimization experiences on wellbeing, along with the possible gender and year-level differences. The hypothesis of resilience as a moderating factor was examined following Baron and Kenny's (1986) approach, and was rejected. On the other hand, separately conducted analysis on different levels of resilience, showed higher resilience was associated with better wellbeing amongst boys and lower-year level students.

The findings have implications in terms of informing prospective interventions targeting the enhancement of student resilience for handling peer aggression effectively.

S 03 – 4

AN INVESTIGATION OF CHILD-TO-PARENT AGGRESSION IN THE U.K. – A QUALITATIVE STUDY

Monks C. P.[1], Tsermentseli S.[1], Papastergiou A.[2]

[1] Department of Psychology, Social Work and Counselling, University of Greenwich, London, England, U.K.
[2] School of Languages, Literatures and Linguistics, Bangor University, Bangor, Wales, U.K.

Although reported by parents and practitioners all around the world, child-to-parent aggression (CPA) has received limited research attention compared to other forms of family violence such as parent-to-child abuse. Definitions are unclear and no validated measures exist to assess CPA within the U.K., hindering research, policy and practice responses. We aim to examine the definitions of CPA and explore how individuals who work in the area of child-to-parent aggression (e.g. charity support workers/police) understand and define CPA.

Four focus groups were conducted with representatives from local agencies, practitioners, youth justice team officers and volunteers working for three non-profit organisations and a police station around the U.K. supporting people living with domestic abuse. Twenty-five participants took part in the focus groups aged 18 to 69 years of age and their length of time in their work with domestic abuse ranged from 3 months to 14 years.

Thematic analysis of the data elicited core themes and offered key findings complementing as well as contributing to the current literature. Participants reported on the varied forms this type of aggression can take and the reasons why it may not be reported including parental feelings of guilt and shame. Many participants highlighted the lack of trust in children services and the need for teachers to be aware of CPA so awareness can be raised, since schools are the first in line of contact.

The results show that suitable measures are needed to assess the CPA situation in the U.K.

Friday, August 30th, 2019

Symposium 4

Mycenae Hall 09:30 - 11:00

S 04

LOGOMETRO: A NEW DIGITAL STANDARDIZED BATTERY FOR THE ASSESSMENT OF LANGUAGE SKILLS

Ralli A.M.
Chair, Department of Psychology, National and Kapodistrian University of Athens

Diakogiorgi K.
Discussant, Department of Primary Education, University of Patras

Aspects of oral language ability provide the foundation of a child's academic success and psychosocial competence in school. Studies have shown that school failure may be avoided if children with language difficulties are identified early on and are provided with needs-based interventions. Up to nowadays, there was luck of a standardized psychometric tool for assessing all the language aspects in early school years in Greece. In order to fill the need for a reliable, research-based screening measure for 4-7 years old, developed *Logometro.* In this symposium, this new digital standardized battery, *Logometro*, for the assessment of language skills in pre-school and first years primary school children will be presented as well as some research findings about the complicated interplay between the various language subsystems. In the first presentation, «*A new digital standardized psychometric tool for the assessment of language in preschool years*», Asimina Ralli, will give an overview of the battery, explaining the rationale of the test, the description of the items, the administration of the tasks, the scoring of the responses, as well as the automatic report provided, and how this can be used both by the researchers and the clinicians. Then, in the second presentation, «*Assessment of metalinguistic and early literacy skills*» Faye Antoniou will focus on how 7 years old students with and without suspected learning disabilities, could be classified by using of phonological, morphological awareness and letter knowledge tasks from Logometro (Mouzaki et al., 2017). The findings are discussed in terms of how complementary mechanisms are engaged in the acquisition of language through the phonological or morphological pathways. In the last presentation, «*Narrative ability of young Greek children in relation to receptive and expressive language*», Angeliki Mouzaki, examines the concurrent association between narrative and other oral language skills in young Greek children using Logometro test. The hypothesis that narrative skills are dependent upon language understanding and are mediated by expressive vocabulary skills was verified for all age groups, genders independently of children's receptive vocabulary.

S 04 – 1

LOGOMETRO: A NEW DIGITAL STANDARDIZED PSYCHOMETRIC TOOL FOR THE ASSESSMENT OF LANGUAGE IN PRESCHOOL YEARS

Ralli A. M.[1], Mouzaki A.[2], Antoniou F.[1], Papaioannou S.[2], Diamanti V.[3]

[1] National and Kapodistrian University of Athens, Greece
[2] University of Crete, Greece
[3] University of Oslo, Norway

Aspects of oral language ability provide the foundation of a child's academic success and psychosocial competence in school. Studies have shown that school failure may be avoided if children with language difficulties are identified early on and are provided with needs-based interventions. Up to nowdays, there was a luck of a standarised psychometric tool for assesing all the language aspects in preschool years in Greece. In order to fill the need for a reliable, research-based screening measure for 4-7 years old, we developed Logometro. In particular, *Logometro* was designed to assess a child's language and communication skills in a variety of contexts, determine the presence of a developmental language disorder, describe the nature of the developmental language disorder, and plan for intervention or treatment. *Logometro* is a normed digital instrument, with a comprehensive and flexible assessment procedure. It is administered electronically and it includes 24 different tasks corresponding to language's subsystems. These are Vocabulary Knowledge tasks, Phonological Awareness tasks, Story Narration tasks, Morphological Awareness tasks, Pragmatics, and Literacy tasks. The standardization sample consisted of 669 children (329 boys and 340 girls) 4-7 years old, from a variety of socioeconomic and ethnic backgrounds across Greece. All children were native Greek speakers, without any diagnosed developmental delay or sensory deficits. According to the results, *Logometro* was indetinfied to have good psychometrilc characteristics (reliability, according to Cronbach a, and test-retest measures, construct validity by assessing children with a diagnosis, as well as high predictive validity). *Logometro* provides a digital report which describes the language strenghts and weakensess and can contribute to a more comprehensive assesment and intervention.

S 04 – 2

ASSESSMENT OF METALINGUISTIC AND EARLY LITERACY SKILLS

Antoniou F.[1], Mouzaki A.[2], Ralli A.[1], Diamanti V.[3], Papaioannou S.[2]

[1] National and Kapodistrian University of Athens, Greece
[2] University of Crete, Greece
[3] University of Oslo, Norway

The aim of the current study was to classify 7 year old students with and without suspected learning disabilities by use of phonological, morphological awareness and letter knowledge (using Logometro Mouzaki et al., 2017). Data collection involved the use of an Android application for mobile devices (tablets). Participants were 82 7-year-old children with suspected learning disabilities and 82 matched for age, and gender, peers. The at-risk group was identified using the discrepancy model evidencing a significant discrepancy between IQ (using Raven's colored matrices) and achievement on a normative language test. A Receiver Operating Characteristics (ROC) analysis was utilized to assess the correct categorization of typical and at-risk students. Results revealed that 74,2% of the students with LD were correctly categorized by the usage of the phonological awareness tasks and especially those assessedf at the phoneme level (i.e., sensitivity). Equally high correct categorization levels were produced from morphological awareness tasks (75,8%). Letter knowledge was associated with significant but lower degrees of correct classifications for at risk students. The findings are significant onto showing complementary mechanisms engaged in the acquisition of language through the phonological or morphological pathways.

S 04 – 3

NARRATIVE ABILITY OF YOUNG GREEK CHILDREN IN RELATION TO RECEPTIVE AND EXPRESSIVE LANGUAGE

Mouzaki A.[1], Ralli A. M.[2], Antoniou F.[2], Diamanti V.[3], Papaioannou S.[1]

[1] *University of Crete, Greece*
[2] *National and Kapodistrian University of Athens, Greece*
[3] *University of Oslo, Norway*

Detection of below average development in language is a very promising way to screen children for language disorders and risk of future learning problems. Narrative language skills are of particular value because they enable us to examine not only linguistic but cognitive and social aspects of child development as well, while they have high ecological validity.

In this study we examined concurrent association between narrative and other oral language skills in young Greek children. Participants were 611 students 4-7 years old. Children's language was evaluated through a new standardized battery for assessing language development in Greek called "Logometro". Task administration was completed individually through an Android application for mobile devices (tablets) enabling direct recording of children's oral responses.

Language comprehension was evaluated by two different tasks (understanding directions and a listening comprehension task). Children's expressive language skills were assessed through a word definition task. Narratives (retelling and free narration) were evaluated on the following macrostructure factors: (a) narrative introduction (convention and/ or place/ time/ heroes), (b) development of characters (state of mind and feelings of heroes), (c) problem reporting (how and/ or why and solution), and (d) result/conclusion, demonstrating adequate internal consistency (α>.82) and test-retest reliability (r=.72) as well as unidimensional internal structure.

A hypothesized mediating effect of expressive vocabulary upon the assumed contribution of language comprehension to the development of narrative skills was examined. Children's expressive vocabulary score was used as the mediating variable. The hypothesis that narrative skills are dependent upon language understanding and are mediated by expressive vocabulary skills was verified and holds for all age groups, genders independently of children's receptive vocabulary. Such findings could assist us in understanding prerequisites of children's narrative skills in order to assist them in achieving better language and communicative competence.

Friday, August 30th, 2019

Papers 1 – Methods

Pella Hall 09:30 – 11:00

OP 001

EVALUATE THE UNDERSTANDING OF EMOTIONS AND MENTAL STATES IN TYPICAL AND ATYPICAL DEVELOPMENT: RESULTS FROM TWO INNOVATIVE TOOLS

Molina P., Bulgarelli D.

Università degli studi di Torino, Dipartimento di psicologia, Torino, Italy

Emotion Understanding and Theory of Mind are two complementary, although different, aspects of child social cognition, and the TEC (Pons & Harris, 2000; Italian version: Albanese & Molina, 20132) and the ToM Storybooks (van Geert, Hoogewys, Loth & Serra, 1998; van Geert & Hoogewys, 2017; Italian version: Molina & Bulgarelli, 2012; Bulgarelli, Testa & Molina, 2015) are two innovative tools conceived to evaluate these aspects. Our research aims at verifying (i) the correlation between the two instruments, both in typical and atypical development; (ii) the developmental trend of competences by age, in typical and atypical children as well; and (iii) the relationships with verbal and non-verbal cognitive competence.

We observed 223 typically developing children, 40 children with Autism Spectrum Disorder (ASD) and 43 children with Specific Language Impairment (SLI), from the Italian standardization sample of the two tools.

Preliminary results showed a good correlation (.726, $p < .001$) in typical population, and in ASD (.713, $p < .001$) and SLI samples (.602, $p < .001$) as well. The developmental trend by age, on the contrary, was different for ASD children in comparison with typical and SLI children.

Results will be discussing in term of theoretical relationships between the two constructs and in term of instrument validation.

OP 002

ARTICULATING ADOLESCENCE AS A TRANSITIONAL STATE: COMPONENTS, MEASUREMENT AND ANALYSIS

Israelashvili M.

School of Education, Tel Aviv University, Tel Aviv, Israel

Background and aims: While adolescence is widely described as a transitional process, current literature highlights more the antecedents and problems that are associated with maladjustment during adolescence, rather than the normative challenges that adolescents encounter as people in transition. Alternatively, the Transitional Stress and Adjustment (TSA) model (Israelashvili, 2009) suggests the generic phases of adjustment to transitions (e.g., lawfulness exploration) that can be applied for better conceptualizing, measuring and intervention of normative adolescent's state and life challenges.

Methods: To explore this possibility, two studies were conducted among Israeli adolescents: Study 1 included 311 Israeli-Arab adolescents (42% males and 52% females; 44% Muslims and 56% Christens) who study in high-schools (grades 10-12). Participants completed a questionnaire that measure their level of adjustment as measured by the TSA model approach, along several other scales that measure adolescents adjustment and well-being (e.g., *C.P.I. - Socialization;* Gough, 1987). Study 2 included 442 Israeli-Jewish adolescents (46% males; 54% females) who study in Grades 7 (41%) and grade 10 (59%). Participants in Study 2 completed the same TSA-related questionnaire and adolescent adjustment scale along scales that are related to their family relationships, vigor, school adjustment and personal report on school achievements.

Results: Findings of the two studies indicated that adolescents who better handle the hassles of adolescence as a transitional state feel more comfortable in their school context, hold more positive perceptions regarding their peers and parents and report on better academic achievements and unrelated to their demographic characteristics.

Conclusions: Findings of both studies support the relevance of the TSA model for measurement of adolescents' developmental needs and as well as for identification of those who have problems with managing the challenges of transition. Theoretical and applied implications will be discussed.

OP 003
REVIEW OF TOOLS FOR PLAY AND PLAY-BASED ASSESSMENT

Bulgarelli D. [1], **Bianquin N.** [2], **Caprino F.** [3], **Molina P.** [1], **Ray-Kaeser S.** [4]

[1] Università degli Studi di Torino, Department of Psychology, Torino, Italy
[2] Università della Valle d'Aosta-Université de la Vallée d'Aoste, Department of Human and Social Sciences, Aosta, Italy
[3] Istituto Nazionale Documentazione Innovazione Ricerca Educativa | INDIRE, Roma, Italy
[4] Haute École de Travail Social et de la Santé | EESP, Lausanne, Suisse

Background and aims. Within the COST Action TD1309 "LUDI-Play for Children with Disabilities", a review of the tools for the evaluation of play and for the evaluation of child competencies through play had been made, with several aims: 1) reporting the state of the art of the existing tools for play and play-based assessment; 2) identifying the most suitable tools for the assessment of different aspects of play of children with disabilities; 3) spreading knowledge about the existing tools among play professionals, who often use self-made observation check-lists (Bulgarelli et al., 2018; Bulgarelli & Stancheva-Popkostadinova, 2018).

Methods. The literature review was performed between Summer 2016 and Summer 2017 on the following databases: PsychInfo, PubMed, Google Scholar, Google search engine. The following keywords were used: child, play, playfulness, assessment, evaluation. The criterion for exclusion were: play therapy and target population over 18 years. The authors focused on tools developed in different cultural and linguistic areas that had at least one publication in international journals.

Results. Twenty-nine tools for play or play-based assessment were retrieved. The 75.9% of the instruments were devoted to play assessment and the 24.1% to play-based assessment. The 65.6% of the tools were based on observation, 17.2% were self-report and 17.2 were other-report. The 58.6% of the tools were developed in the United States of America; the others were developed in other English-speaking countries. Sixteen tools (55.2%) were available in at least one language different from English. Different play aspects were evaluated: play activities (7 tools); play preferences (6 tools); playfulness (4 tools); physical and social environment in play situations (5 tools). Eight instruments were specifically developed for the assessment with children with disabilities.

Conclusions. Dissemination about existing play and play-based tools is crucial to better support professionals' work and play as the goal of their intervention.

OP 004
BEST PRACTICES IN CONDUCTING AND VISUALIZING LATENT CLASS (GROWTH) ANALYSES

Van Lissa C.J.

Utrecht University, NL, dept. Methodology & Statistics

Latent class analyses, or finite mixture models, have become wildly popular in developmental psychology. A downside of this popularity is that they are sometimes inappropriately used. This presentation revisits the theoretical underpinnings of latent class analysis. I will focus on the kind of theoretical questions best addressed, and the kind of statistical problems best solved, by latent class analysis. Conversely, I will also discuss in which situations latent class analysis is sub-optimal, counterproductive, or even a violation of assumptions.

Good visualizations are one of the most useful tools to help determine whether latent class analysis is appropriate, and to reveal the optimal number of classes. Unfortunately, visualizations have been largely neglected in the literature, and latent class analyses are commonly represented as a bar chart of class means based on most likely posterior class membership; occasionally enhanced with standard error bars (Figure 1).

Figure 1. Old-fashioned bar graph. Conveys no information about optimal number of clusters.
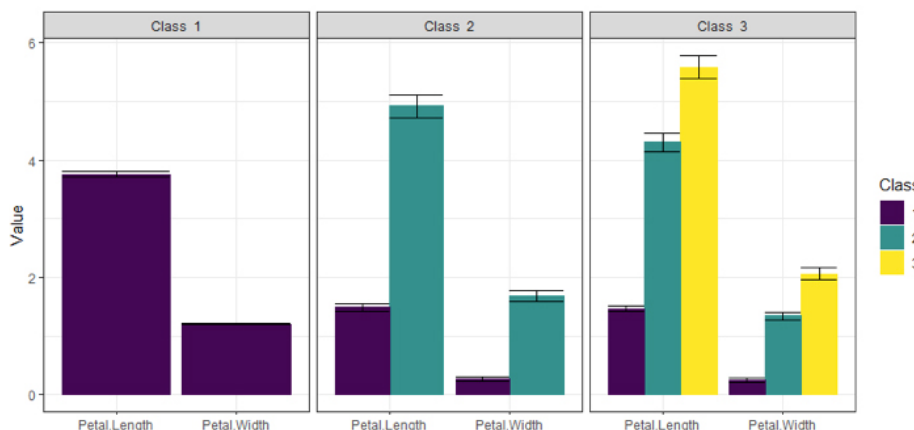
I introduce two new visualizations: First, the enhanced profile plot, with raw data weighted by posterior class probability (Figure 2). Separate classes can be recognized as clusters of dots with the same color. If variances are freely estimated, these can be represented in a way that resembles a boxplot. This plot is a superior alternative to the bar graph. Second, the mixture density plot (Figure 3). Paying homage to the fact that "finite mixture models" refer to a mixture of several normal distributions, these plots visualize those mixed normal distributions using a normal kernel density function, weighted by posterior class probability.

Figure 2. An enhanced profile plot. Visually, two clusters appears best.
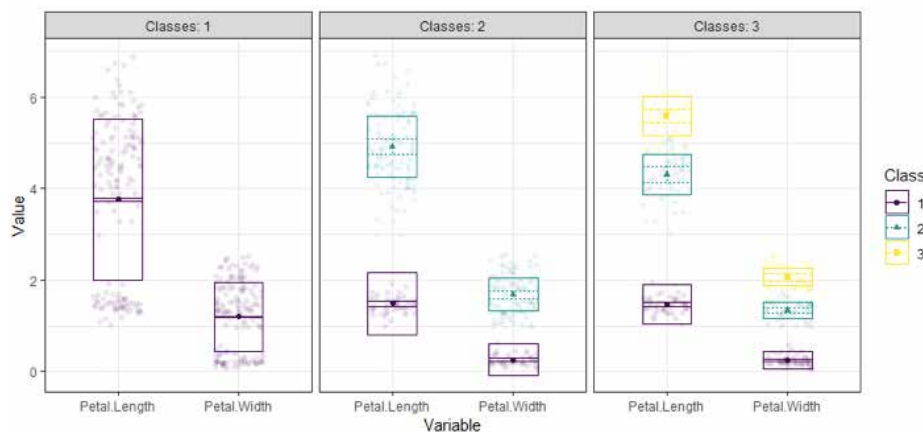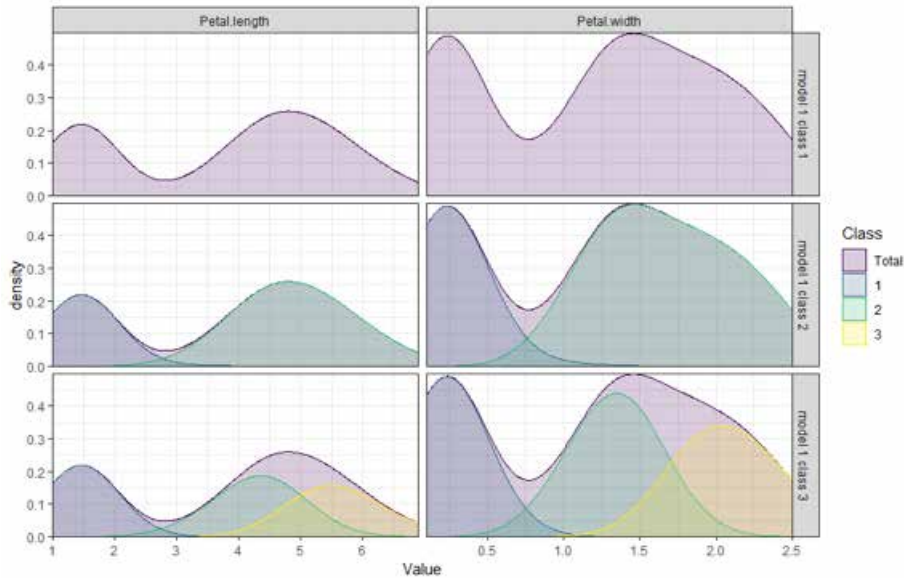
Figure 3. Mixture density plot. Again, two clusters appears best.

I have incorporated user friendly functions for running latent class (growth) analyses in batch, establishing the correct number of classes, and making beautiful, publication-quality graphics, in two R-packages: tidyLPA (only latent class), and MplusAutomation (also latent class growth analysis; requires Mplus).

OP 005

NATURE, NURTURE OR PSYCHOMETRY? - AN AGE GROUP EFFECT IN THE PROCESS OF ADAPTATION AND RECONSTRUING OF GENDER ROLE ATTITUDES SCALE

Zalewska-Łunkiewicz K., **Januszek M.**

SWPS University of Social Sciences and Humanities, Faculty in Katowice, Katowice, Poland

Gender roles attitudes depends on beliefs about them, which at the same time reflects the culture stereotypes about femininity and masculinity. The modern approach to gender roles takes the cultural changes into account and indicates the presence of not only the traditional and egalitarian attitudes but also antitraditional ones. The aim of the presentation is to discuss the process of polish adaptation of Traditional-Antitraditional Gender Roles Scale (TAGRAS) which revealed the psychometric fluctuation of measurement regarding age groups: teenagers, young adults, adults and elderly ones. The differences between adolescents and young adults will be highlighted.

The sample consisted of 540 females and males, including 215 late adolescents (aged 16-18) from secondary schools and 325 adults (aged 19-80). The methodological steps included: translation process, univariate model of CFA, reliability calculating with the use of Cronbach's alpha and test-retest method, convergent validity assessment. The additional PCA and reliability calculation were conducted for particular sociodemographic conditions.

The results showed the existence of a fluctuation in scree plots and reliability of the scale in the age groups. The univariate structure was confirmed for the group of young adults, but for adolescents results of CFA approached the required criterion. Teenagers reached higher scores is test than young adults, what suggested their more traditional attitudes toward gender roles than the attitudes presented by young adults.

The cultural and developmental context will be used to discuss the findings. Also the proposal of longer list of items as the solution will be shown. The current results indicates the need of further studies on gender role attitudes measurement tools.

Friday, August 30th, 2019

Papers 2 - Neuroscience and Psychophysiology

Florina Hall 09:30 - 11:00

OP 009

THE EFFECTS OF EARLY ADVERSITY ON INFANTS HAIR CORTISOL LEVELS: THE MODERATING ROLE OF NEGATIVE EMOTIONAL TEMPERAMENT

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[2] Institute of Child Development- University of Minnesota-Twin Cities

A number of studies have shown that exposure to poverty and socio-economic adversity are related to elevated salivary cortisol levels in children (Chen, Cohen, and Miller, 2010). Likewise, salivary cortisol has been related to infants' negative emotionality (Dettling et al., 2000). Hair cortisol is a newer method of assessing activity of the hypothalamic-pituitary-adrenocortical (HPA) axis, and less is known about how infant hair cortisol relates to family poverty and infant emotionality (Flom et al., 2017). The goal of the present study was to examine infant hair cortisol concentrations as a function of family socioeconomic status (SES) and infant negative emotional temperament. We predict that temperament would moderate SES and cortisol association, where SES effects on cortisol levels are more apparent for infants with high negative emotional temperament.

Sixty infants, 6- to 15-months of age participated in the study. Distress to limitations sub-scale was used to measure negative emotional temperament (IBQ: Gartstein & Rothbart, 2003). Mothers' education level, house income, stimulation in the home environment were reverse scored and combined to index the socio-economic adversity of the families to measure adversity. Cortisol was measured by taking a 3 cm sample of the infant's hair.

Preliminary analyses were run with the process macro of Hayes. The interaction between distress to limitation and early adversity was significant after controlling the age and birth weight of the infants, (B=.25, se=.09, p<.05, 95% CI [-.454, -.056]). According to the Johnson-Neyman region of significance analysis (see Figure 1), at higher levels of negative emotional temperament, the negative association between socioeconomic adversity became increasingly marked, while the positive association between adversity and cortisol was found at lower levels of negative emotional temperament

This study is important in terms of showing individual differences in the effects of early adversity. Results will be discussed in terms of differential susceptibility theory.

OP 010

THE CONTRIBUTION OF GENES TO THE PROGNOSIS AND DIFFERENTIATION OF TYPICAL AND LOW IQ AUTISM SPECTRUM DISORDER PROFILES

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[1] Aristotle University of Thessaloniki, Greece
[2] Democritus University of Thrace, Greece

The present study aims at understanding the relationship between genotype and phenotype in Autism Spectrum Disorders (ASD), by examining behavioral and genetic data of school-aged children with ASD (6-12 years old) with mild and severe phenotypes. We investigated whether: a) there are specific genes involved in ASD that are common in the two phenotypes, and, therefore, if cognitive and verbal skills of children with ASD can be predicted by these genes, b) there are common signaling pathways between the two phenotypes and c) children with ASD can be better classified into two groups based on their performance on cognitive or language tasks.

We assessed with standardized measures: cognitive skills: non-verbal IQ, auditory and visual attention, memory (verbal short-term, visual and auditory memory) and language skills: expressive vocabulary, picture comprehension, narration. Participants were 33 children with ASD: 18 with typical non-verbal IQ (>80 in Raven) and 15 with low non-verbal IQ (<60 in Raven). Discriminant Function Analysis showed that non-verbal IQ correctly classifies 100% of the cases, memory tasks 90.9%, attention tasks 84.8% and language measures 97% of the cases.

Genetic analysis (Whole Exome Sequencing) showed that there are 92 common genes between the severe and mild phenotypes, whereas 97 genes are unique in the severe and 29 in the mild phenotype. Pathway analysis on these unique and common genes reveals 3 common signaling pathways between mild and severe phenotypes: Olfactory transduction, ECM-receptor interaction, Metabolic pathways.

Results revealed that cognitive and language skills of children with ASD can be predicted by specific genes and that there are common signaling pathways between the two phenotypes. Finally, classification based on non-verbal IQ is found to be the most successful in distinguishing subgroups of children with ASD.

OP 011

NEURAL CORRELATES OF ERROR PROCESSING IN LATE ADOLESCENCE AND YOUNG ADULTHOOD: AN ELECTROPHYSIOLOGICAL STUDY

Knežević M.

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Background and aims: Recognizing errors and their outcomes is fundamental for behavioural regulation and optimization. In the scalp-recorded EEG, error processing is reflected in two components: the error-related negativity (ERN) which appears shortly after an error occurs, and the error positivity (Pe) which appears somewhat later and reflects conscious error recognition and strategic adjustment. Late adolescence is the age of important changes, such as completing education and finding a full-time job, which require particular skills essential for success in everyday living. The optimal use of these skills depends on brain-based control mechanisms that seem to still develop into early 20s. The aim of this study was to investigate whether performance and brain dynamics of error processing differ between late adolescents and adults.

Methods: 95 participants ages 19-44 were included in the study, divided into three age groups: late adolescents (ages 19-21), young adults (ages 23-26), and mid adults (ages 28-44). Each participant completed a number of standardized psychological tests and questionnaires, and event-related (ERP) brain activity was recorded during a Go/No-Go response inhibition task.

Results: Performance results revealed that late adolescents made more errors compared to young or mid adults, and both younger groups made these errors significantly faster than mid adults. ERPs showed reduced ERN and enhanced Pe in late adolescents compared to mid adults.

Conclusion: The results of this study indicate that the processes of error detection and conscious evaluation still change in late adolescence, and these changes are reflected in performance differences. This outcome fits well with the findings that point to significance of the ongoing structural and functional maturation of the underlying brain regions at this developmental stage. Although already functioning at a relative early age, the error processing system is not yet fully mature in late adolescence.

OP 012
NEONATAL IMITATION: THE ROOTS

Kugiumutzakis G.

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To my knowledge out of 32 published studies of imitation during the first four weeks of life, 24 studies (from 13 laboratories) have found evidence of imitation in a range of primates, including humans, chimpanzees and rhesus macaques, and eight studies (from six laboratories) have failed to find evidence of imitation in human neonates.

I present the results of four studies exploring the problem of the origin of imitation in successive, experimental studies with term and preterm neonates, aged 10-45 minutes after the birth (N=170). In the first three studies the neonates were exposed to the facial models of mouth opening and tongue protrusion.

Participants in Study I were 98 term neonates, born naturally.

Study II involved 11 term neonates, born by Caesarian section.

Study III involved 12 preterm neonates (35-36 weeks of pregnancy) born naturally or by Caesarian section.

In Study IV 49 term neonates, born naturally, were exposed to the above two models plus the model of closing-opening both eyes and the vocal models of the sounds /a/, /m/ and /ang/.

The results indicated that both preterm newborns (Study III) and term newborns (Studies I and II) were able to imitate the facial models of mouth opening and tongue protrusion. In Study IV the term newborns also imitated the modelling of closing-opening both eyes and the sound /a/.

I discuss here three issues that arise from studies of neonatal imitation:

a) similarities and variations in the intersubjective imitations of term and preterm neonates;

b) possible reasons for the negative results in studies of neonatal imitation; and

c) the possibility that the first observable, imitative *efforts* start prenatally.

Friday, August 30th, 2019

Papers 3 – Cognitive Development

Kozani Hall 09.30–11.00

OP 013
VERBAL AND VISUAL MEMORY PERFORMANCES OF CHILDREN WITH MODERATE-INTO-SEVERE ASTHMA

Taha H.

Sakhnin College And Safra Brain Research Center For Learning Disabilities, Haifa University, Israel

Previous research reported about high comorbidity between asthma and neurodevelopmental disorders. Recently, asthma was associated also with executive functions poorness. The current study aimed to investigate the verbal and visual memory performances among fifteen asthmatic kindergarten children compared to the performances of other fifteen healthy kindergarten children. The results showed that the asthmatic group revealed poor performances in the immediate short term verbal memory and the verbal working memory tests but not in the verbal learning test as it was compared to the healthy group. In addition, the asthmatic group revealed poor performances in the visual memory tasks compared to the healthy group. The results were explained in light of the assumption that poor executive functions might be interfere the process of managing the attentional resources which are needed through the process of memory encoding and retrieval.

OP 014
DRAWINGS FACILITATE SYMBOLIC UNDERSTANDING OF FIGURATIVE EXPRESSIONS

Allen M.L. [1], Butler H. [2]

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[2] *Lancaster University, UK*

Background and aims: Understanding the symbolic aspects of figurative expressions (e.g. metaphors and idioms) develops during middle childhood. Drawing can facilitate recall and may aid other aspects of linguistic expression. We examine whether children aged 5-9 provide more symbolic interpretations of figurative statements in drawings relative to verbal explanations, and whether drawing can facilitate overall symbolic interpretation.

Methods: 96 children participated, and were evenly split into three age groups (5, 7, 9). Within each group, children were randomly assigned to one of two conditions and presented with 4 figurative expressions (e.g. raining like cats and dogs). In the 'draw first' condition, they were asked to depict then explain the statements, and in the 'explain first' condition they were asked to explain then draw the expressions. Drawings and explanations were coded for symbolic or literal content.

Results: A Mixed ANOVA revealed a main effect of response type ($F_{(1, 90)} = 25.46$, $p < .001$, $\eta p^2 = .221$), with more symbolic responses for explanations rather than drawings. Main effects of condition ($F_{(1, 90)} = 4.27$, $p < .05$, $\eta p^2 = .045$), and group ($F_{(2, 90)} = 70.49$, $p < .001$, $\eta p^2 = .610$), were also obtained. Children provided more symbolic responses in the 'draw first' condition, with older children providing more symbolic responses overall.

Conclusions: Drawing figurative expressions can facilitate subsequent symbolic verbal explanations, but overall children provide more symbolic interpretations when they describe metaphors and idioms. Results are discussed in terms of the symbolic links between drawings, figurative language and development.

OP 015
THE ROLE OF CONCEPTUAL ABILITIES IN INTELLECTUAL DEVELOPMENT AT YOUTHFUL AGE

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Problem Statement: Conceptual abilities can play the role of a resource basis for human intellectual development since conceptual abilities determine the development of individual intelligence at all stages of ontogenesis (Vygotsky, 1982; Vekker, 1976; Li, 1996;Kholodnaya,2007,etc.). Conceptual abilities are mental properties that determine the formation and enrichment of semantic networks, the use of categories of different degrees of generality, the generation of new mental contents.

Three different types of conceptual abilities can be distinguished: semantic (the ability to operate on the content of features), categorical (the ability to transform categorical characteristic of varying degrees of generality), generative (the ability to identify implicit regularities and create new mental products) (Kholodnaya,2012). In our studies, the important influence of conceptual abilities on features of intellectual development in adolescence and youth (Trifonova, 2015; Druzhinina, 2016; Sipovskaya, 2016) has been shown.

The purpose of the study is to highlight the selective nature of the connections of conceptual (categorical and generative) abilities with the level of analytical intelligence and indicators of creativity (verbal and non-verbal) in youthful age.

Research Methods: A complex design including assessment of conceptual abilities (techniques "Generalization of three words", "Conceptual synthesis"), creativity (TTCT), intelligence (SPM) and was used. Participants were 408 Russian students (71. 7% female) aged 18-23.

Findings: Respondents with a high level of conceptual abilities (both generative and categorical) have not only high indicators of analytical intelligence ($p \leq 0,05$), but also creativity ($p \leq 0,05$). However, respondents with the highest categorical abilities but relatively low generative abilities have significantly lower indicators of analytical intelligence ($p \leq 0,01$) and creativity ($p \leq 0,001$).

Conclusions: Conceptual abilities can be considered as a leading factor in intellectual development in adolescence. Moreover, generative abilities have a bigger impact on the level of analytical intelligence and creativity.

OP 016

EXPLORING THE RELATION BETWEEN MATERNAL MIND-MINDEDNESS AND CHILDREN'S SYMBOLIC PLAY: A LONGITUDINAL STUDY FROM 6 TO 18 MONTHS

Di Dio C.[1,2]**, Giovanelli C.** [3]**, Lombardi E.**[1,2]**, Meins E.** [4]**, Tagini A.**[3]**, Carli L.**[3]**, Marchetti A.** [1,2]

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Mind-Mindedness (MM) refers to the caregiver's tendency to treat her child as an individual endowed of a mind (Meins, 1997). This ability may facilitate the caregiver's role in promoting the exchange and negotiation of meaning that occurs during children's symbolic play (SP), co-constructing a representational context with her child (Meins & Russell, 1997). Accordingly, the present study investigated how mothers' early mind-mindedness is related to the sophistication of children's symbolic representation during joint mother-infant pretend play, exploring whether mind-related comments in the first year of life predicted later superior symbolic representation.

The study was carried out on 43 mothers. It investigated: 1) maternal Mind-Mindedness (MM coding manual, v. 2.0) when infants were 6 and 12 months of age; and 2) infant symbolic play classified in 5 hierarchical levels (coding system by McCune-Nicolich, 1981) at infants' ages 12 and 18 months. For our purpose, the most complex levels of SP were summed to index sophisticated play at 12 and 18 months of children's age. Regression analyses were used to predict mothers' MM on children sophisticated SP.

The main results suggest a relationship between 6-month appropriate comments and 12-month SP, as well as between 12-month appropriate comments and concurrent and 18-month sophisticated SP, $p<.01$. Twelve-month comments were also found to significantly predict 18-month sophisicated SP, $p<.01$. This effect was independent of mothers' age, education, and profession, as well as of children's gender and age.

This study underlines the role of mothers' appropriate attunement to their infants' internal states for children's developing symbolic representation. In particlular, data show the significance of mothers appropriately interpreting infants' mind by the end of the first year of life for the development of children's sophisticated symbolic play at age a year and a half.

OP 017

COGNITIVE DEVELOPMENT OF INFANTS IN INSTITUTIONAL CARE SETTINGS, COMPARISON WITH THE LOW AND HIGH SES FAMILY GROUPS

Ertekin Z. [1], Berument S.K. [1], Gunnar M.R. [2]

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[2] Institute of Child Development- University of Minnesota-Twin Cities

Research findings have indicated that children who were reared in institutions (e.g. orphanages) increasingly lag behind in cognitive development the longer they are in institutional care (Colvert et al., 2008; Smyke et al., 2007). Most of the studies were carried out with the previously institutionalized children. However, there is less study of infant's development who are currently residing in institutions. Therefore, the aim of the current study is to compare cognitive development of infants currently in institutional care with the infants reared by families in low and high socio-economic (SES) backgrounds. The moderation role of temperament will also be examined.

A total of 182 infants (6 to 18 months) were recruited to the study (institutions= 72, high SES= 52, low SES= 58). Cognitive development of infants was measured by four different tasks: an attention task (Clearfield & Jedd,2013), a deferred imitation task (Goertz et al.,2011), an object permanence task (Moore & Meltzoff,2008) and an a-not-b task (Nampijja et al., 2012). Soothability (falling reactivity/recovery from distress sub-scale) was the aspect of temperament examined (IBQ: Gartstein & Rothbart,2003).

According to ANOVA comparison, institutional infants had lower cognitive scores in all tasks compared to both family group. Moderation analyses were run with the process macro of Hayes. The interaction between care types and soothability was significant in predicting attentions scores. According to slope analyses, the effects of family groups were significant in the low (b=22.23, p<.001, 95% CI [12.03, 32.43]) and moderate (b=14.48, p<.01, 95% CI [7.57, 21.40]) levels of soothability, but not among the most soothable infants. Unexpectedly, it was the low SES infants who scored highest on attention at low (b=25.74, p<.001, 95% CI [14.22, 37.27]) and moderate (b=17.29, p<.01, 95% CI [8.77, 25.81]), but not high levels of soothability.

OP 018

COMPARE FIRST! HOW CHILDREN GENERALIZE NOVEL OBJECT NAMES? WHAT EYE TRACKING DATA TELL US?

Thibaut J.P., Witt A.

University of Bourgogne Franche-Comté, LEAD CNRS, Dijon, France

Background. Studies in conceptual development have repeatedly shown that comparison settings (i.e., several stimuli introduced simultaneously) favor conceptualization and generalization, by comparison with no-comparison learning designs. In a comparison setting, we tested 5- and 8-year-old children's generalization of novel names for objects with a design in which we manipulated the semantic distance between training items and between training and generalization items.

Methods: 14 trials each composed of two learning stimuli and a set of three options in which participants had to find a taxonomic match among a thematic foil and a perceptually similar foil. In order to study the temporal dynamics of comparison we recorded eye-tracking data. We manipulated the semantic distance between the two training items (e.g., two bracelets versus a bracelet and a watch), and the semantic distance between the training items and the test items (e.g., a pendant versus a bow tie).

Results: there were effects of semantic distance showing that the best results were obtained with semantically distant learning items and semantically close stimuli. The eye movement data revealed clear patterns of exploration in which participants first focus on the training items and compared them with each of the choice options. We also compared the search profiles for correct answers and errors, with errors.

Conclusion: We interpreted the generalization patterns in terms of alignment versus projection of a solution and in terms of constructive matching versus response elimination. Overall, these results draws a clear portrait of the steps participants follow to reach a solution, either correct or incorrect.

Friday, August 30th, 2019

Papers 4 – Individual and Social Correlates of Deviant Behaviors

Edessa Hall 09.30-11.00

OP 019

INFANT UNDERSTANDING OF DIFFERENT FORMS OF SOCIAL EXCLUSION

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[1] University of Oslo, Norway
[2] Harvard University, USA

Social exclusion is a complex, painful and pervasive experience of human existence. Given the threat that this experience poses to one's sense of belonging, that is important for maintaining health and well-being (Baumeister & Leary, 1995; Beekman, Stock, & Marcus, 2016; Smart Richman & Leary, 2009), and indeed, must have posed to ensuring one's survival in ancestral times (Hawkley, Cacioppo, & Correll, 2013; Heatherton, 2011; Powers & Heatherton, 2012), it is not surprising that human adults are particularly attuned and responsive to cues that signal exclusion in various social settings (Beekman et al., 2016; Hawkley et al., 2013; Juvonen & Graham, 2014; Shaver & Mikulincer, 2009). But just how adept are human infants at detecting these cues and understanding their associated outcomes?

In a series of eye-tracking studies, we test for infant understanding of explicit and implicit forms of social exclusion by analysing their gaze behaviours as they watch simple animations depicting these social events. Preferential reaching task and anticipatory looking paradigms are used to assess understanding of associated outcomes. Across all studies (n=72), we find that 7-9 month old infants exhibit non-random visual scanning and gaze behaviours and respond systematically in their choice of one character over another in a subsequent preferential reaching task. Together, our results suggest that not only are preverbal infants able to follow and understand these social events, but that they also update their representations of particular characters as events unfold and evaluate characters on the basis of their actions.

OP 020

PROMOTING HEALTHY EATING, ACTIVE PLAY AND SUSTAINABLITY AWARENESS IN EARLY-CHILDHOOD CURRICULA: RESPONDING TO THE IMPACT OF 360 DEGREE MARKETING AND MEDIA ON CHILD DEVELOPMENT

Skouteris H., Morris H.

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Childhood obesity is a persistent and worldwide problem. Digital media reduces young children's levels of physical activity, simultaneously promotes their exposure to 360 degree marketing, and is therefore associated with childhood obesity. Early childhood educators increasingly bemoan the extent to which '360 degree marketing' influences young children's play, the type of foods they bring to their centres and the range of clothing and toys in which they are interested. We therefore, propose a solution to the obesity crisis that is directed towards helping young children understand the connections between healthy eating, active play, and environmental sustainability.

This presentation reports on the: (1) development of a teacher 'tool-kit' that helps educators to combat the influence of media and marketing by integrating healthy eating, active play, and sustainability education for pre-school children using play-based learning; and (2) findings from a randomised trial (n= 300 preschool children) that aimed to increase children's knowledge of healthy eating and sustainability (HES) following participation in teacher developed play-based learning experiences. The secondary aims included: increased fruit and vegetable intake, and decreased packaged/unhealthy foods intake and a tertiary aim was to explore changes in physical activity. 300 children completed a HES assessment at three time-points. Intervention group children significantly increased their HES knowledge three-months post intervention compared to control, reduced their unhealthy food intake at immediate post and increased their vegetable intake three-months post intervention. No significant changes in physical activity were found.

Our play-based HES intervention allowed children to build their everyday concepts into mature concepts of the importance of healthy eating and sustainability. Our aim is to create improved long-term outcomes for children's health and the environment by generating research findings that inform health promotion policy and practices that foster healthy child development, by combating childhood obsogenic behaviours, in early childhood education.

OP 022

CHILDREN'S EVALUATIONS OF HYPER-COMPETITIVE DEVIANT PEERS WITHIN AN INTERGROUP CONTEXT

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Department of Psychology, Goldsmiths, University of London, London, UK

Research has shown intergroup competition and competitive ingroup norms increase intergroup biases during childhood (Abrams, Rutland & Cameron, 2003; McGuire, Rizzo, Killen & Rutland, 2018). In childhood there are different levels of competitiveness (Menusch & Andreas, 2018), with some contexts being hypercompetitive (i.e., when groups want to win at any price). Such hyper-competiveness may be considered a moral transgression, since it goes against fair competition and disregards the welfare of others.

On solely moral grounds children should show a preference for non-competitive over hypercompetitive peers, yet in intergroup contexts children consider both moral and group processes when making social and moral judgements (Rutland et al, 2010). The current study examined children's evaluations of ingroup and outgroup deviant peers within a hypothetical team game, when the ingroup norm was either hypercompetitive or non-competitive.

Children (n= 145, age: 5-11 years) were asked to imagine they were involved in a hypothetical game of 'Tug of War'. Children were allocated to a team and told that their team had an ingroup norm of hyper-competitiveness or non-competitiveness. Children were asked to evaluate both ingroup and outgroup deviant peers. 2 x (Age group: young, old) x 2 (Norm Manipulation: Hypercompetitive, Non-competitive) x 2 (Deviant: Ingroup, Outgroup) mixed design was adopted.

Results indicated that with age children showed an increasing preference for non-competitive deviant peers over the hypercompetitive deviant peers. This suggests a developmental trend towards more moral considerations when judging hypercompetitive peers. However, at all ages children were more tolerant of hypercompetitive ingroup deviant peers than hypercompetitive outgroup deviant peers. This demonstrates an ongoing bias in favour of ingroup peers even when they engage in a moral transgression. The compatibility of these findings with the Social Reasoning Developmental model of social and moral judgments will be discussed (Rutland et al, 2010; Rutland & Killen, 2017).

OP 023

INDIVIDUAL AND SOCIO-ENVIRONMENTAL RISK FACTORS OF GANG INVOLVEMENT IN A COMMUNITY SAMPLE OF ADOLESCENTS

Dragone M.[1], Affuso G.[2], De Angelis G.[2], Esposito C.[1], Miranda M. C.[2], Bacchini D.[1]

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Background and aims: Youth gang, "any durable, street-oriented youth group whose involvement in illegal activity is part of its group identity" (Klein & Maxson, 2006), is an emerging problem throughout the world. Other characteristics (e.g., shared identity, use of symbols and identified territory) are critical 'descriptors' of gang affiliation. Individual and socio-environmental factors promote gang affiliation.

Our aim is to investigate the associations of moral cognitions (individual factor) and family ties (contextual factor) with gang involvement, hypothesizing that gang affiliated are higher in cognitive distortions (CDs) and parental rejection (PR) than not affiliated. Furthermore, we examine whether the associations between CDs and PR with antisocial behaviors (ASBs) varies depending on gang affiliation.

Methods: One hundred fifty-nine male adolescents (Mage=15.81; SD=1.18) attending schools in a high-risk urban area in Southern Italy completed: i) Antisocial behavior scale, developed for the present study, to detect the involvement in 3 different types of ASBs ('interpersonal', e.g. aggression to other people; 'societal', e.g. damaging public property; and 'risk behaviors', e.g. drug use); ii) How I think Questionnaire (Barriga et al., 2001), to evaluate moral CDs; iii) Parental Acceptance-Rejection Questionnaire (Rohner, 1991), to investigate the perceived PR; iv) an adaptation of the Pyrooz and Sweeten (2012) gang involvement questionnaire.

Results: Gang affiliated (53 participants) were higher in CDs and in all ASBs than not affiliated (t test: $ps<.001$). No differences emerged for PR.

Hierarchical multiple regressions revealed that gang affiliation, PR and CDs were unique predictors of all types of ASBs. Gang affiliation moderated the association between CDs and ASBs: among not affiliated, only those with high levels of CDs were involved in ASBs, whereas among affiliated all individuals were highly involved in ASBs regardless of CDs' levels.

Conclusions: High levels of CDs characterized youth gangsters. Gang affiliation is a strong risk factor for ASBs.

OP 024

THE MEDIATING ROLE OF ANGER INTENSITY BETWEEN PEER ATTACHMENT AND ANGER EXPRESSIONS AMONG ADOLESCENTS: DOES SEX MATTER?

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Background and Aims. Anger has been related to physical and mental problems among adolescents (e.g., Chaplin, 2006). Although parental attachment has been demonstrated to underlie adolescents' anger (e.g., Konishi & Hymel, 2014), little is known about the role of peer attachment despite that peers play an increasingly salient role during adolescence (Oberle, 2018). To address this gap, this study examined peer attachment in relation to adolescents' anger experiences, as denoted by anger intensity and anger expressions. Based on Bowlby's (1973) theory, anger intensity was hypothesized to mediate the association between peer attachment and adolescents' anger expressions (see Figure 1). Furthermore, as boys and girls could differ in their anger experiences (Wong, Konishi, & Zhao, 2018), sex was accounted.

Methods. Participants included 776 (379 boys) Canadian adolescents (M_{age} = 15.2). Anxious and avoidant peer attachment were assessed with the Comprehensive Adolescent-Peer Attachment Inventory (Moretti, McKay, & Holland, 2000). Anger intensity and anger expressions (i.e., anger-in and anger-out) were assessed with the State-Trait Anger Expression Inventory 2 (Spielberger, 1999).

Results. A series of multiple regression was performed separately for boys and girls to test the hypothesized models while accounting for sex differences (see Table 1). For adolescent boys, both anger-in expression and anger-out expression were positively predicted by anxious and avoidant peer attachment through anger intensity. For girls, anger-in expression was positively predicted by anxious and avoidant peer attachment through anger intensity; anger-out expression was positively predicted by anxious peer attachment through anger intensity. Although no significant direct association was found between avoidant peer attachment and anger-out expression, an indirect association was found via anger intensity.

Conclusion. Current findings suggest that associations between peer attachment and anger expressions might differ for boys and girls. Implications for theories, research, and practice will be discussed.
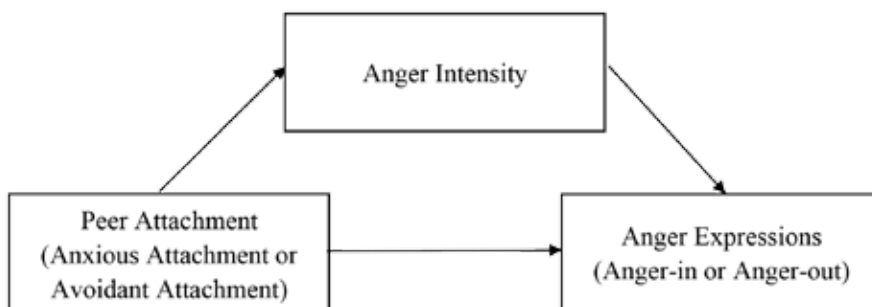

Figure 1. Hypothesized model for the association between peer attachment and anger expressions through anger intensity

Table 1. Mediating Effect of Anger Intensity in the Associations Between Peer Attachment and Anger Expressions Among Boys and Girls.

	Independent variable		Dependent variable	B	SE B	β	Adjusted R²
Boys							
AXPA & AIE							
Step 1	AXPA	→	AIE	.177***	.022	.386***	.147
Step 2	AXPA	→	AI	.139***	.024	.288***	.080
Step 3	AXPA	→	AIE	.136***	.022	.296***	.235
	AI			.297***	.045	.312***	
AVPA & AIE							
Step 1	AVPA	→	AIE	.128***	.026	.244***	.057
Step 2	AVPA	→	AI	.073**	.028	.132**	.015
Step 3	AVPA	→	AIE	.102***	.025	.195***	.191
	AI			.354***	.044	.372***	
AXPA & AOE							
Step 1	AXPA	→	AOE	.078***	.021	.184***	.031
Step 2	AXPA	→	AI	.139***	.024	.288***	.080
Step 3	AXPA	→	AOE	-.001	.017	-.002	.415
	AI			.567***	.036	.647***	
AVPA & AOE							
Step 1	AVPA	→	AOE	.048	.025	.099	.007
Step 2	AVPA	→	AI	.073**	.028	.132**	.015
Step 3	AVPA	→	AOE	.007	.019	.014	.415
	AI			.565***	.035	.645***	
Girls							
AXPA & AIE							
Step 1	AXPA	→	AIE	.155***	.022	.335***	.110
Step 2	AXPA	→	AI	.213***	.022	.438***	.192
Step 3	AXPA	→	AIE	.072**	.022	.155**	.245
	AI			.392***	.046	.411***	
AVPA & AIE							
Step 1	AVPA	→	AIE	.139***	.025	.268***	.072
Step 2	AVPA	→	AI	.070**	.027	.130**	.014
Step 3	AVPA	→	AIE	.108***	.022	.209***	.269
	AI			.431***	.041	.452***	
AXPA & AOE							
Step 1	AXPA	→	AOE	.133***	.021	.304***	.092
Step 2	AXPA	→	AI	.213***	.022	.438***	.192
Step 3	AXPA	→	AOE	.000	.018	.001	.476
	AI			.625***	.037	.691***	
AVPA & AOE							
Step 1	AVPA	→	AOE	-.005	.025	-.001	-.002
Step 2	AVPA	→	AI	.070**	.027	.130**	.014
Step 3	AVPA	→	AOE	-.050**	.018	-.102**	.486
	AI			.638***	.033	.705***	

Note. AXPA = Anxious peer attachment; AVPA = Avoidant peer attachment; AIE = Anger-in expression; AOE = Anger-out expression; AI = Anger intensity.

*p < .05. **p < .01. ***p < .001.

Friday, August 30th, 2019

Papers 5 – Moral Development I

Naoussa Hall 09.30–11.00

OP 025

CHILDREN'S THIRD-PARTY PUNISHMENT: COGNITIVE MODELS, AFFECTIVE STATES AND MOTIVATIONS

Arini R. L. [1], Mahmood M. [1], Bocarejo Aljure J. [2], Nassar Pereira J. S. [2], Wiggs L.[1], Ingram G. P. D. [2], Kenward B. [1]

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People conceptualise moral norms according to multiple domains (Graham et al., 2011); it is unknown whether children fit punishment types to moral violation types in terms of domain. Despite stated deterrist justifications, pleasure at retribution appears to guide adults' punitive behaviour (Crockett, Özdemir & Fehr, 2014); it has not been investigated whether children enjoy punishing.

In Experiments 1 (n=72) and 2 (n=80), the experimenter told British 5- to 11-year-olds they were the referees in a computer game featuring teams of players. As these players violated fairness or loyalty norms, children could punish them. We measured the type of punishment (economic or social) children chose and their enjoyment in doing so.

Unfairness was preferentially punished economically ($p<.001$), but disloyalty was punished equally often economically or socially ($p=.079$), indicating that children make the punishment fit the crime, but only to equalise economic wrongs. Children did not enjoy punishing: those who believed they allocated real punishment reported no enjoyment more often than children who believed they were pretending to punish, p=.018.

Experiment 3 (ongoing, n=33) adapts the paradigm for Colombian children and manipulates intentionality. Transgressions characterised by negative intention and positive outcome elicited more severe judgements than those characterised by positive intention and negative outcome, $p=.014$, but only with loyalty (not fairness) transgressions. Anticipated feelings about punishment were marginally more negative than feelings experienced immediately after punishment, $p=.074$.

In a different paradigm (Experiment 4, ongoing, n=69), British and Colombian 7- to 11-year-olds operated a Minecraft Justice system in which they could punish transgressors and compensate victims of different transgressions. Children enjoyed compensating victims more than punishing transgressors, t(68)= -4.934, $p<.001$, and endorsed deterrence over retribution as their punishment motive, t(68)= -8.318, $p<.001$.

Reported deterrent motives, lack of enjoyment of punishing and preference for compensation suggest that children's punishment motivations are primarily deterrent.

OP 027

CHARACTERISTICS OF NATURAL MENTORING RELATIONSHIPS AS PREDICTORS OF POSITIVE YOUTH DEVELOPMENT

Mirković B.[1], Merkaš M.[2]

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Relationships with caring adults known as natural mentors can enhance positive youth development (Bowers et al., 2014). An important question is which characteristics of these relationships are most important for the positive development of youth. Thus, the aim of this study was to examine how certain structural and quality characteristics of adolescents' natural mentoring relationships contribute to adolescent positive development.

Participants were 277 adolescents from Croatia (57% of girls) with mean age 16.5 years. Adolescents completed the Inventory of positive youth development (Arnold, Nott, & Meinhold, 2012), the Inventory of socially supportive behaviours (Barrera, 1981), and for the purpose of this study, a constructed scale of closeness in their relationships with natural mentors. Adolescents also provided data on the sociodemographic characteristics of their mentors (age, gender, education, employment status, occupation, the social role of mentor for an adolescent).

The result showed that most adolescents (80.5%) have a natural mentor in their life, most of the same gender as adolescent and someone who is a family relative. Adolescents value these relationships highly and see their mentors as role models. The adolescents' natural mentoring relationships are mostly long-lasting (average length is 10 years) and characterized by a high frequency of contact. The relationships are also characterized by high support and closeness (mutuality and disclosing). Adolescents are very satisfied with these relationships and valued them highly. The results of the regression analysis show that significant predictors of positive adolescent development are the gender of adolescents, the education level of mentors, mutuality and the frequency of conflict.

Positive youth development is more expressed in girls, and positive predictors are higher levels of mentors' education, higher sense of mutuality in the relationship, and lower frequency of conflict.

OP 028

MINIMAC: A SHORT DEVELOPMENTAL QUESTIONNAIRE OF MORALITY-AS-COOPERATION

Van Lissa C.J.[1], Chesters M.J.[2], Curry O.S.[3]

[1] Utrecht University, dept. Methodology & Statistics
[2] University of East London, dept. Psychology
[3] University of Oxford, Institute of Cognitive and Evolutionary Anthropology

Most theoreticians agree that moral dispositions motivate prosocial behavior (Hoffman, 2000). From this premise, the theory of Morality-as-Cooperation (MAC; Curry et al., 2018) deduced in which domains of social life moral judgment ought to be relevant. These domains are 1) helping family, 2) helping groupmates, 3) reciprocity, 4) preventing conflict through hawkish, or 5) dove-ish, signaling, 6) fairly dividing resources, and 7) respecting prior ownership. The recently developed MAC questionnaire is the most psychometrically sound measure of moral dispositions available for adults. The goal of the present study was to develop a brief and easy-to-understand version of this scale for children, with three items per domain. The scale should have content validity and psychometric reliability for children as young as 8, and as old as 18.

Five items per domain were generated in English, Dutch, and German, and back-translated by native speakers blind to the study goals. We used a machine learning algorithm (Saris & Oberski, 2014) to predict item quality based on semantic characteristics, and applied suggested improvements until the predicted quality was good for all items. Next, we collected data on two age cohorts in German (N_{8-12}: 172, N_{13-18}: 212), and Dutch (N_{8-12}: 116, N_{13-18}: 128) schools.

Data were analyzed using confirmatory factor analysis, with a holdout dataset for validation. To identify the three best items from each scale, we applied an automated hierarchical process (Akogul & Erisoglu, 2016), assigning equal weight to the factor loadings from each cohort.

Results indicated that the reliability of the resulting scales was acceptable; Cronbach's alphas .62 - .70. Since alpha increases with the number of scale items, this is a relatively high estimate for three-item scales. miniMAC might thus be a suitable instrument for research on moral dispositions in children of a wide age range, which is useful for longitudinal research.

OP 029

THE RELATIONSHIP BETWEEN CHILDREN'S AGE AND SHARING BEHAVIORS: THE MEDIATOR ROLE OF MORAL REASONING

Er Vargün G.[1], Akgün S.[2]

[1] Anadolu University
[2] Mersin University

Literature on the development of prosocial behavior suggests that older children are more prosocial than their younger counterparts. For example, studies on sharing have shown that children's sharing allocations were higher at primary school age than at preschool age. According to Kohlberg's theory of moral development, children's moral reasoning abilities increase parallel to their cognitive development depending on age. These age-related developments in moral reasoning might play an important role in increasing prosocial behavior of children. Therefore, in this study we have examined whether moral reasoning abilities have a mediator role in the relationship between age and sharing behaviors of children aged 4 to 9 years old. Children's sharing behavior was measured by the number of stickers shared with anonymous peers in the dictator game. Moral reasoning abilities of the children were evaluated by having them respond to four stories each containing a moral transgression: stealing, harming another child, not sharing, and peer rejection. The results of the mediation analysis conducted with structural equation modeling showed that children's moral reasoning abilities partially mediated the relationship between age and sharing behavior. In other words, age of the children predicted the sharing behavior both directly and via the children's moral reasoning abilities. Even if the children's sharing behaviors increase as their moral reasoning abilities develop, age has a crucial role in this increase. The partially mediating role of moral reasoning implies the presence of possible other variables explaining the relationship between age and sharing.

OP 030

EXPLORING MORAL VALUES IN PRIMARY SCHOOL CHILDREN IN UK (EU ETHIKA PROJECT)

Fotakopoulou O. [1], Page D. [2], Mogra I. [1]

[1] Birmingham City University, UK
[2] University of East Anglia, UK

Objectives: The primary objective of the proposed paper is to report on findings from UK's participation in the EU ETHIKA project: Ethics and values education in schools and kindergartens. Current study's aim was to explore primary school children's understanding of ethical values.

Design: A qualitative approach was adopted and research was carried out using focus group methodology. Focus groups were designed and delivered by the group of the researchers in line with the principles of the EU ETHIKA project.

Methods: Primary school students from two age groups 7–9 and 9–11 years of age were recruited in the study. Focus groups' discussions took place in their schools, usually in the library, where participants were escorted by their teacher and researcher. The materials consisted of stories and activities designed by ETHIKA on respect and happiness (7–9 age group, titled "The story of Fluffy") and moral values (9–11 age group, titled "The dog and the wolf"). Grounded theory methodology was used in order to analyse children's views and develop a theory grounded in the data collected.

Results: The core coding process brought into light the following themes: emotional competence, pro-social behaviour, morality/ moral values and social seeking in the 7–9 year group; and in the 9–11 group the first three themes were common with an additional (unique) fourth theme titled: self-reflection on actions, beliefs and behaviours. Primary school children are concerned about friendships, social relationships, moral values and 'others'.

Conclusions: The results provide an insight into the conceptualisation of moral values. (The data collection is still in progress as more focus groups will be conducted.

Friday, August 30th, 2019

The George Butterworth Young Scientist Award

Olympia Hall A & B 11:30 – 12:15

SOCIAL EMOTIONS AND SOCIAL COGNITION IN CHILDHOOD SOCIAL ANXIETY

Nikolic M.

University of Amsterdam

Friday, August 30th, 2019

Keynote Lecture 2

Olympia Hall A & B 13:15 – 14:00

Chair: Rueda R.

KL 2
ADOLESCENT BRAIN IN A WORLD OF FRIENDS AND FOES

Güroğlu B.

Leiden University, the Netherlands

Adolescence is a period of growing focus on social interactions and relationships. Functioning in a social context involves affective and regulatory processes, as well as understanding others and mentalizing. We now know that brain regions involved in these processes have differential developmental trajectories. Subcortical brain regions involved in affective processes show enhanced activation during early adolescence. Prefrontal and temporal regions involved in regulatory and mentalizing proceses show protracted developmental patterns into late adolescence. However, the social context can significantly modulate these neural activation patterns. For adolescents, it is the highly salient peer context that importantly shapes social behavior and related neural processes. A social cognitive neuroscience perspective is critical to understand the links between relationships and developmental outcomes, as well as in advancing our understanding of the mechanisms underlying adolescent functioning.

Friday, August 30th, 2019

Invited Symposium 2

Ilissos Hall 14:00 – 15:30

IS 02

THE WIDER BENEFITS OF EDUCATION AND EMPLOYMENT PARTICIPATION: EXPERIENCES OF STUDENTS ON A VOCATIONAL VERSUS ACADEMIC TRACK

Schoon I.

Chair, UCL Institute of Education, University College London, UK

What are the experiences of young people making the school-to-work transition in different contexts? The role of context is operationalised through the differentiation between young people pursuing a vocational versus an academic track and through country specific variations in transition systems. This symposium brings together contributions from 4 countries examining the motivational resources and subjective wellbeing of young people on different educational tracks and in different cultural contexts, enabling a better insight into similarities and differences regarding the challenges associated with different transition pathways. The paper by Gniewosz and colleagues examines variations in subjective wellbeing of students on different educational and work-related pathways in the German context. The German context is characterised by a highly structured transition system and early selection into vocational versus academic tracks. Likewise the school-to-work transition in Switzerland, the focus of the paper by Marlis Buchman, exemplifies experiences in a highly structured transition system. Here the focus is on motivational competencies (such as willingness to exert effort and to persist with a task) and how these competencies are related to the demands imposed by work-focused versus academic-focused transition pathways and associated experiences of success and failure, illustrating the complex interplay of different demands on young people's lives. Interest, commitment, and effort are also the topic of the paper by Salmela-Aro and colleagues, who examine the motivation and task values of young people across different educational transitions and subsequent school-to-work transitions in Finland. The Finnish transition system is characterised by a comprehensive school system and support for individualised learning and training plans. Students select into a vocational versus academic track after the age of 16. The study shows that young people become more motivated as they progress from school to work, in particular for those pursuing the vocational track. Comparing levels of life satisfaction of young people on a vocational versus academic track in Germany and the UK, Schoon and Brzinsky-Fay find that although the prevalence of these tracks differs in both countries, levels of life satisfaction are high for either. However, those who experienced prolonged unemployment were less satisfied with their lives. The findings across countries illustrate the disadvantages associated with the experience of problematic transitions, such as precarious employment or dropping out of education, while participation in either vocational or academic education is associated with goal directedness and wellbeing. Participation in education, training and employment offer opportunities to experience feelings of autonomy, belonging and support, which are in turn associated with feelings of commitment and life satisfaction, while the social isolation associated with unemployment has the opposite effect.

IS 02 – 1

TRANSITION TRAJECTORIES TO DIFFERENT TYPES OF UPPER-SECONDARY EDUCATION: HOW ARE THEY ASSOCIATED WITH YOUNG PEOPLE'S COMPETENCE DEVELOPMENT?

Buchmann M.

University of Zurich

The transition to one of different types of upper-secondary education represents an institutionalized status passage in the adolescent life course, requiring coping strategies and demanding adaptation processes. In this perspective, the study addresses the question of how transition trajectories from compulsory schooling to academic upper-secondary education, (delayed) vocational training or to the labor market are associated with the development of young people's competences. The focus is on motivational competences, such as willingness to exert effort, volition, and persistence, as the transition trajectories of interest are related to achievement-oriented contexts, requiring the ability to act efficiently and effectively. Theoretically, the study differentiates between *context*-related and *success*-related transition trajectories and assumes varying relations to young people's competence development. Transitioning to a work context (i.e., vocational training, labor market participation) implies entering a learning context that differs substantially from that of a school context. Apprentices or employees work hand in hand with co-workers who must rely on the continuous work of others to achieve their objectives. Ongoing, daily streams of willingness to put in effort are therefore required. The learning context of schools, by contrast, is often characterized by intermittently higher or lower individual study efforts (e.g., before and after tests and exams). We therefore advance the hypothesis that transitions to work-affine contexts are associated with increasing motivational competences, whereas the transition to another school context is marked by more or less stable respective competences. Success-related transition trajectories capture the transition quality. Failed entry into certified upper-secondary education and delayed transition to vocational training via interim solutions may be considered as less successful transitions paths than immediate transitions to academic education or vocational training. Competing hypotheses may be advanced with respect to how the transition quality is associated with motivational competence development. The potential frustration resulting from less successful patterns may dampen young people's motivation. Realizing what is at stake regarding future labor market chances, by contrast, young people may double their willingness to put in effort, likely to increase their motivational competences. The analyses are based on data of the *Swiss Survey of Children and Youth* COCON, a representative and longitudinal study, including a youth cohort in Switzerland. The members were 15, 16, and 18 years old at the time of data collection in 2006, 2007, and 2009 (N=940). Motivational competences were measured at the age of 15 and again at the age of 18. The results reveal that both context-related and success-related components of the transition trajectories matter for young people's motivational competence development from mid- to late adolescence.

IS 02 – 2

THE DEVELOPMENT OF MOTIVATION TO STUDY AND WORK AMONG FINNISH STUDENTS IN VOCATIONAL AND ACADEMIC TRACKS

Salmela-Aro K.[1], Symonds J.[2], Schoon I.[3], Eccles J.S.[4]

[1] University of Helsinki
[2] University College Dublin
[3] University College, London, UK
[4] University of California, United States

Young people's motivation to engage in studying and work life is important for their future participation and attainment. It is well documented that motivation changes during the mid-schooling transition when adolescents move from lower secondary to upper secondary education and again during the school-to-work transition when young people move from school to a range of main activities for example employment, tertiary education and unemployment. There is however relative little research spanning the whole sequence from secondary school transitions and the subsequent entry into employment. This study takes a long-term view, following the lives of young people from age 15 to age 22, examining the development of motivation across key transitions, i.e. from comprehensive school to vocational or academic school (age 16-years) and then to a range of activities including higher education, entry into a polytechnic and working at age 19-22-years. The study is informed by expectancy value theory (Wigfield & Eccles, 2000), assuming that motivation is shaped by whether individuals think that a task is useful (utility value), of personal importance (attainment value), interesting (intrinsic value), and worth investing energy in (cost). These indicators of motivation are referred to as task-values. Drawing on data collected for the Finnish Educational Transitions (FinEdu) Studies, piecewise growth curve modeling is used to analyse five waves of data between ages 15 to 22 years in a sample of 878 young people. The findings suggest that across all transitions the intrinsic, utility and attainment value increased, whereas the cost decreased during both educational transitions (mid-schooling) and the school-to-work transition. Interestingly, the increase of interest and reduction of cost were steeper for youth transferring into vocational education during the mid-schooling transition, and for youth transferring from an academic track to higher education at the school-to-work transition. Overall, the results suggest that young people became more motivated as they age from adolescence to young adulthood, in line with normative maturational and gradual social changes and transfer into increasingly personalized environments.

IS 02 – 3

DIVERSE PATHWAYS IN THE SCHOOL-TO-WORK TRANSITION AND THEIR IMPACT ON LIFE SATISFACTION

Schoon I.[1], Brzinsky-Fay C.[2]

[1] UCL Institute of Education, London (UK)
[2] Wissenschaftszentrum Berlin (WZB), Germany

In view of an increasing diversification and polarization in school-to-work transitions, the impact of diverse pathways on life satisfaction is becoming an important issue as the maximization of citizens' life satisfaction is increasingly considered the ultimate goal for social policy. This study examines the association between variations in the school-to-work transition and levels of life satisfaction in Germany and the UK. These two countries differ in the nature of their welfare system and the transition pathways available to young people. While in Germany young people are channeled into different vocational or academic tracks already at the age of 10 years, the UK has a comprehensive education system where decisions regarding transition pathways have to be made only after age 16. Moreover, while in Germany young people are prepared for a smooth transition from education into the labour market, in the UK the transition into the labour market is relatively unstructured and not regulated by education-employer organisations. Drawing on evidence from the German Socio-Economic Panel and the British Household Panel and Understanding Society Study we follow the school-to-work transitions of young people leaving school between 1990 and 2008, covering the crucial period after leaving compulsory education and entry into either higher education or the labour market. We adopt a holistic definition of school-to-work transitions, not focusing on a single transition, such as starting full-time employment, but examining the timing and sequencing of multiple interlinked transitions, comprising moves in and out of education, employment, vocational training, unemployment, and inactivity due to family activities or ill health. The available data allowed us to control for life satisfaction measured at age 16, enabling us to assess the impact of experiences during the school-to-work transition on life satisfaction measured later in adult life. Using sequence analysis we identified 5 distinct transition patterns in both countries: a) continued full-time education (academic track); b) early entry into continuous employment (work orientation); c) entry into continuous employment after some further education; d) prolonged periods of inactivity due to family activities; and e) prolonged experience of unemployment. The prevalence of these patterns differed for both countries, yet we find relative high levels of life satisfaction for all pathways, except the prolonged experience of unemployment. The findings suggest that the assumption of key social roles, such as participation in education or employment, as well as starting a family are associated with a positive evaluation of one's life, while the experience of social exclusion due to unemployment undermines positive adjustment. The findings provide support for theories of social integration, illustrating the benefits of inclusion versus exclusion from key social roles, and the importance of providing viable pathways to independence for young people and effective support for those who struggle.

IS 02 - 4

SCHOOL'S OUT! YOUNG ADULTS' EDUCATIONAL AND PROFESSIONAL PATHWAYS AND THEIR LINKS TO WELL-BEING

Gniewosz G. [1], Greischel H. [2,3], Walper S. [2]

[1] University of Salzburg, Austria
[2] Deutsches Jugendinstitut, Germany
[3] Ludwig Maximilians University Munich, Germany

The transition from school to job training, higher education, and employment reflects a highly critical step in young people's careers with far-reaching implications for future chances. While individual resources facilitate successful mastery of this transition, different pathways are also likely to affect personal resources and well-being. Previous studies emphasized the close link between educational and occupational pathways and young people's well-being (Hadjar, Haunberger, & Schubert, 2008). However, empirical studies on effects of these pathways on the well-being of German youth are still scarce.

This study aimed to (1) identify different pathways of educational and professional activities by using latent class analysis, and (2) link these pathways to young people's emotional well-being prior to and 4 years after the transition using a structural equation framework.

Annual assessments for 1,508 adolescents from the German Family Panel "pairfam" were restructured according to individual timelines (from the year prior to school graduation = T0 to 4 years after school graduation = T1-T4).

Five different pathways (classes) were identified: a typical vocational training track (37.93%), a typical academic track (37.40%), study dropouts or mini-jobbers (9.48%), late entry in vocational training (7.69%), and unsteady workers shifting between employment and unemployment (7.49%). Negative affect was not predictive of the pathway young people chose. However, results confirmed a disadvantage for the well-being of those young adults in the risk groups (i.e., study dropouts and unsteady workers) 2 and 3 years after school graduation compared to other tracks. All analyses were controlled for gender, migration background, and own and mother's level of school education.

These findings are discussed with regard to the benefits of higher education. To further deepen our understanding of the complex pattern of influence on individual well-being when adolescents graduate, these findings will be related to qualitative and quantitative indicators of romantic relationships.

Friday, August 30th, 2019

Symposium 5

Vergina Hall 14.00–15.30

S 05

ADOLESCENTS' INTRINSIC AND EXTRINSIC EMOTION REGULATION ACROSS DIFFERENT TIME-FRAMES AND CONTEXTS

Arbel R.

Chair, Department of Counseling and Human Development, University of Haifa

Adaptive emotion regulation (ER) is a core component of adolescents' healthy psychosocial development (Comas et al., 2017). However, it is somewhat unclear what may be considered as 'adaptive' ER across interpersonal contexts and different time-frames. The fit between situational demands, adolescents' emotional sensitivity (Kool, 2009), ER flexibility (Haines et al., 2016), and the ability to benefit from extrinsic regulation by close others (Niven, 2016) may together contribute to the adolescents' 'adaptive' regulation.

This symposium investigates how inter and intra individual variability in youths' ER contribute to youth's socio-emotional functioning and the well-being of their close others. We explore these links within the family and school contexts, across multiple time frames, spanning from hours to years.

The first study explores associations between moment-to-moment mother-youth emotional synchrony and youth adjustment, across the adolescent transition. The use of six 7-day waves of Ecological Momentary Assessment, with each wave separated by 6 months, allows to explore the role of mother-youth synchrony within multiple time-frames. Flipping the focus from youth to mother's outcomes, the second study examines how youth sensory-processing sensitivity and ER contribute to maternal stress, using a multi-informants design. Exploring these associations for two years enables establishing prospective effects. The third study dives into the day-to-day implementation of specific ER strategies, emphasizing the role of ER self-efficacy in mid-to-late adolescence. By using 15 days of EMA research this study illuminates lagged associations between study's constructs. The fourth study takes us into realm of adolescents' peer relationships within the school context, among mid-adolescents. Assessing relationships with friends and types of ER strategies three times throughout one school year, the study illustrates co-variation between friendships and the use of specific ER strategies.

S 05 – 1

MOTHER-YOUTH EMOTIONAL SYNCHRONY AND YOUTH ADJUSTMENT: 6-WAVE STUDY OF MOTHER-YOUTH DYADS ACROSS THE TRANSITION TO ADOLESCENCE

Arbel R. [1], **Margolin G.** [2], **Mason T.B.** [3], **Leventhal A.M.** [4], **Dunton G.** [3]

[1] Department of Counseling and Human Development, University of Haifa
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[3] Department of Preventive Medicine, Keck School of Medicine, University of Southern California
[4] Preventive Medicine and Psychology, USC Norris Cancer Center

Mothers' emphatic responses to youth's emotional changes is a key for a favorable extrinsic emotion regulation of the youth. This may be reflected in positive mother-youth emotional synchrony, pertains to the degree to which increases in mother's positive (PE) or negative (NE) emotions coinciding with increases in the youth's same valence emotions (Timmons, Margolin, & Saxbe, 2015). Little is known about mother-youth emotional synchrony in real -life or its association with youth adjustment. We explore associations between moment-to-moment mother- youth emotional synchrony and youth adjustment across the adolescent transition- a time of increased emotional intensity and lability (Steinberg, 2001). Our sample is 202 ethnically-diverse mothers [Mage at baseline = 40.1 years (SD=6.1] and youth dyads [Mage at baseline = 10.1 (SD=.90), 51% girls)],who participated in the Mothers and Their Children's Health (MATCH) study (Dunton et al., 2015). The MATCH study includes six 7-day waves of Ecological Momentary Assessment, each wave separated by 6 months. We probed for two PE (youth: happy, joyful; mothers: happy, clam) and three NE (mad, sad, stress) up to eight times a day. Degree of synchrony on each wave was measured as the daily correlations between mother's and youth's reports on PE and NE, separately. Within-wave variability of daily synchrony was measured by the root mean square of successive differences (RMSSD) (Ebner-Priemer & Trull, 2012). On each wave youth completed the Stress in Children Scale (Osika et al. 2007). Series of three-level models, show that within a wave youth stress levels inversely relate to mother- youth emotional synchrony in PE (but not NE), β = -.23, SE = .08, p = .03. Variability in PE synchrony (but not NE) was positively linked to same-wave stress levels, β = .19, SE = .05 p = .04. Results highlight dynamic mother- youth emotional PE synchrony as a key to youth adjustment.

S 05 – 2

HIGHLY SENSITIVE TEENS, STRESSED-OUT MUMS? THE ROLE OF SENSORY-PROCESSING SENSITIVITY AND EMOTION REGULATION ACROSS THE TRANSITION TO ADOLESCENCE

De Pauw S., De Clercq L., Van Den Berghe L.

Ghent University, Faculty of Psychology and Educational Sciences, Department of Special Needs Education, Ghent, Belgium

Backgrounds and aims: To date, many studies have focused on the role of parental socialization on child emotion-regulation (ER) outcomes. However, little is known about how differences in ER competencies affect parents' experiences and behaviors across the adolescent period. This study examines longitudinal associations between sensory-processing sensitivity and ER on the one hand and maternal stress experiences and parenting behaviors on the other.

Methods: The sample included 245 adolescents (58% boys) and their mothers, completing questionnaires when the teens were 11.5 (SD=0.5) and 13.5 (SD=0.5) years old. Sensory-processing sensitivity was assessed by parent/self-reports of the Highly Sensitive Person Scale (Aron, 2002), distinguishing Overreaction-to-Stimuli from Depth-of-Processing (Boterberg & Warreyn, 2016). ER-proxy scales (Emotional Dysregulation, Behavioral Inhibition, and Self-Regulation) were derived from parent/self-reports of the Hierarchical Personality Inventory for Children. Mothers and teens rated parenting (autonomy support, responsiveness, and psychological control) whereas mothers also rated their feelings of competence, detachment, role restriction using the Parenting Stress Index.

Results: Across the two-year interval, all variables showed high mean-level and rank-order stability and no gender differences emerged. Intriguingly, preadolescents' ER competencies differentially predicted maternal stress and parenting behaviors over time. Preadolescents' Overreaction-to-Stimuli was related to more detachment and lower responsiveness. Emotional Dysregulation was related to lower feelings of competence, and more detachment and psychologically controlling parenting. Behavioral Inhibition predicted more role restriction and detachment in mothers. Self-Regulation predicted higher feelings of competence. Notably, preadolescents' Depth-of-Processing emerged as a consistent protective factor. Mothers of teens who indicated to more deeply process both cognitive and emotional stimuli than typical people, reported higher feelings of competence, more attachment, more autonomy-support and responsiveness and less psychological control.

Conclusions: This study highlights the complexity of the ER-parenting interplay across the transition to adolescence and suggests that sensory-processing sensitivity may add valuable information to the investigation of these developmental processes.

S 05 – 3

ANGER, SADNESS, ANXIETY, HAPPINESS AND SELF-EFFICACY BELIEFS ABOUT EMOTION REGULATION: A MOBILE ECOLOGICAL MOMENTARY ASSESSMENT WITH ITALIAN ADOLESCENTS

Di Giunta L.[1], Rothenberg W. A.[2], Fiasconaro I. [1], Lansford J.E. [2], Pastorelli C. [1], Eisenberg N.[3], Lunetti C. [1], Basili E.[1], Thartori E.[1], D'Amico F.[1], Favini A. [1]

[1] Sapienza University of Rome
[2] Duke University
[3] Arizona State University

Previous studies suggest that the association between emotion regulation and adolescent adjustment may depend on the type of emotion being managed (Feng et al., 2009), on the extent to which adolescents feel capable of modulating their emotional experiences (Bandura et al., 2003), and on the level of instability of the emotional experience (Maciejewski et al., 2015).

In the present study we examined (1) how reciprocal associations between anger, anxiety, sadness, and happiness, and self-efficacy in managing such emotions differed between adolescents throughout their daily lives; and (2) how daily fluctuations in emotional experiences and self-efficacy regulating emotions affected one another.

This study included 103 Italian adolescents (53% males; Mage = 16.77, SD = .78). Data were gathered with a mobile ecological momentary assessment. For 15 days, adolescents were prompted via mobile-phones to respond to questions about whether they were feeling angry, sad, anxious, and happy, and how much they believed they were capable of regulating that emotion in that moment (Bandura et al., 2003).

Adolescents experienced all examined emotions at low to moderate levels across the study period. Overall, adolescents with higher self-efficacy managing anger, sadness, and anxiety had lower overall anger, sadness, and anxiety, whereas adolescents with high anger, sadness, and anxiety felt no self-efficacy over the entire 15-day period. Teens with higher overall levels of self-efficacy managing happiness experienced higher overall happiness, and teens with the lowest overall levels of happiness felt no self-efficacy in managing happiness. Moreover, if a teen felt higher than usual self-efficacy managing sadness or expressing happiness on a typical day, they also felt less sadness and more happiness than usual on that day, and vice-a-versa.

This study contributes to clarify the importance of emotion specificity and of self-efficacy about emotion regulation when clarifying the role of emotion regulation over adolescent adjustment.

S 05 – 4

HOW CAN FRIENDS HELP TO REGULATE EMOTIONS IN STRESSFUL SITUATIONS? – A SPECIAL FOCUS ON RUMINATION AND DISTRACTION

Reindl M.

Paris-Lodron University Salzburg, Dept. of Education, Salzburg, Austria

Based on Sullivan's theory, friendships provide opportunities for self-disclosure in stressful situations and can help adolescents to handle their negative emotional reactions. Focusing on adaptive and maladaptive emotion regulation strategies like distraction and rumination, the present study focuses on how friendship quality influences the development of those emotion regulation strategies.

The sample is based on a three-wave longitudinal-study within one school year of 8th graders (N=656). The measurement occasions were scheduled in the beginning (T1), in the middle (T2), and the end of the school year (T3). In a questionnaire, students reported on their friendship quality with their best friend (positive and negative features) and their emotion regulation strategies (rumination and distraction) in stressful situations with others.

Two separate latent change models for distraction and rumination were specified. The results showed that positive friendship quality at the beginning of the school year (T1) predicted the change of rumination negatively (T1-T2), β =-.11, p =.047, indicating that the extent of positive features of a friendship went along with a reduced increase in adolescents' rumination. In contrast, a negative friendship quality (T1) negatively predicted the change of distraction (T1-T2), β =-.08, p =.047. Less negative features of a friendship were associated with a larger increase in adolescents' distraction from stressful situations. Against our expectations, neither positive nor negative friendship quality in the middle of the school year (T2) predicted the change of emotion regulation strategies (T2-T3).

Results indicate that friends play especially in the first half of the school year an important role for the development of handling stressful situations adaptively. One reason might be, that in the beginning of the school year a relatively new system of peer relationships was constituted and the relationship with the best friend might be in this phase a resource to handle stressful situations with others.

Friday, August 30th, 2019

Symposium 6

Makedonia Hall A 14.00–15.30

S 06
THE CHILD OUTDOORS

Gattis M.
Chair, Cardiff University, UK

Leman P.
Discussant, Kings College London, UK

The vast majority of research on child development has examined the child indoors, whether in a laboratory, at home, or in school. Recently, however, architects, educators, and urban planners as well as psychologists have pointed toward the importance of understanding the child outdoors. For example, large-scale studies have demonstrated that children's exposure to green space is positively associated with their cognitive development (Dadvand et al., 2015), and that children's time spent outdoors at preschool is negatively related to inattention and hyperactivity symptoms (Ulset, Vitaro, Brendgen, Bekkus & Borge, 2017). Experimental and quasi-experimental studies have also demonstrated a number of cognitive and communicative benefits to children of natural outdoor environments (Amicone et al., 2018; Cameron-Faulkner, Melville & Gattis, 2018).

Chawla (2015) argued that understanding the child outdoors requires careful attention to different research methods and designs, in order to clearly identify the environmental and behavioural factors involved, and to understand the full scope of outcomes. Comparison across different research methods and designs can also help us identify the underlying causal relations more accurately.

In this symposium we consider three different methods for studying the child outdoors. Amicone and colleagues compare children's attitudes and perceptions to two different outdoor environments: natural versus built environments in school play areas. Gattis and colleagues examine the how natural outdoor versus built indoor environments influence parent-child conversations. Ulset and colleagues focus on the effects of children's time outdoors and related light exposure on their circadian rhythms and inattention and hyperactivity symptoms. These three studies span dramatically different levels of analysis, helping us to better characterise outdoor environments, how children experience them, and how those environments impact development.

S 06-1

CHILDREN'S ACTIVITIES IN NATURE: GRAPHICAL AND VERBAL DESCRIPTIONS OF RECESS-TIME ACTIVITIES IN PRIMARY SCHOOLS' NATURAL AND BUILT ENVIRONMENTS

Amicone G.[1], Collado S.[2], Perucchini P. [3,5], Petruccelli I. [4], <u>Bonaiuto M.</u> [1,5]

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[2] University of Zaragoza, Facultad de Ciencias Sociales y Humanas, Department of Psychology and Sociology. Teruel, Spain

[3] Roma Tre University, Department of Education, Rome, Italy

[4] Universitas Mercatorum, Faculty of Economics, Rome, Italy

[5] CIRPA - Centro Interuniversitario di Ricerca in Psicologia Ambientale, Rome, Italy

Contact with nature and playing freely in natural environments yield benefits for children, such as better attention and concentration (Amicone et al., 2018). However, little is known about children's perceptions of their playtime within the school and the possible differences according to the physical environment. Since most of the studies about the effects of children's experiences in nature are retrospective, a report of actual experiences in nature for children is presently needed. Our main aim was to analyse children's activities and play preferences during their recess time at school in a natural (vs. built) environment, using two different instruments: children's graphical and verbal descriptions of their free play time.

In a between-subjects field experiment, 298 primary school children spent recess-time playing freely in natural (vs. built) environment and afterwards drew themselves in the environment in which they just played. In addition, children wrote a description of their play activities, and filled in a standardized measure of positive and negative affect and a self-report measure of attitude towards the playground.

A series of detailed indicators were developed in order to assess three main dimensions via children's drawings, i.e., the general characteristics of the drawings, as well as the characteristics of both the persons and the environment drawn. Children's descriptions of their playtime were assessed by three indicators: social play, cognitive play, non-play behaviours. Drawings and descriptions were coded in terms of presence/absence and frequencies of each indicator.

Our preliminary results show a significantly higher frequency (in the natural vs. built environment) for graphical and verbal indicators related to the presence of natural and atmospheric elements, exploration, physical activities. In addition, older children reported a more positive affect and attitude towards the natural environment (vs. built). Natural environments within school are associated with more active play and are more appreciated by children.

S 06 – 2

NATURAL ENVIRONMENTS IMPROVE PARENT-CHILD COMMUNICATION

Gattis M.[1], Cameron-Faulkner T.[2], Melville J.[3]

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[2] *University of Manchester, Manchester, United Kingdom*
[3] *University of Oxford, Oxford, United Kingdom*

Background and aims. The quality of parent-child communication influences children's long-term developmental outcomes (Hirsh-Pasek et al., 2005; Romeo et al., 2018). Interventions aimed at improving the quality of parent-child communication often involve teaching parents to change their communication behaviour, for example by training parents to respond to a child's interests or to use an elaborative conversational style (Boland, Haden, & Ornstein, 2003; Rauh, Achenbach, Nurcombe, Howell & Teti, 1988). Drawing on a tradition of research in environmental psychology that has demonstrated multiple benefits of natural environments for cognition and behaviour, we investigated how natural outdoor environments impact parent-child communication.

Methods. We examined parent-child communication in a within-subjects experimental design (Cameron-Faulkner, Melville, & Gattis, 2018). Parents spent 15 minutes exploring a city centre park and 15 minutes exploring the park's visitors' centre with their 3- to 4-year-old children. The order of environments was counterbalanced across participants. Parents and children wore GoPro cameras that recorded video and audio.

Results. We defined the quality of parent-child communication as responsiveness and connected conversational turns. Parents and children produced a proportionally higher number of responses in the outdoor setting in comparison to the indoor setting (Parent proportion of responses outdoors: M=57.72%, SD=8.96; proportion of responses indoors: M=46.15%, SD=9.42, t(17)=4.02, p=.02). Child proportion of responses outdoors: M=66.90%, SD=10.35; proportion of responses indoors: M=51.93%, SD=9.95, t(17)=5.48, p<.001). Parents and children engaged in longer connected communication episodes (CC) in the outdoor setting when compared to the indoor setting (CC length outdoors: M=2.27, SD=.49; CC length indoors: M=1.75, SD=.22, t(17)=4.59, p <.001). Further analyses, currently ongoing, examine how environment influenced parents' conversational style, defined as open- versus closed-ended questions (Boland, Haden, & Ornstein, 2003). We hypothesise that parents use a more elaborative conversational style in the outdoor environment.

Conclusions. Parent-child communication is more responsive and connected in natural environments.

S 06 – 3

HIGHER LEVELS OF ENVIRONMENTAL LIGHT EXPOSURE ARE ASSOCIATED WITH FEWER SYMPTOMS OF HYPERACTIVITY IN PRESCHOOL CHILDREN

Ulset V.[1], Czajkowski N.O.[1,2], Staton S.[3], Thorpe K.[3], Smith S.[3], Pattison C.[4], Allen A.[3], Bekkhus M.[1,2]

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[3] Institute for Social Science Research (ISSR), The University of Queensland, Brisbane, Australia
[4] National Institute of Health, Washington DC, USA

Experimental animal studies show that marmosets who are exposed to high levels of daylight during sensitive periods in early life are less likely to develop inattention-hyperactivity symptoms in adulthood [1]. A similar link has been observed in studies of humans, finding that the prevalence of attention-deficit/hyperactivity-disorder is lower in geographical areas with high levels of sunlight exposure [2], and that children who spend long periods of time outdoors in early childhood are less likely to develop inattention-hyperactivity symptoms [3]. Bright light is the main regulator of circadian rhythm, which in turn is strongly linked with inattention and hyperactivity in both children and adults [4,5]. To our knowledge however, no studies to date have examined how light exposure, circadian rhythm and symptoms of inattention-hyperactivity are related in early childhood. Since there may be sensitive periods in early childhood [1], we followed 48 preschool-aged children for a period of one year, collecting objectively measured light exposure and circadian rhythm, and parental reports of inattention-hyperactivity symptoms. Initial sensitivity analyses revealed a moderate negative association between light exposure and hyperactivity symptoms (r = -0.46, p = 0.02). This finding suggests that daylight exposure may play a role in the development of hyperactivity symptoms in young children.

Friday, August 30th, 2019

Symposium 7

Makedonia Hall B 14.00–15.30

S 07
LONELINESS IN CHILDHOOD AND ADOLESCENCE: DEVELOPMENTAL CHANGES AND INTERVENTIONS

Geukens F.
Chair, KU Leuven, Belgium

Goossens L.
Discussant, KU Leuven, Belgium

Loneliness is an aversive feeling that arises when people are not satisfied with their social relationships. Though often considered a problem of old age, the prevalence of loneliness in childhood and adolescence is not to be underestimated. Four studies from three European countries (i.e., Belgium, The Netherlands, and the United Kingdom) present new findings on this topic. Study 1 examined the co-development of loneliness, depression, and social anxiety. The results revealed a substantial degree of correlated change for these three problems and this "dynamic comorbidity" was particularly pronounced for loneliness and social anxiety. Study 2 explored the underlying mechanisms of adolescents' loneliness trajectories. The findings showed that different patterns of change in loneliness were associated with changes in fear of negative evaluation and self-esteem in predictable ways. Study 3 examined both predictors and outcomes of loneliness trajectories in childhood and adolescence. The results indicated that internalizing problems can be predictors as well as outcomes of loneliness. Given all these longitudinal links among loneliness, its maintaining factors (i.e., high fear of negative evaluation and low self-esteem), and other internalizing problems, studies on interventions to reduce loneliness are essential. Study 4 is a meta-analysis on loneliness interventions in children and adolescents. Interventions with a focus on social cognition or social skills proved most effective. The contributions of these studies will be integrated by our esteemed discussant, an expert on loneliness research from the United Kingdom.

S 07 – 1

CO-DEVELOPMENT OF INTERNALIZING PROBLEMS IN ADOLESCENCE: COMBINED GROWTH PATTERNS OF LONELINESS, SOCIAL ANXIETY SYMPTOMS, AND DEPRESSIVE SYMPTOMS

Danneel S.[1], Bijttebier P.[1], Bastin M.[1], Colpin H.[1], Van Leeuwen K.[2], Van den Noortgate W.[3], Verschueren K.[1], Goossens L.[1]

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[2] Parenting and Special Education Research Group, KU Leuven Belgium
[3] Methodology of Educational Sciences, KU Leuven, Belgium

Background and aims: Loneliness, social anxiety, and depressive symptoms are internalizing problems that frequently co-occur at a single point in time in adolescents. This co-occurrence results in more social and academic difficulties and greater life dissatisfaction. Combined growth patterns for these problems, which could also have a negative impact on adolescent functioning, have rarely been examined. The current study explored which form such patterns could take by examining correlations among changes over time (i.e., slopes) for all three forms of internalizing problems in three longitudinal samples.

Methods: Parallel Process Latent Growth Curve Modelling (PPLGCM) was applied using M*Plus* Version 8 in three samples of Flemish adolescents. In each sample, there were three measurement waves with a one-year interval. Sample 1 (roughly ages 15, 16 and 17) comprised 549 adolescents (62.66% girls), whereas Samples 2 and 3 (roughly ages 13, 14, and 15) comprised 811 adolescents (46.09% girls) and 1,101 adolescents (52.23% girls), respectively. Adolescents filled out well-established self-report questionnaires of loneliness, social anxiety, and depressive symptoms at all three measurement waves.

Results: In all three samples, high and positive correlations were observed between the slopes for loneliness and social anxiety symptoms (i.e., r ranges from .59 to .87). In addition, in Samples 1 and 3, high and positive correlations were observed between the slopes for depressive symptoms and social anxiety symptoms (i.e., $r = .58$ and .51 in Samples 1 and 3, respectively). Only in Sample 3, high and positive correlations were observed between the slopes for loneliness and depressive symptoms (i.e., $r = .70$).

Conclusions: Not only do internalizing problems co-occur during adolescence, but they also show correlated change over time. The strongest concordance was found for loneliness and social anxiety, suggesting a vicious cycle between these two problems. Implications for current understanding of adolescents' internalizing problems are discussed.

S 07 – 2

PATTERNS OF CHANGE IN ADOLESCENT LONELINESS: ASSOCIATIONS WITH CONCOMITANT CHANGES IN FEAR OF NEGATIVE EVALUATION AND SELF-ESTEEM

Geukens F.[1], Spithoven A.[1], Danneel S.[1], Goossens L.[1], Pouwels L.[2], Vanhalst J.[1], Stoltz S.[3], van den Berg Y.[3]

[1] *KU Leuven, Belgium*
[2] *University of Amsterdam, The Netherlands*
[3] *Radboud University Nijmegen, The Netherlands*

Background and aims: Various developmental patterns have been identified for adolescent loneliness (e.g., stable high, increasing, decreasing, and stable low), but the underlying processes for these patterns are still unclear. The present study concentrated on two variables conceptually related to loneliness, that is, fear of negative evaluation and self-esteem, and examined whether changes over time in loneliness were accompanied by changes in these variables in predictable ways. We expected to find changes in the same direction for fear of negative evaluation (e.g., increases in loneliness accompanied by increases in this type of fear) and changes in the opposite direction for self-esteem (e.g., increases in loneliness accompanied by decreases in positive self-regard).

Method: The sample (N = 1189; 50% girls) comprised Dutch adolescents from Grades 7 to 10. They completed measures of loneliness, fear of negative evaluation, and self-esteem on four occasions with a one-year interval. Loneliness trajectory classes were identified through a Latent Class Growth Analysis (LCGA). The developmental trajectory for fear of negative evaluation and self-esteem within each of these trajectory classes was then estimated through a multi-group Latent Growth Curve Model (LCGM).

Results: Four loneliness trajectory classes were identified: (a) stable low (67.0%), (b) moderate decreasing (17.5%), (c) low increasing (11.5%), and (d) stable high (4.0%). Changes in both fear of negative evaluation (ΔX^2 = 71.46, df = 2, p < .001) and self-esteem (ΔX^2 = 61.508, df = 3, p < .001) were significantly different across these classes. As expected, changes in loneliness were accompanied by changes in the same direction for fear of negative evaluation and changes in the opposite direction for self-esteem.

Conclusions: These findings suggest that increasing fear of negative evaluation and decreasing self-esteem may explain in part why some adolescents become lonelier over time. Implications for current understanding of adolescent loneliness are discussed.

S 07 – 3

CHILDHOOD RISK FACTORS AND MENTAL HEALTH OUTCOMES OF LONELINESS TRAJECTORIES FROM MIDDLE CHILDHOOD TO YOUNG ADULTHOOD

Jongen E.M.M.[1], Smeekens S.[1], Verboon P.[1], Van den Berg Y.[2], Pouwels L.[3], Cillessen A.[2]

[1] Open University of the Netherlands, The Netherlands
[2] Radboud University Nijmegen, The Netherlands
[3] University of Amsterdam, The Netherlands

Loneliness represents a subjective state of distress due to a discrepancy between perceived and actual relationships. The present study employed a person-centered approach to investigate how feelings of loneliness emerge in distinct developmental trajectories from middle childhood to young adulthood. We also examined whether certain childhood risk factors could predispose individuals to trajectory membership and whether trajectory membership would lead to increases in certain mental health outcomes.

Participants were children (N between 71-116) from the Nijmegen Longitudinal Study on Infant and Child Development. Loneliness was measured at age 9 (LSDQ), age 13 (LACA), age 16 (LACA), and age 21 (UCLA). Childhood predictors (measured at age 5) included SES, parent-child attachment (Attachment Story Completion Task), internalizing and externalizing symptoms (CBCL/4-18), social competence (TOM test), and self-esteem (Puppet Interview). Mental health outcomes (SCL-90) and self-esteem (Rosenberg) were assessed at age 21.

Three distinct trajectories of loneliness were identified from age 9 to 21: low stable (56%), decliners (18%) and increasers (26%). Significant childhood predictors of these trajectories were internalizing symptoms and self-esteem, with decliners (relatively high on loneliness in childhood and early adolescence followed by a decline) scoring higher on internalizing symptoms and lower on self-esteem than low stable and increasers. Furthermore, the three trajectory classes were differentially related to mental health outcomes, with decliners and increasers scoring significantly lower on self-esteem and higher on depression, anxiety, and inadequacy of thinking than low stable. In addition, increasers scored higher on interpersonal sensitivity and somatic symptoms than decreasers and low stable.

The current study confirms that the developmental course of loneliness is heterogeneous. Childhood factors assessed at age 5 can predict distinct developmental trajectories of loneliness. Finally, our findings suggest that loneliness during childhood may have longterm mental health effects, even when it has reduced at the time of young adulthood.

S 07 - 4

TACKLING LONELINESS - A META-ANALYSIS EXAMINING INTERVENTIONS AIMED AT YOUNG PEOPLE

Eccles A.[1], **Qualter P.**[2]

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[2] Manchester Institute of Education, University of Manchester, United Kingdom

Loneliness is often defined as a negative emotional state caused by a discrepancy between one's desired and actual social relationships. It is an unpleasant state that includes negative affect and feeling disconnected from others. Empirical data shows that loneliness affects individuals of any age, including children and adolescents. Across the lifespan, loneliness is linked to a variety of outcomes including poorer mental and physical health; it also affects immediate quality of life. Given the importance of loneliness and social connectedness during development, there has been an increased focus on reducing loneliness among young people, with charities, governments, and academics arguing for the need for interventions for lonely youth. But, what interventions work for youth who report feelings of loneliness? What interventions have proven successful thus far?

Previous meta-analytical reviews have primarily focused on interventions aimed at older people - from adulthood and beyond. To date, there has been no study focusing solely on interventions aimed at children and adolescents. The current study focuses on interventions aimed at alleviating loneliness among youth, and examines the general effect of loneliness interventions at reducing loneliness. In addition, we explore the role of moderating factors that impact the effect of the interventions, including characteristics of the intervention (e.g. type of intervention, delivery format, use of technology), outcome measure (e.g. how was loneliness measured), and sample characteristics (e.g. age).

Results of the analysis suggest interventions appeared significant at reducing the levels of loneliness in young people. Subgroup analysis demonstrated outcome measure, gender composition, and age of the participants did not moderate the effect size. Result suggest those interventions which focused on social cognition or social skills demonstrated the most promising results. Results from the analysis will be discussed in light of recently proposed interventions by the UK government as well as suggestions for future research.

Friday, August 30th, 2019

Symposium 8

Mycenae Hall 14:00 – 15:30

S 08
EXPLORING NEW GROUNDS WITH THE EXPERIENCE SAMPLING METHOD

Boele S.
Chair, Department of Developmental Psychology, Tilburg University, the Netherlands

Van Halem S.
Chair, Developmental Psychology, Tilburg University, Netherlands

The field of developmental psychology has become increasingly more focused on studying intra-individual processes in their natural and momentary environment. In concurrence with technological developments, knowledge of experience sampling methodology (ESM; Larson & Csikszentmihalyi, 1983) and intensive longitudinal data are becoming standard repertoire among psychological scientists. Although the motivation to implement ESM is partly methodological - i.e., minimizing recall bias, aggregation of scores across occasions, and separating within- and between-person variance (Keijsers & Van Roekel, 2018; Hamaker, 2012) - the important role of day-to-day to processes has also been emphasized in contemporary developmental theories (e.g., Fleeson & Jayawickreme, 2015; Wrzus & Roberts, 2017). While researchers still face many challenges concerning their study designs (For an extensive review see: Van Roekel et al., in press), with the rapid growth of theoretical and methodological knowledge dealing with the study of intra-individual processes, researchers are now well equipped to explore new grounds and conduct innovative research in their field of expertise.

To optimally inform researchers in developmental psychology with the latest insights in the study of ESM, this symposium consists of an overarching theoretical presentation followed by three complementary empirical examples of recent ESM studies. The first presentation provides a framework of the theoretical relevance and methodological advances and challenges regarding the study of daily experiences at the level of the individual. The second presentation discusses how ESM was implemented to measure parenting and parent-child interactions in adolescents. The third presentation involves an ESM study about the momentary relationships between situational task-values and learning experiences among Finish high school students. Finally, with the aim to sample situations that are centered around meaningful events, the final presentation provides insight in how we can extend our ESM designs with physiological measures such as electrodermal activity.

S 08 – 1

NEW METHODS IN ADOLESCENT PSYCHOLOGY: THE PROMISES AND PITTFALLS OF EXPERIENCE SAMPLING METHODS

Keijsers L., Van Roekel E.

Department of Developmental Psychology, Tilburg University, LE Tilburg, the Netherlands

Development shapes children into unique human beings. Yet, even when children have the same set of genetic predispositions, come from the same neighbourhood, receive a similar style of parenting, and have personalities that are alike, they may still end up with different adult lifestyles.

Thus, as researchers we have to acknowledge that there is no such thing as the developmental process that functions as a deterministic force on the route towards adulthood. Indeed, state-of-the-art theoretical models (e.g., Bronfenbrenner & Morris, 2006; Lerner, et al., 2002; Sameroff, 2010) stress the uniqueness of each person, not only in the outcomes of development, but also in the underlying mechanisms. *One size does not fit all.* Moreover, in Dynamic System Theory, the driving mechanisms of development are everyday situations and encounters, whether these are related to social relationships, intrinsic motivation, or stressful events. *Daily moments matter.*

Modern theories thus call for a methodological paradigm shift in developmental psychology, from understanding the general principles with experimental and longitudinal designs, to understanding the unique processes per individual person in daily life (see also Molenaar et al, 2004; Keijsers & Van Roekel, 2018). The Experience Sampling Method (ESM), in which smartphones and wearables are used to assess adolescents multiple times a day, on their thoughts, feelings, and whereabouts, is one possible approach to answer questions regarding the individual mechanisms in daily life.

In this presentation, we will highlight some of the methodological challenges ahead in order to obtain more insights into the level of the person's daily experiences. We will illustrate and explain three fallacies to avoid in designing a study, and in analysing data. The ecological fallacy, the one size fits all fallacy, and the galloping horse fallacy (Keijsers & Van Roekel, 2018).

S 08 – 2

EXAMINING THE QUALITY OF PARENT-CHILD INTERACTIONS AND PARENTING WITH THE EXPERIENCE SAMPLING METHOD

Boele S., Moopen N., Denissen J., Keijsers L.

Department of Developmental Psychology, Tilburg University, the Netherlands

Large panel studies, often with annual time intervals, have provided valuable information about how parenting is linked to adolescent's wellbeing. However, nowadays, with adolescents carrying their smartphones all day, a new method of data collection has increased in popularity, the Experience Sampling Method (ESM) - opening up possibilities to address novel questions regarding daily parenting processes.

Although, the use of ESM has exponentially grown in popularity, studies measuring parent-child interaction or parenting with ESM are still scarce (Boele et al., in prep). To assess whether the quality of parent-child interactions and parenting can be validly and reliably measured in daily life, we have conducted two pilot studies, of which the results and lessons are presented here.

Participants were between 12 and 18 years (pilot 1 *N* = 50; pilot 2 *N* = 30) and received five questionnaires a day for two to five weeks, in which they were asked about their current whereabouts and mood. When they indicated that they interacted with a parent, they received additional questions regarding both positive (e.g., warmth and support) and negative (e.g., conflict, irritation) quality indicators of that interaction. In the second pilot study, we also included items concerning parental monitoring and child disclosure. The ESM data of the first pilot study consisted of 4756 completed questionnaires with a compliance rate of 59%, and participants reported on 2315 parent-child interactions (72% with mother). Within-person reliability was high for most subscales, but items concerning parent-child negativity showed low frequency. The second pilot study is planned in the spring of 2019 and will also be presented.

Thus, we will present first insights into how parenting is linked to adolescent's wellbeing in daily life. Moreover, based on the lessons we have learned, we will provide the promises, but also the challenges for designing future ESM studies on parenting.

S 08 – 3

EMOTIONAL LEARNING EXPERIENCES AND TASK VALUES AMONG FINNISH HIGH SCHOOL STUDENTS: AN ESM STUDY

Upadyaya K., Salmela-Aro K.

Faculty of Educational Sciences, University of Helsinki, Finland

Recent research has highlighted the importance of examining students' situational learning, and what kind of learning experiences students have when engaged in science (Schneider et al., 2016; Shernoff & Csikszentmihalyi, 2009; Shernoff et al., 2003). These studies have identified situational learning experiences (e.g., learning enhancers, detractors, and accelerants) which can either promote or hinder learning (Schneider et al., 2016). Moreover, control-value theory of academic emotions (Pekrun, Goetz, Titz, & Perry, 2002) and expectancy-value theory of motivation (Eccles & Wigfield, 2002) suggest that values students place on the tasks are important for learning and for students' subjective experiences in the classroom. However, only few studies have examined students' situational task values (Dietrich, Viljaranta, Moeller, & Kracke, 2017), and less is known how they are associated with students' emotional learning experiences. Consequently, the present study examined the extent to which students' situational task-values (e.g., intrinsic value, attainment value, utility value, and psychological cost) are associated with students' situational emotional learning experiences (e.g., learning enhancers, detractors and accelerants) during science classes. Finnish high school students (N= 180) participated the study using Experience Sampling Method via smartphones. When signaled, students responded to questions concerning their situational learning experiences science. The research questions were analyzed with hierarchical multilevel modeling (Mplus). The results indicated that learning enhancers (e.g., experiences of success and confidence) were associated with high task values, whereas learning accelerants (e.g., stress and anxiety) and detractors (e.g., confusion) were associated with high cost and lower task-values during science classes. These results are in line with the expectancy-value theory which postulates that when students value their academic tasks, they are also more involved in them (Ryan & Deci, 2000; Wigfield & Eccles, 1994). These results also add to the previous literature by showing that high situational task values impact students' situational emotional learning experiences.

**Table 1.** Results of all the models for Finnish and US Students.

	Finland			USA		
	Enhancers	Accelerants	Detractors	Enhancers	Accelerants	Detractors
Model 1						
		Within-level			*Within-level*	
Challenge	-.17***	.67***	.50***	-.20***	.30***	.33***
Intrinsic value	.64***	0*	0*	.67***	-.15**	-.10***
Challenge x intrinsic value	0*	-.44***	-.25***	.23***	.17*	0*
		Between-level			*Between-level*	
Challenge	0*	.65***	.45***	0*	.77***	.78***
Intrinsic value	1.07***	0*	0*	.81***	-.37***	-.41***
Challenge x intrinsic value	-.15**	-.33*	0*	.18*	0*	0*
Gender	0*	0*	.20**	0*	0*	0*
Model 2						
		Within-level			*Within-level*	
Challenge	-.21***	.48***	.43***	-.15**	.29***	.31***
Attainment value	.48***	0*	0*	.40***	0*	0*
Challenge x attainment value	0*	-.22**	-.18**	.16**	.16*	0*
		Between-level			*Between-level*	
Challenge	0*	.36***	.44***	0*	.82***	0*
Attainment value	.84***	0*	0*	.89***	-.28**	0*
Challenge x attainment value	0*	0*	0*	0*	0*	0*
Gender	-.11*	0*	.20**	0*	0*	0*
Model 3						
		Within-level			*Within-level*	
Challenge	-.22***	.30***	.29**	0*	.40***	.32***
Utility value	.21***	0*	0*	.27***	.10*	0*
Challenge x utility value	0*	0*	0*	0*	0*	0*
		Between-level			*Between-level*	
Challenge	0*	.41***	.53***	-.32**	.60***	1.10***
Utility value	.28***	0*	0*	0*	0*	.66**
Challenge x utility value	.26**	.23*	0*	.97***	0***	-1.05**
Gender	-.13*	0*	.22**	0*	0*	-.11*

Note. *** = $p < .001$; ** = $p < .05$; * = $p < .01$

Figure 1. A Basic Model of the Study.
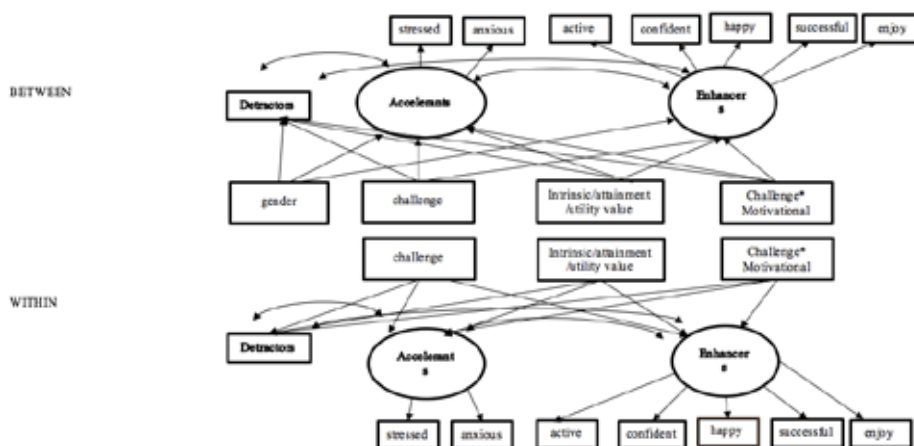
S 08 – 4

MOMENTS THAT MATTER: USING ELECTRODERMAL ACTIVITY BASED TRIGGERS TO SAMPLE AROUSING EVENTS WITHIN AN EXPERIENCE SAMPLING FRAMEWORK

Van Halem S. [1], Van Roekel E.[1], Kroencke L.[2], Kuper N.[2], Denissen J.[1]

[1] Tilburg University, the Netherlands
[2] Universität Hamburg, Germany

Understanding the interaction between situational characteristics and person characteristics is pivotal in explaining inter- and intra-individual variation in behavior, as well as the affective processes that drive this behavior (Baumert et al., 2017; Denissen & Penke, 2008; Fleeson, 2001; Funder, 2006). Although previous studies have started to build situational taxonomies to label the situations that are important in explaining affective and behavioral variation (e.g., Parrigon, Woo, Tay, & Wang, 2017; Rauthmann et al., 2014), sampling methods (i.e., fixed time interval, random time sampling) are often still aimed at capturing as many different situations as possible and hereby ineffectively capture many situations that are not related to affective and behavioral change whatsoever. To better capture personality dynamics in everyday life, it would therefore be useful to selectively sample situations that result in activations of the relevant affective systems.

To specifically capture situations that are emotionally meaningful, the proposed study extends a regular experience sampling design with measures of electrodermal activity (EDA), which are indicative of psychological arousal (Boucsein, 2012), to sample situations centered around events that are arousal inducing. During this study 60-80 first year Psychology students will wear portable devices and once an increase in EDA is registered by the device, they will be automatically notified to fill in a set of surveys about their current affect and whereabouts. As a first step in validating this design, our study explored differences between random and EDA based prompts in situation characteristics, activities, and affect items.

The project is currently in the data collection phase. The results and conclusions of this project are forthcoming and will be presented during this symposium.

Friday, August 30th, 2019

Symposium 9

Pella Hall 14:00 - 15:30

S 09
NEW PERSPECTIVES TO UNDERSTAND, ASSESS AND PREVENT CYBERBULLYING

Menesini E.
Chair, University of Florence, Italy

Spiel C.
Chair, University of Vienna, Austria

Smith P.K.
Discussant, Goldsmiths, University of London, England (UK)

There is a huge body of research on cyberbullying. However, despite this attention many questions about cyberbullying are still open including it's relation to traditional bullying. In particular, concerning the understanding, assessment and the prevention of cyberbullying new insights and knowledge are needed. It is the intention of the symposium to focus these topics from new perspectives. Four groups of researchers from different countries are presenting and discussing their studies on cyberbullying.

Purdy and colleagues present the cross-national Blurred Lives Project that focuses on the online experiences of 14-16 year olds in schools in disadvantaged urban. The project aims to facilitate pupil voice through the creation of resources for teachers, pupils, parents and social networking providers by using a co-participatory approach. The aim of the study presented by Nocentini and colleagues is to evaluate whether a full range of interpersonal goals predict cyberbullying directly and indirectly through online moral disengagement. The researchers test the same model for traditional bullying as well. Also Graf and colleagues target cyber- and traditional bullying. They provide a new tool for analysing differential functions of traditional and cyberbullying. For that purpose they adapted the Cyberaggression Typology Questionnaire (CATQ) which is based on the quadripartite violence typology from Howard to the traditional bullying context and investigate factorial and convergent validity as well as measurement invariance of the new instrument. Palladino and colleagues present the GenerazioniConnesse project, settled in 30 European countries, that intends promoting initiatives to make Internet a better and more trustable place for youths. The aim of the present study is to test if GenerazioniConnesse was effective in relation to three outcomes: the commitment of the schools in preventing and dealing with online incidents; the students' knowledge about risks online and students' online negative behaviour (i.e. cyberbullying).

The four projects have in common (a) a new perspective on cyberbullying, (b) a huge data set for investigating the research aims, and (3) highly interesting findings. Peter K. Smith will bring in as discussant his outstanding theoretical and empirical knowledge in this field.

S 09 - 1

BLURRED LIVES PROJECT - A CROSS-NATIONAL, CO-PARTICIPATORY EXPLORATION OF CYBERBULLYING, YOUNG PEOPLE AND SOCIO-ECONOMIC DISADVANTAGE

Purdy N. [1], Hamilton J. [1], Smith P.K. [2], Culbert C. [2], Scheithauer H. [3], Fiedler N. [3], Brighi A. [4], Mameli C. [5], Guarini A. [5], Menin D. [5], Völlink T. [6], Willems R.A. [6]

[1] Stranmillis University College, Belfast, Northern Ireland (UK)
[2] Goldsmiths, University of London, England (UK)
[3] Freie Universität Berlin, Germany
[4] Free University of Bozen-Bolzano, Italy
[5] University of Bologna, Italy
[6] Open University of the Netherlands

Background and Aims: This paper presents an overview and initial findings from the Blurred Lives Project - a cross-national, co-participatory exploration of cyberbullying, young people and socio-economic disadvantage. The project focuses on the online experiences of 14-16 year olds in schools in disadvantaged urban areas in Northern Ireland, England, Germany, Italy and the Netherlands and aims to facilitate pupil voice through the creation of resources for teachers, pupils, parents and social networking providers. The project is funded by Erasmus+ under KA2 Strategic Partnerships for School Education.

Methods: An online survey was completed by a minimum of 500 pupils in 5+ schools in each country, and explored pupils' online access and negative experiences. The second phase aimed to provide up-to-date resources for teachers, pupils and parent/carers, and make important recommendations to Social Networking Providers, building on ideas from the pupils themselves. This was done through a combination of sequential focus groups (SFGs), and quality circles (QCs), carried out intensively at 2 schools in each country.

Results: Results from the survey will be discussed and highlight high levels of access to online devices and a range of experiences of negative online behaviours. The challenges and opportunities of implementing a co-participatory methodology in the QCs and SFGs with pupils from socioeconomically disadvantaged backgrounds will also be discussed.

Conclusions: Conclusions will be drawn on two levels: first, in terms of the insights gained into the online behaviours of disadvantaged 14-16 year old pupils; and, second, in terms of the importance and associated challenges of engaging in co-participatory work around cyberbullying in disadvantaged school settings.

S 09 – 2

ASSOCIATIONS BETWEEN INTERPERSONAL GOALS, ONLINE MORAL DISENGAGEMENT AND CYBERBULLYING IN ADOLESCENCE

Nocentini A.[1], Palladino B.E. [2], Menesini E. [1]

[1] University of Florence, Italy
[2] Università degli studi Firenze, Italy

Background: Motivational factors define behavioral strategies on the basis of the desired outcome (i.e., goal) for the situation (Crick & Dodge, 1994). Agentic goals (reflecting the aim to be admired and respected by others, having control over peer-group) are positively associated with aggression and bullying. Communal goals (oriented to achieve and maintain positive relationships) resulted not associated with aggression and bullying (Caravita et al., 2012; Ojanen et al., 2005; Salmivalli et al., 2005; Ryan and Shim, 2008). However, we dont' know to what extent social goals are also relevant for cyberbullying. Another important aspect is to understand whether social dominance might be better described by the combination of agentic and separate goals and associated to the specific mechanism of moral disengagement.

Aims and Method: The aim of the study is to evaluate whether a full range of interpersonal goals predict cyberbullying directly and indirectly through online moral disengagement. The same model will be tested for traditional as well. The sample includes 624 adolescents (66% females; M age=14.19; SD=.54). Self-reported bullying, cyberbullying, moral disengagement, and students' interpersonal goals were assessed.

Results: Findings showed that Agentic and Agentic and Separate goals resulted significantly associated with bullying and cyberbullying. For cyberbullying, mediational models showed a full mediated model where direct association between goals and cyberbullying were not significant, and only the indirect path from agentic and separate goal to cyberbullying via online moral disengagement resulted significant (indirect path: B=.076; p=.000). For bullying, mediational models showed a partial mediated model where direct association between agentic and separate goals and bullying is still significant, and both the indirect paths from agentic and agentic and separate goals to bullying via moral disengagement resulted significant (respectively indirect path: B=.055; p=.001; and B=.041; p=.008).

Conclusions: Findings of the current study are discussed in terms of similarity on social motivational processes guiding bullying and cyberbullying.

S 09 – 3

PROVIDING A TOOL TO INVESTIGATE DIFFERENTIAL FUNCTIONS OF TRADITIONAL AND CYBERBULLYING BY EXTENDING THE CYBER AGGRESSION TYPOLOGY QUESTIONNAIRE

Graf D., Yanagida T., Maschler A. , Spiel C.

University of Vienna, Austria

Background and Aim: Cyber- and traditional bullying are driven by underlying aggression motivation (i.e. functions of aggressive behavior). Common theories of aggression motivation consider reactive (e.g. rage) and proactive (e.g. to achieve power and affiliation) aggression. However, according to the quadripartite violence typology (Howard, 2011), this distinction conflates aspects of motivational valence with self-regulatory processes. The Cyberaggression Typology Questionnaire (CATQ, Runions, Bak, & Shaw, 2017) takes this weakness into account and distinguishes four factors of cyberaggression (impulsive-aversive, impulsive-appetitive, controlled-aversive and controlled-appetitive aggression). Nevertheless, the CATQ only considers aggression motivation in cyberspace. Thus, we adapted the CATQ to the traditional bullying context, to provide a tool for analysing differential functions of traditional and cyberbullying. The aim of the study was to investigate factorial and convergent validity as well as measurement invariance between four-factor cyber- and traditional aggression.

Method: 587 university students of six Austrian universities (Mage=21.85, SD=4.18, ♀=63.7%) filled out the adapted CATQ in an online version during regular lectures introduced by a trained research assistant.

Results: Confirmatory factor analysis supported the four-factor structure for both cyber- and traditional aggression, after excluding inconclusive items of the impulsive-aversive subscale. Convergent validity was largely observed. Further, invariance between the measurement of cyber- and traditional aggression has been confirmed.

Conclusions: Despite the common assumption, that reactive aggression is exclusively uncontrolled and proactive aggression is exclusively controlled, our results support evidence of an extended four-factor model of aggression motivation. Regarding new forms of bullying, i.e. cyberbullying, and the changed environmental conditions in which cyberbullying appears, it seems necessary to consider additional functions of bullying, such as thrill and revenge. Finally, the extended version of the CATQ enables investigations concerning differences and similarities of underlying motives for cyber- and traditional bullying.

S 09 – 4

EFFECTIVENESS OF A NATIONWIDE INTERVENTION TO RAISE AWARENESS ABOUT ICTS OPPORTUNITIES AND RISKS

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[2] University of Cagliari, Italy

Background: GenerazioniConnesse project is led by the Italian Safer Internet Centre (SIC), co-funded by European Commission and coordinated by the Italian Ministry of Education. The general aim of the SICs-already settled in 30 European Countries- is the promotion of initiatives to make Internet a better and more trustable place for youths. All the SICs in Europe consist of an Awareness Centre, Hotlines, and Helpline to refer abuse and support children in needs. In Italy awareness raising actions are based on a screening questionnaire devoted to schools. Based on this initial portrait, the participating schools receive a different dosage of intervention (i.e. only online support and materials or additional face-to-face interventions). Until now no evaluation has been published about the effectiveness of SICs activities.

Aim: The aim of the present study is to test if GenerazioniConnesse was effective in relation to three outcomes: the commitment of the schools in preventing and dealing with online incidents; the students' knowledge about risks online and students' online negative behaviour (i.e. cyberbullying).

Method and Results: The experimental design involved: control schools' students ($N=506$); experimental schools' students ($N=634$); high and low dosage of intervention. Using data collected pre- and post-intervention, we found an increase over time in the experimental group on the perceived schools' commitment in preventing ($F_{(1, 708)}=20.040, p<.001$) and dealing with online risks ($F_{(1, 708)}=7.704, p<.001$). While the students feel themselves more aware about online risks ($F_{(1, 708)}=16.626, p<.001$) no significant decrease over time was found in the involvement in cyberbullying.

Conclusions: The complexity of cyberbullying dynamics seems to be not so easy to be modified by a general intervention on online risks and opportunities. Within the framework of the translational research in psychology and the evidence-based approach, the discussion will underline aspects related with the dosage of intervention that can promote a better trade-off between costs and benefits.

Friday, August 30th, 2019

Papers 6 – Attention, Learning, Memory

Florina Hall 14:00 – 15:30

OP 031
PARENT – TEACHER AGREEMENT ON EXECUTIVE FUNCTIONING OF STUDENTS WITH SPECIAL EDUCATIONAL NEEDS WITHIN SPECIAL EDUCATION

Douma F., De Boer A., Minnaert A., Grietens H.

University of Groningen, Department of Special Needs Education and Youth Care, The Netherlands

Executive functioning (EF) plays a vital role in the cognitive and educational development of students, especially in students with special educational needs (SEN) (Blair & Razza, 2007, 2009). Students with SEN regularly have deficits in EF, mostly due to a cognitive impairment (CI) or behavioral disorders (BD), such as autism spectrum disorder or AD(H)D. These deficits in EF strongly impede with the education of these students (Memisevic & Sinanovic, 2014 ; Bull, Espy & Wiebe, 2008). It is therefore important to understand in what areas of EF deficits occur, in order to meet the educational needs of the students.

This study aimed to provide insight in the degree of agreement in the assessments of EF by parents and teachers of students with SEN in special education.

A cross-sectional study was conducted. Parents and teachers were asked to fill in the Dutch version of the Behavior Rating Inventory of Executive Function (BRIEF). A total of 84 teacher-parent pairs were formed, 64 pairs reported on students with CI, 20 pairs on students with BD ($M_{students}$ = 14,1; SD = 2,67).

Through multiple regression analysis, paired sample t-tests and correlations the raw scores were analyzed. No significant differences between teachers and parents reports were found (t(83) = -1,554, p = 0,124). Correlations on the subscales of the BRIEF ranged from r =.68 (inhibition scale) to r = .33 (initiative scale). Gender, type of disability or age were no significant predictors of the reported total scores on the BRIEF. On average parents reported higher scores than teachers, there was less agreement on the EF of girls and amount of agreement increased with age of the student.

Teacher-parent agreement on EF of students with SEN measured with the BRIEF is moderate. The BRIEF reports form a good foundation for educational decisions for students with SEN.

OP 032
DEVELOPMENTAL IMPROVEMENT IN STRATEGIES TO MAINTAIN VERBAL INFORMATION IN WORKING MEMORY

Camos V., Oftinger A-L.

Université de Fribourg, Switzerland

Although it has been proposed that maintenance of verbal information in adults' working memory relies on two strategies, articulatory rehearsal and attentional refreshing, little is known about the interplay of these strategies in children. To examine strategy changes around the age of 7, children were asked to maintain digits during a retention interval introduced between encoding and recall. In Experiment 1, this interval was either unfilled in a delayed span task or filled with an attention-demanding task in a Brown-Peterson task. This concurrent task was either silent or aloud to vary the availability of rehearsal. Experiment 2 introduced variation in the attentional demand of the concurrent task, and an independent concurrent articulation. As predicted, recall performance was better in older children, but was reduced under concurrent articulation or when attention was less available, bringing further evidence in favor of two maintenance strategies. Moreover, the measure of the availability of attention for refreshing was correlated with recall performance in 8- and 7-year-olds, though only when rehearsal was impeded for 7-year-olds, but it did not correlate with 6-year-olds' recall. This could suggest that rehearsal is the default strategy in young children who can adaptively switch to refreshing when articulatory processes are unavailable.

OP 033

ON THE SOURCES OF WORKING MEMORY DEVELOPMENT: MANIPULATING TEMPORAL FACTORS (ALMOST) ABOLISHES DEVELOPMENTAL DIFFERENCES

Barrouillet P., Dagry I., Gauffroy C.

Université de Genève

The age-related growth in working memory (WM) capacity has often been assumed to underpin cognitive development. However, identifying the factors responsible for this growth proved a task fraught with difficulties, because controlling for a series of potential factors in previous studies did not make developmental differences in WM disappear as it should have been observed. The rationale of the present study was to control for two factors assumed by the TBRS model to account for WM performance in complex span tasks: the duration of distracting activities during which memory traces decay and the free time available between successive processing episodes for restoring degraded memory traces. A first experiment using a complex span task in which participants had to maintain letters for further recall while performing additions established that there is a huge developmental difference in WM spans between children aged 9 and adolescents aged 15. In a second experiment, temporal factors were controlled by (a) equating processing times between groups and (b) tailoring free times to the processing speed of each age group. Results revealed that these manipulations made the developmental difference almost disappear, the residual difference being no longer significant. These results suggest that, more than changes in capacity or strategies, WM development between childhood and adolescence depends on an increase in the speed at which information can be processed and degraded memory traces can be restored.

OP 034

DYNAMICS OF EXECUTIVE ATTENTION IN CHILDREN WHO DIFFER IN FLUID INTELLIGENCE

Rico-Picó J.[1,2], Hoyo A.[1,2], Guerra S.[1], Rueda M. R.[1,2]

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[2] University of Granada, Department of Experimental Psychology, Granada, Spain

The Dual Mechanism of Control theory claims that executive attention (EA) processes are segregated into proactive or reactive depending on their temporality. Proactive control is implemented after a cue indicates the upcoming of a probe, whereas reactive control does once the probe appears. In the adult population, the implementation of a more proactive strategy is associated with higher scores in fluid intelligence (gF). During development, the strategy for executive control shifts protractedly from reactive to proactive. Thus, an earlier transition to proactive strategy might explain individual differences in children's intelligence.

The conflict-related N2 ERP varies depending on gF. For instance, high-gF children present reduced conflict-related N2 amplitude, which signals more efficient resolution. Nevertheless, most previous studies used experimental protocols that do not allow proactive control strategies, thus only exploring N2 modulation in reactive control conditions. In the current study, we aimed at testing EA dynamics at the cognitive and neural level in conditions that allow proactive control strategies in children who differ in gF.

We divided the sample (N = 62; mean age = 8.64 ± 0.29 years) into high-gF and low-gF depending on the matrices subtest score of the K-BIT. To test the EA dynamics changes we employed a child-friendly AX-CPT protocol, which includes proactive possible (BX) and reactive (AY) control types of trials.

Our behavioural results suggest that high-gF children implement a more proactive control strategy. Furthermore, we found that high-gF children show equivalent N2 amplitude in reactive and proactive possible pairs, whereas the low-gF group diminishes proactive possible pairs' amplitude respect to reactive pairs. Across groups, larger N2 amplitude in proactive possible pairs correlates with better performance. These results indicates that children with high gF scores uses proactive control to a larger extent than low gF peers, and that it modulates the conflict experienced.

OP 036

DETECTION OF BIOLOGICAL MOTION AND ITS LINK TO GROSS MOTOR SKILLS IN VERY PRETERM 12-YEARS-OLD CHILDREN

Montgomery C. [1], Johansson M. [1], Fredriksson-Kaul Y. [1], Hellström-Westas L.[1], Kochukhova O. [1,2]

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[2] Department of Psychology, Uppsala University, Sweden

Very preterm children (VPT,<32 gestational weeks) are at risk of experiencing difficulties in motor functioning and social perception. According to embodied cognition theories there should be a link between motor functioning and social perception. Previous studies have investigated the association between motor competence and capacity to detect Biological Motion (BM) rendering varying results.

The aim of the study was to explore if motor competence is associated to concurrent ability to detect BM in VPT children.

Thirty-three 12-year-old VPT children performed the Movement Assessment Battery for Children (MABC2). Gaze was recorded with TobiiTX300 eye-tracker whilst looking for 8 walking point-light men (BM). BM was masked by random dot motion in condition 1:6 dots/SQinch and condition 2:12 dots/SQinch. Mean detection time for the two BM conditions was comparable and collapsed into one variable.

In VPT group significant Pearson correlations were obtained between BM detection time and MABC Total scale score on motor competence ($r = -.41$, $p<.05$), Aiming and Catching ($r = -.46$, $p<.001$) and Static and Dynamic Balance ($r = -.38$, $p<.05$). No significant correlation between BM and Manual Dexterity was obtained.

Results indicate that BM detection ability is associated to concurrent gross motor functions but not to fine motor abilities. The finding supports the idea of embodied development of social perception as the BM detection task presented a gross movement pattern. The results render a possibility to form interventions aiding both problem areas for VPT children.

Friday, August 30th, 2019

Papers 7 – Language Development II

Kozani Hall 14.00–15.30

OP 037

HOME LITERACY ACTIVITIES AND THEIR CORRELATES IN A HIGHLY TRANSPARENT ORTHOGRAPGY

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University of Jyväskylä, Jyväskylä, Finland

Background and aims. The study examined the extent to which home literacy activities (teaching of reading and shared reading) during the preschool year would predict the development of children's language and literacy skills in primary school, among Finnish children. Also, the correlates of maternal literacy activities (maternal beliefs and expectations, children's pre-literacy skills) during preschool were examined.

Methods. The data of 1,880 children (6-year-olds at a baseline) and their mothers were used. Children's literacy and language skills were tested at five time-points: the beginning and end of preschool, the beginning and end of Grade 1, and the end of Grade 2. Mothers filled in questionnaires at the end of their children's preschool year.

Results. The results showed that home teaching of reading at preschool age had a weak but statistically significant impact on children's emergent literacy (letter knowledge, reading fluency), while shared reading contributed to oral language skills, such as vocabulary and listening comprehension. Moreover, early letter knowledge was related to both the maternal teaching of reading and shared reading, while maternal beliefs and expectations about their children's schooling and competence (i.e., importance of reading and writing readiness, child's talent in reading and writing, and expectations for child's performance) were associated with more frequent engagement in the teaching of reading.

Conclusions. The results support and expand the home literacy model (previously developed in opaque languages, such as English and French) to the highly transparent Finnish language.

OP 038

SPELLING PREDICTORS IN A LARGE CROSS-SECTIONAL STUDY INVESTIGATING THE ROLE OF PHONOLOGICAL ABILITY AND RAPID NAMING

Niolaki G.[1,2], **Vousden J.**[1], **Terzopoulos A.**[1], **Taylor L.**[1], **Debney L.**[1], **Shepherd D-L.**[1], **Masterson J.**[2]

[1] *Coventry University*
[2] *UCL, Institute of Education*

Previous studies have indicated that phonological ability is an important predictor of early spelling performance. In addition, research indicates that rapid automatized naming ability only affects spelling performance in older more experienced spellers. This study aims to explore predictors of spelling in children using a new interpretive spelling tool consisting of exception words, regular words and non-words. An existing standardised spelling assessment of single words was also employed to explore the validity of the new spelling assessment.

The project is a cross-sectional one using a correlational design to evaluate the association between phonological ability, phonological memory, and rapid automatized naming and single word spelling in a large representative sample of primary age children (RYr-Yr6, N=479) from different schools in the UK.

The results indicated a significant improvement in spelling performance across the year groups, as expected. Regression analysis conducted with all the items in the new spelling assessment (N=106) indicated that phonological ability and rapid naming were significant predictors across the year groups, but phonological memory was not a significant predictor. Similar results were found for exception word spelling (N=36). However, for non-word spelling (N=34) phonological ability and rapid naming were significant predictors for the younger children (RYr-Y3), but not for the older children (Yr4-Yr6). For the older children only phonological ability was significant.

Results indicate that in order to have a better understanding of the development of spelling ability we need to use reliable spelling tools which assess the different components of spelling, as different processes seem to be associated with the different types of letter string across different levels of spelling experience. We suggest that the new spelling assessment provides a reliable means for identifying specific spelling difficulties experienced by individuals and also to help researchers in their studies.

OP 039

FROM BOOK SMART TO STREET SMART? EXPOSURE TO NARRATIVE FICTION IS RELATED TO ADOLESCENTS' SOCIO-COGNITIVE ABILITY

De Mulder H. [1], Hakemulder F. [2], van den Berg T. [3], van Berkum J. [2]

[1] Leiden University, the Netherlands
[2] Utrecht University, the Netherlands
[3] Independent researcher

The current study assesses whether narrative fiction (NF) reading has a beneficial effect on socio-cognitive ability. Literary reading has been found to enhance adults' mental state understanding (Kidd & Castano, 2013) and parent-child book reading benefits young children's false belief understanding (Ratner & Olver, 1998). The socio-cognitive processing that readers engage in in order to understand characters' actions in a fictional world may thus transfer to real world mental state understanding. What is currently unknown, however, is whether these findings also hold for adolescents. Adolescents are still developing in the socio-cognitive domain (de Graaff et al., 2014) and those who are more sensitive to the emotional expressions of others display more adaptive social behaviour (Rosen et al., 2017), so it is relevant to investigate whether exposure to NF may be effective in enabling the further development of socio-cognitive skills.

The current study investigated immediate NF exposure effects and cumulative effects of NF exposure over the lifetime in 144 Dutch adolescents (aged 12-16, 65 boys). Immediate effects were assessed by assigning children to an NF condition or an informative text condition. Understanding of the NF story required the reader to be able to make sense of the protagonist's deceptive intent, whereas the informative text did not rely on mental state understanding. Cumulative effects were assessed using an Author Recognition Test (ART, West et al., 2003) that was specifically developed to assess Dutch adolescents' NF exposure. Socio-cognitive ability was assessed using tasks (Yoni and RMET) that required children to demonstrate their understanding of others' mental states. The findings of this study demonstrated that although there were no immediate effects of NF exposure, there was a significant positive correlation between the ART and the socio-cognitive tasks. Exposure to NF throughout the lifetime may thus be an effective means of enhancing adolescents' social-cognitive abilities.

OP 040
USING MACHINE LEARNING TO IDENTIFY MODERATORS OF FATHERS' INVOLVEMENT IN CHILDREN'S LANGUAGE DEVELOPMENT: A META-ANALYSIS

Van Lissa C.J.[1], Lucassen N.[2], Keizer R.[2]

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[2] Erasmus University Rotterdam, NL

Fathers play a unique role in language development (Cabrera 2013). Compared to mothers, they use more varied and challenging language (Tamis-LeMonda, 2012), thereby expanding the child's vocabulary. Although recent years have seen burgeoning interest in fatherhood, the last meta-analysis covered research until 2008, reporting an average correlation of .08 based on 5 effect sizes (McWayne, 2013). We aimed to update this estimate.

A systematic search yielded 7185 articles; 144 met inclusion criteria, and 31 reported sufficient statistical information to compute 265 effect sizes. Additionally, we coded 83 moderators.

Observed effect sizes ranged from -0.65 to 0.73 (). Sample sizes ranged from 8 to 5190 participants (). Several studies reported multiple effect sizes (1 - 54).

The overall, multi-level effect size estimate was , 95% CI [0.08, 0.17], , . This small-to-medium effect suggests that the association between father involvement and language outcomes is stronger than thought before. Within-studies variance was significant, 0.02, 95% CI [0.01, 0.03], as was the between-studies variance , 0.008, 95% CI [0.002, 0.03].

We used the machine learning algorithm MetaForest (Van Lissa, 2018) to identify relevant moderators. One substantive moderator addressed the open question of which aspects of children's language fathers influence (Cabrera, 2013): We found stronger effects for generative- than receptive language. Furthermore, methodological moderators were most important. Home research yielded larger effects than lab or school-based research, and observations and assessments yielded larger effects than questionnaires (both suggesting ecological validity is important). Trained researchers yielded larger effects than parent-reports. Important statistical moderators delivered the sobering insight that effects found tend to be stronger when dropout rate is high in longitudinal research - suggesting that participants who remain in studies are a biased sample. The higher the number of control variables, the bigger the effect size found. This pattern suggests the occurrence of p-hacking.

OP 041
BABYLEX - A 2-MINUTE TABLET-BASED VERSION OF MACARTHUR-BATES COMMUNICATIVE DEVELOPMENT INVENTORIES

Mayor J.[1], Mani N.[2]

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Background and aims: MacArthur-Bates Communicative Development Inventories (CDIs; Fenson et al., 2007) are one of the most widely-used evaluation tools of early language development. CDIs are filled in by parents or caregivers of young children by indicating which of a pre-specified list of words and/or sentences their child understands and/or produces. Despite its success, their administration is time-consuming and can be of limited use in clinical settings, multilingual environment or when parents possess low literacy skills.

Methods: A new method will be presented, in which an estimation of the full-CDI score is obtained by combining parental responses on a limited set of words randomly sampled from the full CDIs with vocabulary information extracted from the WordBank database (Frank et al., 2017), sampled from age-, gender- and language-matched participants.

Results: Real-data simulations using CDI-WS for American English, German and Norwegian as examples revealed high accuracy and validity of the instrument even for tests having just 25 words, effectively cutting administration time to a couple of minutes. Empirical validation with new participants confirmed the robustness of the test (Mayor & Mani, 2018). Versions of an app and of a web-interface implementing the instrument will be introduced.

Conclusions: BabyLex - the 2-minute tablet-based version of MacArthur-Bates Communicative Development Inventories - is a fast yet valid method for assessing early lexical development between 8 and 36 months of age.

Friday, August 30th, 2019

Papers 8 – Education and Schooling I

Edessa Hall 14.00–15.30

OP 044

RETROSPECTIVE NARRATIVES OF SCHOOL EXPERIENCES OF SUCCESSFUL ADULTS WITH DISABILITIES – EXTERNAL AND INTERNAL RESOURCES

Kass E., Miller E.

Achva Academic College, Dept. Graduate school, Arugot, Israel

Background: The present study examined narratives of successful adults with disabilities, focusing on the contribution of educational experiences to their grit and self-efficacy. Our theoretical framework was positive psychology (Seligman & Csikszentmihalyi, 2014), focusing on grit (Duckworth, 2016) and self-efficacy (Bandura, 2006).

Resources that help people to succeed despite significant challenges, in particular childhood disability, can be divided into personal-internal and social-external (Hobfoll, 2001).

For this study we chose the definition of Reiff et al. (1997) who examined narratives of successful adults with learning disabilities.

Methods: 18 occupationally successful adults with various childhood disabilities (M=15; F=3) were interviewed using an in-depth, narrative interview. It was transcribed and analysed using content analysis.

Results: Participants reported several academic and social challenges in regular schools. However, external resources combined with internal resources helped these individuals better cope with their disability. External resource included efficacy-enhancing messages and parental dedication: Messages from parents and educational professionals, asserting that although the disability, the children were just like everyone else, and that their disability should not hamper their self-esteem or self-image. Another resource was parents' dedication and willingness to fight for their child. Two main categories of internal resources were identified: 1) a distinct trait or skill, unrelated to the individual's disability, that helped these individuals feel valuable and become socially included, or to compensate them for the challenges resulting from their disability; 2) grit, which included plenty of ambition and aspiration to achieve their goals.

Conclusions: Support from both parents and educational professionals and efficacy enhancing messages are crucial for helping children with disabilities develop into occupationally successful adults. These should be combined with inner strengths such as grit, self-efficacy and unique abilities to complement these supports in the successful development of students with childhood disabilities.

OP 045

SO MANY OPTIONS… HELP! THE UNIQUE AND INTERACTIVE ROLE OF AN AUTHENTIC INNER COMPASS AND PARENTAL INVOLVEMENT IN HIGH SCHOOL STUDENTS' STUDY CHOICE DECISION MAKING

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Department of Developmental, Personality, and Social Psychology, Ghent University

At the end of secondary education, many students face the choice to embark on higher education studies. Such decision making can be challenging, with some students being indecisive or feeling pressured. Other students complete this decision-making with ease, exploring and arriving at a solid commitment. Because students' motivation for future plans determine their attainment of and satisfaction with future goals, it is important to identify their determinants. The present study addresses the unique and interactive role of high-school students' identity and parental involvement for the study-choice-tasks and motivation for future plans. More specifically, we expect that need-supportive parental involvement in decision-making and a well-developed inner compass (i.e. being in touch with authentic values and preferences) will positively contribute to this process. Conversely, controlling parental involvement, uninvolvement and a poorly developed inner compass are expected to relate to poor motivational quality and less engagement in study-choice-tasks.

A sample of 202 Belgian high school students (30.2% boys; Mage = 18.06 years; Mgrade = 12th) completed a variety of self-report questionnaires. Results from multivariate linear modeling show that an authentic inner compass uniquely contributes to having more autonomous (β = .20) and less controlling (β = -.16) reasons for future plans and various dimensions of the study-choice-process (e.g. exploration, β = .25). Further, need-supportive parental involvement has unique association to autonomous motivation (β = .18). Controlling parental involvement and uninvolvement were generally related negatively to engagement in the study-choice-tasks. Moreover, some evidence for interactions between students' inner compass and parents' involvement were obtained, indicating that an authentic internal compass mitigates some of the detrimental effects of a controlling and uninvolved parental style. Overall, the findings suggest that high school students' decision-making about the future is shaped by a complex interplay between personal identity and parental involvement.

OP 046

KILLING TWO BIRDS WITH ONE STONE: DO MOTIVATIONAL ORIENTATIONS AND MINDSETS PREDICT CHANGES IN STUDENTS' ACHIEVEMENT AND WELL-BEING BEYOND IQ?

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Fostering both performance and well-being among students is a hot topic in scientific literature and educational practice. We examined the role of two potential determinants, ability and psychological resources, on academic achievement and well-being on both an inter- and intra-individual level by using a longitudinal design. As psychological resources, we proposed two well-established psychological frameworks within educational literature, the implicit beliefs of intelligence and motivation as posed by self-determination-theory. The combination of both psychological resources and ability in research is rather scarce, since most studies examined the role of psychological resources separately. Psychological resources have mostly been related with soft academic outcomes (engagement, effort, persistence). Whether they predict hard academic achievement outcomes (GPA) is less clear, especially when examining their unique predictive effects in addition to intelligence, which is the strongest and best single predictor of hard achievement outcomes. By examining both factors simultaneously, we aim to advance insights on their unique effects.

We relied on data from the SiBO-project, a longitudinal dataset (N=2499, 48,9% female) of Flemish students followed in the transition from sixth to seventh grade. At both waves, students filled out questionnaires tapping into mindsets, motivation, and well-being at school. Achievement was assessed using standardized tests for mathematics. Intelligence was assessed using the SPM and the CIT-3-4-R.

Data were analyzed using latent change modelling, allowing us to longitudinally look at both between- (inter-individual) and within-person (intra-individual) effects. Whereas intelligence was only predictive of students' academic achievement, results indicate that autonomous motivation was predictive of increases in both math and well-being at the between- and within-person level. Furthermore, the initial level of controlled motivation was negatively predictive of increases in math and both at the between- and within-person level, controlled motivation was predictive of decreases in well-being. No effects of entity mindsets were found.

OP 048

ACADEMIC ACHIEVEMENT AND PARENTAL HOMEWORK INVOLVEMENT IN ELEMENTARY SCHOOL – A LONGITUDINAL STUDY WITH A FIXED EFFECTS APPROACH

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Background and aims: Children's poorer academic achievement in elementary school is often associated with more parental involvement in homework tasks. Previous research has not been positioned to account for several confounding factors that may inflate or deflate any observed effects of children's poor performance on parental involvement. Some of such hard-to-measure confounding factors may be fully (i.e. genetics) or predominantly (i.e. personality, parenting) stable over time. In the present study, we aim to examine the bidirectional relations between children's academic performance and parental homework involvement from grade 1-7, applying fixed effects regression, which controls for all unobserved time-invariant confounders.

Methods: 877 Norwegian 6-year olds from the longitudinal community study, the Trondheim Early Secure Study, were followed up at ages 8, 10, and 12. Primary teachers rated students' performance in reading, writing, and math, and a sum score of the three subjects was calculated. Parents reported on their homework involvement. First, an autoregressive cross-lagged analysis within a structural equation modeling framework was used to test prospective and bidirectional relations between academic performance and parental homework involvement. Next, we added fixed effects to the model by creating two latent time-invariant variables that loaded on academic performance and parental involvement; thus, the effect of academic performance and parental homework involvement was adjusted for all unmeasured time-invariant confounders.

Results: The autoregressive cross-lagged analysis revealed that academic performance in 1st, 3rd and 5th grade predicted less parental homework involvement 2 years later (ß= -.17, p<.001; ß= -.22, p<.001, ß= -.09, p<.05). When we controlled for unobserved time-invariant factors in a fixed effects regression, results indicated that academic achievements in 1st and 5th grade no longer predicted parental homework involvement, but academic achievement in 3rd grade predicted less parental involvement in 5th grade (ß= -.11, p<.05).

Conclusion: The results indicate that poor academic performance predicts more parental involvement, but only from 3rd to 5th grade. Future studies should examine potential confounding child and parental characteristics (i.e. personality, parenting) throughout elementary school.

Friday, August 30th, 2019

Papers 9 – Autism Spectrum Disorder

Naoussa Hall 14.00–15.30

OP 049

NEED-SUPPORTIVE PARENTING FOSTERS PSYCHOSOCIAL DEVELOPMENT IN YOUTH WITH AND WITHOUT AUTISM SPECTRUM DISORDER, CEREBRAL PALSY AND DOWN SYNDROME

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Parents play a critical role in supporting their child's social, behavioral and emotional development. In the past decade, research in mainstream populations took huge strides forward by applying insights from Deci and Ryan's Self-Determination Theory (SDT) to better understand the effects of need-supportive and need-thwarting parenting on child behavioral outcomes. In the context of raising a child with a developmental disability, however, very little research has evaluated SDT-based premises. This study investigates the impact of need-supportive versus need-thwarting parenting behaviors on child behavioral problems and strengths across four specific groups.

Parents of children between 7 and 15 years old with Autism Spectrum Disorder (n=95), Cerebral Palsy (n=121), Down syndrome (n=73) and without any known disability (n=120) rated their use of responsive, autonomy-supportive and psychologically controlling parenting strategies, as well as their child's behavioral problems and psychosocial strengths.

Group comparisons indicated that levels of parenting did not vary widely across groups. By contrast, important differences in behavioral presentations were observed, with parents of children with ASD reporting the most behavioral problems and the least psychosocial strengths. Multi-group structural equation models revealed similar, SDT-predicted relations between parenting dimensions and psychosocial outcomes in each group. Three structural effects were found: higher levels of psychologically controlling related to more externalizing problems, whereas higher levels of responsive as well as autonomy-supportive parenting were associated with more psychosocial strengths.

This study demonstrates SDT as a valuable framework to study parenting dynamics in special needs families. Corroborating the beneficial links of need-supporting parenting and the detrimental impact of need-thwarting parenting, this study provides initial support to SDT's universality claim in that "*all* children need to feel loved, autonomous and competent" (Deci et al., 1992), including those growing up with special needs.

OP 050

THE STILL-FACE PARADIGM IN CHILDREN WITH AUTISM SPECTRUM DISORDER

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The Face-to-Face Still-Face (FFSF) Paradigm is a well-known and validated procedure that examines the quality of mother-infant interactions and assesses socio-emotional regulation in children facing a social stressor. Research has shown that children with Autism Spectrum Disorder (ASD) do not respond in the same way as Typically Developing (TD) children in the FFSF Paradigm and tend to display flatter or more neutral affect.

The aim of the present research is to provide a detailed, fine-grained description of the way children with ASD react in the FFSF using a microanalytic approach and focusing on multiple expressive displays such as gaze, facial expressions, gestures, and vocalizations. Participants were ten children with ASD and ten TD children, matched for mental age using the Mullen Scales of Early Learning. For the microanalysis of the video recordings the EUDICO Linguistic Annotator (ELAN) was used, which permits the analysis of joint behaviors and captures subtle qualitative differences in social engagement.

Results show that children with ASD are less responsive and attentive, make fewer vocalizations, display more neutral affect, produce fewer social cues and make rare attempts to reunite with their mothers. On the contrary, TD children demonstrate reduced gaze, increased negative affect and more communicative gestures and vocalizations.

Discussion focuses on the application of the FFSF paradigm as an evaluation and intervention tool in clinical practice with children with ASD and other neurodevelopmental disorders and their parents.

OP 051

SPEECH FEATURES OF CHILDREN WITH ATYPICAL DEVELOPMENT: AUTISM SPECTRUM DISORDERS AND DOWN SYNDROME

Gorodnyi V., Lyakso E.

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This work is a part of the project to study reflecting emotional, psychophysiological and psychoneurological states in voice and speech features of children (the Head of the project - Lyakso E., 2018-2020). The goal of this study is to determine specific features of speech in children aged 6-7 years with autism spectrum disorders and with Down syndrome.

In the study, participants were 30 children aged 6-7 years: with autism spectrum disorders (ASD, n=10), with Down syndrome (DS, n=10), and typically developing (TD, n=10). The method used in the work was developed in the Child Speech Research Group (Lyakso et al., 2012). The acoustic spectrographic, perceptual phonetic analysis for speech, and statistical analysis of data were used.

It has been found that TD children are characterized by maximal values of vowel articulation index (VAI) for stressed vowels; children with ASD - by high values of pitch, pitch variability of words and stressed vowels from words, squares of formant triangles of stressed vowels and VAI for unstressed vowels, non-formation of some consonant phonemes; children with DS - by high values of duration of words and stressed vowels from words, low values of VAI for stressed vowels, non-formation of some consonant phonemes and presence of phonemes uncharacteristic for the Russian language. The connection between values of VAI for stressed vowels and children's diagnoses has been revealed - children with DS has lower values of VAI vs. TD and peers with ASD.

Acoustic features of speech which are specific for TD children, children with ASD and with DS aged 6-7 years have been defined. The obtained data can be used for teaching children with atypical development and creating computer programs.

OP 052

NEUROPSYCHOLOGICAL ASSESSMENT OF A PRESCHOOL CHILD WITH HIPPOCAMPAL ATROPHY AND AUTISM SPECTRUM DISORDER BEHAVIORAL SYMPTOMATOLOGY AND THE POST-ASSESSMENT NEURO-REHABILITATION INTERVENTION STRATEGIES IMPLEMENTED- A CASE STUDY

Halikiopoulou O.

Clinical Neuropsychologist (Private Practice)

Background and Aims: Child Neuropsychology is a specialty within the fields of Developmental and School Psychology, Pediatric Neurology, Child Psychiatry and Neuroscience which involves the understanding and bridging of brain functioning and behavior, as related to each developmental stage (Davids & Reynolds, 2018). As a result, the clinician's in-depth knowledge on diagnostics, brain-behavior relations, cognitive interpretation of psychometric findings as well as the implementation of mediating strategies for cognitive remediation and behavioral intervention based on each child's neuro-developmental profile is of great importance (Davids & Reynolds, 2018).

Neuro-developmental deficits are characterized by a disruption in cognition, verbal skills and communication, as well as behavioral difficulties (Ahn & Hwang, 2018). Children who fit a certain neurodevelopmental profile often present with deficits in social skills across all contexts and most fail to reach the according developmental milestones based on their mental age (Ahn & Hwang, 2018). Research findings show positive features of cognitive remediation interventions on learning, school performance and social interactions (Shaw, 2011, Ahn & Hwang, 2018).

Methods: The Neuropsychological Battery implemented was that of the Wechsler Preschool and Primary Scale of Intelligence -III (WPPSI-III) and the Peabody Picture- Vocabulary Test. Further, rehabilitation strategies used were based on Applied Behavioral Analysis (ABA), Wilson's 7-step rehabilitation techniques (2003) as well as cognitive training aimed towards strengthening executive functioning and verbal working memory and episodic memory.

Results: The results which will be presented will showcase the measureable outcome of the aforementioned techniques. We expect to see a statistically significant increase in cognitive functioning as measured by the WPPSI-III almost 12 months post-assessment, as well as a qualitative overview of behavioral and social elements post-intervention.

Conclusions: This case study identifies several elements of effective therapeutic techniques for preschool children with neurodevelopmental deficits, suggesting that cognitive remediation therapy can improve social skills and communication, as well as learning in order to enhance quality of life in the future.

OP 054

"JOURNEY ON STAGE" DRAMATHERAPY GROUP SESSIONS FOR ADOLESCENTS WITH AUTISM SPECTRUM DISORDER: A MIXED-METHOD RESEARCH STUDY

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Clinical and Health Psychology, School of Health in Social Science, Old Medical School, The University of Edinburgh, Edinburgh, UK.

Background & Aims: Dramatherapy is a form of psychotherapy that entails the intentional use of drama and theatre-arts creative processes such as role play, embodiment, improvisation, storytelling, metaphor and symbol; aiming at personal growth, mind-body connection, self-expression/understanding, change and exploration of life experiences in a potentially indirect, verbal or non-verbal manner. Dramatherapists and researchers have contributed to the development and appreciation of dramatherapy for people with autism. There is evidence to suggest that dramatherapy has benefits for adolescents with autism, however, there is currently a lack of robust research in this field. The present study aims to evaluate the process and outcomes of dramatherapy group sessions for adolescents with autism.

Methodology: A mixed-method design was developed by integrating quantitative and qualitative approaches. 28 adolescents, 11-17 years old, diagnosed with autism, with Greek language as their mother tongue, participated in dramatherapy groups for a block of 15 sessions (15 weeks), facilitated by credentialed dramatherapists. There was a comparison group of 9 participants who did not engage with the intervention. Empathy, symptomatology screening, theory of mind and psychological strengths and difficulties measures were administered to all participants before and after the 15 sessions.

Results: Preliminary results indicated significant changes in emotional and behavioural difficulties following the dramatherapy sessions; the participants' social-emotional understanding was enhanced and their expressive skills were improved. There was also significant empowerment of therapeutic alliance, showed through the repeated measurements of different dimensions including communication, self-observation, emotion, salience, safety, closeness and engagement.

Conclusions: This innovative study demonstrates the potential value of dramatherapy for adolescents with autism. Further research is required to replicate and extend these findings. Dramatherapy is a promising area of professional practice to support young people with autism.

Friday, August 30th, 2019

Symposium 10

Ilissos Hall 15:30 – 17:00

S 10
NEW MODELS OF ACCULTURATION AND ADAPTATION

Lee R.
Chair, University of Minnesota, USA

Motti-Stefanidi F.
Discussant, University of Athens, Athens, Greece

Although the term and subsequent scientific study of acculturation and its relation to adaptation originated over 100 years ago, psychological models of acculturation and adaptation have not changed much over the past twenty-five years. Scholars continue to rely upon John Berry's seminal contributions to the study of acculturation as a bidimensional construct. However, recent developments in acculturation research suggest change is afoot. Drawing upon developmental and life course theories, researchers are now re-examining what is acculturation, when does it begin, how does it manifest, and who experiences such changes. In this symposium, we present three new conceptual models of acculturation and adaptation that relate to new patterns of immigration and development.

The first presentation draws upon attachment theory and relationship science to present a new conceptual model for how youth manage, respond, and adjust to voluntary and forced migration. The authors propose relationships to caregivers, peers, and educators and a sense of connection, belonging, and place may facilitate or hinder acculturation and adaptation for new immigrants and refugees. They outline new areas of research based on this framework. The second presentation draws upon concepts from pubertal developmental to illustrate the dynamic processes of acculturation. Moving beyond Berry's four acculturation strategies, authors propose temporal concepts of acculturation change, such as acculturation timing, tempo, pace, and synchrony. They discuss new research methods to study and analyze such change processes over time. The third presentation tests the assumption that acculturation (and not secular trends) is the explanatory mechanism for health disparities in newly arrived emigrants. The authors present data from an ongoing longitudinal study of Filipino migrants that compares their acculturation and health with a non-migrant cohort who remain in the Philippines. The symposium concludes with discussion from Prof. Motti-Stefanidi who conducts interdisciplinary longitudinal research on the development and adaptation of immigrants.

S 10 –1

USING ATTACHMENT AND RELATIONAL PERSPECTIVES TO UNDERSTAND ADAPTATION AND RESILIENCE AMONG IMMIGRANT AND REFUGEE YOUTH

Juang L.P.[1], Simpson J.A.[2], Lee R.M.[2], Rothman A.J.[2], Titzmann P.F.[3], Schachner M.K.[1], Korn L.[4], Heinemeier D.[4], Betsch C.[4]

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Migration is a critical issue for child and adolescent development in the 21st century. Globally, there are 244 million migrants (United Nations, 2015). During the past few years, an unprecedented number have experienced forced migration and of these, 51% are under age 18 (UNHCR, 2016). Although migration can afford youth opportunities to thrive and develop new competencies, there remain significant risks of marginalization that pose challenges for many immigrant youth. Despite these challenges, many immigrant and refugee youth are valued, do well, and feel well (Kia-Keating & Ellis, 2007; Motti-Stefanidi & Masten, 2017). Drawing from principles of attachment theory and interpersonal relationships research, we present a new conceptual framework to provide insights into how youth manage and respond to migration experiences, with implications for their academic and socioemotional well-being.

Immigrant and refugee youth should experience better outcomes to the extent that they: (1) maintain strong relationships with caregivers, peers, and educators who provide a sense of closeness, safety, and confidence during the process of adjusting to this life transition, and (2) find ways to establish a sense of connection and belonging to the new people, places, communities, and social networks within which they now live. These strong bonds to people and places may fulfill some of the key attachment functions by providing a sense of closeness, safety, and security in stressful situations. These principles lead to important areas for future research such as: How do immigrant and refugee youth create new emotional bonds with their new schools, neighborhoods or communities? How does one create inviting, supportive spaces (e.g., in classrooms or schools) that forge positive connections to specific places, which then promote a sense of belonging, safety, and security? The need for new and better strategies that promote the positive development of immigrant and refugee youth within their families and communities is crucial, not only for individuals and families, but for society as a whole.

S 10 - 2

ACCULTURATION VERSUS SECULAR TRENDS: THE HEALTH OF PHILIPPINE EMIGRANTS STUDY (HOPES)

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Background and Aims: Immigrants often healthier than their peers born in the host country, but this health advantage often erodes over time. For example, many immigrants to the United States (U.S.) are initially less obese than their American-born peers, but then become as obese after 15 years. A popular explanation for this erosion is acculturation to American diets and physical activity patterns. However, rates of obesity are rising globally, suggesting that acculturation effects are confounded by secular trends. Past studies have not been able to disentangle these competing explanations due to reliance on cross-sectional data, lack of information before migration, and lack of a comparison group of non-migrants. Presently, we describe a study designed to address these limitations.

Methods: The Health of Philippine Emigrants Study (HoPES) is a longitudinal study of Filipino migrants. HoPEs includes two cohorts that were interviewed in 2017 and will be followed annually until 2021. The migrant cohort (n=823) was initially interviewed in the Philippines and is re-interviewed in the U.S. The non-migrant cohort (n=802) has all interviews conducted in the Philippines. Baseline data included interviewer-assessed height, weight, waist and hip circumference, a one-hour questionnaire, and samples of dried blood spots (assayed for biomarkers such as c-reactive protein and triglycerides)

Results: Preliminary results suggest that the migrant cohort is healthier than the non-migrant cohort at baseline, as indicated by a lower waist-to-hip ratio (0.89 and 0.91 for migrants and non-migrants, respectively), fewer depressive symptoms (6.55 vs 8.53 symptoms), and greater endorsements of good/excellent self-rated health (74% vs. 34%).

Discussion: HoPES innovates in many ways, particularly with regards to the collection of comprehensive data prior to migration. The inclusion of a comparison group of non-migrants allows us to treat migration akin to a natural experiment that will shed new insights into the well-being of immigrant communities.

S 10 - 3

TOWARDS A DYNAMIC UNDERSTANDING OF ACCULTURATIVE PROCESSES: NEW CONCEPTS OF ACCULTURATIVE TIMING

Lee R.M. [1], Titzmann P.F.[2]

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[2] Leibniz University of Hanover, Germany

The most widely used definition of acculturation by Redfield and colleagues (1936) has been cited about 4000 times in recent decades. A fundamental assumption in this definition is that over time behavioral changes occur due to interethnic contact. Given the frequent use of this definition, it is surprising how few theoretical concepts have been developed that allow the description and assessment of acculturation-related changes. In addition, the dynamic aspects of development are understated in acculturation models (Ward & Geeraert, 2016). To close this research gap, we reference and expand upon concepts pertaining to the biological, social and psychological changes in pubertal development to highlight ways in which acculturation research can be made more dynamic and less static.

We specifically introduce the temporal concepts of acculturative timing, tempo, pace, and synchrony as a means to systematically study in immigrant adolescents' acculturative changes. *Acculturative timing* determines the starting point of acculturative processes. Here, we differentiate between chronological timing (i.e., the age of immigration), transition timing (i.e., when an adolescent actually starts to adjust to the new culture -maybe even before the actual migration), and relative timing (i.e., whether an adolescent is on-time or off-time in adaptation compared to their peers). *Acculturative tempo* determines how long it lasts for an adolescent immigrant to reach a specific acculturation skill. To measure acculturative tempo, a clear definition of the endpoint is crucial. It may be a certain level of language skills or the reaching a subjective stage of belonging to the new cultural context. *Acculturation pace* is defined by the rate of acculturative change, which may vary within and across acculturating individuals. Finally yet importantly, *acculturation synchrony* defines how coordinated acculturative changes are across life domains. The differentiation between these components in acculturative will help to better understand the dynamic nature of acculturative processes.

Friday, August 30th, 2019

Symposium 11

Vergina Hall 15:30 – 17:00

S 11

SOCIAL LEARNING IN DEVELOPMENT: BEHAVIOURAL, COGNITIVE, AND AFFECTIVE PROCESSES

Bazhydai M.

Chair, Lancaster University, Lancaster, UK

Learning through the cultural transmission of knowledge is less evolutionary costly than through relatively unconstrained, independent trial-and-error exploration (Boyd & Richardson, 1985). At the core of this cultural transmission lies the human capacity to flexibly and effectively engage in a variety of learning strategies, each underpinned by a variety of different processes. These processes, which are behavioural, cognitive, and affective in nature, enable social learning in children and adults alike. In this burgeoning research field, experimental evidence is accumulating in studies of imitation, direct observation, explicit teaching, and active information seeking from social partners. Several distinct theoretical approaches in developmental and comparative psychology have been guiding the advancement of the social learning research (Gergely & Csibra, 2009; Harris, 2012; Heyes, 2016; Over & Carpenter, 2012; Tomasello, 1999). The goal of this symposium is to shed new light on the variety of processes found across such theories and highlight findings in contemporary developmental social learning research.

The first presentation will introduce the comparative evidence of the social learning processes available to children and great apes, drawing the trajectory from behavioural processes to normative learning. The second presentation will highlight the cognitive processes of social learning, by exploring infants' sensitivity to the informative potential of their social partners, their active and selective information seeking in situations of epistemic uncertainty, and their preferential information transmission. The concluding presentation will examine the relatively novel concept of affective social learning which helps to explain how children's acquisition of attitudes and values can be influenced by others' affective expressions. Together, these presentations will capture the diversity and richness of social learning experiences across child development, systematically investigating the developmentally available repertoire of social learning strategies enabled by behavioural, cognitive, and affective processes.

S 11 - 1

FROM BEHAVIOURAL TO NORMATIVE LEARNING: CHILDREN AND GREAT APES COMPARED

Gruber T.

Swiss Center for Affective Sciences, University of Geneva, Switzerland

Background & aims: The evolution of social learning is one of the most discussed topics in comparative psychology because of its numerous connections to phenomena that have long been believed to be uniquely human: e.g. imitation, theory of mind or culture. As such, classic theory suggests that imitation and teaching are at the core of human culture, a marked difference with any other possible animal 'cultures', that may not even rely on social learning. Here, I will explore the types of social learning processes that are available to both human and non-human primates, particularly chimpanzees, and which are at the base of their cultures.

Methods: I will discuss data from wild chimpanzees suggesting that social learning of wild material cultures occurs both through horizontal and vertical transmission, making a case for the reality of the existence of animal cultures, more generally. Nevertheless, there are additional characteristics in humans that remain either undescribed or absent in other animals. For example, group membership is a strong driver of everyday life in humans. However, its ontogenetic development and evolutionary origins remain to be understood, as well as how it influences cultural acquisition.

Results: In a recent experimental study, we found that group membership had more influence on similarity and trust tasks rather than learning. Overimitation, the possibly uniquely human imitation of useless actions, often linked to the unique complexity of human cultures, is also highly dependent on context, and both internal and external factors.

Conclusions: All in all, these studies show that numerous factors interact during development to facilitate cultural acquisition in both humans and non-humans. I will conclude by discussing the representational factors that connect the various phenomena outlined in this presentation and argue that limits in complex metarepresentational abilities, rather than social learning processes, may prevent non-humans from accessing to the normative learning instrumental to human cultures.

S 11 - 2

ACTIVE SOCIAL LEARNING IN INFANCY: EPISTEMIC INFORMATION SEEKING AND TRANSMISSION

Bazhydai M., Westermann G., Parise E.

Lancaster University, Lancaster, UK

Cognitive processes of social learning include children's active role in socially guided knowledge acquisition and transmission. Social factors affecting these processes include evaluation of the intentions, competence, past accuracy, and social status of the informants (Harris, 2012), and their use of ostensive, pedagogical cues such as child-directed speech and direct gaze (Gergely & Csibra, 2009, 2011). In this presentation, we explore infants' sensitivity to the informative potential of their social partners, preferential information seeking in situations of epistemic uncertainty, and information transmission given the mode of knowledge acquisition and evaluation of the information source.

Active social engagement is an effective way for children to learn about the world. Prior to the emergence of language, non-verbal communicative cues may enable curiosity-driven, active social learning, such as requesting pertinent information about the immediate environment from someone who can be regarded as knowledgeable about it. Infants' social communication thus has been proposed to serve an information-seeking function (Harris & Lane, 2014; Southgate, Van Maanen, & Csibra, 2007). Here, we present experimental evidence demonstrating that 12-month-old infants actively and selectively use communicative cues in presence of more knowledgeable social partners when they face epistemic, rather than emotional, uncertainty in order to request needed information from them.

Further, we investigated whether and how social (pedagogical communication) and non-social (action complexity) cues affect child-initiated information transmission. Following live demonstrations of novel actions, 24-month-olds preferentially transmitted simple non-pedagogically demonstrated actions over pedagogically demonstrated complex actions. However, when both actions were matched for complexity, we found no evidence of preferential transmission of pedagogically demonstrated actions. We interpret the results from the perspective of the cue combination process - active and selective weighting of non-social and social cues - guiding children's knowledge transmission process. Together, these studies shed light on the early developing cognitive processes of social learning.

S 11 - 3
AFFECTIVE SOCIAL LEARNING: FROM INDIVIDUAL APPRAISAL TO CULTURAL VALUE

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It seems relatively uncontroversial to say that most psychologists consider values as being important for determining human behaviour. In this theoretical presentation, we will highlight a novel concept, Affective Social Learning (Dukes and Clément Eds., forthcoming), which links research in affective science, philosophy and sociology to help explain how a child can socially acquire their values from others' affective expressions.

Abstract concepts such as 'family values', 'cultural values' and 'political values' can all be used as explanations for why people think and act in a certain way, or even be used as a shorthand explanation for others' behaviour or beliefs. Not only do we imagine that people act as a result of their values, but we also like to think that our values are relatively stable and that, to some extent, they define who we are. Interestingly, such values are often represented as being highly personal, in spite of the fact that they are simultaneously often shared with and indeed (in)formed by influential others from the same cultural group. Of course, how the prevalent culture values something (an object, a person, a sporting event, an abstract idea etc.) can have an important impact on how the newcomer learns to feel about that object (e.g. a crucifix, Donald Trump, the Olympic Games, Brexit).

In a nutshell, whereas social learning usually concerns learning from others' behaviour about how to use an object, affective social learning concerns learning from others' emotional expressions how to value that object. And when the people from whom we learn constitute a relatively tight-knit group, learning the value from one of them is akin to learning from the group. In this way, the object's value that was originally subject to an(other's) individual's appraisal, has had its cultural value reaffirmed, learned and perpetuated.

Friday, August 30th, 2019

Symposium 12

Makedonia Hall A 15:30 – 17:00

S 12
OTHER, OBJECT AND TOOL USES: FIRST MANIFESTATIONS OF EFS AND CONTROLLED ACTIONS IN AN EXPERIMENTAL SETTING AND IN EARLY YEARS SCHOOL

Rodríguez C.
Chair, Universidad Autónoma de Madrid, Spain

Tartas V.
Chair, University of Toulouse Jean Jaures, France

Koops W.
Discussant, Utrecht University, The Netherlands

The aim of this symposium is to stress the place of action, object and tool use in relation to the first manifestations of the way children are able to control their own activities. The focus of the two first presentations is the early development of executive functions (EFs). The third presentation refers to the control and orientation of actions by children in relation to time. In the first communication (1), two studies are presented based on an experimental situation with children from 18 months of age. The influence of Joint Attention in the early manifestations of EFs is considered. In the second presentation (2), based on a longitudinal approach in the early years school from a case study, the focus is placed in the challenges that the child (from 8 months-old) gives to himself. The influence of the teacher through the material settings organised in the classroom is considered. On the third presentation, (3) the place of action and object/tool use and control of the own activity is discussed in relation to the organization of time in the preschool years. The focus here is how children construct temporal locations and what are the roles played by the cultural tools and teachers in such a construction. The common goal of this symposium is to define and study controlled actions in the making of the everyday social activities in young children and discuss the roles of the materiality and the other in such development.

S 12 - 1

JOINT ATTENTION CAN SCAFFOLD THE ONSET OF HIGHER-ORDER EXECUTIVE CONTROL IN TODDLERS

Núñez M.

Institute of Psychiatry, Psychology and Neuroscience, King's College London, UK

From the age of 12 months triadic interactions in Joint Attention (JA) bring the opportunity not only to expand the child's communication skills but also to scaffold key human-specific linguistic and cognitive competences in that context. While the role of JA in the acquisition of linguistic (e.g., new vocabulary) and some socio-cognitive competences (e.g., theory-of-mind) has been addressed by developmental psychologists, its potential role in the acquisition of higher order executive control of the child's attention and action has been neglected.

The two studies presented here have a two-fold aim: (1) to investigate the onset of complex executive control through imitative learning of a complex sequence of action in JA (2) to explore the role of different strategies of monitoring JA during the modelling of the sequence in scaffolding toddlers' executive control.

In two studies, 72 children between 12- to 32-month-olds were presented with a means-end task with two executive demands beyond the actual level of competence of toddlers. A model of the task-solution was presented in Joint Attention (JA) with the child who then performed the task herself. Study 1 monitored either the child's visual-attention or her actions while modelling. The two monitoring strategies showed a similar effect over the child's performance, revealing a clear developmental change by 18-24 months. Study 2 showed that a linking-narrative enhanced the correct solution by 18-24-month-olds.

Findings indicate that: (1) complex executive functioning may emerge at the end of infancy and (2) from the age of 18 month, the child's limited executive-control at this stage can be scaffolded (at different levels) by monitoring either her visual attention, her action or her action-understanding during model-presentation. Modelling in JA may work as a "developmental platform" in the onset of mental processes involving the executive control of voluntary attention and action.

S 12 - 2

EARLY DEVELOPMENT OF EXECUTIVE FUNCTIONS. OBJECT USES AS CHALLENGES FOR CHILDREN IN THE INFANT SCHOOL FROM THE END OF THE FIRST YEAR OF LIFE

Moreno-Llanos I., Rodríguez C.

Universidad Autónoma de Madrid, Spain

The second presentation focuses on the early development of Executive Functions (EF). Despite their origin being situated by the end of the first year, little is known about their early development (Marcovitch & Zelazo, 2009), about the significant challenges that *children give themselves in everyday life*, and how such challenges change. How and when do children start posing challenges to themselves, and when do they get to solve them? To articulate early development and EF is urgent. EF research has been mostly done with children older than 2 years, in the laboratory, and through standardized tasks adapted from those used with adults. These tasks (a) always feature language, (b) are generally based on perceptual criteria, and (c) do not relate to children's own challenges. Little is known about how or when children start posing challenges to themselves. Various critical voices highlight the need to study EF with more ecological validity (Baker, Friedman & Leslie, 2010), in everyday life settings. In this regard, one of the objectives of the Infant School is to promote children's autonomy and self-regulation through the first year of life (Rodríguez, Estrada, Moreno-Llanos & de los Reyes, 2017). We present a longitudinal case study on the first manifestations of EF, carried out in the 0-1 classroom throughout an academic year. From a pragmatic perspective, we analyzed objects' and instruments' *types of uses* and *gestures* in a set of sequences where the following criteria was met: (a) children gave themselves a significant goal, (b) they tried to achieve it with flexibility, using objects/instruments and gestures (eventually, they produced some words), (c) they inhibited non-pertinent uses in order to achieve their objective, and (d) their attention was sustained while pursuing the goal. We will illustrate the observed challenges with a case study of a child from 8 to 17 months old.

S 12 – 3

LEARNING TO LOCATE EVENTS IN TIME: A SEMIOTIC AND DEVELOPEMENTAL STUDY IN A FRENCH PRESCHOOL

Tartas V. [1], Amblas F. [2], Boya C. [2], Coudron, C. [2], Garincourt C. [2], Paty-Visseiche I. [2], Cocault A. [3], Le Bellour D. [3], Malin B. [2]

[1] University of Toulouse Jean Jaures, France
[2] DSDEN (Direction des Services Départementaux de l'Education Nationale), Ille et Vilaine, France
[3] Rennes Gantelles Preschool

The third presentation focuses on how children construct temporal locations and what are the roles played by the cultural tools in such constructions. Different developmental studies pointed an important change from a first way to locate events in time based on events (relative references) and a later mode of locating events in time independently from events themselves (absolute references) (Mc Cormack & Hoerl, 2017; Nelson, 1998; Tartas, 2009). Few researches focused on the role of external systems of representations (Teubal, Dockrell & Tolchinsky, 2007) and the abilities that are necessary for the child to use such systems (i.e. calendars, timeline, etc.) (Tillman et al., 2015, 2017). Less research took into account the social interactions between teacher and children in the classroom oriented by the use of the calendar or the different external systems of temporal representations. This communication proposed precisely to study the construction of temporal locations in the wild – i.e. during the discussions between the teacher and the pupils in three preschool levels from 3 y.o to 6 y.o around specific temporal questions (what is the day today? when does the class go to the library?).

We examined first the plurality of tools proposed by the teachers and the difficulties encountered by the pupils. The observations of these three grades of preschool are completed by individual interviews with children from 3 to 6. y.o in order to study the way they located events during the day and during the week, their knowledge about the conventional system and their use to answer "when" questions. We observed an important change before and after 4 y.o in the way children locate events during the day and the week. This change will be discussed regarding the role of language and semiotic tools in cognitive development from a sociocultural perspective.

Friday, August 30th, 2019

Symposium 13

Makedonia Hall B 15:30 – 17:00

S 13
THE ROLE OF SCHOOL CONTEXT FOR THE POSITIVE DEVELOPMENT OF MAJORITY AND MINORITY YOUTH

Miklikowska M.
Chair, Umeå University, Sweden; Utrecht University, the Netherlands

Phalet K.
Discussant, University of Leuven, Belgium

In times of increasing diversity, the school context is considered key to fostering positive intergroup relations and development of majority and minority youth. Much of the existing research is cross-sectional and restricted to one level or aspect of the school context. Therefore, there is a need to better understand its role.

This symposium highlights the importance of various aspects of the school context for youth development in times of diversity. The papers combine majority and minority perspectives from early to late adolescence in samples from Germany, Italy, Czech Republic, Sweden, and Belgium. Eckstein relate democratic school experiences to the development of civic orientations of minority and majority youth in four European countries. The results of a two-wave, multi-level analysis show significant effects of perceived democratic school climate on youth's political efficacy and trust at the individual and classroom level. The relationship between school climate and civic orientations, however, was found to differ among minority and majority youth. Miklikowska and Thijs relate perceived teacher support to the development of anti-immigrant attitudes in majority youth in Sweden. The results of a five-wave, multi-level analysis show that within-person increases in teacher support were related to decreases in prejudice and that youth who perceived teachers as more supportive compared to their peers reported lower prejudice. The results also show that social trust explained these associations. These findings suggest that teachers can counteract prejudice in adolescents by being supportive of them. Finally, Gharaei, Meeussen and Phalet examined how perceived teacher acceptance of identity integration affects the (in)compatibility of ethno-religious and national identities of Muslim minority youth in Belgium. Two-wave, multi-level models show that perceived teacher acceptance qualifies how ethno-religious and national identities co-evolve over time. These findings suggest that Muslim youth develop more (in)compatible identities when they see that teachers (do not) value identity integration.

S 13 – 1

EXAMINING SCHOOL EFFECTS ON CIVIC ORIENTATIONS AMONG MINORITY AND MAJORITY YOUTH

Eckstein K.[1], Noack P.

Friedrich-Schiller University Jena, Jena, Germany

Background and Aims: Adolescence is a critical period for the development of civic behaviors. Yet so far, it still remains a largely unanswered question in how far predictors of civic orientations differ when young people's ethnic background is taken into account. With its goal to educate active citizens, schools are an influential agent of socialization. It is therefore the goal of the present research to examine (1) to what extent a democratic school experiences predict civic orientations (i.e., political trust, internal political efficacy) among immigrant and majority youth and (2) whether civic orientations, in turn, affect civic behaviors among minority and majority youth.

Method: The study based on longitudinal data from a large pan-European project (Catch-EyoU; Constructing Active Citizenship with European Youth). To address the study's research questions, quantitative survey data from 2.127 students ($N_{Classroom}$ = 120) from Czech Republic, Germany, Italy, and Sweden (M_{Age} = 16.92; 47.0 % female) was analyzed at two measurement points.

Results: Multilevel structural equation modeling revealed significant effects of perceptions of democratic school climate on youth's political efficacy and trust at the individual and at the classroom level. Particularly students' individual perceptions of the school climate, in turn, predicted changes in civic behaviors. Moderated mediation analyses showed that school climate effects on civic behaviors were significantly mediated via youths' internal political efficacy among minority youth, while political trust served as mediator among majority youth.

Conclusion: The results show that experiences at school are associated with youth's civic orientations. They also indicate that processes though which school affects young people's readiness to engage civically differ among ethnic minority and majority youth. The findings will be discussed in terms of their theoretical and practical implications concerning school's role for understanding and promoting active citizenship among youth.

S 13 - 2

THE ROLE OF TEACHER SUPPORT FOR ANTI-IMMIGRANT ATTITUDES OF SWEDISH MAJORITY YOUTH

Miklikowska M.[1,2], Thijs J.[2]

[1] Umeå University, Umeå, Sweden
[2] Utrecht University, Utrecht, the Netherlands

Background and Aims: Although research has shown that school context has consequences for intergroup attitudes, few studies have examined the role of teacher qualities, specifically teacher support. The extended attachment perspective suggests that youth who experience support and care from their teachers become more open to ethnic others. Thus, this research examined the effects of perceived teacher support on the development of youth anti-immigrant attitudes as well as the mechanism underlying these effects.

Method: The 5-wave survey data were collected 2010-2015 among the Swedish majority youth ($N = 671$, $M_{age} = 13.41$; SD = 0.53; 50.7% girls; 34 classrooms). Adolescents reported on their attitudes toward immigrants, perceived teacher support, and social trust.

Results: The results of multilevel analyses showed that perceived support was consistently associated with weaker anti-immigrant attitudes at all levels. On the within-person level, increases in perceived teacher support over time were related to decreases in youth prejudice, and on the between-person level, youth who generally perceived their teachers as more supportive compared to their peers reported lower levels of anti-immigrant prejudice. Similarly, the average degree of perceived support at the classroom level explained between-classroom differences in prejudice. In addition, the effects of perceived teacher support were mediated by adolescents' social trust on the within- and between-person level. Adolescents who perceived their teachers as more supportive displayed higher levels of trust and, in turn, lower level of prejudice than youth with less supportive teachers.

Conclusions: These findings suggest that teachers can counteract the development of prejudice in adolescents by being supportive of them. They also suggest that research on multicultural education or school interethnic contact should include teacher support as a relevant variable to better understand the role of school context for youth intergroup relations, and thereby to inform school-based attempts of changing them for the better.

S 13 – 3

THROUGH THE EYES OF THEIR SCHOOL TEACHERS: 'WHEN DO THE ETHNO-RELIGIOUS AND NATIONAL IDENTITIES OF MUSLIM MINORITY YOUTH BECOME (IN)COMPATIBLE?'

Gharaei N.[1], Meeussen L.[1,2], Phalet K.[1]

[1] Center for Social and Cultural Psychology, University of Leuven, Belgium
[2] Research Foundation Flanders, Belgium

Background and Aims: Muslim immigrant minority youth in Europe combine a distinct ethno-religious identity with a common national identity they share with majority peers. As they contend with increased assimilationist pressures and public prejudice, many youngsters experience the national identity as incompatible with their ethno-religious identity. This incompatibility stands in the way of developing a sense of national belonging; and can thus hinder positive development and intergroup relations. The present study examines the identity integration of Muslim adolescents longitudinally; and focuses on the normative influence of school *teachers* - as authority figures and 'diversity managers' - within schools as intergroup contexts.

Method: Drawing on longitudinal data from 646 Turkish- and Moroccan-Belgian Muslim youth across 52 secondary schools, we used a vignette describing an imaginary ethno-religiously *and* nationally identified (i.e., integrated) Muslim minority peer to implicitly assess the perceived teacher acceptance of identity integration at time 1. Specifically, participants rated to what extent they thought teachers would like the integrated peer. As measures of ethno-religious and national pride at time 1 and 2 (two years later), participants indicated their feelings toward the ethno-religious and the national group, respectively.

Results: Using multi-level modelling, we found that the ethno-religious pride of the Muslim minority youth at time 1 was related to a significant *decrease* in their national pride two years later, when they perceived teachers at time 1 to show low acceptance of identity integration. This finding holds above and beyond students' own acceptance and perceived peer acceptance of the integrated peer in the vignette.

Conclusions: We conclude that teachers seem to have a unique normative impact on the development of (in)compatible ethno-religious and national identities of Muslim minority youth. When Muslim youth feel that their teachers do not value identity integration, they struggle to combine their ethno-religious and national identities and thus to belong.

Friday, August 30th, 2019

Symposium 14

Mycenae Hall 15:30 – 17:00

S 14
ADOLESCENT PSYCHOSOCIAL ADAPTATION IN PLURAL EUROPE: A MIXED METHOD PERSPECTIVE

Inguglia C.
Chair, University of Palermo

Musso P.
Chair, University of Calabria

Strohmeier D.
Discussant, University of Applied Sciences Upper Austria

Today's European societies are more and more plural as well as complex communities, in which the mutuality of the relationships between cultural groups are continuously increasing. This poses numerous challenges, the most important of which revolves around how to guarantee adequate levels of civil coexistence and social harmony. In this line, research has more and more increased the interest in the factors that can impact on achieving these social goals especially during adolescence, a period of life particularly susceptible to personal, emotional, socio-cultural, citizenship, and environmental issues due to various developmental tasks and changes. Particularly, scholars have focused on identifying potential resources promoting psychosocial adaptation and positive development of both immigrant and autochthonous youth. However, most existing studies are quantitative and do not include the perspectives of adolescents themselves.

Relatedly, the present symposium aims to facilitate the exchange and the discussion of findings coming from both qualitative and quantitative studies on adolescents' pathways toward psychosocial adaptation in three European countries (Italy, Germany and Greece) with a greater focus on migrant youth. The first paper presented by Musso et al. focuses on the findings of a qualitative study on the perceptions of radicalization mechanisms of Muslim Tunisian adolescents. The second paper by Alhaddad and Kanngiesser focuses on a qualitative study aimed at exploring the main challenges faced by Arabic speaking refugee youth since their arrival in Germany. The third paper by Benbow and Titzmann concerns a quantitative study aimed at identifying groups of immigrant adolescents that differ in their trajectories of involvement with family, school, and peers, considering the associations of these trajectories with adolescents' adaptation. In the fourth paper, Pavlopoulos et al. present a quantitative study aiming to explore different forms and predictors of youth's civic engagement and political participation on EU-related issues among immigrant and autochthonous adolescents living in Greece.

S 14 - 1

EXPLORING MUSLIM TUNISIAN ADOLESCENTS' PERCEPTIONS OF RADICALIZATION MECHANISMS: A FOCUS GROUP STUDY

Musso P. [1], Inguglia C.[2], Lo Coco A. [2], Iannello N. M.[2], Cheah C. [3], Costabile A. [1]

[1] University of Calabria, Department of Culture, Education and Society, Arcavacata di Rende (Cosenza),Italy

[2] University of Palermo, Department of Psychology, Educational Science and Human Movement, Palermo, Italy

[3] University of Maryland, Department of Psychology, Baltimore County, Baltimore MD, US

Radicalization is one of the most concerning social problems in the international community. Although radicalization can characterize any religious, cultural or political group, attention has almost always focused on young Muslims, sometimes indistinctly identified as terrorists within the current socio-political climate after the terrorist attacks in Europe and the United States. Alongside this negative public attention, there has been an increasing interest on this topic within the scientific community, especially in the field of security; however, fewer empirical studies have taken a social and particularly, developmental, perspective and even less have considered the perceptions of non-radicalizedyouth. Therefore, the purpose of this study was to fill this gap, thus giving "voice" to Muslim adolescents regarding the reasons that may lead to radicalization pathways.

Forty-one Muslim Tunisian adolescents (49% girls), aged 13 to 17 years and living in Italy, participated in this study. Each adolescent was included in one of the seven same-sex focus groups. One Italian and one Tunisian moderator conducted the focus groups, indicating that they were interested in the insights and opinions of participants on the potential causes of radicalization and risky behaviour in their life context. All discussions were audiotaped and transcribed verbatim and then subjected to thematic analysis (Braun & Clarke, 2006).

Our analysesrevealednine main themes explaining pathways to violent radicalization:(a) distance from "true Islam", (b) personal psychological maladjustment, (c) uncertainty/hopelessness about the future, (d) negative emotions, (e) perceived threat from outgroups, (f) social and working identity, (g) social and online contact and influence, (h) family influence, and (i) poverty. Furthermore, a number of risky behaviours emerged, including social disengagement from the Muslim Tunisian community.

Findings revealed important pathways towards radicalization from the perspective of non-radicalized Muslim adolescents,which have theoretical and practical implications for understanding and preventing the development of radicalization.

S 14 - 2

WHAT CHALLENGES DO ARABIC-SPEAKING REFUGEE YOUTH FACE IN GERMANY? - A QUALITATIVE INTERVIEW STUDY

Alhaddad L., Kanngiesser P.

Free University Berlin, Faculty of Education and Psychology, Berlin, Germany

Making a new home in a foreign country is a stressful experience: it entails losing direct contact with friends and family, learning a new language, adapting to new cultural settings and seeking support and status in the new society (Berry, 2005; Brough et al., 2003; Arbabi, 2016). For refugees, acculturation is particularly challenging as they may have experienced traumatic events in their home country or during their flight (Patel et al., 2017). Half of the refugees around the world are adolescents (UNHCR, 2016), and they do not only face the challenges of acculturation, but also the social and emotional challenges of adolescence.

In the present study, we investigated the experiences of Arabic-speaking refugee youth since their arrival in Germany. We used semi-structured interviews to investigate the main challenges faced by Arabic speaking refugee youth, their access to social support networks, their impressions of Germany and their hopes for the future. A total of 20 participants between the ages of 14 and 18 were interviewed in their homes. Interviews were conducted in Arabic, transcribed, translated to English and coded using content analysis (Hsieh & Shannon, 2005).

Our analysis revealed that the main challenges were related to education, uncertainty about their legal status and the possibility to reunite with family members, and experiences of discrimination. Participants' main sources of support were parents - even if they were geographically separated from them - friends and social workers at accommodation centers. The refugee community and initiatives of the host country (e.g., youth activities and counseling centers) were not mentioned as sources of support. The findings are discussed in the light of other findings with refugee adolescents residing in developed and developing countries.

S 14 – 3

PREDICTORS AND CONSEQUENCES OF ADOLESCENT IMMIGRANTS' CHANGING INVOLVEMENT WITH FAMILY, PEERS AND SCHOOLS: A GROWTH MIXTURE MODELLING APPROACH

Benbow A.E.F., Titzmann P. F.

Leibniz University Hanover, Hannover Raum, Germany

Background and aims: Navigating mesosystems, the connections and interactions of microsystems, may be particularly challenging for migrant adolescents, because they may comprise microsystems with conflicting cultural demands. We therefore aimed to identify groups of adolescent immigrants that differ in their trajectories of involvement with family, school, and peers. We considered adolescent and parental characteristics that might serve to distinguish between trajectory groups. Finally, we assumed that adolescents' adaptation would differ by group.

Methods: We researched ethnic German repatriate adolescents (N=390, 4 time-points across 4 years, 239 girls, M_{AgeT1} = 15.70, SD = 2.35) and their parents (339 mothers, 51 fathers; collected at Time 3). Adolescents reported demographic and contextual information, family cohesion, school involvement, friendships and psychosocial adaptation outcomes (self-efficacy, minor delinquency, host culture adaptation and acculturation hassles). Parents reported strengths of the child, marital conflict, own host culture adaptation and German language fluency.

Results: Growth-mixture modelling identified two classes of meso-system involvement change. Adolescents in Class 1 (53% of the sample) showed a medium increasing involvement with peers, a medium decreasing involvement with family and a medium stable involvement with school. Adolescents in Class 2 (47% of the sample)displayedsimilar peer involvement, but higher stable family involvement, and higher stable school involvement.The two classes were demographically similar(e.g. age, gender, schooling and SES). Importantly class membership did not differ by migration-specific variables, while peer delinquency was higher and parental reports of child difficulties and marital conflict were more likely in Class 1 than Class 2.Adolescents in Class 1 started with and maintained higher levels of adaptation across time.

Conclusions: Our results highlight that for these adolescents involvement in meso-contexts was more dependent on general than migration-specific characteristics. Importantly, different meso-system involvement trajectories predicted different levels of psychosocial adaptation, but all adolescents showed an improvement over time.

S 14 – 4

EUROPEAN IDENTITY AND PERCEIVED AGENCY OF GREEK ADOLESCENTS AS EXPLANATORY MECHANISMS FOR THEIR POLITICAL PARTICIPATION AND WELLBEING

Pavlopoulos V., Kostoglou D., Motti-Stefanidi F.

Department of Psychology, National and Kapodistrian University of Athens, Greece

Active citizenship of European youth is a timely imperative. The findings of previous studies range from political apathy to alternative forms of participation, although theoretical evidence remains poor. This presentation is based on the Greek contribution to the European program CATCH-EyoU (Horizon 2020), aiming to explore different forms and predictors of youth's civic engagement and political participation on EU-related issues. Drawing on social psychological and developmental theoretical background, we hypothesized that political interest for the EU will translate to specific forms of action and contribute to their global wellbeing. Furthermore, we expected that the dimensions of European identity (i.e., identification, exploration, and reconsideration) and perceived agency (i.e., political efficacy and alienation) will mediate the above relationships, whereas immigrant status may have a moderating role. The sample consisted of 589 adolescents from Greece, aged 14-17 years (60.3% girls, 34.8% of immigrant background). In addition to voting, four components of political participation were studied, namely conventional (in support of political parties and goals), activism (acts of protest against the authorities), online (social networks), and volunteering (non-profit actions), as well their global wellbeing. Mediation analyses showed that the relationship between political interest and political participation can be explained by the adolescents' sense of belonging in the EU, the exploration of European identity and their level of political efficacy. The same pattern of mediation emerged for the relationship between political interest and global wellbeing. No substantial moderating effect of immigrant status was identified. These findings reveal the multiple connotations of adolescents' political participation regarding EU issues and highlight the role of European identity as an emerging form of inclusive, overarching sense of belonging beyond ethnic and national identities.

Friday, August 30th, 2019

Symposium 15

Pella Hall 15:30 – 17:00

S 15
A DEVELOPMENTAL FRAMEWORK FOR UNDERSTANDING SEXUAL INTERPERSONAL BEHAVIOR IN YOUNG ADULTHOOD

Stavrinides P.
Chair, University of Cyprus

Tantaros S.
Chair, National and Kapodistrian University of Athens

Besevegis E.
Discussant National and Kapodistrian University of Athens

Sexual interpersonal behavior is an important area that interests developmental psychologists during the last two decades. However, the evidence has been non-conclusive regarding the theoretical models that explain risky sexual behaviors, sexual aggression and decreased sexual quality of life. Sexual functioning is a significant component of young adulthood that can impact well-being. Adopting a developmental framework to investigate sexual interpersonal behaviors could increase the research and practical implications of studies on this topic.

The present symposium aims to investigate forms of problematic sexual interpersonal behaviors in young adulthood and to identify risk and protective factors that could result in the development of advanced conceptualizations and theoretical models on this topic. The symposium includes four studies. The first one explores the ecological validity of general aggression secondary psychopathy-related risk factors, in the context of sexual aggression, with emphasis on psychopathic traits and anxiety in social interactions. The second one deals with psychoemotional and identity predictors of casual sexual relationships. The third study of the symposium presents a moderation analysis by previous sexual experience on the effect of internal or external locus of control on sexual aggression. The fourth study aims to investigate a theoretical model of sexual anxiety and depression that considers separation anxiety felt in adult relationships and also fear of intimacy and of sexual interactions.

Through the symposium, the audience will learn about new evidence in the area of sexual interpersonal relationships. The developmental perspective adopted in the tested models aims to increase the potential of early interventions and/or prevention programs that can be applied during adolescence and young adulthood. The symposium highlights the importance of early social relationships for the development of dysfunctional behaviors in sexual life, including sexual aggression, depression, and fear of intimacy.

S 15 – 1

AGGRESSIVE BEHAVIOR AND SEXUAL AGGRESSION: SAME COIN, DIFFERENT SIDES?

Stavrinides P.[1], Tantaros S.[2], Ioannou M.[1], Charalampous K.[1], Georgiou S. N.[1]

[1] University of Cyprus, Department of Psychology
[2] National and Kapodistrian University of Athens, Department of Psychology, Greece

Background and Aims: There is extensive literature on risk factors for aggressive behavior, but only few focus on sexual aggression. Most of the literature on sexual aggression comes from sexual offenders' population, limiting their generalizability for sexual aggression presented in young adults' romantic relationships. Previous evidence supports that psychopathic traits are important for predicting sexual aggression (e.g., Krstic et al., 2018), and that sexual offenders seem to have high anxiety in their adult relationships (e.g., Sigre-Leirós et al., 2015). There is no evidence yet on the concurrent effect of psychopathic traits and anxiety (i.e., secondary psychopathy) on sexual aggression and applicability of models for general aggressive behavior. The present study aims to (a) examine the prevalence of sexual aggression in romantic relationships of young adults and the predictive validity of psychopathic traits and anxiety in social interactions, and (b) investigate the degree to which the secondary psychopathy model applies in a similar way to sexual aggression, as to aggressive behavior.

Methods: A sample of 830 university students from Cyprus and Greece aged 18-35 years old (M= 21.06, SD= 3.74) completed an online survey, which included the Multidimenional Sexuality Questionnaire, the Triarchic Psychopathy Measure, the Social Interaction Anxiety Scale and the Buss-Perry Aggression Questionnaire. Structural equation modeling was conducted using Mplus 7.3.

Results: The statistical analyses of the study are currently being processed. Preliminary findings showed that anxiety in social interactions is more predictive of sexual aggression, compared to its predictive ability for general aggressive behavior. That might point to the deficits in perceiving social cues in intimate interactions that increase anxiety in sexual aggression.

Conclusion: The findings of the study will add to the literature and help identify the commonalities and related implications of the theoretical model involving primary and secondary psychopathy to explain aggressive behavior and sexual aggression.

S 15 – 2

IDENTITY INTEGRATION AND IDENTITY DIFFUSION: LINKS TO CASUAL SEXUAL RELATIONSHIPS IN COLLEGE LIFE AND THE ROLE OF EMOTIONAL AWARENESS

Tantaros S.[1], Stavrinides P.[2], Ioannou M.[2], Charalampous K.[2], Georgiou S. N.[2]

[1] National and Kapodistrian University of Athens, Department of Psychology
[2] University of Cyprus, Department of Psychology

Background and Aims: Literature shows that sense of incoherence and diffusion during identity development in adolescence is a risk factor for casual sexual relationships (e.g., Kerpelman et al., 2016). Evidence also links low overall satisfaction in sexual functioning and low sexual quality of life during college with disturbed personality organization (e.g., Prunas et al., 2016). However, there is a considerable lack of research merging the literature between identity development during college life and casual sexual relationships, possibly because they are considered more societally acceptable or appropriate during college years. At the same time, there is an emphasis on environmental mediators of that relationship (peer, family and sexual partner attitudes) but a lack of exploration on personal psychological mediators. The present study aims to (a) examine the effect of identity diffusion and incoherence on involvement in casual sexual relationships, and (b) investigate emotional awareness as a mediator of the relationship between identity development and casual sexual relationships.

Methods: A sample of 800 university students from Cyprus and Greece aged 18-35 years old (M= 20.80, SD= 2.71) completed an online survey, which included the Assessment of Identity Development in Adolescence (AIDA; Goth et al., 2012), the Multidimensional Sexuality Questionnaire (MSQ; Snell et al., 1993) and the Schutte Self-Report Emotional Intelligence Test (SSEIT; Schutte et al., 1998). Structural equation modeling was conducted using Mplus 7.3.

Results: The statistical analyses of the study are currently being processed. Preliminary findings showed that identity diffusion is a significant predictor of casual sexual relationships, mediated by emotional awareness and especially managing own and others' emotions.

Conclusion: The findings of the study expand previous literature on identity development and its effect on emotional management and sexual relationships. The present study gives potential to developmentally informed prevention efforts that consider the identity processing that continues during college years.

S 15 – 3

LOCUS OF SEXUAL CONTROL AND LINKS TO SEXUAL AGGRESSION: DOES SEXUAL EXPERIENCE MODERATE THE RELATIONSHIP?

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Background and aims: Literature shows the importance of locus of control as a predictor of engagement in different forms of physical/verbal aggression, with external locus to be positively related to increased aggressive behavior (e.g., Georgiou et al., 2016). There is lack of evidence regarding the role of locus of control in sexual aggression, as studies usually focus on physical aggression between intimate partners (e.g., Schmidt et al., 2016). However, the nature of sexual aggression largely differs from other types of aggression (e.g., Swartout et al., 2015) and development of specific theoretical models is important. The present study aims to (a) examine the predictive ability of locus of control for sexual aggression, and (b) investigate if sexual experience moderates this relationship.

Methods: A sample of 830 university students from Cyprus and Greece aged 18-35 years old (M= 21.06, SD= 3.74) completed an online survey, which included the Multidimensional Sexuality Questionnaire (MSQ; Snell et al., 1993) and a number of descriptive questions on previous sexual experiences (e.g., age of onset, current romantic relationship status, romantic relationships duration). Structural equation modeling was conducted using Mplus 7.3.

Results: The statistical analyses of the study are currently being processed. Preliminary findings show that internal locus of control was strongly related to rigid beliefs about sexual life and increased risks to engage in sexual aggression. Previous sexual experience was only quantitatively, but not qualitatively moderating the relationship. This is contrary to findings on physical aggression, highlighting the differences in belief systems and individual traits that discriminate perpetrators of physical and sexual aggression.

Conclusion: The findings of the study expand previous literature on locus of control and aggression. Implications include consideration of individualized treatments for sexual aggression emphasized on challenging cognitive schemata of sexual dynamics and control.

S 15 – 4

SEXUAL DEPRESSION AND FEAR OF SEXUAL INTERACTIONS: A DISGUISED FORM OF SEPARATION ANXIETY IN YOUNG ADULTS?

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Background and aims: Recent evidence supports a link between attachment security and sexual satisfaction. Attachment anxiety and avoidance in romantic relationships are negatively related to sexual desire, arousal and functioning (e.g., van den Brink et al., 2016). Given the importance of sexual quality of life in young adults and the strong links to general functioning and well-being, it is striking that very few studies examine the risk factors for sexual dissatisfaction, characterized by sexual depression, anxiety and/or fear of sexual interactions. The emphasis on current romantic relationships' attachment may be misleading, as it underestimates the impact of attachment dynamics and the importance of separation anxiety as presented across various young adult relationships. The present study aims to (a) examine the effect of separation anxiety on indicators of low sexual quality of life, and (b) investigate separation anxiety as a risk factor for fear of sexual interactions that subsequently results in sexual anxiety and depression.

Methods: A sample of 830 university students from Cyprus and Greece aged 18-35 years old (M= 21.06, SD= 3.74) completed an online survey, which included the Multidimensional Sexuality Questionnaire (MSQ; Snell et al., 1993) and the Adult Separation Anxiety self-report scale (ASA-27; Manicavasagar et al., 2003). Structural equation modeling was conducted using Mplus 7.3.

Results: The statistical analyses of the study are currently being processed. Preliminary findings support the effect of separation anxiety on sexual quality of life. Adult separation anxiety significantly predicted sexual fear, which was associated with high sexual depression and anxiety.

Friday, August 30th, 2019

Papers 10 - Developmental Disabilities I

Florina Hall 15.30–17.00

OP 055
DELAY OF GRATIFICATION AND SCREEN-BASED MEDIA USE IN PRESCHOOL AGE

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Screen-based media, especially interactive screen, has bean increasingly used by young children during recent years. However, few studies have attempted to investigate the relation between screen-based media use and self-regulation in preschool children. Most of the existing studies have been limited to the effects of television exposure to children's mental and physical health. This study explored and compared the links of time spent using various types of screens to delay of gratification in preschool children.

A low risk sample of 200 children aged from 4 years 0 months to 5 years 11 months (43.3% female; mean age 58.68 month) and their parents participated in the study. Delay of gratification was measured by "Gift Wrap" task (Kochanska et al., 1996). Information on time children spend viewing television, using smartphones, tablets, computers and consoles on weekdays and weekends had been gathered from children's parents a year before (T1) and at a time of laboratory testing (T2).

Results provided no gender differences in delay of gratification and media use, however the age of the children was important in relationship between screen use and delay of gratification. Children, who spent less overall time in front of screens at T2 on weekends, had the higher abilities to delay of gratification. However this link was significant only in the sample of younger (4-year-olds) children. The interaction between child age and screen use was significant in predicting delay of gratification: the negative link between screen use and self-regulation was more apparent in younger children. The findings emphasize that delay of gratification may have a different susceptibility to media exposure depending on the age: the negative impact of screen use is more relevant in younger children.

The findings highlight the importance for future research to take into consideration both time and content of screen-based media use, also explore in-depth age-differentiated relation between screen use and self-regulation in preschoolers.

OP 057

MENTAL ROTATION STRATEGY AND EMBODIED SELF ROTATION STRATEGY IMPROVE ASD AND TD CHILDREN' VISUAL PERSPECTIVE TAKING PERFORMANCE DIFFERENTLY

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Background and aims: Visual perspective taking is the ability to see the world from others' perspective. Cumulative evidences suggest the level 2 VPT involves both visual and embodied cognitive processing. One can mentally rotate the object (MR strategy) or use embodied self rotation (EB strategy) to solve the VPT2 problems. Previous studies found elder children' VPT2 performance was linked with embodied cognitive performance, while children with autism spectrum disorders' (ASD) was predicted by mental rotation performance. Few research explored how strategy of MR and EB influences VPT. This study directly examines the efficacy of the two strategies for improving VPT2 performance in ASD children and typically developing (TD) children.

Methods: 20 ASD children and 86 4-, 5-, and 6-year-old TD children were recruited. The ASD and compared TD group (mean chronological age 11.8 and 6.2 years accordingly) were matched by the raw scores on Peabody picture vocabulary test and Raven test. A turn table paradigm was employed. Each child completed a VPT2 baseline task, then the VPT2 (MR) task (with MR instruction) and the VPT2 (EB) task (with EB instruction). The latter two tasks were counterbalanced and taken one week apart.

Results: ASD group had significant lower VPT performance than compared group. Both EB and MR strategies improved VPT for ASD, while TD benefited more from EB strategy. Analysis for performance in TD children showed significant main effects of age and task, and an interaction effect of age and task. Specifically, the 4-year-olds performed at chance level in all tasks. The 5-year-olds only benefited from MR strategy, while the 6-year-olds found EB strategy more effective.

Conclusion: EB and MR strategy had different efficacy for TD children in different age group and ASD children. These results indicate possible mechanisms in understanding VPT in TD children and autism, and shed light on social cognition intervention for ASD.

OP 058

PLAY AND SOCIAL INTERACTION IN CHILDREN WITH VISUAL IMPAIRMENTS AUGMENTED BY SMART TOYS

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Background and aims: Children with visual impairments (VIs) face challenges in social play, limiting opportunities to practice social skills. The effect of augmented toys on play was studied in children with VIs who attended special education (study 1) and on children with VI in mainstream education playing with sighted classmates (study 2).

Methods: 52 children with VI (mean age: 9.2 years) played three times with both an augmented and a non-augmented toy in study 1 and 18 children with VI plus 18 sighted classmates (mean age = 7.5 years) played once with an augmented and once with a non-augmented toy, using a counterbalanced crossover repeated measures design in study 2. 15 did this again in week 2. A Playmobil® knight's castle was augmented with Radio Frequency Identification (RFID) technology, producing audio feedback during play when activated. Social and cognitive aspects of play were coded from video and data were analysed using multilevel logistic regression.

Results: Study 1: Children with VIs showed less disengagement and more parallel play, but less cooperative play in the augmented versus the non-augmented condition. This pattern persisted after repeated play sessions with both toys. Study 2: Children showed more parallel play and object exploration, but less cooperative play when they repeatedly used the augmented castle compared to the non-augmented castle. In the augmented condition, the amount of symbolic play increased from the first to the second measurement week, yet it remained at similar levels as with the non-augmented toy. Social interaction behaviours did not differ as a function of play condition.

Conclusions: The addition of sounds to physical toys increased shared attention between children with VIs during the exploration of play materials, yet it interfered with social interaction during peer play. No differences were found between the behaviours of children with VIs and sighted classmates.

OP 059

COMMUNICATION SKILLS OF PRESCHOOL CHILDREN WITH MENTAL RETARDATION AND DEVELOPMENTAL DISORDERS

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The aim of the study is to reveal the specificity of verbal and nonverbal communication skills of preschool Russian children with mild mental retardation and developmental disorders.

Depending on the diagnosis and the upbringing conditions, 80 children were divided into groups: 1. children with mild mental retardation brought up in an orphanage; 2. children with mixed specific developmental disorders brought up in an orphanage; 3. healthy children according to a psychiatrist brought up in an orphanage; 4. children with mixed specific developmental disorders brought up in a family; 5. typically developing children brought up in a family. The speech and behavior of children were video and audio recorded in model situations of interaction of a child with an adult and a peer, and the spontaneous interaction of children with each other. To determine the level of speech development and skills of verbal communication of children, analysis of the texts of adult-child dialogues, spectrographic, phonetic, and perceptual methods of analyzing child speech were used.

Based on the data of spectrographic analysis, it has been found that children with mild mental retardation are significantly different from other groups of children in the temporal and spectral speech features: duration of words and vowels, pitch of vowels and vowel articulation index of stressed and unstressed vowels. The characteristics of child-adult and child-child dialogues in the frequency of use of various types of replicas are described. Based on the expert analysis of video of children's interaction, elements of verbal and nonverbal communication significantly different in the studied groups are highlighted.

The data, which make it possible to outline the connections among intelligence level and child's verbal and non-verbal communication skills in different situations of interaction were obtained.

Friday, August 30th, 2019

Papers 11 - Parenting Styles

Kozani Hall 15.30-17.00

OP 061

PARENTING STYLES AND EMOTIONAL PROBLEMS IN EARLY SCHOOL-AGE CHILDREN: MEDIATION OF EXECUTIVE FUNCTIONS

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The aim of this study is to examine the mediating role of executive functions in explaining relationship between family factors and emotional problems in early school-age children. Since problem behaviors such as emotional symptoms in childhood become salient predictors of internalizing problems in adolescence and adulthood, it seems important to investigate the role of potential protective factors in early school-age children.

This study is part of a larger five-year prospective study examining the role of executive functions, individual, social and genetic outcomes in children (ECLAT). A representative sample of 175 parents of early school-age children was administered measures of parenting styles, children's executive functions and children's emotional symptoms. They completed The Parenting Styles and Dimensions Questionnaire (PSDQ; Robinson, Mandleco, Olsen i Hart, 2001) including authoritative, authoritarian and permissive parenting style subscale, Childhood Executive Functioning Inventory (CHEXY; Thorell i Nyberg, 2008) including working memory, planning, regulation and inhibition subscale, and Strengths and Difficulties Questionnaire including emotional symptoms subscale (SDQ; Goodman, 1997).

Mediation analysis was conducted to investigate the role of children's executive functions in explaining the relationship between parenting styles and children's emotional problems. Analyses showed statistically significant indirect mediation effects of executive function deficits in the relationship between authoritative, authoritarian and permissive parenting style and emotional symptoms in early school-age children.

The study concluded that executive function deficits contribute to the emotional difficulties of early school-age children whose parents employ authoritarian and permissive parenting style, and that authoritative parenting style buffers that effect. The study indicates that interventions should be aimed at parent education and children's executive function training programs in order to prevent the development of severe emotional problems in adolescence and adulthood.

OP 062

ASSOCIATIONS OF PARENTING STYLES WITH SELF-ESTEEM IN CHILDREN AND ADOLESCENTS: A META-ANALYSIS

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Background and aim: Although parenting styles have been suggested to affect self-esteem of children and adolescents, the empirical base and the generalizability of this claim has not yet been systematically assessed. Thus, the present meta-analysis integrates the available research on associations of parenting styles with self-esteem in children and adolescents.

Methods: A systematic search in electronic databases (PSYCINFO, ERIC, Google Scholar, and PSYNDEX) and cross referencing identified 113 studies on associations of parenting styles with self-esteem in children and adolescents that were included in a random-effects meta-analysis.

Results: Cross-sectional studies found a small to moderate positive association of authoritative parenting with self-esteem (r = .27) while authoritarian (r = -.18) and neglectful parenting (r = -.18) were related to lower self-esteem in the offspring. A very small positive association of permissive parenting with self-esteem was observed in studies that defined permissiveness by low control and high warmth according to Maccoby and Martin (1983) (r = .07) rather than only by low control (Buri, 1991). Cross-lagged analyses found evidence for child effects on change in authoritative and permissive parenting but not on effects of parenting styles on change in self-esteem. However only few longitudinal studies (N=10) were available. Few moderating effects of study characteristics were identified, such as stronger negative associations of authoritarian parenting with self-esteem in studies that collected data on both variables from the same rater rather than using different raters.

Conclusions: We conclude that correlations between parenting styles and child self-esteem cannot be interpreted as a pure effect of parenting and that high child self-esteem makes it easier for the parents to behave in an authoritative way. In addition, more longitudinal research is urgently needed for testing potential bidirectional effects.

OP 066

FAMILY HISTORIES, PARENTING STYLES AND MOTHER-CHILD INTERACTIONS IN LOW-INCOME FAMILIES: A FAMILY-CENTERED DYADIC PLAY INTERVENTION EXPERIENCE

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Low-income families are often struggling with recurrent multiple problems, and disruptive family interactions. This exploratory longitudinal study aims to 1) described a group of families from a project neighborhood 2) evaluate a family-centered dyadic-play intervention thought to stimulate mother-child interactions and parenting skills.

Semi-structured clinical interviews were conducted with 9 mothers (mean age 31) of 4 toddler boys and 5 girls (mean age 2.2), mostly from a single mother or blended families. Mothers studied 9 years or less, 78% were unemployed. Participation procedures and consent forms followed ethical standards. Measurements application and sessions occurred in a private play room in a community center. Interviews were transcribed and submitted to phenomenological (PA) and lexical analysis (LA). Mothers answered Parenting Authority Questionnaire for parents (PAQ-P) at T0/T2. The 14 weekly 50' sessions of dyadic play intervention, were videotaped in 5' situations 1) free play, 2) guided play, 3) the clear up task at three T and coded with DPICS.

PA revealed three central themes: family life; history; parenting (family of origin, abusive relations; pregnancy; parenting behavior). Themes corroborated by LA classes: Parenting concerns/dyadic interactions; changes in family life; conflict/ trauma/ violence; family type; family day-to-day interactions. Mothers consider themselves authoritative, however authoritarian scores are above standardized mean (P90). No differences were found between assessments, still an increase tendency in mothers' positive communication was observed. Significant differences were found between situations in Information question/answer in (1) and direct and indirect order with compliance in (2/3).

Mothers, exposed themes of conflict, violence experiences and trauma, but also common parenting concerns. Mix-method provide a closer description of family reality and difficulties, relevant for implementing family-centered interventions. Although with few significant results, changes in positive communication were observed. By playing together in a secured mediated setting, mothers can experience freely pleasure in interactions, while enhancing parenting skills.

Friday, August 30th, 2019

Papers 12 – Developmental Psychopathology I

Edessa Hall 15.30–17.00

OP 067
STUDENTS' ATTITUDES TOWARDS AND EXPERIENCES WITH PEERS HAVING PROFOUND INTELLECTUAL AND MULTIPLE DISABILITIES

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Background and aims: Although inclusive education is a worldwide trend, children with profound intellectual and multiple disabilities (PIMD) are still hardly included in regular schools so far. As a consequence, there is very little contact between typically developing students and peers with PIMD. Hence, it can be questioned what attitudes typically developing students hold towards peers with PIMD and if contact between them has an effect on students' attitudes. This study aims to examine 1) students' attitudes towards peers with PIMD and the effect of contact on their attitudes 2) students' experiences in having contact with peers with PIMD.

Methods: A quantitative study was set up focusing on the attitudes of regular school students (N= 616; N= 444$_{contact}$, N= 172$_{no\ contact}$, age range 8–12, M= 10.1, SD= 0.6). Students having contact with peers with PIMD attended a school with a special integration class. Students completed an attitude survey, including a vignette describing a peer with PIMD, and 14 attitude statements. Moreover, a qualitative study was set up to examine students' experiences in having contact with peers with PIMD (N= 22). A semi-structured interview was held including the following topics: knowledge about PIMD, contact experiences, and attitudes towards peers with PIMD.

Results: In general, students hold a positive attitude towards peers with PIMD. While expecting the opposite, students attending a school with an integration class were less positive than their counterparts without an integration class. Though the experiences of students in having contact with peers with PIMD differed in frequency and type of contact (i.e., undertaken activity), all students were positive about their contact experiences. In addition, all students were positive about the integration of peers with PIMD and indicated to find it of great value.

Conclusions: The inclusion of children with PIMD can be seen as great value for the attitude development of typically developing students.

OP 068

THE ASSOCIATIONS BETWEEN INFANTS' TEMPERAMENT AND MENTAL HEALTH DISORDERS IN CHILDHOOD AND ADOLESCENCE: A SYSTEMATIC REVIEW AND META-ANALYSIS

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AIM: Over 240 million children and adolescents world-wide meet diagnostic criteria for a mental health disorder [1]. Reducing the likelihood of a disorder and developing successful clinical interventions requires understanding its earliest precursors [2]. One construct that has promise for advancing our understanding of psychopathology is temperament. I will discuss the findings of a meta-analysis estimating the strength of the association between infants' temperament and internalising, externalising and autism spectrum disorders later in childhood and adolescence.

METHOD: Inclusion criteria: (1) a prospective longitudinal design, (2) a questionnaire measure of temperament < 24 months, (3) a measure of symptoms or a clinical diagnosis of disorder < 18 years. Using keywords: *infant, child, early, temperament, disposition, personality, regulation, emotion, ADHD, ASD, externalizing, internalizing, depression, anxiety, conduct, mood, neurodevelopment*, seven online databases were searched. After scrutiny of the full content of the 84 articles, 31 studies were included.

RESULTS: Analyses were performed using random-effects models. Estimates of effects sizes were computed for surgency, activity level, regulation, reactivity, difficult temperament and behavioural inhibition. There was no significant association between activity level and disorder ($p=.069$). Regulation and surgency were negatively related to disorder in general ($r=-.23$, $p=.007$ and $r=-.07$, $p=.045$). Thus, poor regulation and low surgency predict later disorder. Reactivity ($r=.14$; $p<.001$), difficult temperament ($r=.11$ $p<.001$), behavioural inhibition ($r=.10$, $p=.021$) were positively associated with later disorder. Greater emotional reactivity, behavioural inhibition and more difficult temperament increase the risk of disorder.

CONCLUSIONS: The findings are consistent with the notion that dysregulated and reactive temperament is an early risk factor for later disorder. Overall, the magnitude of effect sizes suggests that the influence of early temperament on later psychopathology is modest. Inability to regulate emotions may be a more important infant predictor of mental health disorders than excessive displays of negative affect.

OP 069

THE INTERGENERATIONAL TRANSMISSION OF SOCIAL ANXIETY: THE MEDIATING ROLE OF PATERNAL AND MATERNAL FEAR OF NEGATIVE CHILD EVALUATION AND PARENTING

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Background and aims: Social anxiety runs in families. Parents' fear of negative child evaluation (FNCE) has been proposed as a mechanism explaining the intergenerational transmission of social anxiety (Heinrichs et al., 2010). FNCE is the fear parents experience that others evaluate their child negatively. We previously found that that socially anxious parents have higher levels of FNCE already when their child is 4 months old and that FNCE predicted more negative parenting at 1 year. In this study, our first aim was to test whether fear of negative evaluation (FNE), a core belief of social anxiety, in socially anxious parents extended to their child resulting in FNCE. Our second aim was to test whether parents' FNCE was associated with over-involved and negative parenting and social anxiety in school-aged children.

Methods: Eighty-six fathers and 94 mothers completed the Social Phobia and Anxiety Inventory (SPAI-18), the Fear of Negative Evaluation-Scale, and the Fear of Negative Child Evaluation-Questionnaire when their child was 7.5 years old. Both parents' over-involved and negative parenting were measured using the Comprehensive Parenting Behavior Questionnaire. Child social anxiety was measured with the Picture Anxiety Test (child report) and the Screen for Child Anxiety Related Emotional Disorders (parent report).

Results: Preliminary results show that for both parents, social anxiety, FNE, FNCE, parents' over-involved parenting and child social anxiety (parent report) were significantly positively associated (range correlations .26-.71). FNE mediated the association between social anxiety and FNCE for both parents. FNCE did not mediate the relation between parents' social anxiety and child social anxiety. FNCE, however, did mediate the relation between parents' social anxiety and over-involvement for both parents.

Conclusions: Our study shows that parents' FNE extends to their children. The results also provides further evidence for the role of FNCE in the intergenerational transmission of social anxiety during middle childhood.

OP 070

DO ADVERSE CHILDHOOD EXPERIENCES PREDICT DEVELOPMENTAL TRAJECTORIES OF PSYCHOPATHIC TRAITS

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Background: Dispositional characteristics related to psychopathy has the potential for deleterious effects both at the individual and societal level. Prior to adult manifestations of psychopathy and anti-social personality disorder, stable individual trait differences emerge in childhood. Adverse childhood experiences (ACE) are also known to be associated with similar deleterious outcomes, yet, it is less clear the degree to which ACEs may impact the developmental trajectories of psychopathic traits.

Aims: The present study aims to test the degree to which trajectories of the psychopathic traits of Boldness, Meanness, and Disinhibition from adolescence (16 years) through emerging adulthood (22 years).

Methods: In this study, we leverage an existing, diverse dataset of children and adolescents from the Center for Education and Drug Abuse Research (CEDAR). Both an index of childhood adversity (i.e., parental substance use, parental incarceration, divorce, retrospective reports of abuse/neglect, etc.) and MPQ-derived Triarchic Psychopathy Model (TriPM) scales will be examined in a large sample of adolescents assessed every 3 years (16, 19, and 22 year assessments). First, we will investigate developmental trajectories for these traits using latent growth mixture modeling approaches. Second, we will test the degree to which ACEs account for heterogeneity in trajectory class membership.

Results and Conclusion: Data analysis will be performed in the period of April—June. Results will be available for the conference presentation.

OP 071
ANXIETY DISORDERS FROM PRESCHOOL TO ADOLESCENCE - PREVALENCE AND STABILITY OF SYMPTOMS

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Background and aims: Anxiety disorders constitute the most prevalent group of psychiatric disorders in childhood and adolescence, but studies of the development and course of anxiety from preschool age is lacking. We therefore examine the prevalence of anxiety disorders and stability of anxiety symptoms from preschool to pre-adolescence.

Methods: Using a semi-structured psychiatric interview (PAPA/CAPA), we assessed DSM-IV defined anxiety disorders in a community sample of 4-year old Norwegian children (n=1,042) biennially to age 12 years.

Results: Specific phobia was the most prevalent disorder in early childhood (Age 4: 7.6%; Age 6: 6,7%) but decreased by age, whereas generalized anxiety (GAD) increased in prevalence over time and was the most common anxiety disorder at age 12 (4.3%). Stability in symptoms within each disorder was low to moderate and only a few heterotypic (cross-disorder) paths emerged: early GAD symptoms predicted later symptoms of separation anxiety and symptoms of specific phobias predicted later GAD symptoms. No gender differences appeared, except from GAD being more prevalent in boys than girls at age 6.

Conclusions: Our study shows that although the prevalence of anxiety disorders remains fairly stable during childhood, the various types of disorders changes substantially. Stability in symptoms for a specific disorder is low to moderate, and early emerging symptoms of one anxiety disorder only rarely increase the risk for other anxiety disorder symptoms.

OP 333
FACE PROCESSING IN TAIWANESE CHILDREN WITH COCHLEAR IMPLANTS: AN EYE-TRACKING STUDY

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The ability to "read faces" is essential for daily interactions, because faces provide unique information about the race, identity, intension and emotion of others. Previous research reports that deaf signers have enhanced abilities to read faces. Due to diminished auditory input, faces become their major resource for extracting social and emotional information. However, it remains unknown whether the enhanced ability of reading faces also occurs in other deaf individuals such as those with cochlear implants (CIs). The present study aimed to examine face recognition in 3- to 10-year old Taiwanese children with and without CIs, using the eye-tracking technology.

Forty-nine Taiwanese children with normal hearing (NH, Mage = 79.73 months) and 32 with CIs (Mage = 80.97 months) completed a face recognition task on computer, where they identified Asian and Caucasian faces presented on photos. Children's behavioral responses were recorded by an experimenter, and their eye gazes were measured by a Tobii eye tracker.

Children with CIs did not outperform children with NH in recognizing faces of own or other races, nor did they differ from hearing peers in eye gaze patterns. Both groups recognized Asian and Caucasian faces with equal accuracy, and they fixated most time on the eye region. Furthermore, like children with NH, children with CIs looked longer at Caucasian eyes than Asian eyes.

Our findings showed that, unlike deaf signers, children with CIs did not have an enhanced ability in recognizing faces, nor did they pay extra attention to the mouth region, which was observed previously in deaf signers. Possibly, their enhanced hearing ability resulted from CIs makes them rely less on visual stimuli. Furthermore, our findings suggest that like hearing peers, children with CIs have internalized the social norm of avoiding direct eye contact, which is endorsed in many Asian cultures.

Friday, August 30th, 2019

Papers 13 - Parenting, Psychological Control and Self-Regulation

Naoussa Hall 15.30-17.00

OP 072

WHAT ARE THE PREDICTORS OF PARENTING BEHAVIORS AND CHILD BEHAVIORAL SELF-REGULATION? WORK-FAMILY CONFLICT, SOCIAL SUPPORTS, OR CHILD TEMPERAMENT?

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Background and aim: Work-family conflict is an inter-role conflict experienced by worker when family duties and work responsibilities interfere with each other (Greenhaus, & Beutell, 1985). Few studies have emphasized the adverse affects of work-family conflict on parent and child outcomes (Giallo et all., 2014). The primary aim of this study was to examine the effects of mothers' work-family conflict, social supports (organizational, spousal and extended family support on childcare), parenting daily hassles, and child temperament on parenting and child outcomes.

Method: The study consisted of 109 mother-child dyads (M_{child} = 49.13 months, *S.D.*=7.23). In the first phase of the study, maternal work-to-family conflict, parenting, social supports (organizational support, spousal support, extended family support on child care), parenting daily hassles, child temperament, and child inhibition problems were assessed by mother's self-reports. In the second phase, child executive functions were directly measured from children at preschools.

Results: Four hierarchical multiple regression analysis was conducted to test each dependent variable (maternal warmth and inductive reasoning; mother-reported child inhibition problems, and direct measure of child executive functions). Findings have highlighted that work-to-family conflict was negatively but organizational support was positively related to maternal warmth and maternal inductive reasoning. Children's anger/frustration found negatively related to maternal inductive reasoning. Furthermore, maternal inductive reasoning was positively related to child executive function and parenting daily hassles. Child anger/frustration were also positively related to child inhibition problems. Finally, children, whose mothers had higher levels of spousal support showed higher levels of behavioral self-regulation skills when their mothers' work-to-family conflict decreased.

Conclusion: To our knowledge, this is one of the first study examining the effects of mothers' work-to-family conflict on child behavioral self-regulation, incuding both direct measure of child executive functions and mother report of inhibition problems.

OP 073

PARENTAL MIND-MINDEDNESS AND SENSITIVITY MODULATE SOCIALIZATION OF EMOTION AND SELF-REGULATION IN CHILDREN

Wang L.

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Background and aims: Based on the model presented by Eisenberg and colleagues(1998b), this study aims to identify the important role that parental mind-mindedness and parental sensitivity play between parental emotion socialization and child social-emotional competence.

Methods: Home visits including observations of child behaviors and parent-child interactions and parental interviews about their children were conducted in 88 families with 2-3-year-old children. For child behaviors, measured variables include child self-regulation involving delay of gratification, inhibitory control, and social-emotional competence involving emotion recognition and understanding. For parent-child interaction, parental sensitivity, emotion expressiveness were coded in puzzle task, free play and clean-up tasks. Parental mind-mindedness was coded based on parents' description of their own child.

Results: Results showed that parental mind-mindedness had a mediating effect between parents' expressed positive affect and children's emotion recognition and understanding, while parental sensitivity mediated between parents' appropriateness of affect and children's self-regulation.

Conclusions: Parents' expressiveness of positive emotion helped children understand emotions better; this could be explained by parental mind-mindedness, parents who were more likely to view their children as independent mental agents may pay more attention to children's emotions and also express themselves in the face of children like they would do in the face of adults, thus allows children to better perceive and understand their own and others' emotions. Parents' ability to control their emotions appropriately may set examples for their children for self-control; this could be explained by parental sensitivity, parents who responded to children's signals promptly and properly and would let children to lead the interaction, fostered children's better understanding of the "rules" for social interactions and thus have more chances to practice self-regulation. This study emphasized the essential role of parents' mental aspects of socialization in facilitating children's social-emotional competence.

OP 074

INNOCENT DISCLOSURES: CHILDREN'S INITIAL REPORTING OF FAMILIAL NEGLECT DURING FORENSIC INTERVIEWS

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Background and Aims: The hidden nature of child maltreatment complicates identification and intervention efforts. Children's disclosures represent one of the primary catalysts for identification, and a great deal of scientific research has been devoted to determining how to elicit those disclosures. To date, however, this work has primarily considered disclosures of sexual, and to a smaller extent physical, abuse. Virtually no attention has been directed toward understanding children's disclosures of neglect, despite this form of maltreatment being the most prevalent. The aim of this research was to begin to provide this knowledge.

Method: Redacted court jurisdiction reports ($N = 71$) of cases of neglect were obtained from a medium-sized ethnically and racially diverse county in the United States (children 4-17 years old, $M = 11.4$ years, 61% girls). Reports were coded for how neglect was initially suspected, children's perceived awareness of the neglect, and children's disclosures during forensic interviews.

Results: Preliminary analyses tested whether children's age, gender, and perceived awareness of neglect (4-point scale, definitely was not aware, $n = 45$% to definitely was, $n = 20$%) were associated with their interview disclosures. Age was positively associated with awareness, $r = .301$, $p = .011$. Age, gender, and perceived awareness were examined as predictors of disclosures using a multinomial regression (disclosures were coded as: nondisclosure, $n = 30$%; denial, $n = 6$%; partial disclosure, $n = 18$%; or full disclosure, $n = 47$%). The model was significant, $\chi^2(9, N = 71) = 43.03$, $p < .001$, Nagelkerke's $R^2 = 0.50$. Higher perceived awareness that their experiences were not normal or acceptable was associated with disclosing neglect.

Conclusions: Findings suggest that children do not always report experiences of neglect within the home, despite external evidence of neglect, and that indicators of awareness of their own circumstances as not normal or acceptable is associated with disclosing.

OP 075

THE EFFECT OF PERCEIVED PARENTING ON ONTOLOGICAL WELL-BEING IN ADOLESCENCE: A GROWTH-CURVE ANALYSIS

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Most adolescents are influenced by family structure, it is important to identify how family functions patterns interact with adolescent behaviors and it is significant to provide support for healthy adolescent development. Adolescent relationship with their parents has been explicitly considered in many studies and many studies provide empirical evidence for the link between parent relationship and well-being in adolescence (Grolnick, Deci, & Ryan, 1997). Based on the conclusions of the researches in the literature, this study examined whether the change in the perceived parenting over time explains the change in ontological well-being in adolescents.

Methods: This study involved 218 high school students from the Eastern part of Turkey. The sample included 116 (53,2%) males and 102(45,8%) females. The age of the participants ranged from 15 to 17. The change in the measurements taken at three different ages over time was analyzed with the latent growth curve using Mplus7 program (Muthén & Muthén,2008).

Perceptions of Parents Scale (POPS; Robbins, 1994): The scale was designed to measure one's retrospective perceptions of the parents' autonomy support, involvement and warmth provided.

Ontological Well-Being Scale (OWB; Şimşek & Kocayörük, 2013): This scale was used to measure happiness. OWB consists of 24 items rated on a 5-point scale.

Results: Perceived parenting include three dimension for both parents; parent autonomy support, parent involvement and parent warmth. In order to model the observed variability in the intercept and slope factors of the ontological well-being trajectory, the time-varying predictor (perceived parenting) was analyzed. Father and mother autonomy support provided good fits only for boys. However, father and mother warmth indicated good fits only for girls.

Conclusion: This study demonstrated that father and mother autonomy support influenced boys well-being, but father and mother warmth influenced girls well-being across adolescence. Both father and mother involvement influenced boys and girls well-being.

OP 076

CONSEQUENCES OF ADOLESCENTS' COPING RESPONSES TO PSYCHOLOGICALLY CONTROLLING PARENTING: AN EXAMINATION OF WITHIN AND BETWEEN EFFECTS

Flamant N., Haerens L., Mabbe E., Vansteenkiste M., Soenens B.

University of Ghent

Abundant research has shown that psychologically controlling parenting has detrimental effects on adolescents' psychosocial development. Although the negative effects of psychologically controlling parenting are well-established, the agentic way adolescents cope with such parenting is much less understood. The goal of this study is to gain insight in the consequences of adolescents' coping responses when confronted with psychologically controlling parenting. Specifically, we distinguish between three coping strategies, two of which are considered detrimental coping strategies (oppositional defiance and compulsive compliance) and one of which is considered a constructive coping strategy (negotiation).

We considered two possible roles of these coping strategies. First, coping strategies could mediate the relationship between psychologically controlling parenting and adolescents' psychosocial maladjustment. In this case, a psychologically controlling style would elicit more detrimental and less constructive coping strategies that, in turn, affect adolescents' outcomes. Secondly, coping strategies could play a moderating role in the relationship between psychologically controlling parenting and adolescents' outcomes. Coping strategies would then affect the degree to which adolescents suffer from such parenting, with detrimental strategies exacerbating and with constructive strategies attenuating these effects.

Using a longitudinal design, 198 adolescents (Mage=14.89years) reported twice on their experiences of psychologically controlling parenting, use of coping responses and internalizing and externalizing problems. Using a multilevel model, the data was analyzed at both a between- and within-person level.

Results show that psychologically controlling parenting is related to more adjustment problems in adolescents. Regarding the role of the coping responses, we found evidence that oppositional defiance plays a mediating role in the relation between psychologically controlling parenting and adolescents' maladjustment, thereby explaining the detrimental effects of such parenting. Secondly, we found evidence for moderation: oppositional defiance and compulsive compliance play an exacerbating role and negotiation plays a buffering role in the relation between psychologically controlling parenting and adolescents' maladjustment.

OP 077

THE LINK BETWEEN MARITAL CONFLICT AND PSYHOLOGICAL CONTROL: THE MEDIATOR ROLE OF PARENTAL STRESS

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Backround: It has been clearly demonstrated that psychological control (PC) may lead to negative influences on adolescent adjustment. One of the familial factors that increases the use of PC is marital conflict. Within family system theory frame, conflict might increase stress of parents and lead parents to behave more controlling. In order to investigate the underlying mechanisms of the use of PC, we aimed to investigate the mediator role of parental stress between marital conflict and PC. We hypothesized that fathers' and mothers' reports marital conflict would increase their parental stress, which in turn would result in higher PC.

Method: 85 Turkish family (mothers, fathers and two adolescent siblings) participated to the study. Older siblings were aged between 12-19 years ($M = 16.15$, $SD = 1.54$), younger siblings were aged between 10-17 years ($M = 12.05$, $SD = 1.55$). PC scales (Barber 1996, Barber et al., 2007) was completed the separately by family members. Marital conflict (Canel, 2007) and parental stress (Özmen & Özmen, 2012) were assessed with reliable measures and completed by fathers and mothers.

Results: Structural Equation Modeling (SEM) analysis for mothers indicated that conflict was positively related to parental stress, and stress also was positively related with all four PC reports (mothers' report for two siblings and siblings' reports for their mothers). Parental stress also mediated the relationship between conflict and PC. SEM analysis for fathers revealed that marital conflict was positively related to parental stress, and stress was positively related with only father's report PC and mediated the relationship between conflict and PC.

Conclusion: Overall, this study supports the family system theory perspective by confirming links between spousal relations and parent–child relationships. The data collection process is still continues and the findings will contribute to the understanding of familial factors to the use of PC.

Friday, August 30th, 2019

Symposium 16

Olympia A Hall 17:30 - 19:00

S 16
GLOBALISM, INTERSECTIONALITY AND IDENTITY DEVELOPMENT AMONG ETHNIC AND RACIAL MINORITY YOUTH AND YOUNG ADULTS: CONCEPTUAL AND MEASUREMENT APPROACHES

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Nations are increasingly global and racially diverse. These two social forces - globalization and racial diversity - can be both complementary or at odds with each other in many aspects of development. Immigrant youth may find solidarity with peers across national boundaries. Minority young adults starting careers may find themselves in racially hostile work environments. At the same time, oppressive systems can further isolate groups, make them yearn for another way of life, or engage in acts of resistence. These diverse experiences can lead youth and young adults to explore, re-examine, and find resolution with new aspects of their identity. We explore how globalization and critical race theory concepts such as diaspora and intersectionality can be operationally defined and linked with identity development in youth and young adults.

The first presentation introduces the construct of intersectional consciousness which integrates the development of critical consciousness and intersectionality. Intersectional consciousness consists of awareness of intersecting oppressions, efficacy regarding intersecting oppressions, low-risk actions to address intersecting oppressions, and willingness to engage in high-risk actions to address intersecting oppressions. Using a sample of racially and ethnically diverse sample of young adults, the authors demonstrate the construction and validtion of Intersectional Consciousness Scale. The second presentation introduces the construct of diasporic identity which captures how individuals seek to establish belonging in the midst of homeland loss and yearning. Using a sample of transnationally adopted youth, the authors demonstrate the construction and validation of the Diasporic Identity Scale. The third presentation examines the history of oppression, resilience, and resistance among Asians in America and how these experiences can inform the development of a unique racial identity that incorporates multiethnic unity, interracial solidarity, transnational sympathy, reclaiming subjectivity/agency, and intersectionality. The symposium concludes with a discussion by the presenters on implications of new identity models in developmental science research.

S 16 – 1
THEORY AND DEVELOPMENT OF THE DIASPORIC IDENTITY SCALE

Lee R.M., Kim A.Y., Zhou X., Gulamhussein Q. , Hu A.W.

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Immigrant youth often experience a severing of biological and cultural connections that is rooted in their migration. These losses are even more pronounced for children who are permanently separated from their families, such as intercountry adoptees and unaccompanied refugee minors. At the same time, globalization and technological advances provide opportunities for youth to reconnect with their lost homelands. However, there is limited research on the ways in which these youth navigate their transnational migration losses and how these experiences affect their own development.

Integrating identity development models with diaspora scholarship from across the social sciences and humanities (e.g., Bhatia & Ram, 2009; Cohen, 2008; Safran, 1991), we propose a new construct - diasporic identity - to capture how transnational migrant youth develop an identity that draws meaning from their migration histories, the co-ethnic communities that they create, and their relationships with their homelands.

We further describe the development of a new measure - the Diasporic Identity Scale (DIS) - to assess this construct in a sample of transnationally and transracially adopted Korean American youth (N =117). Using an iterative process to generate and reduce the number of potential items, we identified two DIS dimensions. Solidarity taps into a sense of within-group empathy and emphasizes community building. Homeland yearning captures a desire to return to the homeland.

Exploratory factor analysis supports the two-factor structure with 8-items tapping into *solidarity* and 4-items tapping into *homeland yearning*. We provide evidence for convergent validity (ethnic identity rs = .23-.59, adoptive identity rs = .32.-71), discriminant validity (parent-child relationship rs = -.03-.19), and concurrent validity (socialization with other Koreans and non-Koreans rs = .18-.39). Also, homeland yearning was related to travel to Korea (p=.03). The DIS dimensions were unrelated to psychological adjustment measures of internalizing and externalizing behaviors, distress, and life satisfaction (rs = .01-.15).

S 16 – 2
THE DEVELOPMENT AND EVALUATION OF THE INTERSECTIONAL CONSCIOUSNESS SCALE (ICS) IN ADULTS AND EMERGING ADULTS

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Intersectionality perspectives argue that multiple systems of oppression intersect to shape individual's lives by perpetuating certain inequities and affordances (Crenshaw, 1989). Capitalizing on developmental research on the integration of critical consciousness with intersectionality (Godfrey & Burson, 2018), we present a new scale capturing intersectional consciousness. Participants for this study included 402 racially and ethnically diverse split between a sample of emerging adults, and separately adults, recruited online using various online techniques to increase participation of diverse individuals.

The 22 items constituting the ICS scale were created via an iterative process that involved experts, members of the community, and auditors. Subscales included: (1) Awareness of intersecting oppressions, (2) Efficacy regarding intersecting oppressions, (3) Low-risk actions to address intersecting oppressions, (4) Willingness to engage in high-risk actions to address intersecting oppressions. Using the emerging adult sample, we ran an exploratory factor analysis using principal axis factoring and direct oblimin (Tabachnick & Fiddell 2007). Results revealed that there was a clear four factor structure to this data. These results were shown to be stable in a sample of 190 with a KMO value of .89 and communalities exceeding .5 and a parallel analysis of 500 random samples with a cutoff of 95% confirmed a 4-factor structure. Following standards for item deletion, we did not have to delete any items; all items loaded at .4 or above in each respective factor.

Using the adult sample, results from a confirmatory factor analysis provided evidence in support of the structure identified in the emerging adult sample. We found evidence of the convergence between the ICS subscales and systems justification, such that higher intersectional consciousness across subscales were inversely associated with a belief in meritocracy. The findings suggest the ICS appears to have psychometric evidence in support of its structure and hypothesized associations with systems justifying beliefs.

S 16 – 3

RACIAL IDENTITY OF ASIAN AMERICANS: APPLYING A CRITICAL RACE PERSPECTIVE

Yoo H. C., Gabriel A. K., Atkin A. L., Matriano R.

Sanford School of Social and Family Dynamics, Arizona State University

Asian Americans are the fastest-growing racial group in the United States and projected to become the largest immigrant group by 2055 (López, Ruiz, & Patten, 2017). Still, developmental research and theory focused on distinct racialization and unique racial identity experiences of Asian Americans is limited. To advance scientific knowledge in this area, our paper proposes a new model of Asian American racial identity that draws on Critical Race theory and Asian Americanist perspectives that emphasize the unique history of oppression, resilience, and resistance among Asians in America. We argue that this history is inextricably linked to the formation and development of an Asian American racial identity, particularly in response to and challenging U.S. racism and imperialism.

Specifically, *Multiethnic Unity* is a cultural response to the shared experiences of discrimination and exploitation among Asians of all ethnicities, from which the category "Asian American" initially rose. *Interracial Solidarity* is a cultural response to the racial triangulation of Asians in the black–white binary of U.S. racial structure. *Transnational Sympathy* is a cultural response to Asians in the United States and Asians abroad sharing similar racialization and discrimination experiences. *Reclaiming (Racialized) Subjectivity/Agency* is a cultural response to the racial formation of an Asian American identity defined by whiteness. Finally, *Intersectionality* is a cultural response to our era's current discourse about who is included in the category "Asian American" across intersections of gender, skin color, class, and other positionalities. We conclude with a discussion on implications of the new model in developmental science research.

Friday, August 30th, 2019

Symposium 17

Olympia B Hall 17:30 – 19:00

S 17
TRUST IN RELATIONSHIP: FROM HUMAN TO ROBOT

Marchetti A.
Chair, Università Cattolica del Sacro Cuore, Department of Psychology, Milan, Italy

Itakura S.
Chair, Doshsha University, The Center for Baby Science, Kyoto, Japan

Pastra K.
Discussant, Cognitive Systems Research Institute, Athens, Greece

Trust can be described as a *multidimensional psychological attitude* that involves beliefs and expectations about the trustee's trustworthiness derived from social experiences involving uncertainty and risk (Gareth and George, 1998). From this perspective, developmental psychology enables us to study the processes involved in the ontogenesis of trustworthy relationships (Koenig, Clément & Harris, 2004; Harris & Koenig, 2006).

We need to hypothesize a reliable mind in order to consider the other as trustworthy. The ability to understand one's own mind and the minds of others (feelings, desires, thoughts, etc.), namely the Theory of Mind (ToM; Premack & Woodruff, 1978, Wellman, 2014), is central to the establishment of trusting relationships (Clément, Koenig & Harris, 2004). Even when ToM abilities are still immature, as revealed by infants' behaviour (Kanakogi & Itakura, 2011), trust may be inferred from children's proclivity to rely, i.e., to "trust", others as shown by indices that are considered ToM precursors, such as eye-gazing (Okumura et al., 2013). With the development of ToM abilities, trust is increasingly based on an epistemological understanding of the other's intentions and behaviour (Harris & Koenig, 2006). At this level, trust becomes a complex construct encompassing a variety of psychological factors, including *cognitive and affective features* (Lewis, Sycara & Walker, 2018). Accordingly, a full understanding of the psychological processes that underlie trust calls for a life-span perspective, as well as a multidisciplinary standpoint (Marchetti, Manzi, Itakura & Massaro, 2018; Di Dio, Manzi, Itakura, Kanda, Ishiguro, Massaro & Marchetti, 2018). Additionally, given the ever-increasing presence of non-human agents, notably robots, as social partners in particular contexts (i.e., domestic, educational, military, etc.), it is equally important to study trust in response to the behaviour of both humans and robots (Hancock, Billings, Schaefer, Chen, De Visser, & Parasuraman, 2011), and to implement developmental psychological models in robots to make them reliable and efficient partners (Patacchiola & Cangelosi, 2016).

The symposium will include 4 contributions. The eye-tracking study by Shoji Itakura on infants investigates whether 10 and 12-month old children understand the referential nature of gaze, and in particular if it is confined to the human gaze, or if it extends also to non-human gaze (robot). The experimental research by Angelo Cangelosi, Antonio Chella, Samuele Vinanzi, and Massimilano Patacchiola shows the benefits of using a developmental robotics approach to model social skills in robots: the authors designed an artificial cognitive architecture for a humanoid robot that uses a probabilistic approach to model trust and ToM in order to estimate the reliability of human informants. The large scale-study by Tony Belpaeme compares the outcomes of conditions involving learning from a tablet and/or a robot by exploring the possible psychological mechanisms underlying language learning, with the aim of designing effective robot tutors. Finally, the study by Cinzia Di Dio, Federico Manzi, Giulia Peretti, Paul Harris, Angelo Cangelosi, Davide Massaro, and Antonella Marchetti investigates preschool and school-age children's tendency to trust another human or a humanoid robot, as well as children's tendency to regain trust after it has been lost.

These studies will be presented and discussed in order to highlight methodological issues, possible future research areas, as well as possible implications for educational contexts.

S 17 - 1

EXPLORING TRUST IN THE HUMAN-ROBOT INTERACTION IN PRESCHOOL AND SCHOOL-AGE CHILDREN

Di Dio C.[1], Manzi F. [1,2], Peretti G. [1], Cangelosi A. [3], Harris L.P. [4], Massaro D. [1], Marchetti A. [1]

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[2] *University of Neuchâtel, Institute of Psychology and Education, Neuchâtel, Switzerland*

[3] *University of Manchester, Machine Learning and Optimisation, Manchester, United Kingdom*

[4] *Harvard University, Graduate School of Education, Cambridge, USA*

Trust has been studied in a number of disciplines, including developmental psychology (Harris and Koenig, 2006). Studying trust within the human-robot interaction is of particular importance given the ever-greater presence and relevance of robotic agents in the social sphere at all age-levels (Lewis et al., 2018). In this study trust was investigated across developmental ages and as a function of agency: the tendency to trust another human or a humanoid robot was assessed in preschool and school-age children during trust acquisition, trust loss and trust re-acquisition in an in-vivo trust game.

In a factorial design with agency (human, robot), and task (trust acquisition, trust loss, trust re-acquisition), as within-subject factors, and age-group as the between-subject factor, we evaluated the number of trials until children (N=94; 47 females) aged 3, 5, 7, and 9 years 1) acquired, 2) lost, and 3) regained trust in another player's (human or robot) guesses during a "guest where it is" game.

The main results showed that, independent of age, children tended to initially trust the robot more than the human partner. The tendency to trust during the trust re-acquisition phase was, as expected, significantly lower compared to both the trust acquisition and distrust phase for both interactive agents, although this effect was particularly evident for the robotic partner. Age-groups differences were further found, whereby children aged 3 years showed a greater tendency to trust compared to all other age-groups, particularly during the trust acquisition phase.

Our data showed that, independent of age, children are initially prone to trust a robotic partner more than a human partner. The re-establishment of trust is significantly affected by trust loss independently of the interactive partner, although trust decrease was greater for the robot partner than for the human partner. Critically, this finding suggests that when interacting with robotic partners relational failures may lead to great difficulties in relationship restoration.

S 17 – 2
FROM WHOM DO INFANTS LEARN?

Itakura S.

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Social learning enables infants to acquire information, especially through communication. However, it is unknown whether humans are the prime source of information for infant learning. Here we report that humans have a powerful influence on infants' object learning compared with non-human agents (robots).

Twelve-month-old infants were shown videos in which a human or a robot gazed at an object. The results demonstrated that the infants followed the gaze direction of both agents, but only human gaze facilitated their object learning: Infants showed enhanced processing of, and preferences for, the target object gazed at by the human but not by the robot. Importantly, an extended fixation on a target object without the orientation of human gaze did not produce these effects. Together, these findings show the importance of humanness in the gazer, suggesting that infants may be predisposed to treat humans as privileged sources of information for learning.

Infants can acquire much information by following the gaze direction of others. This type of social learning is underpinned by the ability to understand the relationship between gaze direction and a referent object (i.e., the referential nature of gaze). However, it is unknown whether human gaze is a privileged cue for information that infants use. Comparing human gaze with non-human (robot) gaze, we investigated whether infants' understanding of the referential nature of looking is restricted to human gaze.

In the current study, we developed a novel task that measured by eye-tracking infants' anticipation of an object from observing an agent's gaze shift. Results revealed that although 10- and 12- month-olds followed the gaze direction of both a human and a robot, only 12-month-olds predicted the appearance of objects from referential gaze information when the agent was the human.

S 17 – 3
DEVELOPMENTAL ROBOTICS FOR TRUST AND THEORY OF MIND

Cangelosi A.[1], Chella A.[2], Vinanzi S.[1], Patacchiola M.[3]

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[3] *University of Edinburgh, School of Informatics, Edinburgh, Scotland, United Kingdom*

Background and aims: Trust is a critical issue in human-robot interaction (HRI) scenarios: as robotic systems gain complexity and reach a deeper level of inclusion in our environments, it is crucial for them to be able to blend in our human-centered society by both maximizing their acceptability and correctly performing their tasks. This work aims at the investigation of a developmental robotics architecture, inspired by developmental psychology experiments, to integrate a probabilistic model of Theory of Mind (ToM) for trust experiments.

Methods: Vanderbilt et al. (2011) have demonstrated that children are not good at identifying misleading sources of information until age 5, when their ToM fully develops. Following these psychological results, we designed an artificial cognitive architecture for a humanoid robot that uses a probabilistic approach to model trust and ToM in order to estimate the reliability of its human informants. In particular, a Bayesian network has been used and inference is computed on the probability distribution of its nodes.

Results: We tested this architecture replicating the experiment by Vanderbilt et al. (2011). This consists in a sticker finding game where the child, or in our case the robot, must face and learn to distinguish helpers from trickers. This cognitive architecture is able to generate a belief network for each user and to perform decision making and belief estimation. In addition, an episodic memory module makes the robot able to build a personal character that depends on how it has been treated in the past, thus making it more or less keen to trust someone it never met and familiarized with.

Conclusions: The experimental results, in line with one of the original child psychology experiments, supports the benefits of using a developmental robotics approach to model social skills in robots.

S 17 – 4
ROBOTS FOR LEARNING

Belpaeme T.[1,2]

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[2] Centre for Robotics and Neural Systems, University of Plymouth, Drake Circus, Plymouth, United Kingdom

Social robots have been shown to be effective as teaching aids (Belpaeme et al., 2018). Robots are not only able to offer one-to-one personalised tuition but compared to alternatives such as software solutions they can achieve better learning outcomes. Recently, there has been an increased interest in using robots for language learning. In this, the design of the learning interaction between a young learner and a social robot can benefits from insights from developmental psychology and language acquisition.

The discussion on what promotes language learning with robots will be centred around a large-scale study in which 200 5- to 6-years-old children in Dutch day care centres learnt English from a social robot. We compared the learning outcomes of four conditions (1) a control condition, (2) learning from a tablet without a robot, (3) learning using a robot and tablet and (4) learning using gesturing robot and tablet (Vogt et al., 2019).

The results show that the children learnt in all conditions (except the control condition). However, the presence of the robot did not result in more learning compared to having the tablet alone. This is unexpected as in general the mere presence of a robot often leads to increased learning. This talk will explore the possible psychological mechanisms involved in language learning relevant to learning from robots and will explore how a better understanding of these mechanisms enables the design of more effective robot tutors.

While learning with robots has been demonstrated to be effective, learning a second language beyond just learning L2 labels for nouns has proven to be challenging. A more careful design of the interaction and technological developments will be needed to achieve effective language learning from robots.

Friday, August 30th, 2019

Symposium 18

Ilissos Hall 17:30 – 19:00

S 18
MOTHER – CHILD WITH SERIOUS ILLNESS: DISTRESS AND RESOURCES

Kharlamenkova N.

Chair, Institute of Psychology, Russian Academy of Sciences

Child's serious illness requiring surgical intervention is a stressor of high intensity for the whole family and, in particular, for the child himself and his mother. It has been repeatedly shown that a life-threatening diagnosis is accompanied by changes in family roles and responsibilities (Long & Marsland, 2011; Mu et al., 2015 etc.). Child's stress and thus child's experience of pain correlates with mother's emotional and psychological state (Chambers et al., 2002; Evans et al., 2016). Reducing distress in mothers improves adolescent outcomes (Jaser et al., 2018). At the same time greater parenting stress is associated with poorer psychological adjustment in caregivers and children with chronic illness and was unrelated to illness duration and illness severity (Cousino & Hazen, 2013).

The proposed symposium is devoted to a discussion of the resources and possibilities of distress overcoming during medical treatment of the child.

The importance of mother's emotional acceptance of the child/adolescent and her parenting style as well as child's coping strategies, representations of illness, executive functions and emotional attribution are studied in relation to the level of stress. Thus we believe that mother's adequate ideas about child's disease and her emotional acceptance of child can be the resources for overcoming stress.

We use projective and test methods for mothers and children. The results obtained by different methods are compared.

The special attention during discussion will be paid to system analysis of mother's and child's data which provides new and expanded understanding of family stress processes and coping.

S 18 – 1

ILLNESS REPRESENTATION AND COPING STRATEGIES IN ADOLESCENTS WITH TUMOR AND TUMOR-LIKE DISEASE OF MUSCULOSKELETAL SYSTEM

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Institute of Psychology, Russian Academy of Sciences. Psychological development of subject in everyday and post-traumatic states laboratory. Moscow, Russia

Background: The purpose of this study was to reveal the relations between coping strategy and illness representation in adolescents with a tumor and tumor-like disease of musculoskeletal system. The investigations on the problems of illness representations (i.e. inner picture of illness, inner health picture) in children and adolescents with different somatic diseases (Nikolaeva, 1984; Nikolaeva et al., 2015; Orbell, Henderson, 2016) and works on coping with illness threat strategies (Samokhvalova, Kryukova, 2016; Kuftyak, Samokhvalova, 2017; Hagger et al., 2017) are theoretical-and-empirical basis of the study. The reported study was funded by RFBR according to the research project № 18-00-00049 (18-00-00393 (C)).

Method: Disease Representation Profile, DRP (Dan et al., 2019), Adolescent Coping Scale, ACS (Frydenberg, Lewis, 1993, adapted by T. Kryukova, 2002), The Perceived Stress Scale for Children (PSS-C). The participants included 35 patients of Central Scientific Research Institute of Traumatology and Orthopedics named after Nikolay Priorov (21 girls and 14 boys aged from 12 to 16 years).

Results: The results suggested that the coping strategies are connected with different descriptors of DRP for high and low stress level. With low stress, such coping strategies as Focus on the Positive, Seek Professional Help and Invest in Close Friends are associated with the hope of recovery, and strategies Seek Relaxing Diversions and Not Coping — with fear and anxiety as associations to the disease. Under high stress, the strategy Focus on the Positive is connected with such disease representations as parents' anxiety and worry, and Seek Relaxing Diversions and Not Coping — with the expected help of doctors.

Conclusions: we proved the existence of different connection types between illness representation and coping strategies in adolescents with tumor and tumor-like disease of musculoskeletal system with low and high stress level.

S 18 – 2

THE EXECUTIVE FUNCTIONS IN ADOLESCENTS WITH SOMATIC ILLNESS

Vilenskaya G.

Institute of Psychology, Russian Academy of Sciences. Psychological development of subject in everyday and post-traumatic states laboratory. Moscow, Russia

The aim of the work was to identify the cognitive resources of adolescents with somatic disease (benign tumor of the musculoskeletal system). We assume that executive functions can (a) provide an opportunity to select and apply constructive coping strategies with a difficult life situation; b) they help reduce anxiety and contribute to a better emotional state; c) properly chosen methods of anesthesia (including general anesthesia) do not have a significant effect on the executive functions of the child when comparing their state before and after the operation. The following methods were used: repetition of a number series in the reverse order; Stroop test; Kogan task of combining attributes.

30 adolescents aged 12-16 years treated in Central Scientific Research Institute of Traumatology and Orthopedics named after Nikolay Priorov before and after surgery for the removal of a benign tumor were examined. The study was supported by RFBR as the research project 18-00-00049 (№ 18-00-00393 C).

The results show that children with higher indices in all executive functions use a greater number of different coping strategies and these strategies are more constructive (problem-oriented), their emotional state is more stable. Significant differences between indicators of executive functions before and after the operation were not found. Thus, the proposed hypotheses were largely confirmed. The results demonstrate the importance of self-regulation as a resource for family coping in a difficult life situation. It also demonstrated a non-significant effect of general anesthesia on the performance of executive functions measures in adolescents.

S 18 - 3
EMOTION ATTRIBUTION BY ADOLESCENTS IN STRESS SITUATION

Nikitina E.

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Emotion recognition and categorization is especially important for our social life. So from very early age, children are very competent in understanding the feelings of others by their faces. But information about emotional face processing in stressful conditions is contradictory. It was shown (Vanhalst et al., 2017) that lonely adolescents were more sensitive to happy, sad and fear faces. Maltreated children were more successful and fast in identification of fearful faces, relative to controls (Masten et al., 2008). But the increased reactivity of face processing neural circuitry after acute stress was demonstrated only for elderly participants (Everaerd et al., 2017). We hypothesized that adolescent's experience of pain and stress before and after serious surgical intervention could shift emotions attribution towards negative pole of scale. The study was funded by RFBR project № 18-00-00049 (18-00-00393 C).

Participants: 30 adolescents with musculoskeletal system disease (15 girls, 15 boys, 12-16 year old) treated in Central Institute of Traumatology and Orthopedics (Moscow) and 30 adolescents - pupils of Moscow schools during vacations.

Method: all the participants were asked to complete the Perceived stress scale for children (PSS-C) and to select the more appropriate description of each of the 10 neutral faces (Emotions attribution test). For each face picture we suggest 3 adjectives (positive, negative and neutral).

Results: Adolescents with higher level of perceived stress more often attributed negative emotions to neutral faces ($p < 0.05$). Girls of both groups were less likely to choose neutral definitions and words related to anger than boys.

Conclusion: negative shift of emotion attribution by neutral faces can be used as a marker of child's or adolescent's stress.

S 18 - 4
MOTHER'S EMOTIONAL ACCEPTANCE OF THE CHILD, ITS DYNAMICS AND THE TYPE OF PARENTING ATTITUDE

Dan M.

Institute of Psychology, Russian Academy of Sciences. Psychological development of subject in everyday and post-traumatic states laboratory. Moscow, Russia

Serious illness of a child, requiring surgery, makes it important to study mother's emotional attitude to her child. The emotional acceptance and types of the mother's parental attitude are studied. The purpose of this work is to study the types of mother's parental attitude to her child in stress situation, to reveal the level of mother's emotional acceptance of the child, to investigate changes in the emotional acceptance after surgery. Hypothesis: the level of mother's emotional acceptance of the child and its change after surgery depends on the type of parental relationship.

Methods: Parental Attitude Test by A. Varga, V. Stolin; Relationship Color Test by E. Bazhin and A. Etkind.

Sample: mothers (n=30, 30-55 years) of 12-16 years old teenagers diagnosed with benign tumors of the musculoskeletal system.

Outcome of the study: a significant difference was found in the emotional acceptance assessed by the Relationship Color Test in mothers whose type of parental relationship had high scores on the Acceptance, Symbiosis and Cooperation scales compared to mothers who had the highest scores on the Control, Failure and low Acceptance scales. Upon the operation performed on the teenager's musculoskeletal system, the emotional acceptance of mothers with high score on the scales of Acceptance, Symbiosis and Cooperation were not subject to significant changes, and in the group of mothers with the leading type of Control, an increase in the emotional acceptance of the teenager was identified. The study was supported by RFBR as the research project 18-00-00049 (№ 18-00-00393 C).

Friday, August 30th, 2019

Symposium 19

Vergina Hall 17:30 - 19:00

S 19
GOING THROUGH PUBERTY: THE ROLE OF PROXIMAL AND DISTAL DEVELOPMENTAL CONTEXTS

Weichold K.

Chair, Friedrich-Schiller-University of Jena, Germany

Puberty as the process of sexual maturation during adolescence is a human generality and the first milestone of adolescent development. Based on data from Western industrialized countries, this life phase has been characterized as troublesome and stressful for the young adolescents and associated with negative consequences for psychosocial adaptation, in particular for girls and for those adolescents, who enter puberty at a relatively early age. These effects seem to be amplified by risks within proximal social context (e.g., deviant peers, low family support, teasing), as proposed by the *Contextual Amplification Hypotheses* (Ge & Natsuaki, 2009; Natsuaki, Samuels, & Leve, 2015). Proximal developmental contexts, however, are embedded in the broader cultural and societal environment, as characterized by specific norms, values, puberty rites/coming-of-age-ceremonies, taboos around sexual maturation, and beauty ideals - all of them shaping the reactions of families, peers or school context to physical maturation of adolescents - and, consequently, influence how girls and boys perceive puberty and how positively they do through this life phase.

This symposium aims at investigating the contextual influences on adolescent development. Thereby, researchers from Portugal, Turkey, and Germany will present their work. Two papers will focus on adolescents interacting with their proximal developmental contexts, i.e., family and peer context in samples from Portugal and Turkey. The third paper will use cross-national data from 15 counties around the world to discuss the influence of broader contextual features on the perception of puberty and related consequences.

S 19 - 1

THE ASSOCIATIONS AMONG ECONOMIC STRAIN, MOTHER-ADOLESCENT RELATIONSHIP AND ADOLESCENTS' ADJUSTMENT: A FOLLOW UP STUDY*

Güre A.

University of Ankara, Turkey

The family stress model (FSM) proposed that economic hardship influence children and adolescents' development indirectly through a series of mediating family processes (Conger and Elder, 1994). FSM predicts that economic hardship conditions affect couples primarily through the economic pressures. When financial pressure is high, couples are at increased risk for emotional distress and behavioral problems. Emotional distress and behavioral problems are directly related to disruptions in parenting behaviour and leads to poor child adjustment. A limited number of studies were executed recently in Turkey under the scope of a research project (Güre, Uçanok and Ergül, 2014) based on a family stress model which revealed the similar results. The current study aimed to investigate the mediating role of the mother-adolescent relationship (mother behavior and the quality of mother-adolescent relationship) from an adolescents' perspective in a longitudinal approach together with adolescent's psychological well-being (self-esteem and life satisfaction) besides behavioral problems (internalizing and externalizing) under economic strain

The data was gathered twice with an interval of one year. The sampling of the study consisted of 832 adolescents (442 females, M = 13.89, SD = 1.73; 390 males, M= 14.11, SD = 1.74). Economic Strain Scale, the Parenting Behavior Questionnaire, the Quality of Parent-Adolescent Relationship Questionnaire, Multidimensional Students' Life Satisfaction Scale, Self-Perception Profile for Adolescents and Youth Self-Report were used for collecting the data.

The findings showed that economic strain was significantly related to a negative mother behavior and quality of mother-adolescent relationship for girls. Mother behavior and the quality of mother-adolescent relationship, in turn, were associated with adolescents' poor emotional well-being and behavior problems. Results were also similar for boys, apart from non-significant relations between perceived economic strain and the quality of mother-adolescent relationship, as well as the relations between the quality of mother-adolescent relationship and behavior problems. Moreover, structural equation modeling revealed that the effects of economic strain on adolescent emotional well-being and behavior problems were mediated through both mother behavior and the quality of mother-adolescent relationship for girls. For boys, only mother behavior mediated the influence of perceived economic strain on adolescent adjustment. So our findings supported the FSM in a broad extent. It seems that associations between perceived economic strain and adolescent adjustment varied depending on the nature of the mother-adolescent relationship.

S 19 – 2
CULTURAL DIFFERENCES IN DEVELOPMENTAL PROCESSES DURING PUBERTY

Weichold K., Fehmer N.

Friedrich-Schiller-University of Jena, Germany

Beyond the "Western view" on puberty provided by prior studies conducted primarily in the USA and parts of Europe, this current study aims at investigating the cultural differences in the meaning of and the developmental processes related to pubertal maturation across adolescents from various cultural background. More specifically, we were interested in (a) the description of the meaning, perception and consequences of puberty (i.e., status and timing) for boys and girls within different cultures, and (b) the analysis of moderation effects by the societal context. Data were collected within a large cooperative research project "Puberty x Culture" (P.I.: Weichold). Institutions in 15 countries from Africa (e.g., Ghana, Kenya), America (e.g., Ecuador, USA), Europe (e.g., Lithuania, Portugal), and Asia (e.g., China, India, Iran) - all countries with high variation in predominant religious background, existence and institutionalization of puberty rites/coming-of-age ceremonies, and value structure were invited to collect quantitative and qualitative data on 13yr.old girls (N=20) and boys (N=20) in each of the countries (Ntotal=630). Measures included, for instance, individual reactions to pubertal events/pubertal timing, reactions by proximal social contexts, and positive and negative developmental outcomes. Results imply that there are large differences in the evaluation of puberty between countries (and interacting with gender) which can be explained by the societal context. In addition, contextual characteristics, such as shared value orientations, influence the association between adolescent's perception of puberty and their proneness to develop internalizing and externalizing problems, such as depression or aggression. These findings enrich basic research. In addition, they are also relevant for tailoring more cultural-sensitive prevention and intervention tools for adolescents during puberty within single societies and also multi-ethnic settings.

S 19 – 3
PUBERTY AND CONTEXT: THE PORTUGUESE PERSPECTIVE

Verissimo M., Guedes M., Santos A.J.

ISPA Lisbon, Portugal

Puberty is a universal characteristic and a landmark in adolescence. It refers to the biological transformation that occurs in humans, with the goal of achieving physical and sexual maturity. Puberty has social and psychological implications for boys and girls that may vary in different cultural contexts - thus thsi nstudy investigated puberty and realted processes within Portugal (a spart of a larger cross-national study). Thirty eight young adolescents, aged between thirteen and fourteen years old participated in qualitative and quantitative data collection. In general, the boys and girls in Portugal considered that puberty is a mixed experience involving a set of positive changes (eg, physical and psychological maturity) but sometimes negative and difficult to manage. However, most boys and girls (68%) who participated in the study described puberty as a natural experience that is part of the development of the human being and is experienced by all the young people of the world. Although 37% of young people reported that puberty is an experience that does not make them stronger or weaker, about 55% felt that this phase of the life cycle tends to make them stronger because of the physical and psychological changes that occur during this period. On the other hand, the majority of boys and girls (42%) considered puberty to be important, describing it as a necessary experience for the development and transition from childhood to adulthood. Additionally to these results, the presentation will include a comprehensive analysis of the reactions of parents, peers, and the teachers to physical changes in Portugese youth. Also it will be analyszed inhowfar these reactions moderate the relationship between puberty and psychosocial adaptation.

Friday, August 30th, 2019

Symposium 20

Makedonia Hall A 17:30 - 19:00

S 20

INTERGENERATIONAL PATTERNS OF SELF-REGULATION WITHIN FAMILIES: EVIDENCE OF MECHANISMS FROM THREE LARGE LONGITUDINAL BIRTH COHORTS

Kok R.

Chair - Discussant, Department of Psychology, Education & Child Studies, Erasmus University Rotterdam, the Netherlands

Self-regulation of cognition, emotion, and physiology is essential to thrive in modern society, and poor self-regulation is implicated in many maladaptive outcomes across the life span, including psychopathology and poor health (Gross & Munoz, 1995; Moffitt et al., 2011). A growing number of studies has highlighted the relevance of the family system in the intergenerational transmission of regulation (Bridgett et al., 2015; Deater-Deckard, 2014), and its central role in shaping child regulation. However, many questions remain about the mechanisms behind these intergenerational patterns, which could include genetic, intra-uterine, and environmental processes, such as the quality of parent-child interactions.

In this symposium of four studies containing data from three large birth cohorts, we illustrate different mechanisms and patterns of intergenerational transmission of regulation within the family context from early childhood to adolescence.

Study 1, examines the mediating role of mother-child interaction in the association between maternal emotional dysregulation in early childhood and child negative reactivity two years later. In Study 2, the foetal programming hypothesis is tested by studying the associations between prenatal emotional dysregulation of both mother and father and child sleep physiology in middle childhood. Study 3 uses detailed observations of caregiving and cognitive self-regulation of mothers and children to explore mediating and moderating pathways in early childhood. In Study 4, the unique contribution of negative reactivity to novelty of both parents to adolescent over-control is examined, and the mediating role of parental overprotection.

Strong features of this series of studies include consideration of self-regulation of both mothers and fathers, the inclusion of emotional, cognitive, and physiological aspects of dysregulation, the use of gold-standard parenting observations and performance-based self-regulation tasks, longitudinal designs, and examination of moderated and mediated associations across different developmental phases. Together, the four talks provide unique insight in intergenerational transmission of regulation within families across childhood.

S 20 – 1

INTERGENERATIONAL TRANSMISSION OF SELF-REGULATION: THE ROLE OF MATERNAL DISTRESS AND MOTHER-CHILD INTERACTION

Hakanen H.[1]., Korja R.[1], Flykt M.[2,3], Nolvi S.[4,5], Kataja E.L[1], Sinervä E.[1], Eskola E.[4], Karlsson L. [4,6], Karlsson H. [4,7]

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[5] Charité Universitätsmedizin Berlin, Institute of Medical Psychology
[6] Turku University Hospital, Department of Child Psychiatry, Finland
[7] Department of Psychiatry, University of Turku and Turku University Hospital, Finland

Maternal psychological distress has several outcomes in child development, including temperament traits such as higher negative emotional reactivity (Field, 2017; Korja, Nolvi, Grant, & McMahon, 2017). Negative emotional reactivity refers to a heightened tendency to experience and express negative emotions and is a risk factor for later self-regulatory problems and internalizing/externalizing (Rothbart et al., 2006). Negative emotional reactivity is also affected by maternal sensitivity (Gartstein, Hancock, Iverson, 2017). Sensitivity may though also moderate the effects of maternal distress to children (Bergman, Sarkar, Glover & O'Connor, 2010).

The aim was to study the associations between maternal symptoms of depression and anxiety and child's negative emotional reactivity. Furthermore, the aim was to evaluate the possible moderative effect of maternal sensitivity on child's negative reactivity.

Maternal distress was measured repeatedly pre- and postnatally using EPDS (Cox, 1987) and SCL-90 (Derogatis, 1973). Maternal sensitivity was measured with EAS (Biringen, 2008) at 8 months of child's age in a free-play situation. Child behavior was measured with the IBQ-R (Gartstein & Rothbart, 2003) at 12 months and ECBQ (Putnam, Jacobs, Gartstein, & Rothbart, 2006) at 24 months of child's age.

Maternal postnatal but not prenatal symptoms of depression and anxiety and lower maternal sensitivity uniquely predicted child's higher negative emotional reactivity at 12 (R^2=.27, ß=.241 for depression, ß= .039 for anxiety, ß= -.250 for sensitivity, p< .01) and at 24 months (R^2=.228, ß= .386 for depression, ß= .381 for anxiety and ß=-.205 for sensitivity, p< .01) of child's age. We found no interaction effect of maternal symptoms and sensitivity on child's negative reactivity.

These findings suggest that maternal distress postnatally and lower maternal sensitivity predict independently child's negative reactivity at 12 months and at 24 months and give support to the independent effects of both maternal sensitivity and maternal distress symptoms in shaping child's emotional reactivity.

S 20 – 2
DOES PRENATAL PARENTAL EMOTIONAL DYSREGULATION AFFECT CHILD SLEEP?

Ringoot A.P.[1], **Koopman-Verhoeff M.E.**[2,3], **Wetzer J.A.**[2], **Tiemeier H.**[2,3,4], **Luijk P.C.M.**[1,2]

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[4] *Department of Social and Behavioral Science, Harvard TH Chan School of Public Health, Boston, USA*

Child sleep problems are common, affecting about 20-30% of children in the population (Anders & Eiben, 1997; Galland et al., 2012). Sleep has important regulatory functions and problems are linked with (psycho)pathology (Gregory & Saheh, 2016). Accumulating evidence from animal and human models suggests that prenatal exposure to maternal distress may enduringly impact offspring sleep problems (Pesonen, et al., 2009; Palagini, et al., 2015; Newland et al., 2016), which may point to a foetal programming effect. However, until now, long-term effects of maternal prenatal distress on child sleep were not assessed. Moreover, studies primarily focused on mother data, which impedes disentangling foetal programming effects from distress-related rater bias. In the present study, multi-informant, longitudinal data was used to test the effects of prenatal parental emotional dysregulation on child sleep problems.

In a general population sample ($n = 3,607$) emotional dysregulation was reported by mothers and fathers during pregnancy using the Brief Symptom Inventory. Toddler and child sleep problems were assessed at age 3 and 10 years by mother, father and child self-report (age 10) using the Child Behavior Checklist.

Hierarchical linear regression analyses indicated that even after rigorous control for covariates, mothers' prenatal emotional dysregulation was associated with more child sleep problems according to both mothers and fathers at ages 3 (mother report $\beta=0.13$, $p<.001$; father report $\beta=0.06$, $p<.05$) and 10 years (mother report $\beta=0.12$, $p<.001$; father report $\beta=0.08$, $p<.01$). Fathers' prenatal emotional dysregulation was only associated with father, but not mother, reported sleep problems at child age 10 ($\beta = 0.06$, $p<.05$).

These findings highlight that mothers' prenatal emotional dysregulation was associated with child sleep, even 10 years postnatally. This may be indicative of a foetal programming effect. Even more so since effects for fathers' prenatal emotional dysregulation were less pronounced and rather pointing to rater bias.

S 20 - 3

INTERGENERATIONAL EXECUTIVE FUNCTIONING: ARE MATERNAL AND CHILD EXECUTIVE FUNCTIONS RELATED TO MOTHER-CHILD INTERACTION? FINNBRAIN BIRTH COHORT STUDY

Nordenswan E.[1,2], Kataja E-L.[1,3], Deater-Deckard K.[4], Karrasch M.[2], Laine M.[2,5], Holmberg E.[1,3], Nolvi S.[1,6], Eskola E.[1,3], Karlsson L.[1,7], Karlsson H.[1,8], Korja R.[1,3]

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Executive functions (EFs) are essential for development and health (Diamond, 2013). As with other areas of self-regulation, little is known about the intergenerational transmission of EFs (Bridgett et al., 2015). Studies have reported links between poorer maternal EF and less sensitive maternal interaction with children (Deater-Deckard et al., 2012; Gonzalez et al., 2012). Mother-child interaction has also been linked to child EF (Bernier et al., 2010). This raises the question of whether interaction functions as a route for the intergenerational transmission of EFs. Research on this topic is central for developing interventions supporting mother-child interaction and children's developing EFs. This study explores links between maternal EFs, mother-child interaction, and child EFs. We hypothesize that better maternal EFs and better child EFs are related to better interaction.

The sample (n = 61 mother-child pairs) was drawn from the FinnBrain Birth Cohort (Karlsson et al., 2018). Assessments were completed 2.5 years postpartum. Maternal EF was assessed with CogState tasks (www.cogstate.com), measuring working memory, set-shifting, and integrated EF. Child EF was assessed with a working memory task and an inhibition task (Hughes et al., 2005; Kochanska et al., 2000). The mother-child free-play situations were analyzed with the Emotional Availability Scales (Saunders et al., 2015).

Better maternal EFs (working memory, r_s =.217, p = .047; set-shifting, r_s =.227, p = .039) were associated with better maternal structuring during interaction. Higher maternal sensitivity during interaction was related to better child EF (inhibition; r_s =.283, p =.017). Better child EF (inhibition) was associated with better child involvement (r_s = .241, p =.037) and responsiveness (r_s = .342, p = .005) during interaction.

These results correspond to our hypothesis, indicating the relevance of further analyses. More detailed and sophisticated analyses of a larger data and conclusions will be presented during the symposium.

S 20 – 4

THE INTERGENERATIONAL TRANSMISSION OF BEHAVIORAL INHIBITION: THE MEDIATING ROLE OF OVERPROTECTIVE PARENTING

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Department of Psychology, Education & Child Studies, Erasmus University Rotterdam, the Netherlands

Behavioral inhibition (BI) is a bottom-up self-regulatory process that determines how cautious and reserved one responds to (novel) situations. BI was first described in temperament and personality literature, as negative reactivity to novelty (Degnan et al., 2008), shyness (Arroyo et al., 2012), or over-control (De Haan et al., 2013). Elevated BI is a risk for internalizing problems (Clauss & Blackford, 2012; Prior et al., 2000), and social isolation (Fox et al., 2005). Intergenerational links for BI are scarcely studied, mechanisms remain unknown, and knowledge on the role of fathers is lacking. Therefore, this study explores the associations between BI in both mothers and fathers and their adolescent children, and the mediating role of overprotection in this association.

In the longitudinal Flemish Study on Parenting, Personality, and Development, over 500 families repeatedly reported on their BI. A BI factor was derived from the Five-Factor Personality Inventory (mother and father reports; De Fruyt et al., 2004) or Hierarchical Personality Inventory for Children (adolescent reports; Mervielde & De Fruyt, 1999, 2002) repeatedly, from 2001 to 2015. Parents reported on their own overprotective parenting on the *Egna Minnen Beträffande Uppfostran* (Perris et al., 1980).

Parental BI was prospectively related to adolescents' BI 3 to 8 years later (mothers: r=.18**-.19**; fathers: r=.15**-.18**), and subsequent regression analyses illustrated unique contributions of maternal and paternal BI to adolescent BI. Preliminary analyses indicated that maternal and paternal overprotection (at age 14) partially mediate the association between maternal/paternal BI (at age 10) and adolescent BI at age 14 (ß=.02, 95%CI [.00-.04]; ß=.02, 95%CI [.00-.05]). Subsequent analyses will be conducted to explore this mediation pattern across adolescence.

Our results illustrate the relevance of both parents in transfer of behavioral inhibition. Parenting interventions focused on decreasing overprotection could be of relevance for altering intergenerational patterns of BI within families.

Friday, August 30th, 2019

Symposium 21

Makedonia Hall B 17:30 - 19:00

S 21

EARLY RESEARCHERS UNION SYMPOSIUM - FAMILY- AND PARENT-RELATED PROCESSES IN ADOLESCENT DEVELOPMENT

Musso P.
Chair, University of Calabria

Lo Cricchio M. G.
Chair, University of Palermo

Lionetti F.
Discussant, Queen Mary University of London

There is no other area of research in adolescence development that has generated as much attention as the study of their relationships within family context and especially with parents. Although parents sometimes seem to reduce their importance during this period of life, a large body of evidence indicates that they continue to play a critical role in the development of their adolescent children (Hair et al., 2008; Steinberg, 2001). While research has shown strong links among many familial and parenting practices and adolescent characteristics and behaviors, some aspects of those relations need to be further understood.

In this symposium, we present four papers from early career researchers that highlight some of these aspects of family and parent-adolescent relationships in three European countries: The Netherlands, Estonia and Italy. The first study presented by Mastrotheodoros and colleagues looks at the parent-adolescent conflict development and how this development can be shaped by parents' and adolescents' personalities. The second study presented by Musso and colleagues looks at adolescent family identity configurations and their correlates of family connectedness, school adjustment and well-being. The third study presented by Tamm and Tulviste looks at the similarity of adolescents' perceived parental socialization values and their personal values and how value type and adolescents' age and sex may play a role in this process. The fourth study presented by Miklikowska looks at interrelated effects of parent, peer, and classroom context on the development of majority youth attitudes towards immigrants.

Overall, this symposium aims to facilitate the exchange and the discussion of new potential insights in the area of family context by looking at different family and parent-adolescent processes and how these processes can affect various psychosocial aspects of adolescents' development.

S 21 - 1

DEVELOPMENT OF PARENT-ADOLESCENT (DISCREPANCIES IN) CONFLICT INTENSITY: THE ROLE OF PERSONALITY TYPES

Mastrotheodoros S.[1], Van der Graaff J.[1], Deković M.[2], Meeus W.H.J.[1], Branje S.J.T.[1]

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Parent-adolescent relationships change during adolescence. This change involves an increase in parent-adolescent conflict intensity, but also an increase in discrepancies in parent-adolescent conflict intensity. However, little is known regarding how parent-adolescent conflict intensity, and parent-adolescent discrepancies in conflict intensity develop. In addition, the transformation of the parent-adolescent relationship is a complex process, and parental and adolescent personality may affect the extent to which parents and adolescents experience difficulties in this transformation. In this multi-informant longitudinal study, we investigated the development of parent-adolescent conflict intensity and discrepancies in conflict intensity across adolescence. In addition, we investigated how parental and adolescent personality is associated with this development.

Dutch families ($N = 497$) with an adolescent around 13 years old were followed for six years. Mothers, fathers, and adolescents reported on parent-adolescent conflict intensity, and their own personality. Latent Congruence Modeling and Latent Growth Curve Modeling were applied to investigate the trajectories of parent-adolescent conflict, and the trajectories of parent-adolescent discrepancies in perceptions of conflict. Latent Class Growth Analyses on the Big Five were applied to examine the developmental typology of personality separately for adolescents, mothers, and fathers. Finally, personality types were used as predictors of the developmental trajectories of parent-adolescent conflict intensity, and parent-adolescent discrepancies in conflict intensity.

In accordance with developmental theories, we found curvilinear changes in conflict, as well as in discrepancies in conflict. Parental and adolescent personality partially predicted these trajectories.

This study sheds light in how the parent-adolescent relationship transforms during adolescence, and how personality can predict this transformation process.

S 21 - 2

FAMILY IDENTITY CONFIGURATIONS AND CORRELATES OF FAMILY CONNECTEDNESS, SCHOOL ADJUSTMENT, AND WELL-BEING AMONG ITALIAN ADOLESCENTS

Musso P.[1], Lo Cricchio M. G.[2], Palladino B.[3], Ingoglia S.[2], Cassiba R.[4], Liga F.[5]

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[5] Department of Clinical and Experimental Medicine, University of Messina, Italy

Family represents the primary ecological context for adolescents' development. According to social identity theory, it is a crucial source of identification and, in terms of recent extensions of the identity status paradigm, it is one of the multiple identity domains. Research shows that family identity can affect adolescents' family connectedness, school adjustment and general well-being, but few studies explored this issue from a person-centred perspective. To contribute to literature, we examined family identity configurations in the framework of the three-factor identity model proposed by Meeus, Crocetti and colleagues (Crocetti et al. 2008; Meeus et al. 2010), including the three pivotal identity processes of commitment, in-depth exploration, and reconsideration of commitment. Then, we studied the correlates of these configurations.

Three hundred thirty-four (66% female) 14-19-year-old adolescents, living in Italy, participated in this study. Data were collected through self-report questionnaires including measures of identity commitment, in-depth exploration, and reconsideration of commitment (using the Utrecht-Management of Identity Commitments Scale, Crocetti et al. 2010), as well as measures of family connectedness, school engagement and burnout, self-esteem, optimism, and life satisfaction. Cluster analytic methods were used to identify configurations of family identity, and multivariate analyses of variance were carried out to examine the associations of the resulted configurations with family connectedness, school adjustment, and well-being dimensions.

Results suggested three identity configurations of family identity: Achieved ($n = 137$; 41%), Moratorium ($n = 97$; 29%), and Early Closure ($n = 100$, 30%). Adolescents in the achieved configuration showed higher mean levels of family connectedness and well-being dimensions, while those in the moratorium configuration showed lower levels of family connectedness and higher levels of school burnout.

Overall, findings highlight that experiencing a condition of identity achievement in the domain of family identity helps in promoting better family connectedness, better wellbeing and better school engagement among Italian adolescents.

S 21 - 3

ADOLESCENTS' PERCEPTION OF PARENTAL SOCIALIZATION VALUES

Tamm A., Tulviste T.

Department of Psychology, University of Tartu, Tartu, Estonia

Studies examining value transmission within the family have provided evidence for its dynamic and bidirectional nature (Benish-Weisman, Levy, & Knafo, 2013; Roest, Dubas, & Gerris, 2010; Trommsdorff, 2006). To better understand value socialization occurring in the family, it is important to move beyond studying only parental socialization values and practices and also examine which values adolescents consider important and how they perceive their parents' value messages (Grusec & Goodnow, 1994). To contribute to this, we examined how similar are the perceived parental socialization values to adolescents' personal values and whether value type and adolescents' age and sex play a role in this.

The sample included 504 Estonian middle (13-15-year-olds) and late (16-19-year-olds) adolescents, who assessed their personal and parental socialization values with the Portrait Values Questionnaire (Schwartz et al., 2001).

Whilst adolescents were oriented to openness to change values, they perceived their parents as putting less emphasis on these values in socialization. Conservation values, on the contrary, were not considered important personally, but perceived to be socialized by parents. Boys perceived higher socialization of power and lower socialization of benevolence values than girls. Nevertheless, adolescents of different sex and age perceived similar degree of similarity between their personal and parental socialization values.

The findings can be interpreted as showing how parents, as perceived by adolescents, try to balance their adolescent children's openness to change values with conservation values. The key message for parents would be to support children in understanding why parents promote some specific values in them. The finding that boys perceive higher socialization of power and girls perceive higher socialization of benevolence values suggests that sex stereotypes still shape parents' socialization values and practices.

S 21 - 4

THE ROLE OF PARENTS, PEERS, AND CLASSROOMS IN DEVELOPMENT OF ANTI-IMMIGRANT ATTITUDES IN ADOLESCENCE

Miklikowska M.[1,2]

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Department of Psychology, Utrecht University, the Netherlands

Intergroup attitudes develop due to influences of social contexts such as parents, peers, and school. Yet, there have been few longitudinal studies, particularly in adolescence. Hence, we know little about their long-term effects. In addition, the existing research has studied the effects of various social contexts in isolation. Hence, we know little about their relative importance and a possible interplay between them. This study examined the interrelated effects of parent, peer, and classroom context on the development of Swedish majority youth attitudes towards immigrants across 3 biennial measurements ($N = 671$; $M_{ageT1} = 13.41$; 50.7% girls; 34 classrooms).

Multilevel analyses showed significant effects of parents and peers' attitudes: Within-person fluctuations in youth attitudes were positively related to fluctuations in peers (but not parents') attitudes and adolescents with more prejudiced parents and peers showed higher levels of prejudice and smaller linear decrease in prejudice than youth with less prejudiced parents and peers. Although comparison of parents and peers' effects showed them to be of equal strength, mediation analysis showed parental attitudes to predict the attitudes of peers that youth hang out with, suggesting an overall greater importance of parental bias. In addition, moderation analysis showed that youth from more diverse classrooms were less affected by their parents and peers' prejudice than youth from less diverse classroom. Our findings contribute to a more nuanced understanding of the role of social contexts in development of adolescent anti-immigrant attitudes. They suggest that while parents set the stage by directly transmitting some of their attitudes and indirectly affecting what peers youth associate with, peers explain the day-to-day variation in prejudice, and that classroom diversity offsets some of the negative effects of parental bias.

Friday, August 30th, 2019

Symposium 22

Mycenae Hall 17:30 - 19:00

S 22

APPLYING EMOTION SOCIALISATION THEORY TO INTERVENTION: USE OF THE TUNING IN TO KIDS PARENTING PROGRAM IN NORWAY AND AUSTRALIA

Havighurst S.

Chair, University of Melbourne and University of Oslo

Emotion socialisation theory (Eisenberg, Cumberland & Spinrad, 1998) outlines how parent's supportive reactions to children's emotions, their coaching of children in understanding and regulating emotions, and their appropriate expression and regulation of their own emotions are all important factors shaping children's emotional competence (how they express, regulate and understand emotions). The Tuning in to Kids (TIK) parenting program, developed in Australia, has specifically targeted these aspects of parenting in an intervention to improve children's emotional competence, behaviour and other outcomes. This symposium includes a number of controlled trials of the program in Norway and Australia with parents of young children. The first paper by Karevold and colleagues, is a pilot study of Norwegian TIK with parents of 5-6 year old children. Underlying neurophysiological mechanisms were explored that were hypothesised to be involved in changes in child self-regulation. The second paper by Bjørk and colleagues examines how Norwegian TIK impacted parenting and children's understanding of emotions in kindergarten children. The third paper by Havighurst and colleagues, examines whether a version of the program for parents of younger children, Tuning in to Toddlers, was effective in improving parenting and toddler functioning and whether these changes differed between intervention and control participants depending on child temperament. The last paper by Karevold and colleagues, presents preliminary findings from a real-world randomised controlled effectiveness trial of TIK in Norway where the program was delivered by clinicians to parents of children in their final year of kindergarten.

S 22 -1

USING AN INTERVENTION TO TEST EMOTION SOCIALIZATION THEORY IN THE NORWEGIAN CONTEXT: IMPACT ON CHILD SELF-REGULATION AND BEHAVIOR

Karevold E.B.[1], Espeseth T. [1], Tamnes C.K. [1], Bjørk R.F.[1], Stavrinou M. [1], Havighurst S.S.[1, 2]

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[2] Mindful, Department of Psychiatry, University of Melbourne, Australia

Only a handful of studies have explored emotion socialization in Scandinavian countries and how these aspects of parenting are related to children's functioning. Less is also known on behavioral, cognitive, and physiological factors as potential mechanisms underlying the effects of parent emotion socialization on child self-regulation. The aim of this study was to pilot an evidence-based parent emotion socialization intervention from Australia (Tuning in to Kids: TIK) to see whether manipulating this aspect of parenting would have effects on children's self-regulation, internalizing and externalizing behavior, in a Norwegian setting.

This study was a controlled trial of 40 Norwegian parents of children aged 5-6 years, allocated to Intervention or Waitlist control conditions. Measures included parent-reported emotion socialization, child internalizing and externalizing behavior. In addition, two experimental assays were used. The Emotional Go/Nogo (EGNG) served as a behavioral assessment of child emotion discrimination and emotional-cognitive control, and the AX-Continuous Performance Task (AX-CPT) was used to assess context updating performance. Event-related potentials (ERPs) were recorded during the AX-CPT task. Parents in the Intervention condition attended a 6-session TIK group focusing on how to emotion coach their children and regulate their own emotions. At 6-month follow-up, baseline assessments were repeated.

Analyses showed a significant increase in parent emotion coaching in intervention participants compared to controls. Both groups showed a decrease in emotion dismissiveness across time. Parent emotion coaching was related to lower parent-reported child separation anxiety only in the intervention group. For the EGNG task, children's emotion discrimination improved from baseline to follow-up for both groups as did accuracy and reaction time on the AX-CPT task. Preliminary analysis of the ERP revealed neurophysiological evidence of proactive context updating, and this was further strengthened at follow-up for both groups.

These findings in a Norwegian context suggest that parent-reported emotion socialization and children's internalizing problems improved for those participating in TIK. Behavioral and physiological assessment of children's self-regulation showed normative developmental improvements but no significant differences between conditions.

S 22 – 2

TUNING IN TO KIDS (TIK) PILOT STUDY: IMPACTS OF AN INTERVENTION ON EMOTION UNDERSTANDING IN NORWEGIAN PRESCHOOL CHILDREN

Bjørk R.F. [1], Havighurst S.S.[1,2] , Pons F. [1], Karevold E.B.[1]

[1] Department of Psychology, University of Oslo, Norway
[2] Mindful, Department of Psychiatry, University of Melbourne, Australia

Emotion socialization denotes the processes by which children achieve emotional competence through social and emotional interactions with others. Parental Emotion Socialization Behaviors (ESB's) include parents' a) reactions to children's emotions, b) discussion of emotion, and c) expression of emotion within the family. Supportive ESB's include parental encouragement for children to express emotions, parental discussion of emotions with their children, and parental coaching of children's emotions. In contrast, non-supportive ESB's include parental dismissiveness, distraction, minimization and punitive reactions in response to children's emotions. Parental ESB's are suggested as one important predictor of children understands of emotions in self and in others. Emotion understanding involves how children label emotions, how emotions relate to intentions, desires and beliefs, and that emotions can be concealed or mixed.

In this pilot study we tested whether the Tuning in to Kids program improved parent ESB's and children's emotion understanding in Norway. The TIK intervention is a 6 session group program were parents learn five steps of emotion coaching: Parents learn to become aware of emotions, to recognize emotions as an opportunity for intimacy and teaching, to listen empathically and validate the child's feelings, to help the child to label his or her emotions, and when necessary set limits or help the child to solve problems. The sample consisted of 40, 5 to 6 year old kindergarten children and their parents. Measures included parent-reports on ESB's using the *Coping with Children's Negative Emotions Scale* (CCNES) and direct assessments of child emotion understanding using the *Test of Emotion Comprehension* (TEC).

Preliminary results were of a significant change in parents' expressive encouragement following the parenting intervention. In addition, there was a bigger change in emotion understanding for children whose parents were in the intervention compared to thew control condition.

The results from this pilot study are promising, and further research is required to test this in a larger more representative sample in a Norwegian cultural context.

S 22 - 3

WHO BENEFITS FROM AN EMOTION SOCIALISATION INTERVENTION?: FINDINGS FROM THE *TUNING IN TO TODDLERS™* PARENTING PROGRAM

Havighurst S.S.[1,2], Kehoe C.E.[2], Harley A.E.[2], Allen N.[3], Thomas R.[4]

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Parents play an important role in shaping children's emotional competence from a young age. Emotion socialisation, namely how parents react to emotions, whether they teach children about emotions (emotion coach) and the way parents model emotional expression all impact on children's emotional development. Very few interventions target parent emotional socialisation in young children. Further, determining whether some children will profit more from early intervention based on individual characteristics is important so that interventions can be provided early. *Tuning in to Toddlers* (TOTS) is a universal parenting program that aims to assist parents to understand and manage their own emotions while also learning skills in emotion coaching. The aim of the current study was to examine whether some children derived greater benefit from the program than others. Moderators examined were child emotionality and behaviour at baseline.

A randomised controlled trial of TOTS was conducted in Melbourne, with a community sample of 306 parents of children aged 18 and 36 months from childcare centres and maternal child health clinics. Baseline measures were collected and then parents were allocated into intervention or 15-month wait-list control. Intervention parents participated in the 6-session TOTS program delivered for 2-hours a week by two facilitators using a structured manual. Follow-up measures were then re-administered 15-months later for all participants. Measures included parent self-report questionnaires, direct observation, and hair cortisol to measure systemic stress in parents and toddlers.

Parents in the intervention condition reported significant reductions in emotion dismissive parenting as well as improved empathy and emotion coaching compared to control participants who did not report changes. Intervention parents also reported improved child behaviour. Cortisol analyses showed greater reductions in both child stress for intervention parents compared with waitlist controls. Moderator analyses showed that the intervention was effective for all children, regardless of baseline emotionality or behaviour.

S 22 - 4
PRELIMINARY FINDINGS FROM AN EFFECTIVENESS TRIAL OF TUNING IN TO KIDS IN NORWAY

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[3] Mindful, Department of Psychiatry, University of Melbourne, Australia

Children's emotional competence (including how they express, regulate and understand emotions) is an important determinant of a range of outcomes including social functioning, behavior, academic learning and wellbeing throughout development. In addition to the role of child temperament, parents play an important role in shaping children's emotional competence through emotion socialization processes. In particular when parents are less negatively reactive to children's emotions and use a more supportive emotion coaching parenting style, their children have been found to have better emotional competence and behavior. While an increasing number of studies have established this empirical link, very little research has been conducted in Scandinavian where there are considerably greater social and familial supports in place to help parents and children. Interventions that promote children's emotional competence via parent emotion socialization processes are beginning to emerge, and have begun to be used in Norway by those delivering parenting interventions. The aim of the current study was to conduct a real world effectiveness trial in Norway of an emotion socialization parenting program developed in Australia, *Tuning in to Kids*. Specifically, the study sought to determine whether the program resulted in improved parent emotion socialization and child behavior when delivered by Norwegian clinicians to parents of children in their final year of kindergarten.

The study was a randomized controlled trial with 256 Norwegian parents of children aged 5-6 years, allocated to Intervention or Waitlist control conditions. Measures included parent reported emotion socialization as well as children's externalizing behavior. Parents in the Intervention condition attended a 6-session *Tuning in to Kids* group parenting program that taught them how to emotion coach their children and regulate their own emotions. All groups were delivered by trained, certified Norwegian clinicians who used a structured manual, completed fidelity checklists to ensure program adherence and attended supervision with the last author throughout delivery. Measures were repeated at 12-month follow-up.

Preliminary analyses to examine changes in parent emotion socialization showed a significant increase in parent emotion coaching and a decrease in emotion dismissing in intervention participants but not controls. Parents reported that the ideas and skills were understandable and very valuable but at times difficult to apply with their children.

These findings suggest that an emotion socialization intervention delivered by Norwegian clinicians to parents of children in the final year of kindergarten was effective, providing preliminary support for use of the program in this context.

Friday, August 30th, 2019

Symposium 23

Pella Hall 17:30 - 19:00

S 23
FROM COGNITION TO BEHAVIOR IN PREADOLESCENCE AND ADOLESCENCE: A MULTIFACETED APPROACH

Bora C.H.
Chair, University of Oradea, Department of Psychology, Oradea, Romania

Stan R.
Chair, University of Oradea, Department of Psychology, Oradea, Romania

Roseanu G.
Chair, University of Oradea, Department of Psychology, Oradea, Romania

Preadolescence and adolescence are periods of great transformations at the cognitive, emotional and social levels. Research shows that the prevalence rate for internalizing problems are higher in these developmental periods (Cole et. al, 2002). Bullying as social behavior is prevalent among students, and multiple cross-sectional and longitudinal studies have shown that bullies are more likely to engage in externalizing behaviors, such as property and violent offending, alcohol and illicit substance use and dependence, and police arrests (e.g. Gibb, Horwood, & Fergusson, 2011). For victims, depressive symptoms such as internalizing behaviors are reported (Hemphill et al., 2011). These behaviors, internalizing, externalizing and bullying are the focus of the symposia. The cognitive factor (irrational beliefs, social axioms) is the common predictor taken into account for these dependent variables.

The first two papers are dedicated to preadolescent internalizing and externalizing problems/behaviors. They offer a cognitive behavioral perspective on this issue, thus contributing to clinical conceptualization and prevention/intervention.

The next two presentations (third and fourth) focus on adolescence, more specifically on bullying behavior. The third paper offers an interesting model which includes psychological needs satisfaction as a mediator between coping strategies and bullying behaviors and sustain the validity of Self-Determination Theory`s assumptions. The fourth paper proposes and tests a predictive model for bullying and identifies the best predictors for each type of bullying, participants emphasizing the role of social axioms as individual cognitions.

All presentations are focused on emphasizing the implications for clinical conceptualization and, also, for prevention and early intervention programs.

S 23 – 1

A COGNITIVE-BEHAVIORAL PERSPECTIVE ON INTERNALIZING BEHAVIORS IN PREADOLESCENCE

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[2] Albert Elis Institute, New York, USA

Background and aim. Having the cognitive-behavioral theory as a starting point, the present study aims to reveal a different perspective on internalizing problems in preadolescence. For this purpose the combination of irrational beliefs and dimensions of dysfunctional anger as predictors was analyzed.

Method. A number of 250 preadolescents completed The Scale of Low Frustration Tolerance for Students (Trip & Bora, 2012), Children and Adolescent Scale of Irrationality (Bernard & Cronan, 1999), State-Trait Anger Expression Inventory Child and Adolescent (del Barrio, Aluja & Spielberger, 2004, Millon Pre-Adolescent Clinical Inventory (Millon, Tringone, Millon & Grossman, 2005). R statistical package (2016) was used for the analysis of the variables.

Results. The results indicated unconditional acceptance as a common predictor for internalizing problems. In what concerns low frustration tolerance beliefs, they are specific for different internalizing problems. Also, results supported anger as a predictor for internalizing problems, different manifestations of anger predicting different internalizing problems.

Conclusion. Results of this study offer an interesting perspective on internalizing problems in preadolescence. The combination of beliefs and emotions in the development of internalizing problems could be helpful in organizing prevention and intervention in school or clinical settings.

S 23 – 2
COGNITIVE AND EMOTIONAL FACTORS INVOLVED IN EXTERNALIZING BEHAVIORS IN PREADOLESCENCE

Trip S.[1] , **Roseanu G.**[1], **McMahon J.**[2]

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[2] Albert Elis Institute, New York, USA

Background and aim. Based on rational emotive and behavior therapy (Ellis, 1994), the present study tried to offer a better understanding of trans-diagnostic and specific correlates of externalizing problems in preadolescence. The specific aims are investigate which of the two categories of irrational beliefs (low frustration tolerance and global evaluation of human worth) is more responsible for the manifestation of externalizing behaviors and, also, to examine the role of dysfunctional anger in externalizing behaviors and results supported anger as a latent trait factor specific to externalizing problems.

Method. Criterion and predictor variables were assesed by 229 preadolescents using The Scale of Low Frustration Tolerance for Students (Trip & Bora, 2012), Children and Adolescent Scale of Irrationality (Bernard & Cronan, 1999), State-Trait Anger Expression Inventory Child and Adolescent (del Barrio, Aluja & Spielberger, 2004, Millon Pre-Adolescent Clinical Inventory (Millon, Tringone, Millon & Grossman, 2005). R statistical package (2016) was used for analysis.

Results. The results claimed for dissociation in the cognitive profile of specific externalizing problems, low frustration tolerance beliefs specifically predict unruly and disruptive behavior, and global evaluation of human worth specifically explained conduct disorder. Also, results supported anger as a latent trait factor specific to externalizing problems. While for the most part of previous studies, externalizing factor was associated with a male sex, in the present study, this association was specific only for conduct disorder.

Conclusion. Results of this study have implications for the clinical conceptualization of externalizing problems in preadolescence and offers also guide points regarding revention and intervention programs.

S 23 – 3
A STRUCTURAL MODEL FOR THE MEDIATING ROLE OF PSYCHOLOGICAL NEEDS SATISFACTION IN THE RELATIONSHIP BETWEEN COPING STRATEGIES AND BULLYING BEHAVIORS

Roşeanu G., Stan R.

University of Oradea, Department of Psychology, Oradea, Romania

Background and aim. Studies show that having strategies to cope with stress reduced young adults' depressive symptoms of participants who had been victims of bullying (Hemphill, Tollit, & Herrenkohl, 2014). Drawing on Self-Determination Theory (SDT, Deci & Ryan, 2000), this study aimed to better understand the psychological mechanisms of psychological need's satisfaction that can explain the relationships between coping strategies (problem focused, emotional focused, social support focused and avoidant coping) and the frequency of engaging in bullying behaviors as passive victims and as aggressive victims.

Method. Using structural equation analyses, we examined whether psychological resources (perceived autonomy, competence, and relatedness) act as specific mediators between coping strategies and bullying behaviors measured with the Revised Olweus Bully/Victim Questionnaire (Olweus, 1996), after controlling for age and gender. Participants were 212 Romanian high school students.

Results. Results provide support for our hypothesized model, which proposes that certain coping strategies are involved in victims' and perpetrators' bullying behaviors - given their relationships with psychological resources - and that they distinctively predict bullying behaviors.

Conclusion. Implications for bullying research and management practices are discussed. More generally, the results highlight the potential for incorporating SDT ideas in violence reduction programs in general and in bullying effects as predictors for internalizing problems for victims, in particular.

S 23 – 4
THE ROLE OF SOCIAL AXIOMS IN PREDICTING BULLYING BEHAVIORS

Stan R., Roșeanu G.

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Background and aim. Starting from Leung (Leung et al., 2002) who proposed that social axioms are good predictors of social behavior, in this exploratory study we examined the extent to which bullies, passive victims, aggressive victims and not-involved participants possess bully-typifying traits and have specific social cognitions.

Method. We used the short form of the Revised Eysenck Personality Questionnaire (EPQR-S; Eysenck, Eysenck, & Barrett, 1985) and the Social Axioms Survey (SAS, Leung et al., 2011) on a sample of 241 Romanian high school students.

Results. After controlling age and gender, hierarchical regression analyses indicated that bullies, passive victims and aggressive victims are distinct groups in terms of personality traits and social cognitions. Social axioms predict victims' and perpetrators' bullying behaviors over and above the effects of personality traits. This result has an important implication for intervention programs because if personality traits are more stable, social cognitions might be easily changed.

Conclusion. By identifying the so called protective factors, variables thought to mitigate the impact of bullying and being bullied on later outcomes, researchers can help identify targets for prevention and intervention programs.

Friday, August 30th, 2019

Papers 14 – Gognitive and Emotional Development

Florina Hall 17:30 – 19:00

OP 078

SELF-SILENCING AND FUNCTIONS OF IDENTITY IN A GROUP OF STUDENT AND NONSTUDENT WOMEN YOUTH

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Background and Aim. Despite the idealized image of ''good woman'' varies across cultures, women are responsible for the quality of relationships and gender equality has not been reached. Therefore women must spend enormous energy for everything including identity development. In addition, they have to silence their voices and give up their demand for an equal say for considerably large amount of cases (Jack and Ali, 2010). Silencing the Self highlights the way that people think about themselves and interact in their intimate relationships (Jack and Ali, 2010). According to Erikson (1968) women experience intimacy and identity at the same time due to considering their identities in the context of their relationships. For this reason, self silencing can affect functions of identity. Functions of identity stem from outcomes of identity development. These are structure, goals, control, harmony, future (Serafini and Adams, 2002). Considering that women silence themselves for maintaining their relationships, it is thought that self-silencing may affect the identity development. In this context, the aim of this study was to examine the affect of self-silencing on identity functions in group of student and nonstudent women.

Method. The working group of the study consists of 420 individuals, students were taken from two universities of Turkey and non-students from vocational courses, aged between 18-28. Identity Functions Scale and Self-silencing Scale was used. In the study, Pearson correlation analysis and confirmatory factor analysis were performed.

Results. There was a negative relationship between self-silencing and identity functions, and as a result of structural equation analysis, self-silencing in a negative way predicts the functions of structure (ß= -.90, p<.01), harmony (ß= -.84, p<.01), goals (ß= -.89, p<.01), future (ß= -.92, p<.01) and control (ß= -.86, p<.01).

Conclusion. Differences between student and non student groups are discussed.

Results seem to be similar to some studies (Jordan, 2010; Kurtis, 2010). Self-silencing has begun to be addressed in the intercultural context in identity research (Jack and Ali, 2010).

OP 079

THE RELATION OF THEORY-OF-MIND, EMPATHY AND PROSOCIAL BEHAVIORS AMONG PRESCHOOL CHILDREN

Parcon A.M.C.

University of the Philippines Diliman

This research aimed to know the relation among theory-of-mind, affective empathy, cognitive empathy, and prosocial behaviors. A total of 223 Filipino preschool children, with ages ranging from 3 to 6.6 years old (*M*=4.34, *SD*=.63) participated. Each child individually went through different tasks with the researcher. Theory-of-mind was measured through false-belief task. As for the measure of empathy, each child watched three short clips with different emotions (i.e., happy, sad, or angry emotion). To measure affective empathy, their facial expressions were recorded as they watched the clip, and then scored according to the degree of match between the emotion of the characters in the clip and the children's facial expressions. To measure cognitive empathy, children were interviewed regarding the clip that they watched, and their responses were scored according to their understanding of the emotions of the characters in the clips. Prosocial behaviors were measured in two ways: the latency by which the child would help in picking up the crayons that fell on the floor and the degree to which the child would comfort the researcher who hurt herself with the clipboard. Regression analysis showed that only age and theory-of-mind predicted cognitive empathy, while none of the aforementioned factors predicted affective empathy. As for prosocial behaviors, age and gender differences were observed. Also, affective empathy and cognitive empathy significantly predicted prosocial behaviors. While there was no significant moderation effect among factors, there was a significant mediation effect, particularly with cognitive empathy significantly mediating the relation between theory-of-mind and prosocial behaviors. Importance of the relations of factors and implications were further discussed. Possible interventions to further improve theory-of-mind and empathy were also suggested.

OP 080

SPELLING LEXICAL, DERIVATIONAL AND INFLECTIONAL MORPHEMES AND VERBAL SELF-REPORTS OF STRATEGIES BY GREEK-SPEAKING CHILDREN WITH AND WITHOUT READING AND SPELLING DIFFICULTIES

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Department of Psychology, National and Kapodistrian University of Athens, Greece

Greek is as morphologically rich and complex and therefore interesting morphophonemic language. The acquisition of its morphological system is quite a challenge for students in primary school. In this study we examined the spelling accuracy and consistency by Greek-speaking children for nine months using a reading and spelling-level match design. Children attended primary school at Years 3 and 5 and were initially assessed on a battery of tests including reading and spelling tasks, phonological short-term memory, non-verbal IQ and morphological knowledge tasks. From a larger pool, eighty seven children were included in three groups, twenty two children with reading and spelling difficulties (RSD) and two control groups, thirty three chronological age-matched controls (CA) and thirty two reading and spelling-level matched (RSA) younger children. They completed a spelling task twice, in Time 1 (Year 3 and 5) and nine months later in Time 2 (Year 4 and 6). The spelling task consisted of 69 words and was designed to include three derivational and inflectional suffixes of each selected category and three etymologically related words from the selected word families. Moreover, children were asked to provide verbal self-reports of spelling strategies regarding fourteen words selected from the spelling task. The results showed that RSD group had a lower performance and were less consistent than CA in all cases but similar to RSA group in both time points. Group differences between CA and RSD were found in the spelling development during the nine-month period. The results are in line with previous studies suggesting that RSD children's performance reveal a spelling delay, still their spelling abilities seem to develop at a slower pace than younger RSA controls.

OP 081

BEYOND ACCURACY; A DIFFERENT RESPONSE TENDENCY TOWARD EMOTIONAL STIMULI IN CHILDREN WITH A HEARING LOSS

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[5] University College London, Institute of Education, London, United Kingdom

Background and aims: We learn to process and interpret emotional information during social interactions. However, these daily practices are not readily available to children with a hearing loss, resulting in less opportunities for social learning. The aim of this study was to investigate the effect of an altered auditory experience on the processing of emotional information.

Methods: Sixty children who were deaf or hard-of-hearing (DHH) and 73 children with normal hearing (NH) participated in this study in Taiwan (M_{age} = 6.15 ± 1.91 years). They conducted an emotion identification task with static faces as stimuli and an emotion attribution task with videos presenting social situations between a target person and an emotion-triggering person. Meanwhile, their eye gazes and pupil sizes were measured by an eye tracker.

Results: The DHH children more often mistook a happy or emotionally-neutral face as being angry or fearful than the NH children, and more often attributed a positive emotion to a negative social situation than the other way around, while the NH children exhibited the opposite tendencies. Also, the DHH children less often mentioned the interactions between the protagonists than the NH children when explaining social situations. There were no group differences in the looking time at eyes, nose, mouth, and face, nor in the changes of the pupil size, during static face presentation. Yet, when viewing dynamic social scenes, the DHH children looked shorter at the target person's head.

Conclusions: DHH children exhibited a different response tendency toward emotional signals than their NH peers: they tended to misinterpret a face as being negative, had problem understanding interactions, especially negative ones, and used a unique eye-scanning pattern for dynamic social scenes. The findings demonstrated the importance of examining emotion recognition beyond accuracy in order to understand the underlying processing patterns.

OP 083

REVISING STRATEGIES IN SIXTH GREEK-SPEAKING GRADERS' ARGUMENTATIVE WRITING

Bourazeri E., Diakogiorgi K., Fterniati A.

University of Patras

Many studies have indicated the significant role of text revision upon students' writing process in order to improve their texts. However, it is also well documented that students have trouble reflecting on and evaluating their own texts. This is even more true when written argumentation is involved. Argumentative texts set high difficulties for students as they belong to a genre for which students are missing an elaborated schema. The aim of the study presented here was to investigate elementary school students' capacity to revise their argumentative writing as well as the extent to which their revising skills can be improved through strategy instruction. After composing an argumentative text, participants (22 Greek-speaking 6th graders) were assessed in two revision phases. During the first phase, students were asked to revise their argumentative text according to a number of criteria including spelling, punctuation, morphosyntax, text structure, grammatical and lexical features of argumentation as well as appropriate use of arguments. During the second phase, students were asked to revise their argumentative text for a second time after a session of a strategy instruction that included critical standards for argumentation had intervened. Findings revealed that strategy instruction increased students' sensitivity to different types of error committed by them as well as their capacity to make substantive changes in order to improve their text. Quantitative analyses were completed by qualitative ones to more fully describe the type and frequency of the revisions made by the participants during the two phases. After the implementation of strategy instruction, participants could make further revisions on text development and organization. Their essays were of higher quality and included more counterarguments and alternative perspectives. Theoretical and educational implications of the findings are discussed.

Friday, August 30th, 2019

Papers 15 – Typical and Atypical Language Development

Kozani Hall 17:30 – 19:00

OP 084
ORAL NARRATIVES OF MANDARIN-SPEAKING CHILDREN WITH AND WITHOUT SPECIFIC LANGUAGE IMPAIRMENT: STORY RETELLING VS STORY GENERATION

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Specific language impairment (SLI) is a language disorder that delays the mastery of language skills in children who have no hearing loss or other developmental delays. To date, few studies have examined narrative abilities of Mandarin-speaking children with SLI. In light of this, the present study aimed to investigate the oral narrative abilities of such children, and the possible impacts of elicitation tasks on narrative performance.

Seventeen Mandarin-speaking children with SLI (M_{age}: 5.56) and seventeen typically developing (TD) children (M_{age}: 5.55), matched on chronological age, were recruited. The narratives were based on stories A3 and B3, controlled for story length, amount of story information, and number of characters, from the Edmonton Narrative Norms Instrument (Schneider, Hayward, & Dubé, 2006). A generation task and a retelling task that both employ the two stories were used to elicit narratives. The narratives were analyzed in terms of basic narrative measures (i.e., story length, and variety of words), macrostructure (i.e., story grammar elements), and microstructure (i.e., syntactic complexity, evaluative devices, and connectives).

The results revealed that the two groups of children were comparable in story length and the use of connectives across elicitation tasks. In both tasks, the TD group outperformed the SLI group on macrostructure and syntactic complexity. The effect of elicitation task was evident that both groups employed more story grammar elements, more variety of words, and more evaluative devices in the retold stories as compared to the generated ones. More interestingly, the sensitivity of evaluative devices to SLI was manifested only in the retelling task. Compared with the generation task, the retelling task appear to be more clinically useful for assessing children's narrative abilities. The outcome advances our understanding of narrative abilities of the SLI children in Taiwan, and have implications for therapeutic practices.

OP 085

THE RECEPTIVE LANGUAGE OF INSTITUTIONALIZED INFANTS: THE MODERATOR ROLE OF TEMPERAMENT

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Institutionalized infants are cognitively and socially behind than their counterparts who live with their families. The current study aims to compare the receptive language of infants in institutional care to the infants who live with their biological families. In light of the differential susceptibility approach, the second aim of the study is to test the moderator role of temperament on the relationship between care types and receptive language.

A total of 59 infants aged between 3 to 23 months (M_{age}= 13.42). participated in the study (institution= 24; family=35). The main caregivers were asked to fill out receptive language scales (Aksu-Koc et al., 2008) and temperamental characteristics of perceptual sensitivity and reactivity (*Infant Behavior Questionnaire*; Gartstein & Rothbart, 2003). The receptive language scales were assessed at two time points with four months' intervals.

Multiple hierarchal regression analysis showed that infants' reactivity, living with biological family, and having higher receptive language scores at first assessment were positively associated with receptive language scores at second assessment. Regarding the moderator role of temperament, the interaction between perceptual sensitivity and care types was found as significant. Among children with low perceptual sensitivity scores, institutionalized infants had lower receptive language scores compared to infants with their biological families; there is no such difference among children with high perceptual sensitivity scores.

Findings showed that institutionalized children had lower receptive language scores than infants living with their biological families. Also, the moderator role of perceptual sensitivity suggests that perceptual sensitivity is protective factor for institutionalized infants in terms of receptive language development.

Figure 1. Interaction between group-temperament (perceptual sensitivity) in predicting infants' receptive language.
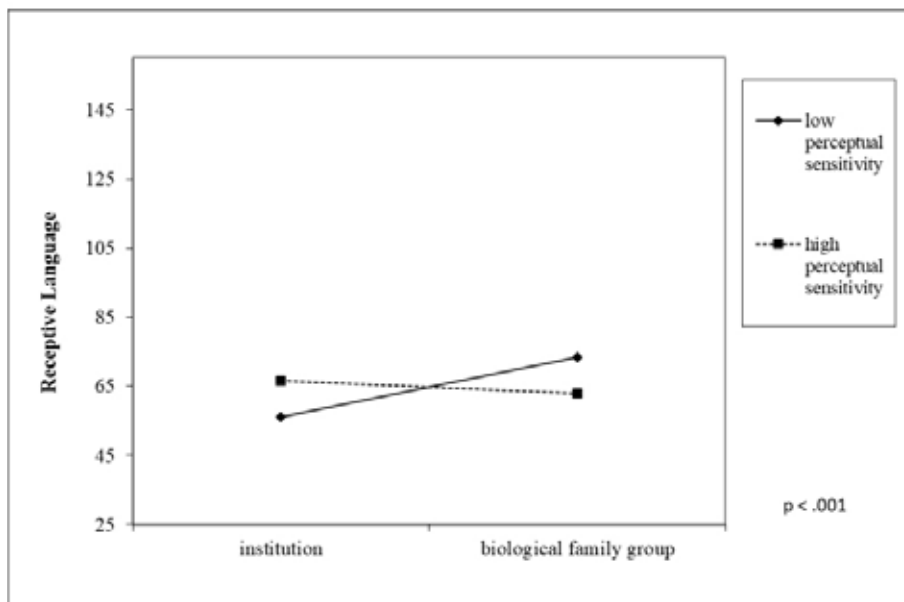
OP 086

INVESTIGATING THE RELATIONSHIP BETWEEN FAST MAPPING, RETENTION, AND GENERALISATION OF WORDS IN CHILDREN WITH AUTISM SPECTRUM DISORDER AND TYPICAL DEVELOPMENT

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[3] *University of Amsterdam, Netherlands*

Autism spectrum disorder (ASD) is often characterised by delays in vocabulary development. While many studies have examined how children with ASD identify the meanings of words, this task alone does not constitute learning. Here we investigate fast (referent selection) and slow (retention, generalisation) word learning processes as an integrated system in children with ASD (Exp. 1 *N*: 16; Exp. 2 *N*: 34) and typically developing (TD) children (Exp. 1 *N*: 16; Exp. 2 *N*: 32) matched on receptive vocabulary (group *M* age equivalents: 5.1-5.8 years).

In Experiment 1, children mapped novel words to unfamiliar objects by applying the 'mutual exclusivity' principle. Children's retention and generalisation of the novel words were assessed after 5 minutes. Experiment 2 investigated whether children's retention and generalisation could be enhanced by re-directing their attention to target objects immediately after referent selection. Children received either social feedback (targets were highlighted via social cues) or non-social feedback (targets were highlighted via a flashing light).

In both experiments, children with ASD were successful in their use of mutual exclusivity to fast-map novel words (although less accurate than TD controls). Both populations showed substantially reduced accuracy on retention and generalisation trials in comparison to their initial referent selection. However, children with ASD who received social reinforcement in Experiment 2 responded more accurately on retention and generalisation trials than TD controls and children with ASD who received non-social reinforcement or no reinforcement (in Experiment 1).

Our findings imply that fundamental word learning mechanisms, and the relationships between them, are not qualitatively impaired by ASD (when expectations are based on language development). We argue that ASD may affect the efficiency of these mechanisms by disrupting children's intake of linguistic input, but difficulties could be mitigated by presenting stimuli and attentional feedback in a way that appeals to the population's strengths.

OP 087

PARENT PROGRAMME FOR THE COMMUNICATION DEVELOPMENT OF PRESCHOOL CHILDREN WITH LANGUAGE DISORDERS

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Theotokos Foundation, Greece

A structured psychoeducational programme, which addresses parents of preschool children 2 to 4 years of age with language disorders, is presented. It is conducted at the Theotokos Foundation, in Athens.

Background and Aims: The programme is based on the principles of the Parent Hanen Programmes. Evidence on indirect intervention was integrated with clinical expertise and client needs to make a decision to administer a parent group. The specific program is based on the premise that it is highly recommended to provide indirect services to preschool children with language disorders by enlisting parent commitment and participation in a psychoeducational group. Within a child centered framework, the main goals of the programme are to educate parents to better understand language development and the factors that influence it, to encourage them to apply strategies to help their children develop communication and language in everyday situations and to support parents by providing them the opportunity to share ideas and concerns with other parents in similar situations.

Methods: The programme is conducted by two Speech and Language Therapists. The selection criteria, the assessment process, the sessions' content as well as qualitative and quantitative programme evaluation data are presented.

Results: Parental reports emphasize improvement in their skills to approach and communicate with their preschool child leading to positive outcomes as far as the child's verbal expression and communicative intent are concerned. Furthermore, there are positive outcomes reported in parental empowerment. Quantitative results are recorded using the clinical tool Focus on the Outcomes of Communication Under Six, a parent questionnaire which evaluates communicative participation and treatment change.

Conclusion: Preliminary qualitative and quantitative evaluation of this programme was consistent with international research in the field of indirect intervention.

OP 088

EXECUTIVE FUNCTIONS AND LANGUAGE SKILLS IN PRESCHOOL CHILDREN WITH AND WITHOUT DEVELOPMENTAL LANGUAGE DISORDER (DLD)

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Executive functions (EFs) refer to a set of top-down cognitive processes used to manage self-regulation, organization and goal-oriented behavior. EFs are responsible for managing basic daily tasks, such as planning, decision making and problem solving.

Difficulties in EFs may significantly affect children's everyday activities and also their academic success. Thus, in recent years there is some evidence showing that Developmental Language Disorders (DLD) are associated with low performance in EFs suggesting that DLD is not an exclusively language deficit. However, the majority of the research refers to school-aged English-speaking children with DLD.

The purpose of the present study was to assess and describe the EFs and language skills and to investigate possible relationships between them, both in typically developing (TD) and children with DLD. Sixty-three TD preschoolers (age range: 4, 3- 4, 9 years) and fifty-two age-matched Greek-speaking peers with DLD were assessed on a set of language skills and on EFs (verbal and visual measures of working memory-WM, inhibition, and shifting) according to Miyake and Friedman model (2000). Children with DLD demonstrated lower performance compared to their TD peers on all measures of language skills and executive functioning. Statistically significant differences between the groups were found in Comprehension, Lexicon, Narration, Pragmatics, Phonological and Morphological Awareness, visual WM as well as in verbal and visual shifting,. The last three EFs could also predict total language performance after controlling for gender and family history.

The results of the present study have both theoretical and practical implications. Theoretically, they provide additional evidence that DLD is not limited to language but is also associated with deficits in WM and shifting. More studies could provide evidence about how language and EFs interact. Practically, the results could inform the clinical practice both in the diagnosis and intervention level.

OP 089

INVESTIGATING THE PROCESS AND PRODUCT OF WRITING. EVIDENCE FROM PRIMARY SCHOOL TYPICALLY DEVELOPING CHILDREN AND CHILDREN WITH DEVELOPMENTAL LANGUAGE DISORDER

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Writing skills of school-aged children, despite their essential role in academic and social success, remain an unexplored area. This neglect of writing by researchers applies not only for typically developing children, but also for children with developmental difficulties, such as children diagnosed with developmental language disorder (DLD). Only a few studies have focused both on the process and product of writing, and this is also evident for the Greek setting. The aim of the present study was: a) to examine the writing product as well as the constraints in the composition of a written text faced by second- grade students with and without DLD and, b) to explore the writing process and particularly the contribution of language, cognitive, and handwriting skills in the production of a written text. Overall, 60 second-grade children participated in the study: 30 children were typically developing and 30 of them had DLD, according to certain criteria. The participants were assessed on tasks measuring their cognitive skills (nonverbal ability, verbal memory, visual memory, processing speed), language skills (expressive vocabulary, phonological awareness, morphosyntax) and handwriting skills (visual motor coordination, handwriting automaticity). They were also administered a writing task to assess their ability to produce a written text. The results revealed that children with DLD performed worse in verbal memory and processing speed tasks, in expressive vocabulary and phonological awareness, in all handwriting tasks, as well as in most of the criteria measuring their writing skills, in comparison to their typically developing peers. Further analysis demonstrated how the different factors contributed to the various aspects of writing production. The results are discussed in the context of expanding our knowledge on children's writing skills both in terms of process and product in different populations.

Friday, August 30th, 2019

Papers 16 – ADHD and Dyslexia

Edessa Hall 17:30 – 19:00

OP 090
SELF-RATED DYSLEXIA AND ADHD SYMPTOMS INDEPENDENTLY PREDICT THE FREQUENCY OF SELF-REPORTED COGNITIVE FAILURES IN EVERYDAY LIFE

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London South Bank University, United Kingdom

Background and aims: Cognitive failures reflect errors of memory and attention in ongoing cognition. Previous work has indicated that everyday cognitive failures are self-reported as being more frequent in adults with a formal diagnosis of dyslexia (Smith-Spark, Fawcett, Nicolson & Fisk, 2004). Using the same self-report questionnaire, the current research extended this work to a much larger community-based sample of adults, in most cases without formal diagnoses of specific learning difficulties. It sought to determine whether a greater self-reported symptoms of reading difficulties also predicted the frequency of cognitive failures and to see whether self-reported symptoms of Attention Deficit Hyperactivity Disorder (ADHD) were also associated with more cognitive failures.

Methods: Two hundred adult participants completed self-report questionnaires online. The Adult Reading Questionnaire (ARQ; Snowling, Dawes, Nash & Hulme, 2012) assessed reading and related skills. The Adult ADHD Self-Report Scale (ASRS; Kessler et al., 2005) measured a range of symptoms consistent with a diagnosis of ADHD. The Cognitive Failures Questionnaire (Broadbent, Cooper, Fitzgerald & Parkes, 1982) probed the frequency of cognitive failures in the past six months.

Results: Higher self-reported problems with reading on the ARQ and higher self-reported levels of ADHD symptoms on the ASRS were found independently to be associated with a higher frequency of cognitive failures experienced in the past six months.

Conclusion: The self-reports of a higher incidence of cognitive failures in the community sample by respondents scoring more highly on self-reported problems with reading skills with the data taken from a smaller sample under controlled conditions. The findings highlight the everyday impact of both reading difficulties and ADHD symptoms on non-literacy-related cognitive behavior in adulthood. They add to the small body of evidence which argues for the importance of acknowledging these broader difficulties within support arrangements and reasonable adjustments in the workplace and in educational settings.

OP 091

ADOLESCENTS DESCRIBE THE MEANING OF PHARMACOLOGICAL TREATMENT OF ADHD FOR THEIR AUTHENTICITY: DEVELOPMENT AND INTELLIGENT USE OF METHYLPHENIDATE

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Achva Academic College, Israel

Background and aims: Minors with attention-deficit-hyperactivity disorders (ADHD) may receive pharmacological treatment against their will and find that it modifies their authentic selves. The use of medication has been widely criticized on this account. In this study, the effect of ADHD drugs on adolescents' personal experience is examined in order to understand how psychological changes that adolescents experience under medication interrelate with their attitude toward being medicated. We investigate these changes among Israeli adolescents, the participants' experience in controlling the change, and their assessment of what the change means for their lives.

Methods: Thirty-eight adolescents participated in semi-structured interviews. Using grounded theory, the authors analyzed the findings separately and called on an external referee to resolve disagreements about the results.

Results: The results show that methylphenidate affects participants' demeanor, mood, and preferences. Most participants began to use it in childhood. Many spoke disapprovingly about how it modified their sense of authenticity as their independence grew in adolescence. Some even discontinued its use. Largely due to the development of their autonomy and their perception of using medication, many manipulate their use of methylphenidate to enhance selected traits and willingness to engage in various activities. When preparing for a matriculation exam, for example, they take the medication; when they wish to be creative or sociable, they avoid it and enjoy what they consider the advantages of ADHD, such as creativity and spontaneity.

Conclusions: As discretionary users, the participants shape their lives in a way that makes them more meaningful and diverse, better tailored to their social surroundings, and more useful in maintaining autonomy in the course of pharmacological treatment of ADHD. Thus, it seems that adolescents with ADHD should be allowed to influence their pharmacological treatment of the disorder in order to adjust it to their needs and personalities.

OP 092

COMMUNICATION BETWEEN INFANT - BOYS AND THEIR MOTHERS WITH ADHD

Karagianni E.[1], Papaeliou C.[1], Maniadaki K.[2], Kakouros E.[2]

[1] *University of the Aegean*
[2] *University of West Attica*

Background and aims: The present longitudinal study aimed to examine the development of temporal and qualitative aspects of the interaction between boy - infants and their mothers with symptoms of ADHD.

Method: Ten infants and their mothers with ADHD symptoms and 10 control dyads were video recorded at home during free-play interactions when infants were 2, 4, 6 and 9 months. Microanalysis of the video recordings was carried out to assess synchronization, type of turn-taking and type of interaction. Infants' temperament was also assessed.

Results: It was demonstrated that the ADHD dyads showed shorter duration of synchronization and shorter episodes of interpersonal play at 2 months and joint attention at 9 months. Moreover, duration of synchronization was significantly correlated with types of interaction. No group differences were observed in infants' temperament.

Conclusion: Mothers with ADHD show deficiencies in their ability of provide the necessary time framework as well as age - appropriate stimuli to their infant, while infants seem to attempt to attune with their mother's pace. Clinical implications of these findings are also discussed.

OP 094

THE LIVED EXPERIENCE OF ADULTS WITH DYSLEXIA WITH DIFFERENT MEMORY SYSTEMS

Smith-Spark J. , Lewis E.

London South Bank University, United Kingdom

Background and aims: While laboratory and self-report evidence exists to demonstrate the continued negative impact of dyslexia on memory in adulthood, qualitative research which privileges the individual's lived experiences is needed in order to complement and enrich the extant quantitative findings. To this end, semi-structured in-depth interviews were conducted with university students with dyslexia.

Method: In-depth semi-structured interviews explored the lived experiences of 12 university students with dyslexia. Questions were designed to address different facets of their memory, and probed experiences with short-term and working memory, long-term memory (both semantic and episodic), and prospective memory. Thematic Analysis was used to analyse the interview data.

Results: Three main themes were identified. Firstly, the interviewees highlighted weaknesses in their memory in everyday situations, with problems arising with accessing stored information when it was needed and remembering where they were up to with ongoing tasks. Secondly, the interviewees felt that they had a poorer and less rich memory compared with significant others who did not have dyslexia, remembering less detail about personally experienced events. Thirdly, the importance of support for memory shortcomings (involving tools, technology, and other people) was raised by the interviewees.

Conclusion: In highlighting dyslexia-related problems across different memory systems, the interviews are consistent with laboratory and self-report measures. Dyslexia affects the quality of memory and has a negative impact on confidence surrounding memory accuracy and reliability. These qualitative findings add a further important dimension to the evidence showing the impact of memory problems on the daily, lived experience of adults with dyslexia. Adults with dyslexia experience difficulties with memory across different situational contexts (study, work, and social life). Problems with these various memory systems need to be accommodated fully within support arrangements and reasonable adjustments in order to ensure that adults with dyslexia are able to achieve their full potential.

OP 095

TEACHERS' ATTITUDES TOWARD PUNISHING PUPILS WITH PHARMACOLOGICALLY TREATED AND UNTREATED ADHD

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[2] The Center for Academic Studies, Or-Yehuda, Israel

Background and Aims: Youngsters with ADHD are more involved in school violence than are their neurotypical peers. One method of treating ADHD and the unruly behavior associated with it is pharmacological.

Brawls among students count among the harshest manifestations of school violence (Fleischmann, 2015). School authorities try to prevent them by, among other gambits, punishing those involved.

This study examines teachers' tendency to punish pupils with ADHD who participate in a brawl. We compare research participants' tendency to punish pupils with ADHD who receive medication with their predisposition to discipline brawling students who are not medicated. We ask how the use of methylphenidate (Ritalin) influences teachers' estimation of the intensity of punishment that participants in a brawl should receive and the effectiveness of this disciplinary tactic.

Method: Teachers (N=196) are given questionnaires that present scenarios of brawls among students and probe the participants' likelihood of punishing them. For this purpose, we adapted a previously developed questionnaire (Fleischmann, 2018).

Results: By using a two-level regression model, we find that pupils with ADHD who receive medication are punished less intensively than those who have the disorder but are not medicated. The effectiveness of punishment, however, is thought to be greater among medicated students than it is among the untreated. The correlation between the values of punishment intensity and punishment effectiveness is very weak if not nil.

Conclusion: Schoolchildren with untreated ADHD are punished more severely than those who take medication but the punishment they receive is considered less effective. This suggests that the reason for punishing is not educational. That is, students with untreated ADHD are disciplined more stringently in order to persuade and their parents that they need to be medicated.

Friday, August 30th, 2019

Papers 17 – Social Cognition I

Naoussa Hall 17:30 – 19:00

OP 096

SWEET REVENGE? CHILDREN RETALIATE BASED ON COST, INTENTION AND RELATIONSHIP WITHOUT REACHING THEIR BASELINE EMOTION

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[3] *University of St Andrews, United Kingdom*

Schadenfreude, the enjoyment following watching others' misfortune, is deeply rooted in our species (Mendes et al, 2018). Moreover, humans feel pleasure when offenders are punished (Singer et al, 2004). Hence, humans seem to possess a pleasure-driven built-in vindictive impulse. How does this impulse develop into adulthood? Although many studies have used economic games to explore how children punish inequity, no study has explored how children modulate their vindictive responses and emotional states in realistic scenarios.

Children (247 six-year-olds (50% girls), 94 ten-year-olds (49% girls), 68 13-year-olds (50% girls) and 42 15-year-olds (50% girls)) participated in an anonymous online drawing contest against other (fake) same-aged children. Subjects uploaded their drawings to a virtual platform where others deleted them intentionally or accidentally. Then, subjects could select one out of four responses whose cost to themselves (=losing virtual coins to be exchanged for rewards) and consequences to the offenders depended on the severity of the subject's response. We recorded how participants felt before and after their loss and their response against the offender. We manipulated the cost and nature (intentional or accidental) of the offending action and whether the offender was a friend of the victim.

Children felt better after getting revenge but never reached their baseline emotional state (Z=-7.86, p<.001). Participants were more punitive after intentional compared to accidental actions (Z=-4.95, p<.001), and their response was more severe if cost to themselves was absent (Z=-13.180, p<.001). Only in the accidental condition the response was significantly less severe if the offender was a friend. Children modulated their punitive response depending on the offender's intention, cost to themselves, and their relationship with the offender. Emotionally, revenge is sweet but not the sweetest action to perform. Further studies should explore whether restorative rather than retributive measures lead to better emotional outcomes.

OP 097

THE RELATIONSHIP AMONG ATTRIBUTIONAL STYLE, MENTALIZATION AND FIVE ANXIETY PHENOTYPES IN SCHOOL AGE CHILDREN

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Extant literature has shown the importance of sociocognitive abilities for social relationships, school achievement and emotional wellbeing. Moreover, difficulties in social cognition tasks have been found in children affected by neuropsychiatric and neurodevelopmental disorders and by depressive symptoms. A recent meta-analysis revealed sociocognitive deficits in anxious adults. Nonetheless, few studies explored sociocognitive abilities in anxious children.

The main aim of the present study was to investigate the relation between two social cognition domains (mentalization and attributional style) and five distinct anxiety phenotypes (panic/somatic anxiety, separation anxiety, generalized anxiety, social anxiety, school anxiety), controlling for the effect of depressive symptoms.

A sample of 337 children aged 8-15 years was recruited and administered self-report questionnaires on mentalization, attributional style, anxiety and depressive symptoms. A correlational design was adopted and multivariate models were used to analyze the data.

Results showed that the performance in the mentalization task was negatively predicted by separation anxiety ($\beta = -.134$, $t = -2.020$, $p = .044$) and by depressive symptoms ($\beta = -.194$, $t = -3.501$, $p = .001$). Moreover, attributional style for positive events was negatively predicted by social anxiety ($\beta = -.155$, $t = -2.657$, $p = .008$) and depressive symptoms ($\beta = -.305$, $t = -5.018$, $p < .001$), whereas attributional style for negative events was positively predicted only by depressive symptoms ($\beta = -.170$, $t = -2.727$, $p = .007$). Results also revealed an interactional effects of depressive symptoms with gender and age on mentalization and of depressive symptoms with age on attributional style for negative events.

The present study shed light on the importance of assessing social cognition skills in children with social/separation anxiety and depressive symptoms, paving the way for intervention studies in such a field.

OP 098

"I DON'T KNOW BUT I KNOW WHO TO ASK": 12-MONTH-OLDS ACTIVELY SEEK INFORMATION FROM KNOWLEDGEABLE ADULTS

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Infants' active social communication, especially pointing, has been proposed to serve information-seeking function (Southgate, Van Maanen, & Csibra, 2007). Recent experimental work showed that infants are sensitive to the distribution of knowledge among social partners (Poulin-Dubois & Brosseau-Liard, 2016) and expect to learn from previously reliable social partners (Begus & Southgate, 2012; Goupil, Romand-Monnier, & Kouider, 2016; Tummeltshammer, Wu, Sobel, & Kirkham, 2014). When preverbal and pre-pointing infants are motivated to obtain information they cannot discover independently, how do they pose epistemic requests to their social partners?

The present study investigated whether 12-months-olds reliably identify and selectively seek information from more knowledgeable adults when in need of relevant information. We measured social referencing as a behavioural correlate of epistemic, information-seeking process. In a live, head-mounted eye-tracking laboratory experiment, infants were introduced to two unfamiliar adults, an Informant (reliably labeling novel toys) and a Non-Informant (providing an equal amount of social engagement, but ignorant about object labels). At test, the caregiver placed two novel objects out of infants' reach and asked to locate a novel referent among them - that is, to make an essentially impossible choice. Infants were significantly more likely to turn to the Informant than the Non-Informant. In addition, infants looked equally more often at either the Informant or the Caregiver than at the Non-Informant, and following the initial look, increased looking at the Informant while reduced looking at the Caregiver. These results suggest that preverbal infants actively and selectively seek information from social partners using social referencing prior to the emergence of pointing as part of the communicative toolkit.

OP 099

EYE-MOVEMENT PATTERNS REVEAL ATYPICALITIES IN AUTISTIC PERCEPTION WITH REGARD TO SOCIAL COGNITION AND THE USE OF PRIOR EXPERIENCES

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[2] *University of Manchester*

Eye-movement patterns can reveal a surprising wealth of information about the observer's mind- the way the person thinks, their personality, their goals and preferences and how they see the world. Moreover, eye-tracking is a non-invasive technique that allows us to probe cognition without requiring behavioural or verbal responses. For this reason, eye-tracking is particularly well suited for researching individuals with autism. I would like to present three studies that show how studying eye-movement patterns can reveal the workings of the minds of people with autism.

The first study shows that, when asked to recognise facial emotions, people with autism look at faces in a different way than people who developed typically- their face scanning patterns are more variable and less focused on the eyes. We also showed that this hinders their ability to recognise emotions by demonstrating that an emotion recognition machine learning algorithm was less effective when it was given only those parts of the faces that autistic people looked at, compared to when it was given the information visually selected by typically developing people.

The second study shows that autistic people use their knowledge and experience to a smaller extent when making perceptual decisions, compared to typically developing people. We found that the eye-movement patterns of persons with autism did not change as much after learning what a highly degraded pictures represented, as it was in the case of typically developing individuals.

The third study shows that that autism is characterized not only by a weaker preference of the social world, but also by a stronger bias towards the non-social world.

Finally, I will talk about the significance of these findings for understanding and supporting autistic minds.

OP 100

SHARED SENSORY EXPERIENCE AND EMERGING SOCIAL COGNITIVE COMPETENCE

Lábadi B.

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The development of social knowledge, including the ability to recognize and understand mental states of others, is an essential aspect of emerging socioemotional competence. Recent theories of embodied simulation have suggested that understanding mental states of others develops in social interaction through observing and mirroring others' actions within one's own sensorimotor system. In present studies we investigate the interpersonal multisensory experience effect on the development of social-cognitive process, namely, emotion recognition and perspective taking in children at age between 4 and 10 years. In these experiments we used the enfacement method evoked by synchronous interpersonal multisensory stimulation that could elicit changes in the mental representation of self - other bonundary resulted the perceived similarity of others. Exp 1. children (4-8 years) were touched on their face while observing another person's face being touched in either synchrony or asynchrony. The results showed that even in young children the experience of synchronous shared visuo-tactile stimulation facilitated the recognition of facial expressions in others. Exp 2. we demonstrate whether shared sensory experiences between two people could alter the way peripersonal space was represented, and whether this alteration could be influenced the ability to take another person's viewpoint in perspective taking task. In this study children (8-9 years old) and adults were involved to measure the shared sensory experience effect in a perspective taking task performance varying first person perspective and third person perspective, and location of the target. The results show that only the the synchronous interpersonal multisensory stimulation facilitate the perspective taking performance and only in those condition when we used third-person perspective. These findings support that early shared multisensory experience have an important contribution to developing interpersonal social competencies.

OP 101

AGENCY IS NOT A PROBLEM: A STUDY ON THE ACTION UNDERSTANDING IN INFANTS COMPARING HUMAN AND ROBOT

Manzi F.[1,2,3], **Ishikawa M.**[4], **Itakura S.**[4], **Kanda T.**[5,6], **Ishiguro H.**[6,7], **Di Dio C.**[1,2], **Massaro D.**[1,2], **Marchetti A.**[1,2]

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Several studies have suggested that eye-contact is fundamental for human-human interaction in infants. Few studies have analysed the role of eye-contact in infants when the partner is a robot, despite the fact that in recent years robots have also been introduced in educational contexts as possible educational partners. In particular, it remains unclear how infants use the robot gaze as an informative signal. Nor has the understanding of intentionality of an action performed by a robot ever been analysed in infants. Accordingly, the aim of this study was to investigate the understanding of action intentionality in infants by comparing an action made by a human or a humanoid robot.

In a repeated measures factorial design with Agency (human, robot), Eye-Contact (present, absent), Looking-to-Object (congruent or incongruent with respect to the action) and AOIs (Face, Hand and Target) as within-subjects factors, we investigated through the Eye-Tracking technique the understanding of action intentionality in infants (N=32) aged between 14 and 16 months.

The results showed that there is no significant difference in infants' total fixation time between human and robot. A significant interaction was found between Areas of Interest (AOIs) and gaze congruence ($p=.048$). More specifically, we found a preference for the face of both agents (human and robot), although infants tended to look longer at the hand when gaze to the object was congruent with respect to the action.

These results overall suggest that infants are equally sensitive to action intentionality when the action is performed by a human or robot. Previous studies have shown that infants do not follow the robot's gaze (Okumura et al., 2013 a, b). Our results suggest that action is a crucial factor for infants' gaze-following also when observing a robot.

Saturday, August 31st, 2019

Keynote Lecture 3

Olympia Hall A & B 08:30 - 09:15

KL 3

ON THE IMPORTANCE OF SEPARATING WITHIN-PERSON DYNAMICS FROM BETWEEN-PERSON DIFFERENCES IN PSYCHOLOGICAL PROCESSES

Hamaker E.

Methodology and Statistics - Faculty of Social and Behavioural Sciences - Utrecht University - the Netherlands

In recent years several publications have appeared that discuss the importance of separating stable between-person differences in longitudinal data from temporal within-person fluctuations in psychological research. In this presentation I begin by explaining when and why we should be concerned about within-person and between-person variance in our data. A fundamental—yet often avoided—question in this context is whether we are interested in association or causality. I will explain that when we are interested in understanding the underlying mechanisms, we need to separate within from between, and I will indicate how this can be done using longitudinal data. Subsequently, I elaborate on what can be learned from the within-part of the model, but also how we can interpret the between-part, arguing that what is considered variable versus stable is to a large extent a matter of perspective. I briefly discuss two tools that have been developed in other disciplines and that may help us further along in this area, and I summarize a few critical issues that need to be considered in this kind of research. I end with a plea for more theory building to support better choices in both the measurement and the statistical modeling of psychological processes.

Saturday, August 31st, 2019

Invited Symposium 3

Ilissos Hall 09:30 - 11:00

IS 03

INTEGRATION AND DIFFERENTIATION OF MENTAL PROCESSES THROUGH THE LIFE SPAN

Demetriou A.
Chair, University of Cyprus, Nicosia, Cyprus

Greiff S.
Discussant, Université du Luxembourg, Esch-sur-Alzette, Luxembourg

This symposium outlines the basic premises of an integrative theory of intellectual development. The theory integrates psychometric, cognitive, and developmental theories of intelligence into an overarching framework. This theory is based on a 40-year long research program which generated a large array of empirical studies on all aspects of cognitive development from early preschool to late age years. Andreas Demetriou outlines the basic premises of the theory and discusses its relations to other theories, emphasizing its aspects that relate to education. Smaragda Kazi presents studies on the development of mental awareness and its role in the development of executive functions and reasoning and individual differences in them. Nikolaos Makris presents research on the relations between cognitive development and academic performance in primary and secondary school. George Spanoudis presents research on the educational implications of the theory, summarizing studies designed to boost the development of general cognitive developmental processes.

IS 03 – 1

MAPPING THE DIMENSIONS AND DYNAMICS OF DEVELOPING GENERAL INTELLIGENCE

Demetriou A.

University of Cyprus, Nicosia, Cyprus

This symposium presents recent research designed in the context of an integrative theory of mental architecture and development focusing on general intelligence and its implications for education. The theory integrates psychometric, cognitive, and developmental theories of intelligence into an overarching framework. This presentation outlines the basic premises of the theory about the composition and development of general intelligence from birth to adulthood. I suggest that general intelligence is a developmentally varying composite of control, representational, inferential and awareness processes. Although always present, their relative importance changes across four developmental cycles, defined by the nature of the dominant representational unit (episodic, realistic mental, rule-based, and principle-based representations). Transitions occur as a result of representational reorganizations altering awareness and control of one's own mental functioning. I also discuss the implications of the theory for general theories of the human mind, brain research and education.

IS 03 – 2

COGNIZANCE IN COGNITIVE DEVELOPMENT: A LONGITUDINAL STUDY

Kazi S.

Panteion University of Social Sciences, Department of Psychology, Greece

We present a study which explored longitudinally how cognizance mediates between executive and reasoning process from 4 to 10 years of age. Four-, 6-, and 8-years old children were tested twice by executive (inhibition, flexibility in shifting, and working memory), cognizance (awareness of perceptual and inferential origins of knowledge, first- and second-order ToM, and awareness of similarities and differences between cognitive processes), and reasoning tasks (deductive and Raven-like fluid reasoning tasks). Perceptual awareness, first-order ToM, and simple inductive and deductive reasoning were acquired at preschool; inferential awareness, awareness of cognitive processes, and relational and deductive reasoning were mastered later in childhood. The various processes preserved their relative functional autonomy; however, there were two factors standing for their interactions: one for the state of ability at a time and one for general change dynamics. Latent change score modeling and latent transition analysis showed that cognizance was the best proxy of the general change factor collecting reasoning and executive influences early and leading transitions to higher level reasoning later. Implications for developmental, psychometric, and developmental psychopathology theories are discussed.

IS 03 – 3

PREDICTING SCHOOL PERFORMANCE FROM COGNITIVE ABILITY, COGNIZANCE AND PERSONALITY FROM PRIMARY SCHOOL TO SENIOR HIGH SCHOOL

Makris N.

Democritus University of Thrace, Department of Primary Level Education, Greece

We present three studies exploring relations between academic performance, cognition, and personality. The first study involved 9-15-year-old participants examined on executive control processes, reasoning in several domains, self-evaluation of performance in these domains, and language. Structural equation modeling showed that cognitive and language ability highly predicted school grades. These relations changed with age; executive control dominated from 9-11 and reasoning and awareness dominated from 13-15 years. The second study involved participants from 10-15 years, examined longitudinally, at three testing waves, by a cognitive battery addressed to reasoning domains, creativity and drawing, self-evaluation of performance, and domain-specific and general cognitive self-representation; school achievement in mathematics, science, and Greek was measured at first testing. SEM showed that creativity, reasoning, performance evaluation, and general self-representation significantly predicted school performance. Growth modeling showed that school performance affected cognitive change and self-evaluation. The third study examined 702 participants from 10-17 years of age, by a cognitive battery addressing reasoning domains, and inventories addressing self-representation about reasoning domains and general cognitive processes, the Big Five factors of personality and aspects of volition. Performance in mathematics, science, and Greek was measured. Cognitive ability strongly and personality (conscientiousness) moderately predicted school performance. These relations varied with age and ability: the effects of cognitive ability on academic performance decreased and the effects of personality increased with increasing age and ability, respectively. The implications for cognitive developmental theory and educational implications are discussed.

IS 03 – 4

EDUCATING THE MIND: THE ROYAL ROAD TO FAR TRANSFER

Spanoudis G.

University of Cyprus, Department of Psychology, Nicosia, Cyprus

This presentation summarizes two studies designed to boost cognitive development in deductive and mathematical reasoning. The studies involved late primary and early secondary school students from 9 to 15 years of age. Students were trained to become aware of the cognitive processes involved in various types of reasoning and mathematical problems, build models implementing the various types of relations, and automate inferential and relational thought processes. Various measures of processing and executive efficiency together with reasoning were taken before and after interventions. The studies suggest the conclusions following: First, training is possible. Any ability improves with systematic training; some of the gains are lost with time, but much of them remain. Second, transfer is possible; top-down transfer is much more likely than bottom-up transfer. The royal road to transfer is training cognizance and relational thought; gains in these processes transfer to executive control processes, such as attention control and working memory. Third, learning is phase sensitive; to succeed, it must take into account the present state of thought of the persons involved; to be sustainable, it must recycle to upgrade each phase's core cognizance and relational thought processes. Implications for educational practice are discussed.

Saturday, August 31st, 2019

Symposium 24

Vergina Hall 09:30 – 11:00

S 24

PRENATAL RISKS, PARENTAL FUNCTIONING AND CHILD DEVELOPMENT

Konijnenberg C.

Chair, Department of Psychology, Inland Norway University of Applied Sciences, Lillehammer, Norway

Brandlistuen R.E.

Discussant, Division of Mental Health, Norwegian Institute of Public Health, Oslo, Norway

The quality of the prenatal environment has a major impact on the trajectory of child development. Both exposure to stress and teratogens during pregnancy can negatively influence child health and development. Literature on the effects of prenatal risks on child development have shown for several decades the key role of the prenatal environment for children's short and long-term development. However, while the prenatal environment matters a great deal, the postnatal environment also has a critical influence on child development. Particularly parental mental health and functioning has been found to play a significant role. This symposium will contribute to the current knowledge on the effects of prenatal risks on parental functioning and child development. The first presentation (Mona Bekkhus, Research Centre for Developmental Processes and Gradients in Mental Health [PROMENTA], Department of Psychology, University of Oslo, Norway) focuses on whether the detection of fetal anomaly triggers social dysfunction and psychological distress in the male partners of pregnant women. The second presentation (Ulrika Håkansson, Inland Norway University of Applied Sciences, Lillehammer, Norway) addresses parental reflective functioning and executive functioning in mothers with substance use disorder and its effect on child development. The third presentation (Egil Nygaard, Department of Psychology, University of Oslo, Norway) discusses the results of a meta-analysis and structured literature review investigating long-term cognitive, motor, behavioral and visual outcomes after prenatal exposure to methadone or buprenorphine. The last presentation (Carolien Konijnenberg, Inland Norway University of Applied Sciences, Lillehammer, Norway) discusses the results of a prospective longitudinal study investigating the neurocognitive development and cortisol levels of children prenatally exposed to methadone or buprenorphine.

S 24 – 1

PATERNAL PSYCHOLOGICAL STRESS AFTER ULTRASONIC DETECTION OF FETAL ANOMALIES. THE SOFUS STUDY

Bekkhus M.[1,2], Kaasen A.[3]

[1] Department of Psychology, University of Oslo

[2] Research Centre for Developmental Processes and Gradients in Mental Health (PROMENTA), Department of Psychology, University of Oslo, Norway

[3] Oslo Metropolitan University, Faculty of Health Science, Midwiferey Science Research Group

Background and Aims: Knowledge of carrying a fetus with a prenatal diagnosed anomaly may cause acute psychological stress to the parents. Most studies, however only focus on maternal stress, yet today fathers are often present at the ultrasound examinations and birth, and therefore may be affected in a similar way as the expectant mother (Weaver & Cranley, 1983). However, to date no other studies have examined how detection of fetal anomaly emotionally affects the expectant fathers throughout the remaining pregnancy. Our aim was to examine the level and development of general health perception, social dysfunction and psychological distress in a subgroup of men where fetal anomaly was detected during pregnancy.

Methods and Results: This study is part of the SOFUS - study, a prospective longitudinal observational study. Participants were recruited when referred for an ultrasound examination conducted by a specialist in fetal medicine at Oslo University Hospital - Rikshospitalet on suspicion of fetal malformation (study group). We examined differences between the men in the study group (N= 32) and a comparison group (N=83) on General Health Quality, Impact of Event Scale and Depression across four time points in pregnancy. Independent sample Mann-Whitney U test showed that men who experienced fetal anomaly prenatally did not differ from the comparison group on overall general health (GHQ Sum case score). However, the men in the study group reported more anxiety at all four assessments. The men in the study group also reported higher social dysfunction as compared to the comparison group.

To **conclude** the main finding suggests that men in the study group were more anxious, scored higher on psychological distress and had poorer general health than the comparison group. This difference remained over the following 2-3 weeks, but that this difference decreased around 30 week of gestation.

S 24 – 2

CHILD DEVELOPMENT, PARENTAL REFLECTIVE FUNCTIONING AND MATERNAL EXECUTIVE FUNCTIONING IN MOTHERS WITH SUBSTANCE USE DISORDER

Håkansson U.[1], Watten R.[1], Söderström K.[1,2], Øie M.G.[3,4]

[1] Innland Norway University of Applied Sciences, Lillehammer, Norway
[2] Division Mental Health Care, Innlandet Hospital Trust, Lillehammer, Norway
[3] Department of Psychology, University of Oslo, Oslo, Norway
[4] Research Division, Innlandet Hospital Trust, Lillehammer, Norway

Background and aim: There is a consensus that having a substance use disorder (SUD) may adversely affect caregiving capacities, and consequently the development of physical, emotional and cognitive capacities in the child. Parental reflective functioning (PRF) and executive functioning (EF) are both important capacities for sensitive parenting as well as often being impaired in SUD mothers. The aim of this study was to investigate developmental capacities in infants to SUD mothers in relation to maternal PRF and EF.

Study Population: The sample consisted of forty-three Norwegian mother-infant dyads. Mothers (M = 31.0 years, SD 6.4) with a SUD diagnosis and a child under the age of 18 months (M = 8.6 months, SD = 3.8) were recruited during pregnancy or early during the postpartum period.

Methods: PRF was measured using using the Parent Development Interview (PDI-R2) (Slade, Bernbach, Grienenberger, Levy, & Locker, 2005). Mothers were also tested with a neuropsychological test battery including the Wechsler Adult Intelligence Scale (Wechsler, 2014), and D-KEFS (Delis, Kaplan, & Kramer, 2001) to measure EF. In addition, the infants were clinically assessed for child development using the Ages and Stages assessement (Squires, Bricker, & Twombly, 2002).

Results: Results revealed that children to mothers with adequate to high PRF performed significantly better on communication, problem solving and social-emotional development compared to children to mothers with negative to low PRF, even after controlling for maternal EF and neonatal abstinence syndrome (NAS).

Discussion: The results suggests that maternal mentalizing capacities might be important for social-emotional and cognitive development in children of mothers with SUD. It would be important to offer early and long-term parenting support already in pregnancy in addition to a continuing support later in development to support PRF as a possible contributing protective factor for a healthy child development in a high-risk group.

S 24 – 3

LONG-TERM OUTCOMES AFTER PRENATAL EXPOSURE TO METHADONE OR BUPRENORPHINE: A META-ANALYSIS

Nygaard E.[1], Andersen J. M.[2], Høiseth G.[2]

[1] Department of Psychology, University of Oslo, Norway
[2] Department of Forensic Sciences, Oslo University Hospital, Norway

Background and aim: Opioid maintenance treatment (OMT) is recommended for pregnant women with opioid addiction, but the long-term outcomes for the children are uncertain. The aim of the present study was to perform a meta-analysis and a structured review of long-term cognitive, motor, behavioral and visual outcomes after prenatal exposure to methadone or buprenorphine.

Methods: We performed structured literature searches in Medline, Embase, Web of Science, CINHAL, Cochrane and Epistemonikos, in addition to finding articles through reference lists. In the meta-analysis, we included studies published in English of children with prenatal OMT exposure and comparison groups with outcomes at 3 months or later. In the structured review, we included experimental studies of animals with similar exposure and long-term outcomes.

Results: We included 29 clinical studies in the meta-analysis and 30 experimental animal studies in the structured review. The meta-analysis showed worse cognitive, motor, vision, behavior and executive functioning for children born of mothers on OMT during pregnancy relative to children born without prenatal drug exposure. The experimental animal studies indicated that part of the findings may be caused by the prenatal exposure. The quality of the clinical studies may have limited the generalizability. Older age and more recent publication year were significant predictors for larger group differences. There were, however, few studies of older children.

Conclusions: Children born of mothers on OMT during pregnancy are at risk for worse long-term developmental outcomes than unexposed children across multiple areas. As there may be increasing problems over time, these children should have long-term follow up to ensure individualized help. Future evaluation of treatment of pregnant women with opioid addiction should take these aspects into consideration.

S 24 – 4

NEUROCOGNITIVE DEVELOPMENT AND CORTISOL LEVELS IN CHILDREN PRENATALLY EXPOSED TO METHADONE OR BUPRENORPHINE

Konijnenberg C.[1], Melinder A.[2]

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[2] Department of Psychology, University of Oslo, Norway

Background and aims: Opioid maintenance therapy (OMT) is generally recommended for pregnant opioid-dependent women. Despite evidence of the beneficial effects of OMT in the care of pregnant opioid-dependent women, prenatal methadone or buprenorphine exposure may not be without risk. Both methadone and buprenorphine cross the placenta and enter the bloodstream of the fetus and may consequently disrupt normal fetal development. The aim of this study was to study the long-term development of children prenatally exposed to methadone or buprenorphine.

Methods: In this ongoing prospective longitudinal study, 40 children (20 exposed and 20 non-exposed), followed-up since birth were evaluated at age 9-11 years. Neural correlates of cognitive control were investigated with ERP measurements while participants performed a modified version of the Eriksen Flanker task. Cognitive development was measured using the Wechsler Abbreviate Scale of Intelligence (WASI) and salivary cortisol samples were collected to measure HPA-axis activity.

Results: Children prenatally exposed to methadone or buprenorphine scored significantly lower on WASI compared to the comparison group, $F(1,39) = 16.72$, $p = <.001$, $\eta^2 = .31$. Children in the exposed group showed normal cognitive control function. However, an atypical ERP response related to perceptual and attention allocation processes was found in the exposed group. No group differences were found for salivary cortisol levels or cortisol reactivity levels (all $p > .05$). Cortisol levels significantly predicted nonverbal cognitive scores for the OMT group, $\beta = -65.58$, $t(20) = 15.70$, $p = .02$.

Conclusion: Findings suggest that prenatal exposure to methadone or buprenorphine does not have long-term effects on children's HPA-axis functioning. However, since children of women in OMT scored significantly lower on tasks of cognitive function, careful follow-up throughout the school years and across adolescence is recommended.

Saturday, August 31st, 2019

Symposium 25

Makedonia Hall A 09:30 – 11:00

S 25
SELF AND OBSERVER-RATED ENVIRONMENTAL SENSITIVITY AS A MEASURE OF DIFFERENTIAL SUSCEPTIBILITY ACROSS COUNTRIES

Lionetti F.
Chair, Queen Mary University of London, London, UK

Nocentini A.
Chair, University of Florence, Florence, IT

Pluess M.
Discussant, Queen Mary University of London, London, UK

According to the Differential Susceptibility model (Belsky & Pluess, 20009), children differ in their susceptibility to the environment, with some more sensitive than others. This assumption has been supported across many studies, but the majority of them relied on more or less proximal markers of an increased sensitivity to the environment. All four papers included in this symposium feature samples in which the Differential Susceptibility model has been assessed using direct phenotypical measures of an increased Environmental Sensitivity: the self-report Highly Sensitive Child scale (Pluess et al, 2018), the Highly Sensitive Person (Aron & Aron, 1007) scale, and the newly developed observer-rated Highly Sensitive Child Rating System (Lionetti et al., 2017). Specifically, the first paper provides data on Environmental Sensitivity measured with an adapted Arabic version of the Highly Sensitive Child scale, in a large sample of 1,600 Syrian refugee children based in Lebanon. The moderating role of sensitivity is investigated in relation to adverse effects of war and displacement on both mental health and well-being outcomes. The second paper explore the relationships between several sensitivity markers, among which self-reported Environmental Sensitivity, and their role on a set of behavioural outcomes amongst black South African members (n = 670 - 1822, depending on marker) of the Birth-to-Twenty Plus cohort. The third and fourth papers report empirical evidences that self-reported and observer-rated Environmental Sensitivity moderates the role of parenting on children's behavioural problems respectively in a clinical sample of 50 Italian children with a Disruptive Behavior Disorders (DBD) diagnosis, and in a community sample of 192 children from the USA-based Stony Brook Temperament Study investigating internalizing symptoms. Applied implications of research findings for intervention programs are discussed.

S 25 - 1

ENVIRONMENTAL SENSITIVITY IN SYRIAN REFUGEE CHILDREN

Pluess M.[1], McEwen F.[1], de Villiers B.[1], Karam E.[2], Karam G.[2], Moghames P.[3], Legoff S.[3]

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[3] *Médecins du Monde, Beirut, Lebanon*

Keywords: Differential Susceptibility, Personality, Mental Health, War Exposure, Displacement

It is well established that children exposed to war and displacement are at increased risk for the development of psychological problems. However, little is known about refugee children's *Environmental Sensitivity* and how it relates to their mental health. The current paper aims at investigating *Environmental Sensitivity*, measured with an adapted Arabic version of the *Highly Sensitive Child* (HSC) scale (Pluess et al., 2018), in a large sample of 1,600 Syrian refugee children based in Lebanon. After presenting descriptive findings on how the child-reported sensitivity scale performed in our sample, we report bivariate associations between sensitivity and various mental health and well-being outcomes. We then test whether environmental factors predict children's sensitivity and whether sensitivity moderates the adverse effects of war and displacement on both mental health and well-being outcomes. The current analysis is based on data from the BIOPATH study, an on-going longitudinal study on risk and resilience of Syrian refugee children (aged 8-16 years) in Lebanon. Data includes measures of psychopathology, well-being, and various risk and protective environmental factors. All measures are being collected face-to-face through interviews at the home of the refugee families. The reported results focus on cross-sectional analyses from the first wave.

The HSC scale performed reasonably well in this refugee sample (α=.73). According to bivariate correlations, HSC was associated with most mental health (r=.08-28) and well-being outcomes (r=.11-.17). Several risk and protective factors explained 12.7% of the total variance in HSC. Finally, HSC moderated the effects of war exposure on depression symptoms (β=.25, p=.06), with more sensitive children being more depressed when having been exposed to a higher number of war events. Results suggest that Environmental Sensitivity can be measured reliably in refugee children and that the HSC scale should be considered when investigating their mental health and well-being.

S 25 – 2

MULTIPLE MARKERS OF ENVIRONMENTAL SENSITIVITY INFLUENCE CHILDHOOD ADJUSTMENT IN A SOUTH AFRICAN BIRTH COHORT

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[2] Department of Psychology, School of Human and Community Development, Faculty of Humanities, University of the Witwatersrand, Johannesburg, Johannesburg South Africa

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Individual differences in environmental sensitivity have risen in importance over the past two decades due to their significant biopsychosocial implications. Notably, these differences may moderate the effectiveness of developmental health interventions, which are of particular importance to low and middle-income countries. Although there are several proximal and distal markers of environmental sensitivity, these have rarely been examined together in a single cohort, especially of non-European ancestry. This study aimed to explore the relationships between several sensitivity markers and their role in early childhood behaviour amongst black South African members of the Birth-to-Twenty Plus cohort. Pre-existing cohort data on temperament (6 months; Carey Infant Temperament Questionnaire) and birthweight/gestational age was supplemented by self-reported sensory processing sensitivity (SPS) levels and genotypic results for 5-HTTLPR and *DRD4* (n = 670 - 1822, depending on marker). The inter-relationships between these five markers were examined, along with their effects on caregiver-rated internalising and externalising behaviour when cohort members were age 7. A standardized socioeconomic status (SES) score was entered as an environmental modifier variable. Low birthweight, high SPS levels and the short allele of 5-HTTLPR were significantly (p < .05) related to higher levels of internalising behaviour. For SPS and 5-HTTLPR, this relationship was suggestively modified by SES scores, indicating a potential differential susceptibility trend. *DRD4* tended towards significance in predicting internalising behaviour, whilst temperament had no discernible effects. Lower birthweight and gestational age were weakly, but significantly indicative of higher levels of difficult temperament and SPS. Inter-correlations between other pairs of sensitivity markers were weak to negligible. Our results encouragingly support environmental sensitivity theory in a diverse ethnocultural sample. Birthweight, 5-HTTLPR genotype and SPS might be particularly reliable markers for environmental sensitivity across ethnicities, and may be useful to include as covariates in future intervention studies. This is an ongoing study with additional sampling currently underway.

S 25 – 3

ENVIRONMENTAL SENSITIVITY PREDICTS POSITIVE RESPONSE TO PARENTAL INVOLVEMENT IN CHILDREN WITH DISRUPTIVE BEHAVIOR DISORDER

Nocentini A.[1], Lionetti F.[2], Muratori P.[3]

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[2] Department of Biological and Experimental Psychology, Queen Mary University of London,
[3] Scientific Institute of Child Neurology and Psychiatry Fondazione Stella Maris, Calambrone (Pisa), Italy

Disruptive Behavior Disorders (DBD) constitute a serious mental health issue associated with a host of other social, emotional, and academic problems (Odgers et al. 2008). Neuro-biological, family, peer, and social risk factors are involved in their aetiology, with parenting playing a pivotal role (Matthys and Lochman, 2010). Recently, children's individual features have been explored as moderators able to buffer or to increase this parenting-child behaviour association. A candidate moderating variable is children's *Environmental Sensitivity*, defined as the inherent ability to perceive and process environmental stimuli (Pluess, 2015), and consistently reported to characterize a minority of the population across children, adolescents and adult samples (Pluess et al., 2018; Lionetti et al., 2018). The current study aims to evaluate whether *Environmental Sensitivity* moderates the link between parenting and externalizing symptoms in a clinical sample of 50 boys (aged 7-10 years), with a DBD diagnosis. Children's sensitivity was assessed with the Highly Sensitive Child scale (Pluess et al., 2018). Parenting was assessed using the Alabama Parenting Questionnaire (Frick 1991). The outcome measure was the Externalizing subscale of the Child Behavior Checklist (Achenbach 1991). Multiple linear regressions showed that Environmental Sensitivity interacted with positive parenting and parental involvement - but not with negative parenting - in the prediction of externalizing symptoms (B= -.403, p =.03), with children's scoring high on sensitivity being more susceptible to positive parental quality than low sensitive children. For these latter, no significant parenting-child behaviour association was identified. To conclude, data are in line with previous studies providing evidence that there are some children who are more susceptible than others to the influences of positive contexts on the basis of their level of environmental sensitivity (Nocentini et al., 2018; Pluess & Boniwell, 2015). Implications for intervention programs promoting positive parenting are discussed.

S 25 – 4

ENVIRONMENTAL SENSITIVITY INTERACTS WITH EARLY PARENTING IN THE PREDICTION OF INTERNALIZING SYMPTOMS IN MIDDLE CHILDHOOD

Lionetti F.[1], Klein D. N.[2], Aron E. N.[2], Aron A.[2], Pluess M.[1]

[1] Department of Biological and Experimental Psychology, Queen Mary University of London, London, United Kingdom
[2] Department of Psychology, Stony Brook University, Stony Brook, USA

Individuals scoring high in Environmental Sensitivity appear to be at increased risk for the development of internalizing symptoms. Research shows that this is mainly the case when heightened sensitivity is paired with environmental risk factors (see Greven et al., 2019). In a recent study, we found evidence that observed sensitivity moderates the impact of permissive parenting on children's internalizing behavioural problems at age three and six years in line with a diathesis-stress effect (Lionetti et al., 2018). In the current study we extended the investigation of sensitivity and internalizing symptoms to age nine and twelve, and considered rumination and depression as outcomes. Data were available from a sample of 192 children who took part in the Stony Brook Temperament study. When children were aged three, mothers reported on permissive parenting, and Environmental Sensitivity was observed in a laboratory context. At age nine and twelve, children reported on rumination and depression. According to a multivariate regression analysis, permissive parenting significantly interacted with sensitivity in the prediction of rumination which, in turn, was associated with higher rates of depressive symptoms (indirect effect B = -.27(.11), p = .02). A follow-up multi-group analysis supported an indirect effect of parenting on depression through the mediating role of rumination for children scoring high on sensitivity (i.e., top 30%), but not for those scoring low (bottom 30%) on sensitivity. At age twelve, this moderated mediation effect was no longer apparent, suggesting that other environmental variables (e.g., peer relations) should be considered in addition to parenting. To conclude, data provided evidence that sensitivity is a vulnerability factor for the development of internalizing symptoms up to age nine but only when children are exposed to early non-optimal parenting quality. These findings may have important implications for early parenting programs aimed at preventing internalizing problems in early childhood.

Saturday, August 31st, 2019

Symposium 26

Makedonia Hall B 09:30 – 11:00

S 26

A DEVELOPMENTALLY-INFORMED APPROACH ON REVISITING RISK MODELS FOR AGGRESSIVE BEHAVIOR AT SCHOOLS

Georgiou S.N.
Chair, University of Cyprus

Stavrinides P.
Discussant, University of Cyprus

A considerable amount of literature investigates the risk and protective factors involved in bullying behaviors that take place in the school context. However, a number of studies are conducted in a cross-sectional design, or investigate a subset of factors that does not consider interacting variables and does not capture the complexity of the interrelationships between risk and protective factors.

The present symposium aims to revisit risk models for aggressive behaviors at school in a developmentally-informed approach. The symposium includes four studies. The first one explores the longitudinal interactions between cognitive distortions, including cognitive disengagement and cognitive emotional dysregulation, and the moderating effect of mindfulness. The second one deals with a latent profile analysis of risk factors involved in bullying behaviors, aiming to address the heterogeneity that exists among children and adolescents who take a bully or a bully/victim role in the incidents. The third study of the symposium presents a meta-analysis of studies investigating the executive function deficits in adolescents involved in bullying behaviors. The fourth study aims to investigate a developmental model for long-term victimization, which includes the longitudinal effects from maternal attachment relationships, individual mechanisms developed to regulate emotions and the internalizing problems experienced, as well as the school climate tendencies.

The current symposium attempts to address the topic in a developmentally sensitive way and using advances statistical methods to test the research hypotheses. The use of latent profile analysis, meta-analytic fixed and random effects models, and meta-regression analyses, as well as advanced longitudinal interaction models (mediation, moderation and cross-lagged effects) enhances the potential of the findings to support comprehensive theoretical models and propose relevant clinical implications for assessment and treatment.

S 26 – 1

LONGITUDINAL INTERACTIONS BETWEEN COGNITIVE DISTORTIONS, MINDFULNESS AND DELINQUENCY OUTCOMES IN ADOLESCENCE

Stavrinides P., Ioannou M., Charalampous K., Georgiou S. N.

University of Cyprus, Department of Psychology, Nicosia, Cyprus

Background and aims: Previous literature suggests a link between long-term involvement in delinquency outcomes and distorted cognitive perception of personal and others' behaviors (e.g., Helmond et al., 2015). At the same time, at least a group of individuals involved in delinquent behaviors are believed to have intact levels of cognitive empathy and mindfulness (e.g., Velotti et al., 2018). The present study aims to (a) longitudinally explore the interactions between cognitive distortions in the forms of cognitive disengagement and cognitive emotional dysregulation and delinquency outcomes and (b) examine mindfulness as a vulnerability trait moderating those interactions.

Methods: A sample of 520 adolescents aged 15-18 years old (M= 16.02, SD= .82) took part in this longitudinal 3-wave cross-lagged design. All participants were asked to complete every 4 months the Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski et al., 2002), the Moral Disengagement Questionnaire (MDS; Hymel et al., 2005), the Child and Adolescent Mindfulness Measure (CAMM; Greco et al., 2011). Delinquency outcomes were measured using 5-point likert scale assessing the frequency of involvement in delinquency (including drinking, substance abuse, property damage, illegal driving and violence/bullying towards others). Structural equation models were conducted using Mplus 7.3.

Results: The analyses are currently being processed. Preliminary findings of the present study support the reciprocal effects between distorted cognitions and involvement in delinquency over time. Maladaptive emotion regulation skills predicted higher cognitive disengagement and both predicted delinquency. The reciprocal effects from delinquency to more distorted cognitive processing were stronger for individuals with low mindfulness levels.

Conclusions: The longitudinal approach of the study highlighted the need to consider trait vulnerability factors that may enhance the maintenance of delinquency and distorted cognitive beliefs held about these delinquent behaviors. Early interventions are promising in inverting the additive reinforcement of cognitive distortions during longitudinal involvement in delinquency.

S 26 – 2

PSYCHOPATHIC TRAITS AND RELATED RISK FACTORS FOR SCHOOL BULLYING REVISITED: A LATENT PROFILE ANALYSIS

Georgiou S. N., Ioannou M., Charalampous K., Stavrinides P.

University of Cyprus, Department of Psychology, Nicosia, Cyprus

Background and aims: Previous literature suggests psychopathic traits are a consistently important predictor of engagement in school bullying incidents (e.g., van Geel et al., 2017). Other risk factors interacting with, or influenced by psychopathic traits are also shown to predict school bullying (e.g., moral disengagement, impulsivity), but findings are not consistent across studies and countries (Zych et al., 2017). These inconsistencies prevent theoretical models from being updated and intervention programs from being effective for the heterogeneous group of adolescents who bully. The present study aims to concurrently examine a number of different risk factors to create the latent profiles of adolescents who get involved in bullying.

Methods: A sample of 500 adolescents aged 15-18 years old (M= 16.02, SD= .82) from Cyprus participated and completed a packet of questionnaires measuring psychopathic traits (YPI), moral disengagement (MDS), cognitive emotion regulation (CERQ), impulsivity (BIS-11), mindfulness (CAMM), attachment to parents and peers (IPPA) and school climate (SCBS). Latent profile analysis was performed on the subsample of adolescents who reported involvement in bullying incidents at least once over the past year and identified themselves as bullies or bullies/victims.

Results: The analyses are currently being processed. Preliminary findings of the present study support the heterogeneity of adolescents who bully. Importantly, consideration of the different types of psychopathic traits (affective, interpersonal, behavioral psychopathic traits) instead of a general psychopathic traits variable, results in meaningful derived latent profiles.

Conclusions: Revisiting the findings of previous studies about the risk factors for school bullying using a latent profile analysis, allows the concurrent examination of multiple important risk factors that explain the heterogeneity of the children and adolescents involved. Emphasis on the distinct mechanisms that characterize each profile is recommended for prevention and intervention programs, rather than a generic application of anti-bullying programs to all students involved in school bullying.

S 26 – 3

EXECUTIVE FUNCTIONS AND AGGRESSION: A META-ANALYSIS

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Background and aims: A number of studies have recently been examining the links between executive functions (EF) and aggressive behavior in childhood. There is evidence supporting impairments of some EF, such as working memory and inhibition, but not for others, such as mental shifting, but there are also studies supporting no impairment of EF systems (e.g., Granvald & Marciszko, 2016; Pollock et al., 2017). The heterogeneity of studies and definitions of EF and aggressive outcomes is highlighted as preventing conclusive evidence (Sulik, 2017). The present study aims to review current evidence on the link between EF and aggressive behavior using a meta-analysis.

Methods: Electronic databases and hand-searches were performed, resulting in 63 identified studies that examine at least one EF (among inhibitory control, cognitive flexibility, updating information in working memory, error monitoring, sustaining attention, and planning) in a childhood or adolescent population presenting a form of aggressive behavior (among bullying, delinquency, problematic externalizing behavior, conduct problems, conduct disorder, oppositional defiant disorder, disruptive behavior disorder). The comprehensive meta-analysis software was used to perform the analyses.

Results: The analyses are currently being processed. Descriptive synthesis of the included studies highlights the heterogeneity in the way EFs are measured (self-report measure, computerized task, paper and pencil administered task), and the methodological pitfalls of existing studies (e.g., heterogeneity in terms of inclusion of control group of typically developed children or a clinical control group).

Conclusions: The findings of the present study will add to the literature investigating EF in children and adolescents involved in a type of aggressive behavior, by summarizing existing evidence in qualitative and quantitative ways. Recommendations will be offered in terms of research (definitions of variables and methodology applied to measure these variables) and practice (EFs that should be targeted in prevention and intervention programs for aggressive behaviors).

S 26 - 4

RISK FACTORS OF LONG-TERM VICTIMIZATION AT SCHOOLS: A DEVELOPMENTALLY-INFORMED APPROACH

Ioannou M., Charalampous K., Georgiou S. N., Stavrinides P.

University of Cyprus, Department of Psychology, Nicosia, Cyprus

Background and aims: Long-term victimization is a long-standing concern for students, as it has been related to negative consequences that could last during adulthood, including internalizing disorders, health problems and suicidality (e.g., McDougall & Vaillancourt, 2015; Wolke & Lereya, 2015). A comprehensive model of risk factors for long-term victimization is missing from the literature, despite recognition that risk factors for long-term victimization can be largely different from the contextual risks for short-term victimization (e.g., Azeredo et al., 2015). The present study aims to (a) examine the concurrent effect of risk factors in predicting long-term victimization, and (b) examine a developmental model for long-term victimization with effects of early attachment relationships on subsequent internalizing problems, maladaptive emotion regulation strategies and passive responses to change their experience.

Methods: Fifty hundred adolescents aged 15-18 years old (M= 16.02, SD= .82) participated in the study and completed the cognitive emotion regulation questionnaire (CERQ), the attachment to parents and peers inventory (IPPA), the strengths and difficulties questionnaire (SDQ) and the school climate - willingness to report the incidents (SCBS). The study followed a cross-lagged design with 3 time-points over a year. Long-term victimization was determined based on self-reports using the BVQ-R and descriptive questions on victimization frequency and duration. Structural equation modeling was performed using Mplus 7.3.

Results: The analyses are currently being processed. Preliminary findings suggest the reciprocal strong effect between victimization and internalizing disorders (emotional difficulties including anxiety and depression). Maladaptive attachment schemata characterized by low trust predict the development of self-blaming mechanisms and passive reactions towards reporting the incidents at school, which additively explain long-term victimization.

Conclusions: The findings of the present study support the importance of adopting a developmentally informed approach to investigate the risk factors for long-term victimization in order to propose a comprehensive theoretical framework and related interventions.

Saturday, August 31st, 2019

Symposium 27

Mycenae Hall 09:30 – 11:00

S 27

EARLY CHILDHOOD DEVELOPMENT OF THEORY OF MIND IN TYPICAL AND ATYPICAL SAMPLES: ASSOCIATIONS WITH LANGUAGE AND SOCIAL ABILITIES

Conte E.

Chair, University of Milano-Bicocca, Department of Human Sciences for Education, Milan, Italy

Devine R.T.

Discussant, University of Birmingham, Edgbaston, United Kingdom

Human social cognition is founded on the understanding that everyone has mental states. Having a theory of mind means that we can explain and make predictions about others' actions (Premack & Woodruff, 1978). Throughout three decades of studies on theory of mind, we have had insights that the acquisition of this social cognition skill develops early in life (Scott & Baillargeon, 2009; Surian et al., 2007). However, much still remains to be known on theory of mind in young children (Wellman, 2018). Thus, the aim of this Symposium is to present recent findings on theory of mind and its associations with social-emotional and language abilities, as well as with socialization practices, in children from 2 to 5 years old with typical and atypical development.

The first paper investigates the direction of effects among language, emotion knowledge, and theory of mind performances in 2- and 3-year-olds by adopting structural equation modeling analyses.

The second paper focuses on children aged between 3 and 5 years old and compares their references to mental states at preschool when they are involved in three distinct storybook contexts by teachers.

The third presentation reports a study on 3-year-old children with and without developmental language disorder, comparing their understanding of intentions, desires, and beliefs.

Finally, the fourth paper analyzes visual, cognitive, and affective perspective taking in preschoolers who are victims of psychological maltreatment, and how these abilities are associated to prosocial behaviors and aggressiveness.

This Symposium will offer an occasion to discuss the most recent findings on young children's theory of mind, reflecting on new lines of research.

S 27 – 1

THE ASSOCIATION BETWEEN EMOTION KNOWLEDGE AND THEORY OF MIND IN EARLY YEARS: THE ROLE OF LANGUAGE ABILITIES

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Children's understanding of social world is dependent on the development of emotion knowledge (EK) and theory of mind (ToM), two intertwined abilities in early childhood (Eggum et al., 2011; O'Brien et al., 2011). Literature suggests that language has powerful connections with the development of these abilities (Milligan et al., 2007; Strand et al., 2016), however the direction of effects among language, EK, and ToM performances in the first years of life is still debated. The innovative purpose of this study was to test the effects of EK and language on young children's ToM scores within a single comprehensive model, while taking into account age and gender.

Participants were 147 children from 24 to 48 months (Mage= 35.5 months; SD=6.74 months). In the nursery school and preschool context, children were directly administered the AKT (Denham, 1986) as a measure of EK, two ToM tasks (the Diverse-desire Task by Wellman & Liu, 2004, and the True Belief Task by Wellman, 1990), and the PPVT-R (Stella et al., 2000) as a measure of language. Analyses were performed via structural equation modelling techniques.

Data revealed a good fit of the model (x2=1.31, RMSEA= .016, NFI = .976, NNFI = .982, CFI = .983) and it revealed that both children's EK (ß=.31, *p*=<.001) and language abilities (ß=.30, *p*=<.001) had direct positive effects on ToM scores, while EK and language significantly co-varied (ß=.74, *p*=<.001). Furthermore, age revealed statistically significant direct effects on EK (ß=.81, *p*=<.001), language (ß=.65, *p*=<.001), and ToM (ß=.43, *p*=<.001). No statistically significant results were found in relation to gender with the target variables.

The findings show the directions of relations among EK, language, and ToM and highlight the meaningful role of language in early childhood, supporting the impact of conversational studies carried out to promote social cognition skills in nursery schools and preschools.

S 27 – 2

PRESCHOOL CHILDREN'S REFERENCES TO THEORY OF MIND TOPICS IN THREE STORYBOOK CONTEXTS: READING, RECONSTRUCTION AND TELLING

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[3] *Tel Aviv University, Department of School Counseling and Special Education, Tel Aviv, Israel*

Children's understanding of their own and others' minds, defined as Theory of Mind (ToM), is a foundational social cognitive skill, with implications for many aspects of children's functioning. These include social competence, successful interactions, peer acceptance, and success in school (Carlson, Koenig, & Harms, 2013; Wellman, 2012). Few studies investigated children's references to mental-states during shared book reading interactions in a natural setting. In the current study, we analyzed and compared preschool children's references to ToM topics during three natural book sharing contexts with their teacher: (1) reading a book, (2) reconstruction of the story - The teacher read the book before the interaction with children, and then discussed the story with them based only on illustrations, and (3) telling the book, based solely on its illustrations.

Participants were 500 children (247 boys) from middle SES families. They were recruited from 100 preschools in the center of Israel. Their age ranged from 46 to 62 months ($M = 53.75$; $SD = 4.48$). We utilized Hebrew versions of three out-of-print, originally wordless children's picture books by the same author, Elzbieta. In Israel, a well-known children's author wrote a text for each of these illustrated stories, as an insert in a pocket on each book's back cover. The teachers read/reconstructed/ told the book to groups of five children. We transcribed and analyzed children's input to the interactions.

Primary results show that children used more mental-state utterances (cognition, emotion and desire), especially cognitive mental states, during telling, compared to the other two contexts. They also referred to false belief more during telling and reconstruction of the story than during reading the book.

The findings can elaborate our understanding of children's mental-state understanding, as manifested in preschool.

S 27 – 3

THEORY OF MIND IN PRESCHOOL CHILDREN WITH LANGUAGE DISORDER

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Many children with developmental language disorder (DLD, formerly known as Language Impairments (LI)) have well-documented problems in their understanding of false beliefs. However, Theory of Mind is more than false beliefs alone. Yet, the other elements, such as intentions and desires, are not well studied in this particular group.

In the current study, we examined the understanding of intentions, desires, and beliefs in three-year-old children with and without DLD (N=85 and 133 respectively).

Results showed that children with DLD fell behind their peers without DLD on tasks involving all three core concepts: intentions, desires, and beliefs. Yet, language levels could only partially explain these outcomes.

In this presentation we will discuss the possibility of a qualitative different or delayed ToM development in DLD children, and its implications.

S 27 – 4

PERSPECTIVE TAKING ABILITY IN PRESCHOOL CHILDREN VICTIMS OF PSYCHOLOGICAL MALTREATMENT

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There are different empirical evidences that maltreatment could impair the socio-cognitive development of the child. Among the developmental competences investigated in relation to maltreatment situations, perspective taking rarely appears. Thus, the present research aimed at analyzing perspective taking ability in preschool children belonging to maltreated family contexts, living in mother-child communities. We also evaluated the influence of the following variables: gender, age, presence of siblings, type of community, time spent inside the community, and presence of contact with the father. Finally, we analyzed the existence of possible relationships between perspective taking and social abilities (prosocial behaviors and aggressiveness).

The group of participants was composed of 43 preschoolers, victims of psychological abuse (21 males and 22 females) living together with their mothers in 15 mother-child communities of Northern Italy. Perspective taking was measured through several tests, administered individually, in order to detect each component of perspective taking (visual, cognitive, affective). Social behaviors (prosocial behavior and aggressiveness) were analyzed through non-participant observations.

Considering the scores of the single dimensions of perspective taking, results showed that children obtained better performances in visual perspective taking tasks, followed by cognitive and emotional tasks, which was the most deficient. Positive correlations were obtained between affective perspective taking ($\rho = .614$; $p = .009$), visual ($\rho = .499$; $p = .042$), and total ($\rho = .615$; $p = .009$) and prosocial behaviors; negative correlations emerged between affective perspective taking ($\rho = -.662$; $p = .004$) and total ($\rho = -.581$; $p = .014$) and aggressiveness. These findings indicate how the ability to understand others' point of view is associated to prosocial abilities, even in victims of psychological abuse.

In conclusion, it seems that perspective taking ability could represent a "protection factor" for these children, able to promote their social skills.

Saturday, August 31st, 2019

Papers 18 – Social Cognition II

Pella Hall 09:30 – 11:00

OP 103

GENERALISATION EFFECT IN FALSE BELIEF UNDERSTANDING AFTER EXECUTIVE FUNCTION TRAINING IN YOUNG CHILDREN

Gotseva-Balgaranova K., Mutafchieva M.

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Adele Diamond (2002; 2013) claims that it is possible to develop different academic and cognitive abilities by training executive functions (EF). Independent lines of correlational research showed that two components of EF, namely the inhibitory control and working memory (WM), are related to the Theory of Mind (ToM) (Perner, 1999; Carlson et. al., 2013; 2015). Despite this, to the extent of our knowledge, only one study, using a short training with two card sorting tasks, showed a causal relation between inhibition and ToM (Kloo & Perner, 2003). In our previous study, we found an effect of inhibitory control and WM training on analogical reasoning and false beliefs (FB) tasks using the same tasks on the pre- and post-test measurements (Gotseva-Balgaranova & Mutafchieva, 2018).

The aim of current study was to explore the generalisation effect of inhibition and WM training on ToM using FB tasks. We conducted a mixed design experiment with three groups - a) an experimental group with inhibition training; b) an experimental group with WM training; c) a control group with conservation tasks training. Each of the trainings was 7 days long, 25 minutes individual work per child every day. The within-subject factor had two levels: pre- and post-test, each containing different FB tasks. The participants were 61 4-year-old children. The results showed a significant increase in FB understanding after both inhibition and WM trainings, but not after the training with conservation tasks in the control group. Additional analysis showed that each of the trained abilities (inhibition, WM, and conservation understanding) increased significantly, but only the EF components influenced FB understanding. This finding goes against previous studies, which have shown that similar effects are mainly task-specific and could provide further evidence that ToM can not only be trained, but also that the effect can be broadened to new tasks.

OP 104

BUBBLES OF EMOTIONS. WHAT FACIAL FEATURES DO CHILDREN AT RISK FOR ANXIETY USE FOR EMOTION RECOGNITION

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Background and aims: Understanding the emotions conveyed by others' facial expressions is an important ability in our daily interactions with people. There is also a growing body of evidence that individuals with different social skills rely on different facial features. For example, adults with and without social anxiety relied on different facial features and facial regions to correctly recognize anger expressions. Surprisingly there is little work which investigate how this ability changes with age as a function of social skills.

Methods: Here we used a powerful "bubbles" technique to find facial features (e.g., eyes or mouth) and facial regions that are diagnostic for a given emotion. Briefly, a face image is partly revealed by a number of circular apertures that are randomly distributed on the image on each trial. Over successive trials, the bubbles converge on the features or regions that lead to correct emotion categorization. We tested 153 children (9-12 year olds) at different schools across the northeast UK, and 82 adults (20-40 years old) in the lab. Participants discriminated between anger, fear, disgust and sadness facial expressions on each trial. Parents filled out the parent version of the Spence Children's Anxiety Scale for their child and adults filled out the State-Trait Anxiety Inventory. These questionnaires were used to divide volunteers into low or high anxiety groups.

Results: We found that adults relied on eye and mouth regions more than children to categorize fear and sadness. Moreover, anxious individuals for both age groups also relied on these facial regions to categorize fear and sadness (and disgust to a smaller extent).

Conclusions: Overall, our findings highlight a shift with age and with increased anxiety to use eye and mouth regions for categorizing negative emotional expressions.

OP 105

PERSON VS. EMOTION: WHAT DRIVES DEAF CHILDREN'S ATTENTION IN A NEW MENTALIZING TASK?

Budai T., Kiss Sz. , Lénárd K., Lábadi B.

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Background and aims: In our everyday life we constantly attribute mental states to ourselves and to others. Neurotypically developed children are able to attribute mental states from the age of four, and from that age, they can pass the false belief task as well. In case of deaf children, there is a delay in the development of mindreading compared to hearing children of the same age.

Methods: In a previous study we used the modified version of the Eyes test (Schnell, 2015), where the six basic emotions are tested. The test contains six short stories paired with the six basic emotions. The children's task is to tell how the protagonist was feeling (mentalization task), and then to choose his or her eyes (emotion task). In this case, we found no significant differences between the performance of deaf and hearing children, because for deaf children, the person was more important than the emotion. That means that for example when the protagonist was the mother, they chose those eyes which met the criteria of a mother's eyes (female, older). In the current study, our hypothesis was that if we match the eyes to the stories' protagonists (e.g. boy protagonist: younger boy eyes with different emotions to choose from), deaf children would perform better because they can focus on the emotions only. We also tested if this change has any affect on the performace of hearing children as well.

Results: So far our results show that deaf children performed better on the new test, while there is no significant difference between the performance of hearing children on the two tests.

Conclusions: Until now we can say that for deaf children, who the information is coming from (eyes) is more important than the information itself (emotion).

OP 106

GENDER-BASED REASONING OF TOY CHOICE IN PRESCHOOL AND SCHOOL-AGED CHILDREN: THE CONTRIBUTION OF CATEGORISATION SKILLS AND PARENTAL GENDER NORMS

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University of East London, UK

Background and Aims: Key sources of early gendered experiences include parents, peers and toy-play. Not only do children explore more, and prefer, novel—yet same-sex-labelled—toys, even without explicit labels, children by age 4 (Martin, Eisenbud, & Rose, 1995) selectively generalise to same-sex peers their own toy-liking until at least the age of 9 years (Lam & Leman, 2003). This paper presents ongoing research that examines gender-based toy choice with two contributing variables: categorisation skills and parental gender norms.

Method: Children (currently N=110; 57F) aged 3 to 8 (M=4.85) years from pre- and primary schools were shown pictures of novel and gender-neutral toys and asked to indicate their own liking and infer about that of unfamiliar peers. Data on children's categorisation skills (sorting tasks; Lam, Guerrero, Damree, & Enesco, 2011) and parents' (N=88; 53F) gender language use and behavioural expectations (Bluestein, 2013) was collected.

Results (preliminary): On peers' novel-toy-liking, preschooler boys inferred that other boys would like the toys more than other girls would. Analyses comparing differences between children's own liking and inferences about same-gender versus other-gender peers (gendercentric reasoning/gendercentrism) found a gendercentrism x own gender x age group interaction: Preschool boys inferred that other boys would like the toys more similarly to how they themselves did. Controlling for children's age, the degree of gendercentric reasoning of preschoolers was associated with their parents' age and gender language use whereas that of school-aged children was associated with their categorisation skills.

Conclusions: The research has hitherto confirmed that children's use of gender group membership for decision making about new toy objects is evident by school-starting ages, but more prevalent in younger boys, and that both social and cognitive factors can play a role. Gender-based reasoning in childhood will be discussed with respect to social-learning and cognitive-developmental influences on gender development.

OP 107

CHILDREN'S RESPONSE TENDENCIES TO A HUMANOID ROBOT

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Background and aims: Two- and 3-year-olds are known to exhibit a yes bias to yes-no questions and this tendency disappears with age (e.g., Fritzley & Lee, 2003; Okanda & Itakura, 2008, 2010). Okanda and her colleagues have investigated whether children exhibit a yes bias to various interviewers (Okanda & Itakura, 2007; Okanda, Somogyi, & Itakura, 2012; Okanda, Kanda, Ishiguro, & Itakura, 2013) and reported that Japanese older children exhibit a yes bias only to a strange adults in a face-to-face interview (e.g., Okanda & Itakura, 2008, 2010). Okanda et al. (2013) also presented a robot and a human interviewers in videos and reported that 3- and 4-year-olds did not discriminate those (Okanda et al., 2013). In the present study, we examine whether 3- and 5-year-olds exhibit a yes bias to a humanoid robot in a face-to-face interview.

Methods: Participants were 15 three- and 18 five-year-old Japanese children. A humanoid robot, NAO (Aldebaran Robotics), asked children 24 yes-no questions pertaining to knowledge of familiar and unfamiliar objects (Fritzley & Lee, 2003, Okanda & Itakura, 2008). Children's mean response bias scores were obtained for familiar and unfamiliar objects based on their proportion of "yes" and "no" responses.

Results: A 2 (age) * 2 (familiaryty) mixed ANOVA revealed that 3-year-olds' response bias scores were significantly higher than that of 5-year-olds [$F(1, 31)=22.29$, $p < .01$, $\eta^2=.418$]. One-sample t-tests revealed that 3-year-olds exhibited a yes bias for both objects and 5-year-olds exhibited a nay-saying bias only for unfamiliar objects.

Conclusions: The present results indicated that a humanoid robot might be different from a human when it was presented in face-to-face interviews for 5-year-olds. However, we again confirmed that 3-year-olds exhibited a yes bias regardless of interviewers. Further study needs to investigate whether 4-year-olds exhibit any response biases to a face-to-face robot.

Saturday, August 31st, 2019

Papers 19 – Self-concept and Self-esteem in Children and Adolescents

Florina Hall 09:30 – 11:00

OP 108

GENDER STEREOTYPES IN SECONDARY-SCHOOL STUDENTS: ADOLESCENTS' SPONTANEOUS SELF-DESCRIPTIONS

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Society defines a range of traits and behaviors considered as acceptable, appropriate and desirable for boys and girls. Children and adolescents learn that boys and men are expected to express agentic behaviors and traits that reflect independence, assertiveness, and dominance, whereas girls and women are associated with communion, i.e. relational interdependence, sensitivity to others, and attractiveness. Gender stereotypes refer to generalized beliefs about one gender based on these expectations a society holds towards men and women. Previous research has shown that individuals not only apply gender stereotypes when describing others but also when describing themselves. However, most previous studies on self-stereotyping used questionnaires (e.g., Bem Sex Role Inventory and the Personal Attribute Questionnaire; Bem 1974; Spence et al. 1974) that are criticized by several authors and may have been outdated. Moreover, the vast majority of these studies were conducted with adult rather than adolescent participants. The aim of this study was to investigate adolescents' self-stereotyping regarding agency and communion using the method of spontaneous self-descriptions. A total of 3465 secondary-school students in Austria (49.8% girls and 50.2% boys) described themselves using three attributes in an online questionnaire. The students were second (N = 989, M_{age} = 11.36), third (N = 1185, M_{age} = 12.36) and fourth (N = 1291, M_{age} = 13.43) graders. We analyzed boys' and girls' self-descriptions using lexicographical analyses and subsequently coded the students' self-descriptions regarding agency and communion. Preliminary results indicate that girls include more communion-related attributes in their self-description than boys, whereas boys use more agency-related attributes than girls. In the next step, the difference between the self-descriptions of adolescents at different ages will be analyzed. The results of this study provide new insights into girls' and boys' self-stereotyping regarding agency and communion and build the basis for a new questionnaire assessing adolescents' gender stereotypes.

OP 110
CREATIVITY AND SELF-ESTEEM DEVELOPMENTAL TREND AND INTERRELATIONSHIPS IN PRIMARY SCHOOL

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Primary school years are important for the development of children's creative potential (see eg Charles & Runco, 2001; Claxton et al., 2005). Empirical evidence on its trend is somewhat inconclusive and subject to different interpretations (see Runco, 1999, 2014). Torrance, in this regard, highlights the so-called fourth grade slump of creativity around 8-9 years, in correspondence to the emergence of an increasingly logical and conventional thinking. The exercise of creative thinking, therefore, could lead to a distress, with potential development of anxious symptoms and lowering of self-esteem. The main aim of our study was to assess creativity trend during primary school years, with a clear expectation for a negative peak around the age of 8 (Torrance, 1968; Darvishi e Pakdaman, 2014). A second critical goal was to investigate on the correlation between creativity and self-esteem, supposing an indirect association.

384 children (189 boys) between 7 and 11 years (mean=8,63; SD=1,16) were administered: Incomplete Figures sub test of TTCT (Torrance Tests of Creative Thinking, Torrance, Sprini & Tomasello, 1989) assessing Fluency, Flexibility, Originality, Elaboration; CFSEI (Culture-Free Self-Esteem Inventory for Children, Battle, 1992, It. Adapt. Tressoldi & Vio, 1996) evaluating a global measure of Self-esteem and four sub dimensions: Personal, Interpersonal, Emotional, Behavioral.

The results suggest that during primary school, while the scores Elaboration increase, the scores of Originality decrease. The negative correlation of Originality with global Self-esteem and Interpersonal sub-scale and the positive correlation between Elaboration and Emotional sub-scale suggest that "divergent" children feel less adequate in social relationships, otherwise, "convergent" children feel more emotionally self-confident.

These results stimulate a deeper reflection about the role of the educational system in fostering or inhibiting the development of creativity and promoting children's wellbeing.

OP 111
INVESTIGATING THE SELF-CONCEPT, SELF-ESTEEM AND MENTAL WELL-BEING OF INTELECTUALLY GIFTED ADOLESCENTS COMPARED TO TYPICALLY-DEVELOPING PEERS

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Giftedness has been described as complex and developmental situation affects the socio-emotional domain and the inner self of the gifted persons. Levels of self-concept, self-esteem and mental well-being were examined among 26 intellectually gifted adolescents in relation to a comparison group of 26 typically-developing peers with a mean age of 13.6 years. All participants belonged to middle class families. Intellectually gifted adolescents' were selected after an assessment on WISC-III[GR] (IQ>120). The Behavioral Academic Self-Esteem Scale (BASE), the Self-Concept Scale for Adolescents (PATEM-IV) and the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) were used in order to determine the psychological makeup of intellectually gifted adolescents' who are not attend gifted education services. The group identified as intellectual gifted scored significantly higher on 3 of 5 behaviorally academic self-esteem scale (BASE) (p< .01) and on the general self-concept scale (p< .05). The comparisons on self-concept, self-esteem and mental well-being scales provide evidence that intellectual gifted adolescent boys' and girls' responses do not differ from one another significantly. Furthermore, the data reveal that a common myth held by many that gifted adolescents' are more psychological vulnerable and tend to score lower in mental well-being because of their advanced cognitive abilities is undocumented by the research findings. Correlation analysis indicates strong relationship between self-concept and self-esteem for the intellectually gifted group (p< .01) and for the most of the subscales. Recommendations for psychological practice and future research needs will be discussed.

OP 112

ACHIEVEMENT GOAL ORIENTATION PROFILES AND DIGITAL ENGAGEMENT IN GRADES 8 TO 9

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Achievement goal orientation profiles have been widely studied before; still, person-oriented longitudinal studies shedding more light on the stability and change of goal profiles over time are scarce. Previous studies have also indicated that students' goal orientations are related to their academic achievement and well-being; however, less studies have examined the associations between goal orientations and digital engagement, even though it might be informative, given the emphasis on utilizing digital technologies in schoolwork. Thus, the aim of the current study was to investigate achievement goal orientation profiles, transitions between these profiles from Grades 8 to 9 and how students with different goal orientation profiles differ considering their digital learning preference, wish for digital schoolwork, schoolwork impairment related to internet use, and grade-point average (GPA).

The sample included 557 (60% girls) Finnish students from Grades 8 to 9 (age ~15 - 16 yrs.). Students' achievement goal orientations, digital engagement, and GPA were assessed with self-report questionnaires. Latent profile and latent transition analyses were used to investigate goal orientation profiles and profile stability. Profile differences were investigated by ANOVAs.

Four groups with different achievement goal orientation profiles were identified: mastery-oriented, success-oriented, disengaged, and indifferent. Most of the students remained in a similar group over time. Mastery- and success-oriented students had higher GPA than other students; however, mastery-oriented students had significantly lower schoolwork impairment related to internet use than success-oriented students. Success-oriented students had higher digital learning preferences in Grade 8 and higher wish for digital schoolwork in both grades than mastery-oriented students.

Overall, achievement goal orientation profiles and transitions between the profiles in the current study were similar compared with previous studies. The study provided new insights into relations between goal orientation profiles and digital engagement; for example, students striving for multiple goals (i.e., success-oriented) seemed to wish for more digital schoolwork.

OP 113

SELF-CONCEPT AND SOCIAL COMPARISON DURING CHILDHOOD

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The self-concept is a key dimension for the child development. A large number of studies have highlighted its implication in well-being and mental health. Research has been mainly focused on the social influences that shape children's conception of self. However, children are also producers of their own development (Lerner et al. 2013). They interpret and filter information from their partners. They actively compare themselves to others, and select positive or negative feedback and comments on themselves in order to build their self-concept (Boissicat & al., 2012; Festinger, 1954; Suls & Wheeler, 2002). This study examines the link between children's self-concept and social comparison with peers along four dimensions: identification (upward and downward) and contrast (upward and downward).

The sample included 1079 children (51.35% girls; 6 to 12 y-o) enrolled in elementary school (43 classes; 2nd to 5th gr.). Self-concept was measured using revised Harter's psychometric scales, translated and validated (Bettayeb, 2017; Harter, 2012). Social comparison processes are measured using the social comparison questionnaire for children (Bouffard et al., 2014).

Preliminary analyses showed grade and gender differences in both self-concept and social comparison processes. Multiple linear regression results indicated that five out of six dimensions of self-concept (scholastic, social, athletic, physical, and global self-worth) were related with social comparison, positively for upward identification and downward contrast, negatively for downward identification and upward contrast. Behavioural dimension of self-concept was an exception, only identification (upward and downward) has a significant effect.

These results enrich former studies on the link between social comparison and scholastic dimension of self-concept. They underscore the weight of social comparison on most of self-concept dimensions and enlighten the process of its influence. This study will contribute to deepen our understanding of the processes underlying the development of the self-concept and offer some path for intervention within the school system.

Papers 20 – Adolescent Adjustment in Context

Kozani Hall 09:30 – 11:00

OP 114

ADOLESCENT GAMBLING: TESTING THE ASSOCIATION BETWEEN SELF-EFFICACY BELIEFS AND GAMBLING BEHAVIOR ON A SAMPLE OF ITALIAN STUDENTS

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Nowadays gambling and Gambling Disorder (DSM -5) among adolescents represent serious concerns in public health. Although in the gambling literature self-efficacy has been examined in the context of treatment of pathological gambling, we hypothesize that it is also crucial as a protective factor. Our research is part of the project *"Game Over #insertinfo"* financed by Regione Lombardia, with the municipality of Busto Arsizio as leading institution and the University of Insubria among the partners. The aim of our work was, in addition to investigating gambling involvement and pathological gambling among Italian adolescents aged 14-19, to explore the association between self-efficacy and gambling in the context of the Social Cognitive Theory (Bandura, 1986).

The data were collected on a convenience sample of 560 students (M age = 16.23, SD age = 1.64) from two high schools in Busto Arsizio. The subjects completed (1) a questionnaire about their gambling knowledge and experience; (2) the Italian validation of the South Oaks Gambling Screen Questionnaire Revised for Adolescents (SOGS-RA); and (3) the Scale of Perceived Social Self-Efficacy, the Scale of Perceived Scholastic Self-Efficacy and the Scale of Perceived Self-Regulatory Self-Efficacy, which all have been validated for Italian adolescents.

The statistical analyses show that gambling behavior (assessed using SOGS-RA) is negatively correlated with perceived scholastic self-efficacy (r -0.102, p 0.05) and with perceived self-regulatory self-efficacy (r -0.172, p 0.01). However, although gambling behavior does not seem correlated to perceived social self-efficacy, this dimension could have an indirect effect on gambling behavior since the Scale of Perceived Social Self-Efficacy is positively correlated with the Scale of Self-Regulatory Self-Efficacy (r +0.092, p 0.01) and the Scale of Perceived Scholastic Self-Efficacy (r +0.362, p 0.05).

These results suggest that self-efficacy should be taken into greater consideration in future research on adolescent gambling and in problem-gambling prevention programs.

OP 116

BE MINDFUL AND ADJUST TO UNIVERSITY

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First year of university is a new and stressful situation that students have to face. This transition period is perceived both exciting and frightening. Although it would be difficult to adjust university life for freshmen, there has been limited research examining the role of trait mindfulness and associated factors in supporting freshmen's university adjustment. The aim of present study is to explore the association between trait mindfulness and social adjustment to university via emotion regulation, through an investigation using moderated mediation model.

Turkish freshmen between 18 and 25 years (female = 158; male = 72) completed Mindfulness Attention Awareness Scale, Emotion Regulation Questionnaire, University Life Scale and demographic form. Bivariate correlations between all variables were conducted. Then, hierarchical regression analysis was conducted to explore the relationship between social adjustment to university, trait mindfulness and emotion regulation controlling participants' gender and income. Mediation (model 4) and moderated mediation (model 7) analysis was conducted in SPSS using by Hayes's (2013) PROCESS models.

Results of the study showed that both trait mindfulness and cognitive reappraisal subscale of emotion regulation were significantly associated with freshmen's social adjustment. Freshmen's with higher trait mindfulness and cognitive reappraisal skills also showed better social adjustment to university life. Additionally, results indicated that cognitive reappraisal mediated the relationship between mindfulness and social adjustment, and also the relationship between mindfulness and social adjustment through cognitive reappraisal was moderated by gender. For females, greater cognitive reappraisal predicted higher social adjustment.

The findings indicate that freshmen's trait mindfulness and emotion regulation are key factors associated with social adjustment to university. Also, cognitive reappraisal explains the links between trait mindfulness and social adjustment. The strength of the indirect effect of mindfulness and social adjustment via cognitive reappraisal is stronger for female students.

OP 118

THE ASSOCIATION BETWEEN MATERNAL PSYCHOLOGICAL CONTROL, ADOLESCENT ADJUSTMENT PROBLEMS, AND LEGITIMACY BELIEFS ABOUT PSYCHOLOGICAL CONTROL: A MODERATED MEDIATION MODEL

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Research consistently demonstrated that higher parental psychological control (PC) is related to higher internalizing and externalizing problems. However, there is scarcity of research regarding intervening role of adolescents' interpretations of controlling behaviors in these relationships, and also little is known about which factors affect adolescents' interpretations of PC. Therefore, this study's aim was to (1) investigate the mediating role of adolescents' negative interpretations of maternal PC (e.g., as an indication of intrusion to their life) in the association of PC with adolescent anxiety/depression and rule-breaking behavior, and (2) the moderator role of adolescents' legitimacy beliefs about PC in this relationship. A total of 689 adolescents (M_{age} = 13.95, SD = .94) and their mothers (M_{age} = 40.82, SD = 5.11) were recruited. Adolescents reported maternal PC, interpretations of PC (via vignettes), and legitimacy of PC (via vignettes). Mothers reported adolescent anxiety/depression and rule-breaking behavior. We performed structural equation modelling with residual centering approach to test our moderated mediation model. Results indicated that interpretations of PC partially mediated the positive relationship between PC and anxiety/depression but not PC and rule-breaking behavior. Besides, legitimacy beliefs about PC moderated this relationship: the positive relationship between PC and negative interpretations of PC was stronger for adolescents with higher legitimacy beliefs compared to those with lower legitimacy beliefs. These findings imply that (1) when PC is higher, adolescents' interpretation of PC is more negative and, in turn, results in adolescent anxiety/depression, and (2) although both groups of adolescents (i.e., lower vs. higher legitimacy beliefs) have more negative interpretations of PC at higher levels of PC, the latter group is more sensitive to the PC level in terms of negative interpretation. Overall, current findings help us to understand why some adolescents are more/less likely to develop internalizing problems (at least depression) in response to maternal PC.

OP 119

MENTAL HEALTH AMONG YOUTH IN NORWAY: THE ROLE OF DEVELOPMENTAL ASSETS

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Background and aims: With the growing elderly population and the declining working class proportion, youth in Norway constitute an immense source of human resources that can be harnessed for societal development. However, increasing mental health problems among the youth could change this societal asset into a liability. Consistent with Positive Youth Development (PYD), this change does not have to happen if youth are supported with the necessary developmental assets in their contexts. Indeed, PYD proposes that an alignment between youth strengths and contextual resources are developmental assets (internal and external, respectively) that can promote thriving, but also hinder destructive development. In the present study, the influences of internal and external assets on mental health indicators (sadness and suicide attempt) are examined.

Methods: A cross-sectional data on items measuring internal and external assets as well as sadness and suicide attempt were collected from 591 high school students in Norway (N = 591, 55% girls).

Results: Confirmatory factor analysis on the four composite variables that assessed internal assets and another four that assessed external assets showed adequate model fit: x2 [18, N = 591] = 58.168, p < .001, RMSEA = .061, CFI = .972, TFI = .956. Results from SEM analysis that were used to examine the relationship between internal and external developmental assets on sadness revealed a negative and significant association between internal assets and sadness even after adjustment for age, sex and parents' educational background (standardized coefficient = -0.33). In contrast, a negative and significant association was observed between external assets and suicide attempt (standardized coefficient = -0.29).

Conclusions: Youth who report more developmental assets are also likely to report better mental health. Accordingly, policies and programmes that ensure that youth have access to the necessary developmental resources will also be facilitating youth participation in societal development.

OP 282

IDENTITY PROFILES AND SOCIO-DIGITAL PARTICIPATION AMONG LITHUANIAN 13-17 YEARS ADOLESCENTS

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In response to increasingly challenging societal circumstances to form a strong, healthy and empowering identities is a critical important developmental task for youth (Mastrotheodoros & Motti-Stefanidi, 2017). Nowadays digital and interconnected online world offers for young people new possibilities to explore different values, lifestyles, ideas and make decisions about their identities. However, there is no clear answer if new online opportunities and socio-digital participation are helping adolescents explore their future options and make meaningful and stable identity commitments. Mannerström et al. (2018) research has shown that identities profiles are related to high school students' digital engagement in Finnish context. We aimed to investigate how identities profiles are associated with socio-digital participation among Lithuanian early and middle adolescents. This study contributes to the existing literature on digital world shaping identity development by analyzing identities processes not at global level, but in different domains - ideological (i.e. education) and interpersonal (i.e. friendship). We proposed that identity development in friendship and education can have different associations with online activities. Three-factor model of identity formation (commitment, in-depth exploration and reconsideration, Crocetti, Rubini, & Meeus, 2008) was used. Socio-digital participation was operationalized as type of internet activities, risky on-line behavior, excessive internet use and knowledge about safety online. Participants were 522 (66.3% females) adolescents aged between 13 and 17. Latent profile analyses revealed that the five identity statuses emerged in interpersonal domain and the four identity statuses in ideological domain. Findings revealed that patterns of association between identity profiles and socio-digital participation depends on identity context domain.

Saturday, August 31st, 2019

Papers 21 – Cognitive Processes I

Edessa Hall 09:30 – 11:00

OP 120

EXPLORING THE EFFECTS OF A MUSICAL PLAY INTERVENTION ON YOUNG CHILDREN'S SELF-REGULATION

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Background and aims: Self-regulation skills are considered important for lifelong functioning. Most importantly, self-regulation can be strengthened with intervention, especially before the age of 7. Observational research proposes that play, specifically musical play, enables self-regulatory development. Despite this, internationally, there are reports that both music and play are side-lined from the school curriculum.

We propose the introduction of a musical play intervention in primary schools as a route for self-regulatory development. This project aims to examine the musical play intervention's impact on children's self-regulation.

Methods: We adopted a quasi-experimental, pre-test and post-test control-group design, with 150 children-participants aged 6. The children were split into 3 groups (N=50 each): the intervention group, control group A, and control group B.

Initially, all children's self-regulation was assessed on two validated instruments: the CHILD checklist (Whitebread et al., 2009) and the Train Track Task (Bryce & Whitebread, 2012). The experimental group then participated in the intervention consisting of 15 musical play sessions. The Experimental and Control Group A attended the same number of music lessons (2/week), but the control group's music lessons continued as normal, following the curriculum. Control group B had less frequent music classes (1/week). After the intervention, children's self-regulation was re-assessed.

The children's gender, age, family socioeconomic status (SES) and attendance of extra-curricular music lessons were used as control variables.

Results: We hypothesise that the experimental group will show a steeper increase in their self-regulatory development than the control groups. This project is currently at the data collection stage, which will be completed in April 2019. We expect the results in June 2019, in time for the conference.

Conclusions: We hope that this study's results will inform policy and practice, but also the extant literature, since the field is lacking in rigorous experimental research examining the effects of musical play.

OP 121

THE EFFECT OF ENACTIVE EXPERIENCE AND SYMBOLIC REPRESENTATION IN EMERGING CARDINAL KNOWLEDGE

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The study presented in this communication examines the impact of enactive experiences with concrete representations of quantity (objects and pictures) on 3.5- and 4-year-old children's performance when building collections of 1-6 items. We adapted the Give-N task including three representations of quantity: sets of bottle caps, cards with dots and spoken number words. Children were assigned to one of two conditions, manipulation and observation; the main difference between them was whether enactive experiences with the caps and pictures were encouraged or not. The results show that 3.5-year- olds' performance when producing sets of size 3 was clearly opposed by condition, with children succeeding with caps only in the observation group. In contrast, manipulation enhanced 4-year-olds' performance when producing sets size 4 with all symbolic modalities. Emerging cardinal knowledge seems to be influenced, not only by the kind of representations used by children, but also by their active involvement during the task.

OP 122

READ IT, NAME IT AND MEAN IT: EFFECTS OF WORD SIMILARITY AND TASK DEMANDS IN PROCESSING TRANSLATIONS IN GREEK AND ENGLISH

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Second language learning requires fast and effective processing of lexical (phonological, orthographic) and semantic properties of translations. Previous research with similar (English-Spanish) and different (English-Chinese) orthographies has shown that the degree of lexico-semantic similarity (cognate status) affects the speed of processing word representations: as similarity increases words are processed faster. In three experiments we examined the effects of cognate status with two partially similar orthographies, Greek and English, with bilingual children (N =128) late learners (10-11 years old) of second language (either Greek or English).

In all experiments, stimuli were cognate and non-cognate translations where either the prime was in the dominant language (L1) and the target in the non-dominant (L2), or vice versa. The control baseline involved unrelated word primes. Mixed-factorial ANOVAs were used to analyse reaction times (RTs). Experiment 1 (N= 42) employed a masked priming lexical decision task. Significant priming was observed for cognate translations with L1 primes and L2 targets only. Orthographic similarity was a significant predictor of the priming effects. In Experiment 2 (N= 42), with a masked priming semantic categorisation task, significant priming effects were observed for cognate translation non-exemplars in the L2 - L1 direction only, whereas non-cognates did not show any effects. There were no effects of orthographic or phonological similarity. In Experiment 3 (N =44), with a masked priming naming task, significant translation priming was observed for cognate translations only and only in the L1-L2 direction. Phonological similarity predicted significantly priming effects.

Results from the three experiments highlight the importance of considering task demands and the interaction with cross-language word similarity for bilingual word processing models (BIA+, DevLex) while taking into account the effects of the L2 teaching method. A significant implication is the selection of stimuli in bilingual studies from appropriately developed psycholinguistic databases (e.g. HelexKids, Bilex-Kids).

OP 123

EPISODIC MEMORY: ESTIMATION OF DURATION IN TERMS OF ACTION SPEED

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Perception, speed, temporal duration, recall

This research constitutes an attempt to extend Burt's original study (1999) concerning the relationship between the perceived speed of an event and the duration attributed to it. Our aim was to investigate this relationship in conditions of immediate and late recall.

Following Burt's methodology, a pilot study was initially conducted in which 60 undergraduate students evaluated the suggested speed of 38 action verbs on a 100-degree scale. Based on their average estimates, verbs were ranked in three speed categories: slow, medium and fast. From each category some verbs were selected in order to be included to one of the three corresponding versions of a short text describing a bank robbery.In the main study, participated 149 undergraduate students divided into three groups. They read a version of the text and then they were asked to evaluate the robber's action speed and the duration of the incident. They had also to answer a questionnaire about some characteristics described in the text. Half of the participants completed on line the same questionnaire the following day, too.

The results showed that, in accordance with Burt's study (1999), action verbs in a text affect the reader's perception of the action's speed. Furthermore, it is shown that the latter is linked to an inverse relationship with the perception of the duration of the event, irrespective of (a) whether the evaluation is late or is attempted directly and (b) the accuracy of the recall. Further analysis has shown that this relationship between perceived speed and duration is evident especially in extreme conditions of speed (fast and slow). The findings are discussed with regard to the eyewitness's memory, its significance and its implications.

OP 125

COGNITIVE PROCESS EXPAINING THE EXPANATORY COEXISTENCE IN LATE CHILHOOD AND EARLY ADOLESCENCE

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The current study aimed to elucidate the cognitive processes activated in the explanatory coexistence of both scientific and intuitive explanations in the same mind in late childhood and early adolescence. Being familiar with two explanations for the same phenomenon individuals under the pressure of time experience interference of the intuitive explanations. Although scholars interpreted this interference in terms of the dual process theories (DPT) and as the recruitment of Type 2 analytical thought to detect the conflict, this interpretation has never been tested. A typical method used within the DPT framework to reveal whether individuals activated the Type 2 processing to solve a task is to examine the belief bias, namely, their tendency to assess the conclusions of deductive syllogisms by their empirical truth (Type 1 processing) and not by their validity (Type 2 processing). The transition from the late childhood to the early adolescence is the period that many critical cognitive changes occur, while in schools, students are familiarized with the scientific concepts. We hypothesized that it would be more likely for the early adolescents (than to children) to recruit Type 2 processing in judging the validity of deductive syllogisms that, although valid, challenge the empirical truth. Twenty-four 10-years-old and 12-years-old students were examined in six Deductive syllogisms on concepts of school science, in front of a Tobii Eye-Tracker, to record the eye-movements. Half of the syllogisms had a conclusion incompatible with intuitive beliefs. Beyond the accuracy and reaction time in responses, the fixation and duration count and eye movement paths were recorded. No differences between the two groups were found on the compatible syllogisms. However, compared to children, early adolescents reviewed more than once the incompatible syllogisms, making more and longer fixations, indicating the conflict detection and the activation of the Type 2 reasoning.

Saturday, August 31st, 2019

Papers 22 - Cyberbullying

Naoussa Hall 09:30 - 11:00

OP 126
THE RELATION BETWEEN SCHOOL BULLYING AND CYBERBULLYING: RISK AND PROTECTIVE FACTORS IN SCHOOL CONTEXT

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Background and aims: Previous research indicates high comorbidity between traditional and cyber- forms of bullying. Recently, prevention and intervention programs for traditional bullying at schools are applied for cyberbullying too, recognizing their high correlation and potentially the importance of school-related factors in explaining both phenomena. However, there is scarce empirical evidence on the role of school-related parameters in the relationship between traditional and cyber-bullying. Objective: The study aims to test (1) the effect of being involved in traditional bullying in the past on current cyberbullying, and (2) the potentially mediating or moderating role of school-related factors (i.e., school climate, teacher-student interaction and quality of peer relationships) in the relationship between conventional and cyber-bullying.

Method: A sample of 917 students aged 15-18 years old in Cyprus completed the PECK, the QTI, the SCS-B and the IPPA, and rated the frequency of past involvement in conventional bullying and victimization. We used AMOS 24.0 to run structural equation models and test the study hypotheses.

Results: Negative school climate, as defined by the low willingness to report bullying and seek help and alienation from peers were the only school-related factors that mediated the relationship between involvement in forms of conventional bullying in the past and cyber- forms of bullying at present.

Conclusion: The findings are discussed in light of theoretical and practical implications: there are common grounds on the mechanisms behind conventional and cyber forms of bullying, which may increase the potential of programs applied in schools that aim on cyberbullying reduction.

OP 127
PREVALENCE OF THE BEHAVIORS OF SEXTING: GENDER AND AGE DIFFERENCES

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Background and aims: Sexting is an emerging phenomenon that stands out because of the possible consequences. It has become another way for adolescents to express their sexuality, but there is still no consensus regarding its definition. This study defines sexting as the sending, receiving or forwarding of sexually suggestive or explicit images, messages or videos through a technological device; and it is proposed to analyse the four behaviour that can take place in sexting in order to know the prevalence of each behaviour and if there are differences according to gender and age.

Methods: The sample consisted of 3417 students (48.3% girls) between 11 and 19 years old (M= 13.70, SD= 1.32). Four direct questions were used on sexting (sending, forwarding, receiving and receiving sexts via an intermediary). Descriptive analyzes were performed, the Chi square test was used to evaluate gender differences and Student's T of independent samples to evaluate differences according to age.

Results: The data reveal that 8.4% of the students have ever sent sexual content, 9.5% have forwarded it, 21.6% have received it directly from the content issuer and 28.8% have received it via an intermediary. Significant differences have been found in the four behaviours according to gender [sending: $x2(1, N=3377)=5.58$, $p= .18$; receiving: $x2(1, N=3371)=30.64$, $p<.001$; forwarding: $x2(1, N=3375)=34.72$, $p<.001$; receiving via an intermediary: $x2(1, N=3376)=11.18$, $p= .001$]. Differences have also been found according to age in all forms of sexting (sending: $t(343.016)= -12.402$, $p<.001$; receiving: $t(1130.953)= -11,426$, $p<.001$; forwarding: $t(390.206)= -10,562$, $p<.001$; receiving via an intermediary: $t(1735.238)= -14,115$, $p<.001$).

Conclusions: Sexting is evidenced. Passive behaviors (reception and reception via an intermediary) are more frequent than active ones (sending and forwarding). Sexting is more practiced by boys and older ages. However, it cannot be considered as a normative practice. Educational psychoeducational implications will be discussed.

OP 128

THE ROLE OF FAMILY DYNAMICS, SOCIAL SUPPORT AND EMOTION REGULATION IN CYBERVICTIMIZATION AND CYBERBULLYING PERPETRATION

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Background and aims: There is a growing need for evidence based prevention/intervention programs against cyberbullying thus the examining of the phenomenon has become more and more important in the past few years. Our aim was to explore the effects of family dynamics (cohesion, adaptability, communication and satisfaction), social support (from family, friends and significant other) and difficulties in emotion regulation on cyberbullying.

Methods: 159 high school students (75 males, mean age=16.13, SD=1.38) participated in the study. The following questionnaires were used: Difficulties in Emotion Regulation Scale (Gratz & Roemer, 2004), FACES IV (Family Adaptability and Cohesion Evaluation Scale, Olson, 2011), European Cyberbullying Intervention Project Questionnaire (Del Rey et al., 2015) and Multidimensional Scale of Perceived Social Support (Zimet et al., 1988).

Results: Linear regression models were tested to examine which variables have an effect on cybervictimization and cyberbullying perpetration. In case of cybervictimization, disengaged family cohesion, chaotic flexibility as a family adaptation form, lack of social support from friends and family, and limited access to emotion regulation strategies had a significant effect. Further on, chaotic flexibility and problematic family communication, lack of social support from friends, lack of emotional clarity and limited access to emotion regulation strategies have a significant effect on perpetrating cyberbullying.

Conclusions: According to our results social support from friends is a protective factor against cyberbullying. Further on, family cohesion, adaptability and communication play an important role too, this can be an explanation why both cyberbullies and cybervictims have problems with emotion regulation. Our results show the importance of family, friends and emotion regulation in cyberbullying, thus future prevention and intervention programs should focus on teaching adolescents how to help their peers, how to adaptively regulate their emotions and involve the family dynamics too.

OP 129

CYBERBULLYING, SEXTING AND ONLINE SEXUAL VICTIMIZATION IN GREEK UNIVERSITY STUDENTS: PREVALENCE, CHARACTERISTICS AND PSYCHOLOGICAL EFFECTS

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Communication online and via phone can take various forms, from exchanging information with peers to online harassment, cyberbullying and Online Sexual Victimization (OSV). Cyberbullying, sexting and OSV can have in serious consequences to their victims including increased levels of anxiety and depression, and can lead to social isolation. The above phenomena have been extensively studied in in school aged population but there are no studies so far in university students in Greece. The aim of this study is to explore the prevalence of cyberbullying, sexting and OSV in adult university student population and identify the effects they can have to the psychological wellbeing of the victims. Data collection was conducted using online self-report questionnaires. Eight hundred and twenty three university students (72% women), aged 17-55 (Mean age= 26.12; sd= 25), participated in the study. The students were randomly selected from different Greek Universities. Self- report questionnaires; including the Greek versions of ECIPQ to measure cyberbullying, the Sexting Questionnaire to measure sexting, the Online Sexual Victimization Questionnaire for OSV, and the PHQ- 9 and STAI-Y to evaluate stress and axiety. Results showed that participants are using mobile and electronic devices in an average of 4 hours a day to communicate with others. They are engaging in sexting (72.8%) but the incidents of online sexual victimization (OSV) are not often (12.4%), following the international findings in the field. The implication of cyberbullying is relatively low (18.7%). Female and gender fluid individuals reported more incidents of cyberbullying and OSV in contrast to male participants. Being cyberbullied or harassed online is associate to highs levels of anxiety.

OP 130

PREDICTORS OF TEACHERS'ACCURACY IN IDENTIFYING BULLYING AND CYBERBULLYING - A PILOT STUDY

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Assessing students' academic achievement is a well-understood everyday task for teachers. Identifying social-emotional problems of students, especially (cyber)bullying and (cyber)victimization, is much less researched. To ensure students' safety and well-being, teachers have to identify students involved in bullying and cyberbullying precisely. Furthering our knowledge about teachers' accuracy in identifying bullying and cyberbullying and about predictors of their judgement is theoretically and practically relevant.

Utilizing signal detection theory, we examined influences on teachers' accuracy regarding students' involvement in bullying and cyberbullying.

Altogether, 172 students (M_{age} = 14.37 years, SD_{age} = 1.21; 49.4% girls) from grades 7 to 10 participated in this study along with their teachers (n = 10, M_{age} = 37.38, SD_{age} = 7.99; 40% female, 50% male, 10% not indicated). Teachers read a definition of offline and cyberbullying and rated each student globally regarding offline victimization, offline bullying, cybervictimization, and cyberbullying. Students reported their involvement on 8-item-scales assessing specific behaviors. Predictors of teachers' judgements were students' age, gender, language spoken at home, norms regarding reactions to cyberbullying, justice sensitivity, and general trust.

The results show that accurate assessments by the teachers were predicted mainly by the level of target behavior, but also younger age, speaking another language at home (cybervictimization), and general trust (cybervictimization). False assessments were predicted by levels of target behavior, but also by general trust (offline bullying), German language at home (cybervictimization), and low levels of norms endorsing staying out of cyberbullying incidents (cybervictimization). Results of sensitivity analyses show high rates of correct rejection, but low rates of correct identification of (cyber)bullies and (cyber)victims. On average the teachers had very low sensitivity ($M_{d'}$ = -0.01, $SD_{d'}$ = 0.59) accompanied by a high detection threshold (M_c = 1.46, SD_c = 0.61). This indicates that teachers need to be better educated about cues and biases regarding these phenomena.

OP 131

CYBERBULLYING AND ONLINE AGGRESSION AMONG RUSSIAN ADOLESCENTS

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Adolescence is a period of high vulnerability to the different types of risks, and the role of the Internet increases day by day in the modern society, so the cyberbullying problem also increases. There are very few information on cyberbullying extension in Russian-language internet, partly concerning the adolescents, but its harm is heavy, so we tried to start supplying this gap and to evaluate the frequency and characteristics of cyberbullying experience among Russian adolescents.

We used a modified version of the "Cyberbullying and Online Aggression Survey Instrument" (2015 version) by S. Hinduja and J.W. Patchin. The adolescents' experience in three roles - as a bystander, a bully, and a victim in the cyberbullying situations they meet with was examined. We also were interested in the web-platforms where cyberbullying situations predominantly take place.

Our sample comprised 294 adolescents aged 11-16 (Mage=13.3, 54% were female), learning at five Moscow regular schools.

The results show that only 28.4% of the respondents have never meet the cyberbullying situations, while 48.3% of them have met with them more than one time. The predominant forms of cyberbullying they meet with are rude and offensive comments and pictures, and rumors. The most mentioned platforms for is situations are social networks, especially Vkontakte and Youtube. 35.5% of the respondents confirm their experience of bullying, 29,4% - of being bullied. The respondents were also asked if they accounted cyberbullying as a problem or as a norm, and the results show that adolescents' tolerance towards cyberbullying significantly increases with aging.

These results demonstrate a high frequency of meeting with cyberbullying situations among the adolescents. At the same time the ways of treating with it (stopping it, not initializing it, considering it as unallowable form of behavior) are not yet developed and not expanded as it is needed nor among adults neither among adolescents. This research allows discussing cyberbullying prevention development basing on the adolescents' experience.

Saturday, August 31st, 2019

Keynote Lecture 4

Olympia Hall A & B Hall 11:30 – 12:15

KL 4
USING THE SCIENCE OF CHILD SOCIAL-EMOTIONAL DEVELOPMENT TO INFORM PRACTICE

Malti T.

University of Toronto, Canada

Social-emotional development sets the stage for kindness, learning, and mental health across childhood and the lifespan. How can we use knowledge on the mechanisms of development to nurture social-emotional growth? This talk will provide new insights into research on child social-emotional development, and how this information can be used to advance contemporary psychological intervention practices. Drawing upon a theoretical framework to study social-emotional processes from a developmental perspective, I outline three core components of social-emotional development: concern for others, self-conscious emotions, and emotion regulation. Building upon this model, I will provide an overview of empirical findings on the development of these social-emotional processes across diverse samples. Next, I will highlight associations between these social-emotional capacities and behavioural health outcomes, both cross-sectionally and across time. On the basis of these findings, I will elaborate how information on normative social-emotional development can inform interventions designed to address the needs of children exposed to adversity. Lastly, I will elaborate on the translation of this knowledge into assessment tools and tailored practices aimed at nurturing social-emotional capacities in every child, everywhere.

Saturday, August 31st, 2019

Invited Symposium 4

Olympia Hall B 13:15 – 14:45

IS 04
DOES DEVELOPMENTAL PSYCHOLOGY HAVE A FUTURE?

Leman P.

King's College London, UK

Developmental psychologists chart the processes by which an infant, child, adolescent or adult acquires knowledge. But what are these processes developing *towards?* As adults, many of us appreciate that we do not know everything. And research from across the field - cognitive, social, clinical - demonstrates that what counts as knowledge is, even for adults, often a rather uncertain matter or that what we understand or know can often be inaccurate or open to debate.

This invited symposium will tackle two seemingly different issues but which are, in practice, highly inter-related. First, how does developmental psychology theorise the future in the developmental process of change? What is the infant, child, adolescent or adult developing towards? Such themes are arguably evident in the classic epistemological approach of Piaget, which a focus on the developmental significance of autonomous thought. They are possibly less evident in work from a Vygostkian perspective where development is presented as more a process of socialisation and internalisation of external norms and rules. Typically, recent approaches in the field do not consider questions of epistemology or "the future" in development, are grounded in a simple socialisation approach or a view of development as the internalisation of a static and immutable reality that is external to the child.

A second, perhaps more prosaic issue, concerns the future of the field itself. What is the future for developmental psychology? The field faces many challenges in terms of moves towards a more open science, and against a backdrop of increasing distrust of science and expertise, particularly as it relates to personal issues such as education and parenting. This second set of issues relates to the first in that there is arguably a dearth of recent meta-theory about processes of developmental change: much contemporary work focuses on applying insights from other disciplines and sub-disciplines (e.g., neuroscience, cognitive and social psychology) to explain age differences or the acquisition of adult psychological functions, but does not conceptualise change itself in the context of broader child development.

The symposium brings together leading developmental psychologists to discuss and debate these topics, in a paper presentation format that will allow plenty of space for panel and audience discussion.

IS 04 – 1

SPECIFICITY AND COMMONALITY: COMPLEMENTARY PRINCIPLES OF DEVELOPMENT

Malti T.

University of Toronto, Canada

What is the future for developmental psychology? In this talk, I will discuss how the specificity and the commonality principles of development may help us shape the pathway of our discipline. Developmental processes are inherently complex, vastly heterogeneous, and all too often nonlinear. This requires attention to specificity and an in-depth exploration of what is specific to history, culture, and unique experiences in development. Yet, developmental processes can also be simple, relatively homogenous, and even predictable. This suggests some commonalities in child development across time and space. What are the implications of this seeming contradiction? Is it possible to identify themes, dynamics, and mechanisms of development without foolish confidence? Here I argue for the complementary nature of the specificity and commonality principles, and I show how their recursive nature can inform a mechanistic understanding of development. Next, I will use three comparative perspectives to illustrate this idea: cross-species, cross-nations, and cross-individuals. Lastly, I will show how this perspective on diversity in development provides a promising venue for the next-generation of developmental research and practice innovations.

IS 04 – 2

CHILDREN AS INVESTIGATORS OF "POSSIBLE WORLDS": SOME SUGGESTIONS TO UNDERSTAND PSYCHOLOGICAL DEVELOPMENT

Iannaccone A.

Université de Neuchâtel, Switzerland

In this contribution I would like to show the relevance of a narrative approach to understand the psychological development. In some of his last works, Bruner presented the child's interpretative activity of reality as a sort of continuous elaboration of narrative versions of the world. This "narrative turn is somehow the result of his 50-year awareness into how the mind, in the process of perceptual and conceptual construction of reality and sense making, can actively go beyond the given information (Bruner, 1973). According to this standpoint, the Bruner version of "possible narrative worlds" seems to offer an interesting explanation of the child psychological development as a gradual evolution of highly complex imaginative activities in which the child explores (and negotiate with peers and adults) reality before and while acting upon them. Through the presentation of some examples, it seems possible to think of psychological development as a progressive evolution of the argumentative competences of the child as challenges not always recognized by the adult.

IS 04 – 3

A DYNAMIC SYSTEMS APPROACH TO THE DEVELOPMENT OF DEVELOPMENTAL PSYCHOLOGY: CHALLENGES AND OPPORTUNITIES FOR GROWTH

Vleioras G.

University of Thessaly, Greece

The dynamic systems approach is a meta-theoretical perspective that is especially suited to describe processes that function over time. In the field of developmental psychology, it has already been applied to the study of motor development, identity development, parent-offspring relationship development, language development, creativity development etc. This presentation will start with an overview of some fundamental aspects of a dynamic systems approach, introducing emergence and restriction, micro- and macro-level processes, resources and self-organization, attractors and time variability. It will continue with the steps that are necessary to apply such an approach to the study of developmental processes. Finally, it will attempt to describe the development of developmental psychology as a scientific field by means of this approach. This framework will be used to identify empty slots in the descriptive space and to suggest ways to fill these slots.

IS 04 – 4

GENETIC SOCIAL PSYCHOLOGY: A ONCE AND FUTURE DISCIPLINE?

Psaltis Ch.

University of Cyprus, Nicosia

Paraphrasing the title of one of most renowned books by Michael Cole written more than 20 years ago I would like to take a critical stance to that turn of Cultural Psychology and claim that some of its basic assumptions led to cultural relativism and a loss of direction in what we mean by development. I will argue that this was largely premised on a) the anthropologist's credo of self-determination of local populations, b) a superficial reading of Piaget as a "stage theorist" suppressing the most crucial element of his genetic epistemology, his social psychology and c) the socio-political context of the cold war where the reception of Vygotskyan theorizing and its translations were received in the west. Building on both Serge Moscovici's insights, the work of the Social Genevans and more recently the work of Gerard Duveen I proposed *Genetic Social Psychology* as a once and future discipline that aims at the articulation of processes of microgenesis, ontogenesis and sociogenesis as an emphasis on process over content bringing back the study of development in developmental psychology.

Saturday, August 31st, 2019

Symposium 28

Ilissos Hall 13:15 – 14:45

S 28

SCHOOL-AGED CHILDREN'S INTERNET USE WITHIN AN ECOLOGICAL SYSTEMS FRAMEWORK: CROSS-CULTURAL COMPARISON FROM LATVIA, LITHUANIA AND TAIWAN

Pakalniskiene V.
Chair, Institute of Psychology, Vilnius University

Sebre S.B.
Discussant, Department of Psychology, University of Latvia

With the surge of internet use among increasingly younger children both parents and teachers are concerned about its possible overuse. It seems imperative to ask both children and their parents about potential risk factors and protective factors which can mitigate the possibilities of the child developing problematic, compulsive internet use. To date there have been various studies examining the impact of problematic internet use with adolescents and adults, but very few studies to date which have included early elementary school-aged children, asking the children themselves, as well as their parents, to report on the child's internet use. Recent literature has also emphasized the need to explore these issues from an ecological systems framework, taking into consideration the individual's characteristics, including biologically influenced aspects, aspects of the family environment including parenting practices and parental monitoring, attitudes and restrictions offered in the school setting, and finally the broader sociocultural contextual aspects of how these various factors interact. The goal of this symposium is to present the first results of this cross-national study, including participants from Latvia, Lithuania and Taiwan - countries which differ along the individualistic-collectivistic cultural values dimension. The first presentation (Pakalniskiene, Jusiene, Sebre, & Wu) presents an overview of the three-country comparison in regard to the child's internet use duration (as reported by both child and parent), types of activities online, knowledge and rules, in association with demographic variables. The second presentation (Jusiene, Laurinaityte, & Pakalniskiene) focuses on the similarities and differences between the child's and parent's ratings in regard to internet use duration and compulsive internet use symptoms. The third contribution (Sebre, Miltuze, Martinsone, & Elsina) examines the associations between individual level biologically based factors such as hyperactivity, and familial factors such as parental rules and inconsistent parenting. The fourth presentation (Wu, Li, Chiang, & Wang) examines the socioeconomic patterning of internet use among the children, and examines the role of parental involvement.

S 28 – 1

DOES CHILDREN'S INTERNET USE AND PARENTS' KNOWLEDGE ABOUT IT DIFFER IN LATVIA, LITHUANIA AND TAIWAN?

Pakalniškienė V.[1], Jusienė R.[1], Sebre S.[2], Wu J.[3]

[1] Vilnius University
[2] University of Latvia
[3] National Taipei University of Education

Internet is becoming a part of young children's everyday life. Each year with new technologies developing, children are spending more time online, gaining new knowledge and experiencing new online risks. It seems that parents do not always know what their children are doing online, or what they know how to do online. Until now primary school children's internet use has been relatively neglected. The aim of the present study was to examine 8 and 9 year old child reported Internet use, their experiences online and parent reported view of their child's Internet use.

Participants were 682 dyads, including 8 - 9 year old children (M = 8,34 years; 48,3% girls) and their parents, living in Latvia, Lithuania, and Taiwan. Participants completed questionnaires including Internet use duration, activities online, internet use knowledge, parental monitoring, Internet use rules, and sociodemographics.

Results suggest some similarities between countries. In all three countries parents generally reported their child's internet use duration as significantly longer than the children themselves, especially in regard to weekends. Although the children from all three countries reported similar Internet use, children from Taiwan reported slightly more. In all three countries parents reported higher scores for their children on the Compulsive internet use scales as compared to their child. However, some differences between countries also exist. In the Baltic countries many children reported that there are no internet use rules at home (in contrast to school), although their parents think differently. It is also interesting that many more children in Taiwan reported that there are rules, and that they follow these rules, as compared to the Baltic countries. Results suggest that demographic variables such as education, parents' employment, immigration, and living conditions could play a role in the degree of disagreement between children's and their parents' reports on Internet use in the different countries.

S 28 - 2
INTERNET USE IN YOUNG SCHOOL-AGED CHILDREN: DO PARENTS REALLY KNOW ABOUT THEIR KIDS?

Jusienė R., Laurinaitytė I., Pakalniškienė V.

Institute of Psychology, Faculty of Philosophy, Vilnius University

Internet becomes increasingly more accessible and more engaging. More children at a younger age are using the Internet extensively. Thus it is very important to carefully study and capture children's time spent online, and risks for compulsive Internet use. Usually researchers rely on parents reports when researching pre-school children, and on self-reports when researching adolescents. Young school-aged children are under-researched as there is no agreement on whom - the children themselves and / or parents - to rely upon. The aim of the present study is to analyse the agreement between children aged 8 to 9 years and their parents on reporting children's Internet use.

Participants were 232 dyads of second and third graders (mean age 8,46 years; 49,4% girls) and their parents in Lithuania. They completed questionnaires including the Compulsive Internet Use Scale (CIUS, Meerkert et al., 2009), Internet use duration and activities, parental monitoring, rules regulating Internet use and adherence to them, and sociodemographic information.

Results showed that parents in general reported significantly longer Internet use duration than their child, especially regarding the weekend. Duration reported for school days was similar, although agreement was low. Agreement between parents and children on CIUS was good, with parents reporting higher mean scores than their child. Considerable differences were found when children's and parents' answers on rules and adherence were taken into account: in comparison to their parents, many more children believed that there are no rules at home (in contrast to school) regarding Internet use. Interestingly, children's adherence to rules and parental monitoring was not related to CIUS as reported by children and parents, and only parental control was related to parental reported, but not child reported, CIUS. Results also imply that higher parental education and child's female gender tended towards more favourable and (or) socially appropriate answers while reporting various aspects of Internet use.

S 28 - 3
CHILDREN'S COMPULSIVE INTERNET USE, HYPERACTIVITY, PARENTAL RULES AND INCONSISTENT PARENTING

Sebre S.B., Miltuze A., Martinsone B., Elsiņa I.

The University of Latvia, Riga, Latvia

With the surge of internet use among increasingly younger children both parents and teachers are concerned about its possible overuse. It seems imperative to ask both children and their parents about potential risk factors and protective factors which can mitigate the possibilities of the child developing problematic, compulsive internet use (CIU). The aim of this study is to consider the interactions of individual, familial and cultural factors in relation to CIU.

This study is part of a larger cross-cultural investigation of these issues, but the current presentation will report on the data from Latvia whereby 260 second and third grade children (mean age 8.6 years) and their parents completed a questionnaire packet including items from the Compulsive Internet Use Scale (Meerkert et al., 2009), Strength and Difficulties Questionnaire (Goodman, 1997), Alabama Parenting Questionnaire (Frick, 1991), as well as items regarding rules at home and school concerning internet use.

Results showed significant correlations between the child's and parent's ratings of compulsive internet use (CIU). Predictors of CIU included the parent's ratings of the child's hyperactivity, inconsistent parenting practices and less pronounced rules regarding the child's internet use. These results are discussed in relation to individual and familial factor interrelationships with implications for parental practices and parental strategies to mitigate the child's overuse of the internet.

S 28 - 4

SOCIOECONOMIC PATTERNING OF INTERNET USE AMONG SCHOOL-AGED CHILDREN AND ITS RELATIONSHIP WITH PARENTAL INVOLVEMENT

Wu J.C.L.[1], Li Y.F.[2], Chiang T.L.[2], Wang M.Y.[3]

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[2] *College of Public Health, National Taiwan University, Taiwan*
[3] *Department of Psychiatry, Chinese Medical University, Taiwan*

Socioeconomic status (SES) in relation to Internet use has historically been discussed from a digital divide perspective, with the premise of poor online access and skills rising inequality in education and later life chances for the socio-economically disadvantaged. With Internet use expanding exponentially in all parts of the world and the use starting from younger ages, the present study aims to depict socioeconomic patterning of Internet use among school-aged children and examine the role of parental involvement.

Survey data came from 200 dyads of third and fourth graders (mean age=8.4) and their parents in Taiwan, as part of a cross-national investigation on children's Internet use. SES was reflected by parents' educational level and measures of Internet use were based on children's report. A 14-item scale covering dimensions such as preoccupation, withdrawal symptoms and loss of control was used to measure the severity of compulsive Internet use (CIU) among children.

The results showed that children with lower SES had fewer electronic communication devices at home, but tended to have such devices on their sole disposal and were more accessible to the Internet. Concerning types of online activities, lower-SES children used the Internet more frequently for leisure and gaming than their higher-SES counterparts while no differences were found in use for social and informational purposes. Multiple regression analysis revealed that higher levels of SES significantly predicted lower severity of children's CIU and the disparities could be explained partially by parents' employing an active engagement approach in children's online activities but not a control-oriented approach such as blocking or keeping track of the Internet content.

Socioeconomic patterning of Internet access and use does exist among school-aged children but might present itself in a differential form of inequality. Future investigation is needed to clarify potential mechanisms and offer implications for preventing negative consequences of problematic use from younger ages.

Saturday, August 31st, 2019

Symposium 29

Vergina Hall 13:15 – 14:45

S 29
BULLYING AND CYBERBULLYING: LINKS TO MORALITY AND NEW INTERVENTION PERSPECTIVES

Bartolo M.G.
Chair, University of Calabria

Palermiti A. L.
Chair, University of Calabria

Menesini E.
Discussant, University of Florence

Both bullying and cyberbullying represent well-recognized critical social concerns and have increasingly attracted the attention of the international scientific community. Thus, in recent years a large number of studies and possible interventions aimed at understanding and preventing such phenomena have been produced. Although this interest has helped to draw a clearer theoretical and practical framework, there is still much to be understood about the personal, social, emotional, cultural and environmental factors and processes that influence bullying and cyberbullying behavior, as well as what are interventions that seem to act more effectively in terms of prevention.

This symposium is situated along this line of demand and present new insights by connecting findings coming from three different European countries (Italy, Spain and Swiss). The first study presented by Gutzwiller-Helfenfinger and Perren looks at relationships between moral functioning, bystander behavior and school and online bullying, placing the focus on passive moral temptations, where a protagonist does not intend to transgress but realizes s/he might do so due to specific circumstances. The second study by Bartolo and colleagues looks at the mediating role of moral disengagement in the relations of parental monitoring and school climate with cyberbullying. The third study by Romera and colleagues looks at relationships between moral disengagement, emotional disconnection and the need for popularity and the related implication in bullying and cyberbullying. The forth study by Del Rey and colleague looks at impacts of a recent intervention programme to reduce cyberbullying involvement, by focusing on the differential effects of school grade, gender and participation in social networks.

Overall, in this symposium, we primarily explore variables and mechanisms linked to the development of moral thought and behavior and the consequences in terms of involvement in bullying and/or cyberbullying. Complementarily, the evaluation of a recent intervention program and its implications are presented.

S 29 – 1

TEMPTED TO JOIN IN OR NOT? MORAL TEMPTATION AND SELF-REPORTED BEHAVIOUR IN BULLYING SITUATIONS

Gutzwiller-Helfenfinger E.[1], **Perren S.**[2]

[1] *University of Duisburg-Essen, Interdisciplinary Center for Integration and Migration Research, Essen, Germany*
[2] *Development and Education in Early Childhood, Thurgau University of Teacher Education and University of Konstanz, Kreuzlingen, Switzerland*

Research on the moral dimensions of bullying involving hypothetical scenarios has focused on youths' evaluations of accomplished transgressions rather than temptation situations. Passive moral temptations, where a protagonist does not intend to transgress but realises s/he might do so due to specific circumstances, are more open and ambiguous. Such temptations are common in everyday life and share one characteristic with being a bystander of bullying: There is no initial intention to transgress. We investigate the relationship between moral functioning, specifically participants' construction of a transgression (judgment and emotion expectancy) and bystander behaviour (assisting the bully, ignoring, helping the victim) and bullying (traditional and online).

331 Swiss eight-graders participated in the study (Age: M=14.9, 51% female). Moral functioning was assessed using an extended measurement (deontic judgment, self-judgment, judging the transgression) in the context of a passive moral temptation scenario (written answers). Additionally, participants completed an electronic questionnaire on bystander behaviour, bullying, moral disengagement and empathy. A person-oriented approach was used to identify patterns of moral functioning. We identified two clusters within the moral temptation measure. For part 1 (free behaviour decision), we can differentiate between happy transgressors, happy moralists, ashamed moralists and unemotional moralist. For part 2 of the scenario (happy victimizer paradigm) we identified two clusters: Moralists and happy transgressor.

The GEE-analyses yielded significant effects of moral functioning, especially in the free decision question, with bystander behaviour and bullying. Happy transgressors (part 1) reported higher levels of assisting the bullying and online bullying than the different groups of moralists. Furthermore, empathy predicted more positive bystander behaviour, and moral disengagement higher levels of antisocial behaviour. The study shows that adolescents who construct a favourable interpretation of yielding to temptation display higher levels of both assisting the bully and online bullying, emphasising the need for incorporating targeted moral education in bullying prevention.

S 29 - 2

MEDIATING PROCESSES IN THE RELATIONS OF PARENTAL MONITORING AND SCHOOL CLIMATE WITH CYBERBULLYING: THE ROLE OF MORAL DISENGAGEMENT

Bartolo M. G., Palermiti A. L., Servidio R., Costabile A., Musso P.

University of Calabria, Department of Cultures, Education and Society, Arcavacata di Rende (CS), Italy

In recent years, studies have largely investigated factors to prevent cyberbullying among adolescents and/or tried to identify new forms of interventions. Particularly, research has focused on exploring both personal and environmental predictors of cyberbullying. Among these predictors, parental monitoring and school climate were often expected to be associated with cyberbullying behaviors. However, little is known about the mediating mechanisms through which these relations may develop. Interestingly, despite the crucial associations linking moral disengagement with parental behaviors, school environment, and cyberbullying, no study, to our knowledge, has examined moral disengagement as a mediator among these constructs. In light of this, the present study aimed to expand the current research by testing a theoretical model including the mediating role of moral disengagement in the relations between parental monitoring (comprising less collaborative vs. more collaborative strategies), school climate, and cyberbullying behaviors.

A sample of adolescents (N = 571; males = 54.5% and females = 45.5%) aged 14 to 20 years (M = 15.81; SD =1.36) was recruited from five public high schools located in southern Italy (Calabria region). All the participants completed the validated Italian version of the European Cyberbullying Intervention Project Questionnaire (Brighi et al., 2012), including measures of parental monitoring, school climate, moral disengagement and cyberbullying. To test the hypothesized model, we estimated full and partial mediation models.

Findings supported our hypotheses and revealed negative indirect links of parental monitoring (but only the more collaborative strategies) and school climate with cyberbullying via moral disengagement. Less collaborative strategies of parental monitoring were neither directly nor indirectly related to cyberbullying.

This study revealed moral disengagement as an important process in explaining how ecological factors, such as parenting behaviors and school environments, are associate with cyberbullying and have practical implications for preventing the development of online peer aggression.

S 29 – 3

WHY DO TEENAGERS MORALLY DISENGAGE IN BULLYING AND CYBERBULLYING? THE INFLUENCE OF EMOTIONAL DISCONNECTION AND THE NEED FOR POPULARITY

Romera E. M., Casas J. A., Carmona M., Ortega-Ruiz R.

Universidad de Córdoba, Department of Psychology, Córdoba, Spain

Studies on bullying and cyberbullying indicate that the aggressors show mechanisms of moral disconnection and low levels of empathy. But the involvement in bullying and cyberbullying is sometimes a strategy of adaptation in the peer group to gain popularity. It has been shown that boys and girls who seek social recognition are more likely to develop aggressive behaviours (on/off-line). There is a recognition of the need of studies, mainly of a longitudinal nature, that address the relationship between moral disengagement, emotional disconnection and the need for popularity and the implication in bullying and cyberbullying. The analysis of these relationships is the object of this research.

The study presented a longitudinal, one-group design with two waves of data collection, with an interval of 6 months between each wave. The sample consists of 4023 secondary students (48.8% girls) from the south of Spain, whose average age is 13.64 years (SD = 1.35). Longitudinal structural equation models were used with the Robust LS method (EQS), paying attention to the non-normal distribution of the sample in some variables.

Results showed that emotional disconnection and the need for popularity influence the development of mechanisms of moral disengagement. In turn, these mechanisms act as a risk and consequence of the involvement of aggression, mainly in bullying. The conclusions drawn by this study are discussed regarding the need of paying more attention to social motivations, moral and emotional mechanisms to explain the risk of bullying and cyberbullying.

S 29 – 4

"ASEGURATE" PROGRAMME: DIFFERENTIAL EFFECT IN CYBERBULLYING ACCORDING TO GENDER AND AGE

Del Rey R.[1], Ojeda M.[1], Mora-Merchán J.A.[1], Elipe P.[2]

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"Asegurate" programme is based on the theory of normative social behavior, the development of self-regulation skills and students' previous ideas. Its main aim is promoting safe and healthy use of the Internet and social networks to prevent cyberbullying. The objective of this study is to present the impact of "Asegurate" programme in cyberbullying according to course, gender, and participation in social networks.

The sample consisted of 7,056 students (47.9% girls) from Primary (5°-6° grades) and Secondary School (1°-4° ESO) (9-19 years old; M = 12.96, SD = 1.65). A quasi-experimental design with two groups was applied: control (3,144 students) and quasi-experimental (3,912 students). ECIPQ (Del Rey et al., 2016) was used to assess cyberbullying. Repeated measures ANOVA were performed to determine if significant differences appear between groups in cyberaggression and cybervictimization according to gender, year, and participation in social networks after the programme implementation.

Results show a significant decrease in the experimental group compared to the control group both in cyberaggression (F = 6.717, p = .010) and in cybervictimization (F = 11.947, p = .001). Specifically, intervention reduced cyber-aggression and cybervictimization in girls (F = 6.571, p = .010, F = 5.356, p = .021, respectively), cyber-victimization in boys (F = 6.560, p = .010), cybervictimization in 1° of ESO (F = 11.260, p = .001) and cyber-aggression in 2° of ESO (F = 1.129, p = .008). Likewise, intervention reduced cyberaggression (F = 6.156, p = .013) and cybervictimization (F = 13.355, p <.001) among those students who had participated at least in one social network.

"Asegurate" have shown to be an effective intervention for the decrease of cyberbullying, especially in those courses where this phenomenon occurs more frequently, in girls and among those students who have social networks. Educational implications are discussed.

Saturday, August 31st, 2019

Symposium 30

Makedonia Hall A 13:15 – 14:45

S 30

PEERS, PARENTS, SIBLINGS AND SCHOOL: THE ROLE OF CONTEXTS IN THE DEVELOPMENT OF ACADEMIC AND NON-ACADEMIC VALUES AND ATTITUDES DURING ADOLESCENCE

Reindl M.
Chair, Paris Lodron University Salzburg, Dept. of Education, Salzburg, Austria

Gniewosz B.
Chair, Paris Lodron University Salzburg, Dept. of Education, Salzburg, Austria

During adolescence, several important academic and non-academic values and attitudes change considerably. These values and attitudes have been shown to be linked to important distal outcomes, such as academic achievement or civic engagement. Thus, a thorough investigation of how social contexts contribute to value and attitude formation is crucial.

Following a socio-ecological approach, this international symposium brings together four important social contexts: peers, parents, siblings, and school, focusing the developmental period between early and middle adolescence. By the use of sophisticated analyses, such as multilevel SEM, latent change analyses etc. based on cross-sectional and longitudinal multi-informant samples, this symposium contributes to a deeper understanding of the role of contexts.

The first study focused the peer context and investigated the influence of the amount of stable friendships on the development of intrinsic value in mathematics during school transitions. The longitudinal design with four measurement points allows drawing conclusions about the period when friendship stability is most important.

The second study focused the family context and examined the indirect influence of maternal actual utility values on the development of adolescents' utility values, as mediated through the perceived maternal values. The maternal school involvement was expected to moderate this value transmission.

The third study focused siblings and their influence on political attitudes. In considering important interactional processes with parents, this study investigates whether siblings play also a compensatory role in case of bad parent-child-relationships or divergent political views of parents.

The fourth study emphasized the school context and how a critical and color evasive classroom climate is related to adolescents' critical reflection and critical action in middle adolescence.

S 30 – 1

PEERS AND MOTIVATION: THE INFLUENCE OF FRIENDSHIP STABILITY ON INTRINSIC MOTIVATION IN MATHEMATICS - A LONGITUDINAL VIEW

Prlic S., Reindl M.

Department of Educational Science, University of Salzburg, Austria

Based on rationales of Self-Determination Theory (Deci & Ray 2003) and Stage-Environment Fit Theory (Eccles & Midgley, 1989), social inclusion is related to the development of intrinsic motivation, especially during school transitions. Thus, establishing stable friendships becomes increasingly important during adolescence. Focusing friendship as a dynamic and malleable phenomenon, we investigated if the amount of stable friendships within one school year influences the development of intrinsic motivation in mathematics.

The sample is based on a larger German longitudinal study with four measurement points of 5th graders (n = 537). The measurement occasions were scheduled in the beginning of the fifth and sixth grade (T1, T3) and the respective follow-up occasions in the middle of the school year (T2, T4). Students reported on intrinsic motivation in mathematics and on their friends in the classroom (unlimited peer nomination). The amount of stable friendships was calculated by identifying reciprocal ties between classmates and summing the ties lasted from T1 to T2 and from T3 to T4.

The results of latent change models showed a significant positive effect of friendship stability (T1-T2) on the change of intrinsic motivation in mathematics (T1-T2; β = .12; p = .030) in the 5th grade. A higher number of stable friendships after the transition to a new school, went along with a smaller decrease in their intrinsic motivation. In contrast, friendship stability (T3-T4) had no effect on the development of intrinsic motivation in the 6th.

The results confirmed that social inclusion in form of reciprocal friendship stability influences adolescents' intrinsic motivation development, especially during the year after a transition to a new school. Following the theoretical frameworks, school grade changes did not equal the challenges and consequences caused by a whole school change. Thus, the importance of friendship as a developmental resource after school changes as compared to changes within one school was discussed.

S 30 - 2

BY THEIR FRUIT YOU WILL RECOGNIZE THEM - PARENTAL UTILITY VALUE TRANSMISSION AS MODERATED BY PARENTAL INVOLVEMENT

Gniewosz B.[1], Noack P.[2]

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[2] Friedrich-Schiller University Jena, Dept. of Psychology, Jena, Germany

Following Eccles' expectancy value theory, this study focuses on mother-to-child transmission of math utility values in early adolescence, as mediated through the perceived maternal values. Parental school involvement is expected to moderate this process. However, there are two possible underlying mechanisms: 1) The parental involvement might enhance the visibility of the maternal utility values or 2) Parents acting according to what the adolescents perceive to be the parental values might enhance the transmission due to an increased credibility.

This survey study is based on a two-wave longitudinal sample (one year time lag), comprising 1192 German 5th graders and their mothers (N=874 mothers). Students and parents reported on their math utility values. Moreover, students reported on their perceptions of their parents' values. Finally, the mothers reported on their school involvement.

Longitudinal latent autoregressive models show that the mothers' self-reported math utility values affected the early adolescents' values indirectly, as mediated through the adolescents' perceptions, indirect effect: ß=.09; *95%CI* [.04, .15]. In a second step, two latent interaction terms were added: 1) parental involvement x maternal self-reported values, to predict the adolescent-perceived maternal values, and 2) parental involvement x adolescent perceived maternal values, to predict the adolescents' values. The significant effect of the latter interaction term, ß=.18, *p* =.004, indicates a moderation of the path between the adolescent-perceived maternal values and the adolescent self-reported values. In all models, gender, school track, math grade and SES effects were controlled.

The reported results supported the expected academic value transmission between mothers and their children through the perceived parental values. If mothers were not involved in their offspring's school live, however, these perceived values were adopted to a lesser extent. Therefore, parents should act according to the values they communicate if they want to make sure that these messages are adopted.

S 30 – 3

SAME SAME, BUT DIFFERENT? EXAMINING SIBLING AND PARENTAL EFFECTS ON POLITICAL ATTITUDES IN ADOLESCENCE

Eckstein K.[1], Gniewosz B.[2], Noack P.[1]

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[2] Paris Lodron University Salzburg, Dept. of Education, Salzburg, Austria

Background: Youth's political development is closely tied to experiences in daily life settings such as the family. In contrast to the role of parents, which has traditionally been at the core of political socialization research, that of siblings has received scant scholarly attention. By using a longitudinal multi-informant approach, it was therefore the goal of the present study to examine (1) if siblings affect each other's political attitudes over time and (2) whether sibling effects are moderated by family characteristics. In particular, we focused on the question whether siblings play a compensatory role, i.e. whether their influence is stronger when the parent-child-relationship is bad or when parents' political views strongly diverge.

Methods: Participants (N = 362 sibling dyads) were drawn from a larger longitudinal study of social-political tolerance in Germany. Young people's mean age at Time 1 was 13.61 (SD = 1.39) years for younger siblings (61.3% female) and 17.77 (SD = 2.92) years for older siblings (53.6% female). For almost all sibling dyads, maternal (N = 348) or paternal (N = 298) data were available. The study focused on two political attitudes: Political alienation and tolerance towards immigrants.

Results: Longitudinal analyses across two measurement points revealed that especially older siblings' attitudes predicted changes in younger siblings' political attitudes. While the relationship quality with parents did not moderate the effects of siblings' attitudes, older siblings had a stronger effect on younger sibling's political attitudes when parental disagreement was low.

Conclusion: The results will be discussed against the backdrop of the existing socialization literature. While siblings were generally identified as an important agent of political socialization in youth, the findings also point to the necessity to gain a deepened understanding of the processes facilitating or hindering sibling effects.

S 30 – 4

DISCUSSING SOCIAL INEQUITY AT SCHOOL: CLASSROOM CLIMATE AND ADOLESCENTS' CRITICAL CONSCIOUSNESS

Schwarzenthal M., Moffitt U., Juang L., Schachner M.

University of Potsdam, Inclusive Education, Potsdam, Germany

Background and aims: In order to strive for social justice in diverse societies, students need to develop critical consciousness, i.e, critical reflection on social inequities and critical action aimed at changing these conditions (Diemer et al., 2017). A mere focus on similarities and a common identity in intergroup contexts may reduce perceptions of discrimination and prevent social change (Dovidio et al., 2016), while a classroom climate fostering critical analysis of social inequities may promote students' critical consciousness (Diemer et al., 2016). In this study, we explore how a classroom climate in which a common humanity is emphasized (i.e., a color-evasive climate), and a classroom climate fostering critical analysis of social inequity (i.e., a critical consciousness climate) are related to adolescents' critical reflection and critical action.

Methods: We draw on a cross-sectional sample of 1335 adolescents in Germany (M_{age}= 14.69 years) of which 52% were of immigrant background, meaning that they themselves or at least one parent was born abroad. Self-report questionnaires tapped into a classroom climate of color-evasion and critical consciousness, critical reflection (i.e., perceptions of personal discrimination, unequal treatment in the classroom, and Islamophobia in society), and critical action (i.e., intentions for civic engagement).

Results: Multilevel SEM indicated that a color-evasion classroom climate was related to lower perceptions of discrimination and was mostly unrelated to students' intentions for civic engagement, while a critical consciousness classroom climate was related to higher perceptions of discrimination, and was positively related to students' intentions for civic engagement. The relations were partly moderated by the students' immigrant background, religion, and status as stigmatized vs. non-stigmatized minorities.

Conclusions: We conclude that in order for students to develop critical consciousness, it is crucial that schools not only focus on similarities between different social groups, but also teach about social inequity.

Saturday, August 31st, 2019

Symposium 31

Makedonia Hall B 13:15 – 14:45

S 31
SOCIAL-EMOTIONAL COMPETENCE IN EARLY CHILDHOOD: THE ROLE OF SOCIAL INTERACTIONS AND PLAY IN EARLY EDUCATION AND CARE SETTINGS

Jaggy A.-K.
Chair, University of Konstanz (Germany)/ Thurgau University of Teacher Education, Kreuzlingen (Switzerland)

Malti T.
Discussant, University of Toronto

The focus of this symposium is on social interactions and play in early childhood education and care settings. Teacher-child interactions, but also peer interactions are of great importance for children's development, both providing a wide range of possibilities to create and structure supportive developmental learning environments. As play is the leading activity in early childhood, it provides an important opportunity where such interactions can emerge: In play, children have the opportunity to experience positive peer and teacher interactions. Furthermore, their social-emotional skills are challenged, why play is presumed to foster children's positive development. From a caregiver perspective, play may be a significant activity to support and model social interactions. On the other hand, through social interactions in play caregiver can support children's social-emotional competence well.

Various factors contribute to the different ways in which social interactions and play can have their impact on children's developing competencies. The current symposium addresses this issue and includes three contributions, investigating different predictor and outcome variables of social interactions and play in the ECEC. The first contribution focuses on the impact of childcare groups' age composition on caregiver-child interactions and child engagement under the unique conditions of the Swiss childcare system. The second contribution examines the association between adult's (pretend) play support and children's engagement with their social and material environment. In the third contribution, the impact of social pretend play tutoring on children's social pretend play quality and emotional competence is considered.

S 31 – 1

THE IMPACT OF DAYCARE GROUPS' SITUATIONAL AGE COMPOSITION ON CAREGIVER BEHAVIOUR AND CHILD ENGAGEMENT IN SWISS CHILDCARE CENTRES

Diebold T.[1], Perren S.[2,3]

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[2] *Thurgau University of Teacher Education Kreuzlingen (Switzerland)*
[3] *University of Konstanz (Germany)*

In Swiss childcare centres children are usually grouped in mixed ages with a wide range from four month up to five years. A few studies (e.g., Tietze et al., 2013) have shown that in mixed-aged groups, lower-quality caregiving may be observed. Concerning the impact of groups' age composition on children's behaviour, previous studies provided inconsistent results. The present study aimed to investigate the role of situational peer-group age composition in caregiver and child behaviour and to shed light on the potential negative effects of wide age range reported in the previous research.

Nine childcare groups participated in the study and included 54 children (46% females, age in years: M = 3.5, SD = 0.5). The procedure consisted of live observations, assessing caregiver behaviour (CLASS: Toddler; La Paro et al., 2012), and individual child engagement with peers, caregivers and tasks (inCLASS: Pre-K; Downer et al., 2010). To assess the situational peer-group age composition (peer-group age range, median age, and the number of children younger than 18 months of age), observers recorded the names of children present during each observation cycle.

The results from multilevel structural equation modelling showed that age composition was significantly associated with caregiver behaviour. A wide age range and - most importantly - a higher number of infants present were related to lower observed caregiver-child interaction quality. On the other hand, the age composition had no impact on children's behaviour. However, child engagement was affected by other situational characteristics, i.e., activity setting and number of adults and peers present.

The study indicates that the age composition of daycare groups should be considered more carefully as a potential context for social-emotional learning.

S 31 - 2
PRESCHOOLER'S ENGAGEMENT WITH ADULTS, PEERS AND TASKS: WHAT IS THE ROLE OF ADULT'S ACTIVE INVOLVEMENT?

Kalkusch I.[1,2], **Jaggy A.**[1,2], **Burkhardt-Bossi C.**[2], **Weiss B.**[2], **Sticca F.**[3], **Perren S.**[1,2]

[1] University of Konstanz (Germany)
[2] Thurgau University of Teacher Education Kreuzlingen (Switzerland)
[3] Marie Meierhofer Children's Institut, Zürich (Switzerland)

Children's engagement can be defined as a multidimensional construct, which is composed of children's ability to interact with their environment: educators, peers and tasks (Williford et al., 2013). These interactions are children's main opportunities for learning (Vygotsky, 1978) and therefore important for their development. Which role adults play to foster children's engagement is not conclusively investigated.

The aim of this study is to examine differences in children's engagement between three experimental conditions. They differed in their intensity of adult's involvement, conceptualized as (pretend) play support. Data from 14 Swiss playgroups of a controlled randomized intervention study (releFant, wave 1) is used. In total 101 children participated (Age: $M = 43.02$ months, $SD = 5.94$; 50 % female). Playgroups were randomly allocated to one of these conditions for the duration of six play-sessions: play tutoring, material or control. Children's engagement was assessed with the observation tool *inCLASS Pre-K* (Downer et al., 2012). Adult's active involvement was assessed with a standardized observation tool assessing the intensity of adult's pretend play support.

The analyses yielded differences between the conditions regarding their intensity of play support: highest in play tutoring, medium in material and lowest level in control condition. We expected that adult's play support is promotive for children's engagement with educators and tasks. Thus, we hypothesized highest ratings for positive engagement with educators and tasks for children in the play tutoring and material conditions. Children's positive peer interactions we expected to be lower in the play tutoring condition as the more active part of the adults may provide less opportunities to show peer interactions. Preliminary descriptive results indicate potential differences between the conditions regarding engagement with educators and task orientation, but no differences concerning positive peer engagement. In further analysis the statistical relevance of these differences is investigated, and control variables are included.

S 31 - 3
THE IMPACT OF SOCIAL PRETEND PLAY ON PRE-SCHOOLER'S EMOTION COMPREHENSION

Jaggy A.[1,2], **Kalkusch I.**[1,2], **Burkhardt-Bossi C.**[2], **Weiss B.**[2], **Sticca F.**[3], **Perren S.**[1,2]

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[3] Marie Meierhofer Children's Institut, Zürich (Switzerland)

Social pretend play occurs early in young children's life and is presumed to foster children's positive development. Empirical findings confirm associations between children's social pretend play and their social-cognitive and social skills. However, the causality of these associations is not clarified yet (Lillard et al.,2013). The present intervention study investigates whether social pretend play tutoring effectively promotes children's pretend play quality and thereby their social-cognitive skills (emotion comprehension). For this purpose, 28 Swiss playgroups (N= 200 three- to four-year-olds) were randomly assigned to the intervention group (play tutoring), the material group (half-dose) and the control group (treatment as usual). The treatment groups took place once a week over 6 consecutive weeks. Pre-tests, post-tests and a follow-up were made. Children's social pretend play quality was assessed at each timepoint with a multi-method approach including three methods: Dyadic Pretend Play Assessment (DPPA), Tools of the Play Test (TOPS; Seeger & Holodynski, 2016) and an educator questionnaire. A standardized test was used to assess children's emotion comprehension (IDS-P; Grob, Reimann, & Frischknecht, 2013). Results from cross-sectional analysis showed a significant association between children's pretend play quality, assessed through the multi-method approach, and children's emotion comprehension (β=.40). First results regarding hypothesized intervention effects on children's pretend play quality and thus on their emotion comprehension will be presented and discussed at the conference.

Saturday, August 31st, 2019

Symposium 32

Mycenae Hall 13:15 – 14:45

S 32
VOICES OF CHILDREN ON THE MOVE

Markodimitraki M.
Chair, University of Crete, Greece

Tsourtou V.
Discussant, University of Crete, Greece

The present symposium will focus on ways of empowering *children on the move* to develop resilience and strength against loss and trauma caused by war, poverty and exile.

Development is culturally embedded. Ecological/transactional models to childhood and traumatic stress take into consideration the broader context of risk and protective factors.

Culture, education, family context, and individual traits of child refugees' overall well-being influence the way interventions and research actions are implemented.

New methodologies should be developed in order to fully understand the mental and physical health and wellbeing needs of young survivors over the long term.

In the context of this symposium, K. Hatzinikolaou will focus on good practices implemented in Greece aiming at protection of *children on the move* from human trafficking.

S. Papastathopoulos and C. Giatroudi will describe a qualitative study with refugees' children narrating about their experiences from their inclusion in the public Greek educational system.

Finally, S. Chioti will present the efforts of *youth on the move* to film their life in the refugees' site. It concerns a different way to narrate through images that depict scenes of their everyday life, in their effort to survive and confront the challenge of change.

S 32 – 1
CHILDREN ON THE MOVE: GOOD PRACTICES FOR THEIR PROTECTION FROM HUMAN TRAFFICKING

Hatzinikolaou K.[1,2]

[1] *Office of the National Rapporteur, Ministry of Foreign Affairs, Hellenic Republic*
[2] *Aristotle University of Thessaloniki, Greece*

Recent mass mobility from Middle East Africa and South-East Asia toward Europe has posed many children on the move into danger to be heavily exploited and maltreated during their journey.

European countries have failed to develop common policies to receive, protect and rehabilitate underage third-country nationalities, and this failure has further increased children on the move's risks.

Due to its geographical position, Greece has been either a short-term or long-term home for thousands of those children. Despite the financial and socio-political adversities, Greece has taken several legislative and operational measures to receive, protect and rehabilitate those children.

This presentation will focus on such good practices that were directly developed to diminish child trafficking risks or that have indirectly contributed towards that end.

S 32 – 2

THE EXPERIENCES OF CHILDREN WITH REFUGEE BACKGROUND FROM THEIR INCLUSION IN THE GREEK PUBLIC EDUCATION SYSTEM: A QUALITATIVE STUDY

Papastathopoulos S., Giatroudi C.

University of Ioannina, Greece

During the last three years children with refugee background that live in Greece are included in public education, in morning and evening classes. Most of the children arriving from Syria, Afghanistan and Iraq had been out of school for more than one or two years in their countries and for an additional time period in Greece.

The available research addresses how pre- and post-arrival factors affects children's education and their academic future, but there is limited research on how the children themselves understand their previous educational exclusion and their present participation in a public educational system about which they have non or limited knowledge.

This ongoing study seeks to address the following issues: a. How children experience and feel about their participation in the Greek public education., b. which factors they prioritize as affecting more their educational experience, c. how they understand their educational future as refugees in the hosting countries and what are their expectations.

The sample consists of 14 children of refugee background, aged from 9 till 16 years old, that live in urban accommodation in the city of Ioannina. Semi-structured interviews have been conducted, with the help of translators. The transcriptions are analyzed through thematic analysis and in the symposium will be presented the preliminary findings.

S 32 – 3

SUVRIVORS' TESTIMONIES: YOUNG REFUGEES FILM THEIR OWN LIFE NARRATIVES

Chioti S.

Department of Philosophy and Social Studies, University of Crete, Greece

We are going to describe psychoeducational actions-interventions that aimed at empowering the psychosocial development and welfare of children and youth, who suffered a war that undermined their life. Through our everyday collaboration in the field (refugees' site in Attica, Greece), we tried to surpass obstacles in communication and together re-build the base for a creative intercultural co-existence and sustainable change.

With commitment to humanitarian values and to a systemic approach in the context of a community that needs to be extroverted, we have engaged in a co-active research that allowed *children on the move* to deal with a change.

Through individual and collective voices based on survivors' testimonies, it is the narrative of each one's experience that captures the *reflective thinking process*, the personal "journey" here and now and the awareness of sharing.

Our challenge for effective communication in the multicultural environment, in order to build cooperative networks facilitating integration, was to reveal the beauty from the hidden qualities and potentialities. When we were focusing on the so-called *"cultures of silence"* through the culture of arts and play, this emerged more spontaneously and changed from a challenge to a chance for communication; regardless culture, age or gender that seems to be a hindrance at both peace and war.

Within the context of an international initiative, citizens from the host countries and refugees, were educated to make their own short documentaries filming their own life narratives. We are going to present exerts of the work of adolescents and young adults, as an indicative result of this psychoeducational action.

Saturday, August 31th, 2019

Papers 23 – Health, Injury and Growth

Pella Hall 13:15 – 14:45

OP 132
PARENTAL COPING WITH OTITIS MEDIA IN YOUNG CHILDREN

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[2] Oxford Brookes University, UK

Background: Otitis Media (OM) affects children worldwide mostly before the age of 7 (Bluestone and Klein, 2007). Impact is predominantly in the first 3 years when speech, language and social skills are establishing. Language and literacy skill development can be impacted (Winskel, 2006). Most research focuses on OM's medical management with limited investigation into its psychosocial impact on parents and families (Barber et al., 2014), or on parents' coping and support needs (Capewell & Ralph, 2015). Currently no support groups exist for OM parents in the UK, except for one specific online forum and threads in two general forums for parents. However, these are neither monitored nor sufficiently supported by professionals. Parents are often left feeling that their child's condition is highly medicalised and become concerned that unusual social behaviour reflects on their parenting skills (Capewell, 2014).

Methods: Examining existing data from an online forum for parents of children with OM to gain insight into parents' needs and coping processes. The forum's content provided naturalistic data about real-time concerns. Content Analysis was used to analyse the data.

Results: Parents perceived support from audiologists and information regarding treatment options in the public sector as insufficient, with only a conservative approach to treatment. They required information about alternative options and greater clarity about treatment outcomes. Some parents took initiative, contacting teachers and school nurses with a plan or actively seeking support.

Conclusions: OM affects many children ages 0-7. It may result in speech delays, and permanent hearing loss. Parents desperately seek support, and require evidence-based information about existing range of treatment options to avoid or minimize developmental delays in speech, hearing and social skills. Current online support is insufficient and needs to become more effective. Future research is needed to provide more structured ways of raising awareness of the issues around OM.

OP 133

CANCER DURING CHILDHOOD AND PREADOLESCENCE: ASSOCIATED COGNITIONS, EMOTIONAL CORRELATES AND COMMUNICATION ON THE FAMILY

Barrios P., Enesco I., Varela E.

Universidad Complutense de Madrid, Psychology Department, Madrid, Spain

How do oncological children comprehend their illness and its severity? Which are the emotions they feel and how do they regulate them? How the family members face this stressful situation, and how they communicate among them and support the ill child since the time of the initial diagnosis? Here we present findings from a larger research project, whose main objective is to enhance knowledge of the cognitive and emotional aspects of the experience of cancer during childhood from the perspective of both the child and the family. Participants were 38 oncological children aged 6 to 14 years and their parents (usually, the mother). Using semi structured interviews supported by pictorial material, we assessed several aspects of children's understanding of their disease (causal attributions, role of medication, prognosis, etc.), and their emotions associated with the illness experiences in different contexts (hospitalization, non-attendance at school, home climate, etc.). Parents were interviewed to assess their emotions at the time of diagnosis, and to find out the degree and quality of communication among family members, in particular, whether they communicated truthfully to the child about her disease or they concealed information. As expected, we found age differences in children's understanding of cancer: misconceptions and false beliefs about the causes of cancer were significantly higher among younger children (6 to 9) than older children (10 to 14). We also observed a relationship between the age of children and communication among family members: the younger the child, the more nuanced or concealed was the information given by the parents. An unexpected result was that while parents commonly described their emotions as sadness and fear, children mentioned sadness but also happiness during the disease process. A tentative explanation may be found in the belief -shared by many parents and children- that positive thinking can lead to healing.

OP 135

HOW EXPRESSING GRATEFULNESS CAN ENHANCE TEACHER RESILIENCE

Gramann L., Uklei J., <u>Käser U.</u>

Department of Psychology, University of Bonn, Germany

Resilience can be understood e. g. as the capacity to bounce back in the face of adversity (cf. Turner 2001) or as a dynamic process which leads to adaption in the context of significant adversity (cf. Margalit 2004). It can be strengthened by enhancing individual working conditions and, in particular, by appropiate psychological trainings (Kumpfer 1999). Regarding the mental stress teachers experience in their profession, its serious consequences - not only for themselves, but also for their pupils (cf. Hüber & Käser 2015) -, and the necessity to develop effective resilience trainings, it is important to measure the resilience of teachers and to analyse which factors come along with a high or low resilience.

Therefore, a research project was realised in two steps. In orientation on the four-dimensional model of resilience (Mansfield et al. 2012), in which a profession-related, a social, a motivational, and an emotional dimension of resilience are distinguished, a questionnaire was developed and evaluated based on a sample of 351 teachers. Secondly, a revised version was tested on a sample of 71 probands. Thereby, potential correlates of resilience as appreciation, social exchange, self-efficacy, job satisfaction, and subjective stress experience were recorded to identify systematic interrelations.

From a methodical point of view, the results show that the modified questionnaire is reliable and economic. The theoretical framework of a four-dimensional structure of resilience is supported. However, it becomes evident, that a competing model which differs between a social, an emotional, a competence-oriented and a professional development-oriented dimension of resilience does have its legitimation, too. Furthermore, there are positive correlations between resilience and self-efficacy, job satisfaction, and social exchange. In particular, how appreciation is expressed matters. Additionally, teachers with a mentor relationship were more resilient. On the other hand, resilience is negatively associated with stress experience.

OP 136

ADOLESCENTS' WELL-BEING: THE ROLE OF DIFFERENT SOURCES OF NEED FULFILLMENT

Snell N.R., van der Gaag M.A.E., Kunnen E.S.

University of Groningen

Background and aims: Adolescence is a crucial phase of life in which the foundation for a promising future can be laid (Sawyer e.a., 2012). In fact, well-being during adolescence is an important predictor for general health in later phases of life (Hoyt, Chase-Lansdale, McDade, & Adam, 2012). To enhance adolescents' well-being the fulfillment of basic psychological needs is essential (Ryan & Deci, 2000). Need fulfillment can be facilitated by need supportive contexts (Vansteenkiste & Ryan, 2013) and an adolescent is often involved in several contexts (i.e. a school context, a family context and a friends context). However, it is unclear how need fulfillment in these different contexts contribute uniquely to well-being. In the present study we distinguish the school context from the non-school contexts and we will examine to what extent the need fulfillment in both contexts has unique relations with adolescents' well-being.

Methods: We present results of our u-can-act project, where we conducted an experience sampling study following adolescents ($n = 187$) from vocational education for several months. We use individual dynamic linear models to examine to what extent the need fulfillment in both contexts has unique relations with adolescents' well-being.

Results: Preliminary analyses show that we have obtained suitable data to be able to effectively perform our targeted analysis. Each student, who started the EMA study completed on average 22.3 questionnaires during the study protocol, which is approximately 84% of the possible questionnaires.

Conclusions: Our study will inform theory by showing whether it is relevant to distinguish different contexts when studying need fulfillment. In addition, our study informs practitioners on whether it is important to focus need support more on the school or the non-school context in order to enhance adolescents' well-being.

References: Hoyt, L. T., Chase-Lansdale, P. L., McDade, T. W., & Adam, E. K. (2012). Positive Youth, Healthy Adults: Does Positive Well-being in Adolescence Predict Better Perceived Health and Fewer Risky Health Behaviors in Young Adulthood? *Journal of Adolescent Health, 50*(1), 66-73. Ryan, R.M., & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American_Psychologist*, 55(1).Sawyer, S. M., Afifi, R. A., Bearinger, L. H., Blakemore, S.-J., Dick, B., Ezeh, A. C., & Patton, G. C. (2012). Adolescence: a foundation for future health. *The Lancet*, 379(9826), 1630-1640. Vansteenkiste, M., & Ryan, R.M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal_of_Psychotherapy_Integration*, *23*(3), 263-280.

Saturday, August 31th, 2019

Papers 24 - Social Relationships

Florina Hall 13:15 - 14:45

OP 138

CORRELATIONS BETWEEN MANIPULATIVE BEHAVIOR AND EMOTIONAL INTELLIGENCE AMONG THE STUDYING LITHUANIAN YOUTH

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[2] Lithuanian University of Health Sciences, Faculty of Public Health Sciences

Background and aims: There is relatively little research done to reveal the negative aspects of emotional intelligence (EI). The aim of this study is to evaluate the relationship between different EI factors and manipulative behavior among Lithuanian youth.

Methods: Participants of the study included 1430 students from different regions in Lithuania, ages 17 to 27. The study used the EI-DARL-V1 test (Lekavičienė, Antinienė, 2014) to evaluate the four most important EI factors (understanding and managing their emotions, understanding and managing emotions of others), as well as the tendency to manipulate other people.

Results: Statistically significant relationships ($p \leq 0.01$) are found regarding two EI factors: manipulative behavior is positively related to ability to understand other people's emotions ($r = 0.34$, Pearson coefficient) and ability to manage other people's emotions ($r = 0.14$, Pearson coefficient) . There is no link between tendency towards manipulation and self-knowledge (which entails understanding and influencing one's own emotions). Applying the MDS (Multidimensional Scaling) model, it was found that the EI structural components and the manipulative scale are located in different areas of psychosemic space, which indicates that manipulation cannot be considered an EI dimension and, therefore, should not be integrated into the overall EI test structure. Model fit is high (Stress = 0.11; RSQ = 0.94). Additionally, the resulting MDS model demonstrates the psychometric validity of the test used.

Conclusions: Manipulative behavior is more common in young people who better understand emotions and feelings of others and are able to influence them. In cases when a person seeks out emotional information that could allow superiority to others, reducing the risk of such behavior can be achieved by emphasizing the advantages of empathic behavior in the EI curriculum, as well as showing negative and risky aspects of manipulative relationships.

OP 139

STUDENTS' EMOTIONAL INTELLIGENCE AND CONFLICT SOLUTION STRATEGIES

Antiniene D.[1], Lekaviciene R.[2]

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[2] *Kaunas University of Technology, Faculty of Social Sciences, Arts and Humanities, Lithuania*

Background and aims: There are numerous contradictory statements about the relations between emotional intelligence (EI) and conflict resolution strategies in the scientific literature. (Deniz & Yilmaz, 2006; Erözkan, 2013; Fernández-Berrocal, Extremera, Lopes, & Ruiz-Aranda, 2014). The aim of the study is to ascertain how EI among Lithuanian students correlates with their ability to resolve conflicts and to choose appropriate ways to solve them.

Methods: The sample of the presented quantitative study consists of 375 Lithuanian school students (59,8% girls and 40,2% boys); the mean age is 17,4 years (SD = 0,67). To evaluate students' EI, an original EI-DARL V1 test (Lekavičienė & Antinienė, 2014) was used. Five conflict-solving strategies (avoiding, competing, accommodating, compromising, and collaborating) were evaluated using the Thomas-Kilmann Conflict Resolution Mode (TKCRM). The psychometric quality indexes of the tests were proven to be sufficient.

Results: To determine the relation between EI and conflict solution strategy, a regression analysis model was used. The regression analysis revealed statistically significant connections between general EI and two conflict solution strategies: collaborating and competing ($R^2 = .34$; $\beta = 27$; $p < 0001$). While analysing the data according to separate EI subscales, significant correlations between the EI subscales "awareness of others' emotions" and "control of others' emotions" with the named conflict solution strategies were found. The subscale "awareness of own emotions", although the effect was slight, statistically correlates to the collaboration strategy ($R^2 = .25$; $\beta = 19$; $p < 005$). "Control of own emotions" and choosing the competing strategy correlate conversely ($R^2 = .34$; $\beta = -21$; $p < 0001$).

Conclusions: EI is a reliable predictor of students' conflict solution strategies (collaborating and competing); students with higher EI tend to choose these conflict solution strategies.

OP 140

LINKS BETWEEN RELATIONAL AGGRESSION AND PERCEIVED PARENTAL ATTACHMENT AMONG ADOLESCENTS: THE MEDIATING ROLE OF FRIENDSHIP JEALOUSY AND ANXIETY

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Background and aims: Whilst research has focused on the role of emotions, including friendship jealousy and anxiety, in adolescents' engagement in relational aggression (RA; i.e., damaging or threatening to damage one's relationships, including spreading rumors, gossip or secrets, ignoring), little attention has been given to whether these factors might longitudinally mediate the relationship between perceived attachment security (parental availability and adolescent dependency on parents) and RA. This short-term longitudinal research based on the General Aggression Model (positing that personal factors interact with situational ones to trigger a composite of affect influencing decision making processes, which may or may not result in aggressive responses) extends previous work by exploring the mediating role of friendship jealousy and anxiety in the links between the two dimensions of attachment to both parents and RA among adolescents.

Methods: A community sample of 2207 Greek adolescents (52.8% females) attending the three junior high school grades completed a self-report questionnaire measuring related constructs at two different time points in the school year with a six-month interval.

Results: Results revealed that high friendship jealousy mediated the negative links between father's and mother's availability and the positive link of dependency on mother and subsequent RA, while low father's availability was related to RA through high anxiety.

Conclusions: Findings provide an understanding of the RA in adolescence by highlighting the role of both interpersonal factors and emotional traits of perpetrators and suggest that high friendship jealousy and anxiety may be a route through which adolescents who perceive their parents as not responsive and available or that they seek maternal help are likely to use relationally aggressive behavior. Implications for fine-tuning interventions in ways that account for the motivators underlying RA are discussed.

OP 143
ATTACHMENT STYLE AND INFORMATION SEEKING PREFERENCE IN YOUNG ADULTS

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Research showed that children rely both on direct first-person experiences (Piagetian way) and indirect third-person testimony (Vygotskyan way) when seeking information about the World. No research has been trying to describe and explain why some adults prefer first-hand experiences and others third-person testimony. Taking into account adults' attachment styles might provide some insight into these information seeking preferences (attachment figure is a secure base to explore the World). The main goal of this study is to investigate, for the first time, the impact of attachment styles on the prevalence of first-hand experience and third-person testimony information seeking in young adults. 900 1st year bachelor students in psychology in France, Spain, Italy, Poland, Russia, Romania, Georgia, Ivory Coast and China are being tested. They are recruited anonymously through University lectures and social media and tested via a questionnaire for their information seeking preference and attachment style. Preliminary results showed (i) a proportion of secure and insecure individuals similar to those found in Western Europe community sample and (ii) a significant relation between individuals' attachment style and their information seeking preference: 80% of secure seek for help whereas 60% of insecure continue to search by themselves when seeking information about the World. Analyses with the full sample will include the (mediating or moderating) effect of gender and culture. If confirmed, the results of this study will have several implications: contribution to a better understanding of the nature and origins of information seeking; expansion of the field of attachment research outside the emotional and social World; participation to the understanding of the impact of culture on attachment and information seeking; and development of intervention programs seeking to promote information seeking (from childhood to adulthood).

Saturday, August 31th, 2019

Papers 25 – Early Parenting

Kozani Hall 13:15 – 14:45

OP 144

MUSICAL DYNAMICS AND COGNITIVE DEVELOPMENT IN EARLY TRIADIC TNTERACTIONS

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Background and aims: Research of the last 30 years showed the importance of music for psychological development. Most studies carried out from the theory of communicative musicality described musical organizations in dyadic interactions (adult-baby). In the present study we propose that, from the beginning of life, there are also early triadic interactions (adult-object-baby) that should be analysed in terms of their musical structure and dynamics. There is evidence that musical characteristics of early triadic interactions could contribute significantly to our understanding of different cognitive developmental processes. Following previous research, early triadic interactions could have a rich and multilevel musical organization.

Methods: Our longitudinal study focuses on babies from 2 to 12 months of age interacting with one of their parents and an object in their home. We combine data provided by ELAN, Finale, and Matlab-MIRtoolbox for microgenetic quantitative and qualitative analysis of musical characteristics of the adult's actions and the children's responses during interactions.

Results: The results of a pilot study we conducted recently show that babies participate in triadic interactions in which parents communicate about and through objects using musical resources in increasingly complex ways. In this study, musical structuring would happen within and between sequences of interaction (at the intersegment, intrasequence, and intersequence levels). It would involve as well different musical parameters (e.g. rhythmic-metric structure, temporal organisation). In other words, adults constantly organised and adjusted their interaction with the baby, which was largely based on interrelated and musically structured actions. This way, adults involve the infant as an active participant in an interaction in which they are still unable to participate on their own initiative.

Conclusions: Following this evidence, we hypothesize that musical organization in early triadic interactions follows a holographic structure in which each piece carries information about dynamic processes of different timescales. Validating our hypothesis would suppose a substantial turn regarding the importance of objects and their uses for early communicative musicality and cognitive development.

OP 146

MATERNAL AND PATERNAL INFANT-DIRECTED SPEECH IN THE FAMILY CULTURE OF FIRST- AND SECOND-BORN INFANTS

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Background and aim: Speculations on parental expressive behaviors (including parental infant-directed speech) as a function of infant birth order may be informed by the following literature: a) behavioral data coming from family interactions very shortly after birth; b) neurophysiological evidence related to adult brain areas involved in infant-directed speech processing; and c) infant and parental neuroendocrinology of sex hormones and oxytocin concentrations prior to, at, or after birth. Regarding behavioral data coming from family interactions, a restricted number of within-family and in-between family research compared maternal and paternal behavior as a function of infant birth order at a single age point. In connection to this, in the framework of the theory of intersubjectivity, we compared the structure and the content of mothers' and fathers' infant-directed speech as a function of infant birth order longitudinally from the 2nd to the 6th month after birth. This is important because it may extend our understanding of the early developmental path that underlines the uniqueness of infants' early interactive experiences in micro-environments of intra-familial culture, with implications on cultivating sensitive child-responsive care and education, both important for the well-being and development of the young mind.

Method: Seven first-born and four second-born infants were video-recorded during their natural dyadic interactions with their mothers and fathers at home from the second to the sixth month after birth at 15-day intervals.

Results: Microanalysis of parental speech according to infant birth order revealed structural variations, qualitative and quantitative differences that indicate patterns of complementarity and, stability with mother and father.

Conclusion: These results are discussed in relation to the psychobiological theory of intersubjectivity and of the complementary, intimate and trusted company and care both parents give to the developing personality of infants.

OP 147

FACTORS INFLUENCING MOTHERS' AND FATHERS' BEHAVIOURS DURING PARENT-CHILD INTERACTION IN THE FIRST TWO YEARS

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Background and aims: In everyday life, parents and their child interact in various contexts. Previous works have shown that mothers and fathers present similarities as well as differences regarding their interactions with their child. Moreover, child's gender and global family functioning may also influence parental interactional behaviours. The aim of this longitudinal study was to explore the influence of the context in which the interaction takes place, of gender roles and of family alliance on parental behaviours during play.

Methods: We observed parental play behaviours in a sample of 67 volunteer families at 3 (t_1), 9 (t_2) and 18 months postpartum (t_3). We assessed parental behaviours in two different contexts: when alone with the child (D), and in the presence of the other parent (DT). Parents' behaviours were coded into four categories: stimulation, observation, joint activity and interference. Family alliance was assessed with the Family Alliance Assessment Scales. We computed Generalized Linear Mixed Models to account for both within- and between-person variability.

Results: Results showed that stimulation rate significantly diminished through time, and was significantly higher in the D context, when the child was a girl and in families with a non-optimal alliance. In these families, parents did significantly more interferences and spent less time observing their child and sharing joint activity with her/him. Observation rate was significantly higher in the D context when the child was a boy, but was higher in the DT context when the baby was a girl. Differences in the type of parental behaviours between contexts vary through time. Mothers did significantly more interferences than fathers did. They also tended to share more joint activities with their infant, except at t2.

Conclusions: Our findings suggested that interactional context, gender roles and family functioning influence parental interactive behaviours.

OP 148

'I CANNOT GIVE SOMETHING THAT I DIDN'T RECEIVE' – FAMILY ORIGINS OF EMOTIONAL RESPONSIVENESS TO INFANT CRYING

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The experiences in family of origin have been linked to responsiveness to child's crying (Leerkes & Siepak, 2006) - a reaction that most strongly engages caretakers (Bell & Salter Ainsworth, 1972). The presented study was aimed at analyzing the retrospectively assessed parenting styles' effects on caretaking behaviours and emotional reactions to infant crying with use of a life-like doll (Voorthuis et al., 2013).

In each of two experiments participants reacted to a crying doll. 100 couples (age: $M_{females}$= 26.04, SD= 3.18; M_{males}= 27.49, SD= 3.81; relationship duration M_{years}= 5.98, SD= 3.05) participated in experiments independently (1), and as a couple (2). The couples assessed parenting styles of their parents (*"My Family" - Field's family types*; Rys, 2001), emotional reactions to doll's crying (*"My Emotions Scale"*; Kazmierczak & Pawlicka, 2018) and partner's perceived support, engagement in communication and depreciation during the experiment 2.

Participants assessing their parents' style as democratic and loving in childhood (group 1) expressed more empathy and sympathy towards the crying doll than those who perceived their parents as autocratic and unloving (group 2) (experiment 1: t(198)= -3,082; p< .01; experiment 2: t(198)= -3,985; p< .001). No effects of family of origin were found for self-oriented emotional reactions to crying. Maternal, compared to paternal, parenting styles more strongly correlated with reactions to crying in both, women and men (Spearman's rho, p< .05). In experiment 2, couples who both were in group 1, compared to other participants, assessed their partners as more supportive while taking care for the doll (women: t(91.317)= 2.107, p< .05; men: t(98)= 1.884, p= .06); and men were perceived as more engaged in mutual communication during the experiment (t(92.801)= 2.005, p< .05).

The results confirmed a significant effect of family-of-origin for the experimentally measured emotional responsiveness towards infant's crying. Unique couple effects were obtained.

OP 149

GAZE AND TACTILE BEHAVIOUR IN SPONTANEOUS INFANT-PARENT INTERACTION: AN EXPLORATORY CASE STUDY

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Background and Aim: Previous studies investigating patterns of gaze and tactile behavior in early infant-parent interaction focused either on differences between mother-infant and father-infant interactions in one culture, or comparisons between cultures were carried out solely for one parent gender. There is no longitudinal, naturalistic and cross-cultural study comparing gaze and tactile behavior according to parent gender. To fill this gap, within the theoretical framework of the theory of innate intersubjectivity, this case study investigated the relationship between culture, parental gender and infant age with patterns of gaze and tactile behavior in spontaneous dyadic infant-parent interactions.

Method: Two infants, one coming from Greece and one coming from Scotland, were video-recorded at home in spontaneous dyadic interactions with their mother and father from the second to the sixth month after birth at 15-day intervals. Within well-defined units and subunits of analysis, we micro-analyzed patterns of gaze and tactile behavior. Gaze behavior was analyzed according to gaze direction [partner's face, body, eyes, elsewhere (gaze aversion)]. Tactile behavior was analyzed according to the direction (face, body) and the kind of touch (care touch, game touch). The duration of gaze and tactile interactions was analyzed too.

Results: This study provided the following evidence: a) Gaze and tactile interaction predominated in mother-infant dyads compared to father-infant dyads; b) Gaze and tactile interaction lasted longer in parent-infant dyads from Greece, but the frequency of gaze and tactile behaviors were higher for parent-infant pairs from Scotland; c) Infant age, culture and parental gender were related to the developmental trajectory of gaze behavior, while the developmental course of tactile behavior was correlated to infant age, but not to parental gender or culture.

Conclusion: The results of this study will be discussed and interpreted in the frame of the theory of innate inter-subjectivity.

Saturday, August 31th, 2019

Papers 26 - Personality

Edessa Hall 13:15 - 14:45

OP 150
THE COGNITIVE STRUCTURE OF LOVE IN BABY BOOMERS AND MILLENNIALS

Gawda B.

University of Maria Curie-Sklodowska, Poland

Background and aims: Love has been thoroughly studied and a variety of definitions of love have been described. Given the data presenting natural language of love concept, the aim of the present study is to compare the cognitive structure of love concept in two generations i.e. Baby Boomers and Millennials. These two generations are defined as different in terms of their preferred communication ways, needs, group interactions, beliefs, or attitudes towards authority, career, and achievements. The main thesis was formulated on the differences in the structure of love concept in the individuals from two different generations.

Methods: The study involved two groups of adults of similar level of verbal intelligence: baby boomers (persons born before 1964, $n = 117$) and millennials (persons born between 1980 and 2000, $n = 120$). The affective verbal fluency technique was used to examine the structure of love concept. A task named 'love' was performed by all participants. Nouns generated by people were recorded and grouped in the semantic clusters. The following clusters were identified: intimacy, passion, commitment, existential aspects, temporal aspects, symbols, types of love as Storge, Eros, Ludus, Mania, and Agape.

Results: The number of words in the semantic clusters was compared between two groups (One-way ANOVA analysis) namely Baby boomers and Millennials. Some constant and some different aspects of lay-concept of love were revealed. Millennials' concept of love encompasses less intimacy while more passion, Eros type, and symbols elements. Baby boomers' structure of love contains more intimacy, and Storge type aspects.

Conclusions: The results are discussed in terms of developmental changes, emotional prototypes, and schemas. The present findings confirm difference in the structure of concept of love and expression of love in baby boomers and millennials.

OP 151

TRAIT- AND STATE-LIKE EFFECTS OF PROSOCIALITY ON LIFE SATISFACTION DURING LATE ADOLESCENCE AND ADULTHOOD: A SHORT-TERM AND LONG-TERM INVESTIGATION

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Background and aims: Previous studies highlighted the importance of prosociality (PRO) to sustain one's own life satisfaction (LS) across adolescence and adulthood. Yet, the extent to which LS could be explained by stable differences in PRO (*trait-like*) and/or to momentary increase in PRO (*state-like*) deserves further investigation. In the present study, we aimed to clarify this gap by analyzing the effect of PRO on LS using a random-intercept cross-lagged-panel-model (RI-CLPM; Hamaker et al., 2015). We also evaluated the short- and long-term nature of the effect of PRO on LS by using two different samples of participants followed over 10 days (sample 1) and over 12 years (sample 2).

Methods: Sample 1 included 356 students (81% girls; M_{age}=25.90, SD=1.80) followed each day for 10 days whereas sample 2 included 845 participants (51% girls; M_{age}=17.45, SD=1.67) followed over 12 years (2000, 2002, 2004, 2008, 2012). Participants in both samples reported their PRO (Caprara et al., 2005) and LS (Diener, 1984) using validated scales (αs >.80).

Results: RI-CPLMs indicated a positive correlation between PRO and LS at the trait-level in sample 1 and 2 (rs =.27 and .26, ps<.001, respectively). At the state-level, PRO at time t was positively associated with LS at the same time-point in sample 1 and 2 ($rs \approx$.28 and .08, ps<.02, respectively) but its positive lagged effect on subsequent LS (time $t+1$) was significant in sample 1 ($\beta \approx$.07, ps<.05) but not in sample 2 ($\beta \approx$.04, ps<.15).

Conclusion: Our findings revealed that PRO and LS were positively related to each other both at the trait- and state-level. However, behaving more prosocial than usual predicted higher than usual LS only in a day-to-day framework and not in a long-term perspective. The practical implications of these results for promoting prosocial actions and LS in everyday contexts are discussed.

OP 152

PEER GROUP CONTEXTUAL EFFECTS ON SHYNESS AND UNSOCIABILITY IN ADOLESCENTS

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According to previous studies, socially withdrawn children are at increased risk of a host of maladjustment, because of few social interactions. Shyness and unsociability are the two main sub-types of social withdrawal. However, shy and unsociable adolescents also have their own friends and maintain stable friendships, even though they tend to isolate themselves from social interaction.

The purpose of the present research was to examine the effects of peer group on the development of shyness and unsociability. Two-wave longitudinal panel data were collected from self-reported questionnaires that were completed by 981 adolescents in grades 7-8 in China. Multilevel structural equation modeling was used to examine the Peer group contextual effects on shyness and unsociability.

The main findings were as follows: (1) The majority of adolescents who has high level of shyness belonged to a peer group. Compared with individuals who had lower level of shyness, individuals who had higher level of shyness were more likely to be at the core position of peer group. (2) The majority of adolescents who has high level of unsociability belonged to a peer group. Compared with individuals who had lower level of unsociability, individuals who had higher level of unsociability were more likely to be at the secondary and marginal position of peer group. (3) Members of peer group were similarities in shyness and unsociability. (4) Group shyness and unsociability could contribute to later shyness and unsociability. High-shy group context reduced the level of shyness in individuals, and high-unsociable group context strengthened the level of unsociability in individuals. These results indicate that peer group contextual effects on the development of shyness and unsociability in adolescents

OP 153

THE EFFECT OF RESILIENCE ON PTSD: MEDIATION EFFECTS BY THE BIG FIVE

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Theoretical models and the literature on PTSD have established that there is a wide range of outcomes in how persons cope with traumatic experiences. The five-factor model of personality is the most popular structural personality model, confirmed across virtually all cultures and fairly stable over time. In addition, resiliency connotes strength, flexibility, a capacity for mastery, and resumption of normal functioning after excessive stress that challenges individual coping skills.

In this study, the following hypotheses were tested:

(1) resilience will be associated with Big five personality dimensions;

(2) the association between PTSD and Big Five personality will be mediated by resilience

(3) neuroticism, extraversion/introversion, and conscientiousness fully mediate the association of resilience on PTSD.

Data were collected from 191 adolescents (N_{girl}=83, N_{boy}=102; M_{age}=16.25) attending high schools in different parts of Turkey (Ankara, Gaziantep). Measures included Big Five Personality Scale, Resilience Scale, and PTSD scale.

Model tests included separate models for each hypothesized mediator as well as combined model with all three of them. There were relationships between being an entrepreneur and extraversion, becoming a leader; being enterprising and agreeableness; stronger and conscientiousness, entrepreneur and being a leader; being an entrepreneur with neuroticism and becoming a leader. The direct relationship between conscientiousness and neuroticism and PTSD was significant. It is seen that this is a partial means of being entrepreneurial and predictive. The direct relationship between entrepreneurship and PTSD was significant from the subscales of Resilience. In this relation, conscientiousness and neuroticism had a partial mediating role.

Based on these findings, PTSD was predicted by resilience through Big Five Factor dimensions. However, only entrepreneurship mediated this relationship, which indicates some possible overlap among the three mediators. The evidence also supports the notion that effects by individual differences on PTDS are mostly indirect, and through what appear to be resiliencent people associated with personality.

OP 154

TRAJECTORIES OF TEMPERAMENTAL ACTIVITY IN CHILDHOOD AS PREDICTORS OF PERSONALITY TRAITS AND FACETS IN ADOLESCENCE

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Objective: Activity is considered the dimension of temperament that changes the most in its expression across childhood. However, very few studies have assessed developmental trajectories as well as personality outcomes of childhood activity. This study aims to examine how temperamental activity develops from infancy to middle childhood, identify potential gender differences in this development, and investigate how this development predicts the Big Five personality traits and these traits' lower-order facets in adolescence.

Method: We analyzed data from a Norwegian population-based study following 939 children and their families from age 1.5 to 18.5 years. Mother-rated activity development across four time points (age 1.5-8.5) was modeled using latent growth curve analyses, and growth parameters were used to predict adolescents' self-reported personality (age 16.5).

Results: On average, temperamental activity decreased substantially with age, with girls having a steeper decrease than boys. High initial level of activity predicted high levels of extraversion and its facets activity and assertiveness in adolescence. Comparably smaller decreases in activity predicted high levels of the activity facet of extraversion and the self-discipline facet of conscientiousness.

Conclusion: This study is the first to show empirically that different periods of activity development have different implications for the prediction of later personality. The association from later activity development to the productiveness and achievement-related component of the conscientiousness dimension is particularly important, as previous research has tended to portray the activity dimension as mainly a risk factor for negative adjustment outcomes. The results of this study thus suggest instead that high childhood activity might serve as a promotive factor that could have positive implications for healthy adjustment.

OP 155

THE RELATIONSHIP BETWEEN SELF-COMPASSION AND REJECTION SENSITIVITY: THE MEDIATOR ROLE OF EMOTIONAL REACTIVITY

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Rejection sensitivity is crucial for sustaining stable social relationships. The rejection sensitivity theory indicates that experience of rejection predicts psychopathology symptoms through developing sensitivity for related emotional and social circumstances (Kanchewa, Yoviene, Schwartz, Herrera, & Rhodes, 2018). Instead, self-compassion is necessary to establish healthy interpersonal relationships. Openness to unpleasant emotions, being attentive to one's emotion, and approaching potential failures in an understanding manner are defined as components of self-compassion. Self-compassion is conceptually influenced by both rejection sensitivity and emotional distress (Joeng, Turner, Kim, Choi, Lee, & Kim, 2017). Besides emotional distress, as a part of emotional regulation mechanism, emotional reactivity also plays an important role in regulating intimate relationships beginning from the early years of life. Furthermore, valence and persistence of emotional reactivity vary between individuals which in turn have potential to influence their interpersonal relationships (Cook, Blair, & Buehler, 2017). In the light of the literature, the aim of the present study is to reveal the mediating role of the emotional reactivity in the relationship between self-compassion and rejection sensitivity.

The participants of the study will consist of 300 undergraduate students that will be recruited based on convenience sampling. Data will be collected using the Self-Compassion Scale (Neff, 2003), the Emotion Reactivity Scale (Nock, Wedig, Holmberg, & Hooley, 2008) and the Rejection Sensitivity Scale (Downey & Feldman, 1996).

A mediational model will be tested that includes rejection sensitivity as a criterion variable, self-compassion as a predictor variable, and emotional reactivity as a mediator. Initial findings of the study that included 102 undergraduates (M_{age} = 21.66, SD = 1.58) indicated that emotional reactivity fully mediated the relationship between self-compassion and rejection sensitivity. The results of the current study will help us understand the individual factors that affect rejection sensitivity.

Saturday, August 31th, 2019

Papers 27 – Adversity and Resilience

Naoussa Hall 13:15 – 14:45

OP 157

ADULTS' REPRESENTATION OF CHILDREN'S EMOTIONS AND COPING STRATEGIES RELATED TO EARTHQUAKES

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Background and aims: For children, the traumatic psychological impact of natural disasters such as earthquakes has been documented. Also the study of children's earthquake-related emotions and coping strategies has gathered increasing attention. However, little is known on the corresponding adults' representation. Examining the influence of earthquake experience: (a) we hypothesized adults to consider fear more salient than sadness, during and after earthquakes, and (b) we explored how adults represent the efficacy of coping strategies related to children's fear and sadness.

Methods: The participants were 569 Italian university students with different earthquake experience (no experience/damage: 70%; experience with damage: 30%). Referring to what happens during and after earthquakes, they were asked to list children's (a) expected emotions, and (b) coping strategies for diminishing fear and sadness. We coded (a) the number of fear and sadness terms; (b) the presence of 13 coping strategies (Zimmer-Gembeck & Skinner, 2011), i.e. problem solving, information-seeking, helplessness, escape, self-reliance, support-seeking, delegation, social isolation, accomodation, negotiation, submission, opposition, and support-giving (agreement for reliability: 95%).

Results: We used Generalized Linear Mixed Model. Fear was reported more frequently than sadness, and more frequently during vs. after earthquakes (and vice versa for sadness). Some coping strategies were reported rarely (≤ 5%: helplessness, escape, delegation, social isolation, negotiation, submission, opposition, and support-giving). Among the others, problem solving, information-seeking, self-reliance, and support-seeking were more salient for fear vs. sadness, and vice versa for accommodation. Problem solving was more salient during vs. after earthquakes, and vice versa for accommodation. These effects partially depended from earthquake experience.

Conclusions: Our findings enable to deepen the knowledge on adults' emotional representation of earthquakes, filling a gap in the literature. At an applied level, they can help professionals to develop prevention trainings to prepare children to disasters, promoting their knowledge on earthquake-related emotions and efficacious coping strategies.

OP 158
THE RELATION BETWEEN RESILIENCY AND PARENTIFICATION EXPERIENCED BY TEENAGERS

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The term 'parentification' means distorted division of roles and responsibilities in the family where those roles of children and adults are being reversed (cf. Minuchin, 1984; Jurkovic, 1997; Hooper, 2008, 2011; Schier, 2010, 2014; Haxhe, 2016). A situation which goes beyond the child's capabilities and exhausts resources usually yields various negative outcomes. Nevertheless, in some circumstances parentification may be beneficial by boosting one's self-agency, self-esteem and shaping resilience because the child may feel helpful and valuable by performing certain functions and roles in the family (cf. Chase, 1989; Hooper, 2008, 2011).

The main aim of the study was to explore the relations between parentification characteristics and resiliency. There were 208 Polish teenagers (M=14.54; SD=1.11) who participated in the study. Resiliency was evaluated using Polish scale to measure resiliency in children and adolescents - *SPP-18* (Ogińska-Bulik, Juczyński, 2011). Parentification level was measured with *Parentification Questionnaire for Youth* (Borchet, Lewandowska-Walter, Połomski, Peplińska, in review).

The preliminary analyses have revealed significant relations between parentification and resiliency characteristics. Moreover, being satisfied with the roles performed in the family was correlated with all the resiliency factors. The obtained results are novel and show that child's perception of his/her role in the family is crucial for parentification outcomes and it is important to note resiliency while assessing perceived benefits of parentification.

OP 160
NEGATIVE LIFE EVENTS AND SECONDARY EDUCATION STUDENTS' PERCEPTIONS OF RESILIENCE

Athanasiou D.

Department of Psychology, National and Kapodistrian University of Athens

Taken into account the socioeconomic recession that Greece has faced the past years, with various negative consequences for students and their families, this presentation will focus on the study of negative life events that students of secondary education may have experienced and have affected them. Furthermore, resilience is often examined in relation to difficult living conditions and negative life events constituting a protective individual factor that can help students overcome adversities and minimize possible negative outcomes in their further psychosocial development. In this context, this study also explores students' of secondary education perceptions of resilience. For the purpose of this study, students from junior high schools and high schools of Athens (N=560) completed the following questionnaires: (a) Life Events Scale (Fthenakis & Minsel, 2002); and (b) Resilience Scale-15 (Neil & Dias, 2001). Findings regarding relations between the negative life events in students' life and their perceptions of resilience will be presented. Furthermore, statistically significant differences in relation to gender, age, parental unemployment and family status will be discussed. The results of this study will contribute to a better understanding of the relation between negative life events that students may experience and their resilience. Finally, suggestions regarding the promotion of students' resilience and well-being will be discussed.

OP 161

INVESTIGATING RESILIENCE AND HOPE IN RELATIONS TO ANXIETY AND STRESS IN GREEK ADOLESCENTS

Agathou F., Antoniou A.-S., Polychroni F.

Department of Primary Education, National and Kapodistrian University of Athens

Resilience enables young people to cope with negative experiences and often become stronger. However, it is known that an adolescent's personality is adversely affected by anxiety and stress. Based on the existing literature the aim of this study is to examine the levels of resilience of adolescents, the relationship of stress, anxiety, depression and hope with resilience as well as with several demographic variables. The sample consisted of 259 students attending the last grade of primary school and Grades 1, 2, 3 of high school (11 to 14 years old). The measures consisted of a demographical questionnaire, the Children's Hope Scale, the Depression, Anxiety and Stress Scale, the Resilience Scale for Adolescents and the Child and Youth Resilience Measure. The findings showed that the levels of resilience for the adolescents of the present study were average. Moreover, anxiety, stress and depression were negatively correlated with all subscales of hope and both measures of resilience. In terms of demographic characteristics, adolescents in the nuclear family reported higher levels of resilience, hope and lower levels of anxiety, stress and depression as compared to students in single parent families. Primary school students reported higher levels of resilience and hope as compared to high school students. A few differences in resilience and hope levels were found favouring higher level educated parents. Finally, no significant differences were noted in terms of gender. The implications of the findings are discussed for supporting adolescents by reducing risk factors and increasing protective factors in order to enhance resilience.

Saturday, August 31st, 2019

Symposium 33

Olympia Hall A 14:45 - 16:15

S 33
DAILY PHYSIOLOGICAL AND RELATIONAL PROCESSES IN PARENT-CHILD RELATIONSHIPS DURING ADOLESCENCE

Branje S.

Chair, Discussant
Department of Youth and Family, Utrecht University, Utrecht, The Netherlands

This symposium brings together four presentations from Belgium, The Netherlands and The USA on daily dynamics in family relationships during adolescence. The emphasis of the symposium is on within-person (or within-family) processes as opposed to between-person processes, thereby putting the individual back into development. In other words, these studies address whether family processes affect adolescents' relationship quality or functioning compared to their own mean level of relationship quality or functioning. Together, the different studies will not only examine the interrelations between various aspects of parent-adolescent relationships and individual functioning, but also shed light on mediating and moderating processes.

The first presentation will use both day-to-day and year-to-year analyses to test the spillover hypothesis of interparental conflict on mother-adolescent conflict. Moreover, the mediating role of negative mood will be examined. The second study will use day-to-day and year-to-year analyses to address the extent to which adolescent personality moderates the detrimental effects of psychologically controlling parenting on children's adjustment. The third presentation focuses on individual differences in the amount of within-family covariation, and tries to disentangle whether greater within-family covariation in parenting and adolescents' perceived connectedness is associated with higher risk, or whether greater covariation reflects adolescent's capacity to extract benefit from positive parenting. The fourth study examined the direction of effect between parents' and children's cortisol patterns across a four-day period. A discussion with the audience is organized about the way that daily processes in adolescents' families are interrelated and the meaning of daily family dynamics for adolescents' psychosocial functioning.

S 33 – 1

INTERPARENTAL CONFLICT AND MOTHER-ADOLESCENT CONFLICT: LONGITUDINAL MEDIATION BY MOOD USING ANNUAL ASSESSMENTS AND DAILY DIARIES

Mastrotheodoros S., Van Lissa C., Van der Graaf J., Dekovi M., Meeu W., Branje S.

Utrecht University, Utrecht, the Netherlands

Objective: To test the spillover hypothesis of interparental conflict on mother-adolescent conflict, and the mediating role of negative mood, by using both day-to-day and year-to-year analyses.

Background: The spillover hypothesis proposes that interparental conflict instigates parent-adolescent conflict. Among the reasons why this is expected is the transfer of negative mood. Fundamental aspects of this hypothesis are the time-lag between the two conflicts (first interparental conflict happens, then parent-adolescent conflict happens), and the fact that the effect is located within the family (not across families). Even though much empirical research to date has supported the spillover, most studies have neglected at least one of these premises. Furthermore, the role of mood has not been tested.

Method: Data came from 497 Dutch adolescents (M = 13.03, 43.1% girls), and their mothers. Daily diaries were completed for 5 days/week, 3 weeks/year, and 5 years (75 daily diaries) regarding conflict and negative mood. Random-Intercept Cross-Lagged Panel Models were applied to investigate year-to-year, and Dynamic Structural Equation Modeling to investigate day-to-day spillover.

Results: Interparental conflict spilled over to mother-adolescent conflict annually, but not daily. Mood did not mediate the spillover, but was associated with both conflicts.

Conclusion: Limited support for the spillover hypothesis is offered. The different time scales applied herein indicate that the question might not be whether spillover happens or not, but when does it occur.

S 33 - 2

THE ROLE OF CHILD PERSONALITY IN EFFECTS OF PSYCHOLOGICALLY CONTROLLING PARENTING: AN EXAMINATION AT THE WITHIN PERSON LEVEL

Mabbe E.[1], Vansteenkiste M.[1], Brenning K.[1], De Pauw S.[2], Beyers W.[1], Van der Kaap-Deeder J.[1], Dieleman L.[1], Mouratidis A.[3], Bart Soenens B.[1]

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[2] Department of Special Needs Education, Ghent University, Ghent, Belgium
[3] TED University, Ankara, Turkey

Research increasingly demonstrates the detrimental effects of psychologically controlling parenting on children's adjustment. An important and practically relevant question is whether some children are more vulnerable for the effects of psychologically controlling parenting. Previous research used mainly cross-sectional studies, adopting a between-person perspective and focusing on interindividual differences between adolescents. It is important, however, to also take a look at this question from a within-person perspective and focusing on change within adolescents' functioning, using diary-based and longitudinal designs. From a within-person perspective, examining the moderating role of personality means that one is looking at the question which children are more or less susceptible to changes in parenting compared to their own mean level of perceived parenting.

Study 1 is a multi-informant diary study, sampling 206 children (M age = 9.93 years) and their parents. All 3 family members filled out a diary each day for 7 days. Study 2 is a 3-wave longitudinal study with one-year intervals between waves in which 198 families participated. A multi-informant assessment was again used, with both adolescents (M age = 14.89 years) and their parents providing ratings of parenting and outcome variables.

In Study 1, multilevel analyses indicated that daily maternal and paternal psychological control were positively related to daily externalizing and internalizing problems, a pattern that was fairly consistent across informants. Out of the 35 interactions with personality tested, only 3 turned out to be significant. In Study 2, multilevel analyses demonstrated that changes in maternal psychological control (as reported by both mother and adolescent) and paternal psychological control (as reported by adolescents) related positively to changes in multi-informant scores of both internalizing and externalizing problems. The moderating role of personality was tested using both a dimensional approach and a person-centered approach. Evidence for the moderating role of personality was found for 3 out of 25 interactions (12%) in a variable-centered approach and for 3 out of 8 interactions (25%) in a person-centered approach.

Overall, the limited number of interactions suggests that psychologically controlling parenting is generally detrimental to children's daily functioning. Still, children differ somewhat in their susceptibility to the effect of psychologically controlling parenting.

S 33 – 3

VANTAGE SENSITIVITY OR FRAGILE CONNECTEDNESS? DAILY RESPONSIVENESS TO POSITIVE PARENTING AND LONG-TERM ADOLESCENT RISK

Fosco G.M., LoBraico E.J.

The Pennsylvania State University

Background and aims: Rapid declines in parent-adolescent relationship quality are associated with adolescent problem behavior and substance use (Dishion et al., 2004). How and why adolescents differ in their declines in connectedness with caregivers is less clear. This study has two aims. 1) To evaluate whether a daily variation in positive parenting would covary with adolescents' feelings of connectedness to caregivers. 2) To evaluate whether within-family covariation in parenting and connectedness represents a vulnerability factor -*fragile connectedness*- where greater covariation is associated with higher risk, or a protective factor -*vantage sensitivity*- where greater covariation reflects adolescent's capacity to extract benefit from positive parenting.

Methods: 151 families participated in a 21-day daily diary study. Parents reported on daily positive parenting. Adolescents reported on daily connectedness with caregivers. Adolescents provided 1-year follow-up data on problem behavior and substance use.

Results: Analyses consisted of two stages. 1) Multilevel model results indicated that daily variation in parenting behaviors was associated with adolescents' diminished feelings of closeness to caregivers. Specifically, on days when parents used more praise and positive reinforcement, adolescents felt less connected with their caregivers. 2). Random slopes were extracted from models and evaluated as a between-person predictor of long-term outcomes, controlling for initial levels of outcomes and adolescent gender. Regressions provided partial support for a "fragile connectedness" hypothesis. Findings indicated a direct association in which adolescents who experienced the strongest changes in connectedness in response to changes in day-to-day parenting were at higher risk for engaging in problem behavior and substance use. In several analyses, these findings are tempered by baseline levels of connectedness to caregivers.

Conclusions: Results support a fragile connectedness hypothesis, in which adolescents' feelings of connectedness to caregivers was highly contingent on parents' day-to-day behaviors as a risk factor for problem behavior and substance use.

S 33 – 4
CHILD EFFECTS ON DAILY PARENTS' CORTISOL

Lippold M.[1], **Molenaar P.**[2], **Lee S.**[3], **Chandler K.**[4], **Almeida D.**[2]

[1] The University of North Carolina, School of Social Work, U.S.

[2] The Pennsylvania State University, Department of Human Development and Family Studies, State College, PA, U.S.

[3] University of South Florida, School of Aging Studies, Tampa, FL, U.S.

[4] University of South Florida, College of Public Health and Human Sciences, Corvallis, OR , U.S.

According to transactional models, parents and children have a bidirectional influence on one another. Yet, little is known about how parents and children affect each other physiologically. Cortisol, a biomarker of stress, is linked to health outcomes. Family members' cortisol patterns covary over time but the direction of effect is unclear. In this study, we test the direction of effect between parents' and children's cortisol patterns across a four-day period. We hypothesize that parent and child cortisol will have bidirectional linkages.

The sample included 311 parent-child dyads in an eight-day daily diary study in the Work, Family, and Health Study. Cortisol was collected four times a day on four study days (converted to nmol/l and log-transformed). Given the diurnal rhythm of cortisol, unhealthy patterns of cortisol include high bedtime levels and blunted Cortisol Awakening Response (CAR). Longitudinal autoregressive cross-lagged models estimated cross-lagged paths (parent predicts child cortisol; child predicts parent cortisol) and stability paths. Control variables include child age, gender, race, time of cortisol sample, medication use, and daily stressors.

When controlling for prior levels, higher children's bedtime cortisol levels were significantly associated with higher parent bedtime cortisol levels the following day (B=.13, p <.001). However, parents' bedtime cortisol levels were not associated with children's bedtime cortisol levels (B=.03, p = ns). Steeper children's CAR was significantly associated with steeper parents' CAR the following day (B= .11, p <.05), but parents' CAR was not associated with children's CAR (B= -.01, p = ns). Model fit was good according to RMSEA, NNFI, and CFI.

Parent and child cortisol patterns covary across days. However, these associations were not bidirectional: Child cortisol affected parent cortisol but not vice versa. Findings support a child-driven model of stress transmission and suggest that interventions to help parents become less physiologically reactive to children's stress are warranted.

Saturday, August 31st, 2019

Symposium 34

Olympia Hall B 14:45 - 16:15

S 34
IDENTIFYING AND EVALUATING CHAOS IN EARLY HOME ENVIRONMENTS

Gattis M.
Chair, Cardiff University

Tomalski P.
Discussant, Neurocognitive Development Lab, Faculty of Psychology, University of Warsaw, Poland

Early home environments influence human development. A large body of research has documented the central role of adverse environments in shaping children's development. Recent research focuses on chaos as a particularly important aspect of children's early environments (Evans et al., 2009). For example, Vernon-Feagans et al. (2012) demonstrated that household chaos is the key mediator of the effects of poverty on child development. However, conceptualising home environment poses a number of challenges, as it involves both physical and psychological aspects (e.g. Wachs, 1993).

In this symposium we survey recent work taking diverse approaches to conceptualising the home environment generally, and chaos specifically. We consider different operational definitions of chaos, including as the temporal patterns and physical properties of the household (Matheny et al., 1995), as well as unstable and disordered rearing environments (Sameroff, 2010) that involve multiple carers and households. We seek to show how different ways of conceptualising and measuring chaos may lead to building better multifactorial models of both adverse and typical home environments.

Gattis investigated how household chaos relates to beliefs about structure in caregiving in a large sample of pregnant women.

Tomalski presents longitudinal associations between changes in household chaos throughout infancy and language and cognitive outcomes at 2 years of age.

Paine studied the moderating role of parent-child relationship quality on longitudinal associations between pre-adoption chaos and post-adoption child adjustment.

Finally, Wass investigated how exposure to auditory noise at home was related to autonomic regulation, attention-eliciting and visual sustained attention in 12-month-olds.

S 34 – 1

STRUCTURE AND CHAOS IN THE TRANSITION TO PARENTHOOD

Gattis M.

Cardiff University, Cardiff, United Kingdom

Background and aims: People bring different life histories to their role as parents, which in turn shape their beliefs about caregiving during infancy. This study investigated how experience shapes the attitudes and beliefs pregnant women have about caring for infants.

Method: 364 pregnant women completed questionnaires online. For the Confusion, Hubbub, and Order Scale (CHAOS) (Matheny, Wachs, Ludwig, & Phillips, 1995) women rated the extent to which statements such as "It's a real zoo in our home" described their home environment, using a 4-point scale from very much to not at all. For the Baby Care Questionnaire (BCQ), women used a 4-point scale to rate their agreement versus disagreement with statements measuring parental belief in structure, defined as support for regularity and routines in childcare (Winstanley & Gattis, 2013). Those who did not respond to at least 70% of items for both measures or did not answer all demographic items were excluded from further analyses, leaving a final sample of 276.

Results. Both measures had satisfactory internal consistency (Cronbach's α = 0.78 for CHAOS, 0.86 for structure measured by the BCQ). Neither maternal age nor parity influenced household chaos or maternal beliefs about structure in caregiving. Maternal education and household income correlated negatively with home chaos. A non-parametric partial correlation revealed a negative relation between home chaos and structure, whilst controlling for maternal education and income, $rs(272)$ = −.133, p = .028.

Conclusions. Women who experience less household chaos place more importance on the role of routines and rituals in caregiving during infancy. Because this was a correlational study at a single point during pregnancy, it is not possible to identify the causal direction. Future research should investigate these relations longitudinally in order to better understand the underlying causality.

S 34 – 2

CHANGES IN CHAOTIC HOME ENVIRONMENT IN INFANCY ARE ASSOCIATED WITH LANGUAGE AND COGNITIVE DEVELOPMENT AT 2 YEARS OF AGE

Tomalski P., Malinowska A.

Neurocognitive Development Lab, Faculty of Psychology, University of Warsaw, Poland

Background and aims: Household chaos is a construct describing the physical properties of early environment and includes crowded living space, noise and lack of regularity or routines. Household chaos in mid-childhood predicts adverse developmental outcomes and mediates the effects of low SES on child development. Only few studies tested the effects of household chaos in infancy. Recently, we demonstrated that 5-month-olds from families with reported higher household chaos show lower processing speed during visual habituation (Tomalski et al., 2017). Here we tested the associations between household chaos measured in infancy and developmental outcomes at 24 months of age.

Methods: We used a validated questionnaire measure of chaos (CHAOS, Matheny et al., 1995) and standardised measures of temperament (ECBQ), language (OTSR, picture vocabulary task; Polish CDI) and a cognitive development battery (Mullen Scales of Early Learning). The sample (final n=55) was predominantly middle class and consisted of typically-developing children.

Results: Higher CHAOS scores at 5 months predicted higher scores for High Intensity Pleasure in ECBQ at 24 months ($r= 307$, $p=.025$). We also found associations between higher CHAOS scores at 11 months and lower vocabulary size (OTSR: $r=-.284$, $p=.017$; trend for CDI: $r=-.277$, $p=.066$) and Mullen total scores ($r=-.289$, $p=.024$) at 24 months. Interestingly, the reduction in CHAOS scores between 5 and 11 months of age was significantly associated with higher Mullen ($r=.383$, $p=.004$) and vocabulary (CDI: $r=.322$, $p=.04$) scores at 24 months.

Conclusions: Our results demonstrate moderate-to-low longitudinal associations between chaos during infancy and later language and cognitive development. Better outcomes were predicted by the reduction in chaos across the first year, suggesting a distinct timescale in the effects of changes in home environment on development.

S 34 – 3

THE MODERATING ROLE OF PARENT-CHILD RELATIONSHIP QUALITY ON LONGITUDINAL ASSOCIATIONS BETWEEN PRE-ADOPTION CHAOS AND POST-ADOPTION CHILD ADJUSTMENT

Paine A., Anthony R., Shelton K.

Cardiff University, Cardiff, United Kingdom

Background and aims: The bioecological model of human development emphasises the importance of stable and consistent proximal environments to child wellbeing (Bronfenbrenner & Evans, 2000). Children placed for adoption often come from chaotic environments characterised by *instability and disorder* (see Sameroff, 2010), with many having experienced pre-adoption neglect, abuse, and trauma (Selwyn et al., 2014). We investigated how the effects of chaos defined by rearing histories (including number of carers before final move, days in state care, and early adversity) may transfer to (1) other rearing environments and (2) children's psychological adjustment, and show (3) how the effects of chaos on children's adjustment may be attenuated by parent-child relationship quality in adoptive family life.

Methods: The Wales Adoption Study is a 4-wave prospective, longitudinal mixed-methods research study. We used data from a sample of 96 children and their parents, where the child was placed for adoption between 2014 and 2015. Parents completed questionnaires at 4-, 18- and 30 months post-placement including measures of parent-child relationship quality (warmth; hostility, Melby et al., 1993) and child psychological adjustment (Child Behavior Checklist, Achenbach & Rescorla, 2000; 2001). Local authority data was used to estimate pre-placement chaos (indexed using number of carers before final move; days in state care; early adversity e.g. neglect, abuse).

Results: We modelled relationships between pre-placement chaos and post-adoption child adjustment. Interaction effects were found between pre-placement chaos and warmth. Children exposed to less chaos and high parental warmth had the lowest levels of child adjustment problems. However, at higher levels of chaos, relationships appeared strongest with externalising problems for children whose adoptive mothers demonstrated higher warmth. This result is not without precedent, and may reflect a redoubling of efforts by parents of very troubled children.

Conclusions: The evidence from this study informs how adoptive family relationships unfold in their early years in the context of the child's earlier experience of chaos. The findings have potential implications for the focus of therapeutic support required by families during this time.

S 34 – 4

INFLUENCES OF HOUSEHOLD NOISE ON AUTONOMIC FUNCTION IN 12-MONTH-OLD INFANTS: UNDERSTANDING EARLY COMMON PATHWAYS TO ATYPICAL EMOTION REGULATION AND COGNITIVE PERFORMANCE

Wass S.V.[1], Smith C.G.[2], Daubney K.[1], Suata Z.[2], Clackson K.[3], Begum A.[1], Mirza F.U.[4]

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[2] Institute of Psychiatry, Psychology and Neuroscience, King's College, London, UK
[3] University of Cambridge, UK
[4] University of Plymouth, UK

Background and aims: Previous research has suggested that children raised in more noisy and chaotic homes show worse mental health outcomes and impaired cognitive performance in later life, but the mechanisms subserving these relationships remain unknown.

Method: We examined for the first time infants' physiological responsiveness to noise in the home environment, using specially designed miniaturised wearable microphones and physiological arousal monitors (Electro-Cardiography, Heart Rate Variability, Actigraphy). The sample was 82 12-month-old infants from mixed demographic backgrounds. The same infants also attended a lab testing battery where their physiological responsiveness to attention-eliciting stimuli was assessed.

Results: Noise exposure was independent of other socio-economic variables; average sleeping microphone noise correlated with the parent-rated Confusion Hubbub and Order Scale (CHAOS). Using analyses derived from Granger-causal methods we showed that children exposed to high average noise levels displayed: (i) more unstable physiological arousal patterns and (ii) reduced physiological responsiveness to naturally occurring environmental noise. Infants exposed to high levels noise in the home also showed reduced physiological responsiveness to novel attention-eliciting stimuli in the lab battery, along with reduced visual sustained attention overall.

Conclusions: Our results offer new insights into the mechanisms by which high levels of environmental noise can confer increased risk of adverse mental health and impaired cognitive outcomes during later life.

Saturday, August 31st, 2019

Symposium 35

Ilissos Hall 14:45 – 16:15

S 35
THE COMMON CORE OF ORAL AND WRITTEN LANGUAGE DEVELOPMENT

Spanoudis G.
Chair, Department of Psychology, University of Cyprus

Stavrakaki S.
Discussant, Aristotle University of Thessaloniki, Greece

The development of oral language plays a key role in the development of written language. Children develop strong knowledge of both the spoken and the written language in order to be successful readers and writers. Also, language, spoken and written, is interrelated with cognition. Cognition can be considered, on one level, as a frame that orchestrates a symphony of knowledge and skills on children's current and prior experiences and learning. The proposed symposium aspires to highlight the dynamical interrelations within language and across language and cognition continuum.

The main aim of the present symposium is to highlight the interconnection of oral and written language in typical and atypical development. To this end, four talks will be delivered: two presentations concern language in typical populations and the other two atypical language development. The first two studies show that different levels of language develop a close relation with cognition and language learning environment. The other two studies also confirm the impact of cognition on atypical language development. All in all, the findings of the four studies stress the importance of dynamical interaction between language development and cognition.

S 35 – 1

DECODING AND FLUENCY DEVELOPMENT ACROSS ELEMENTARY GRADES: A COMPARISON BETWEEN TYPICAL DEVELOPMENT AND LEARNING DISABILITIES

Padeliadu S.[1], Antoniou F.[2]

[1] *Aristotle University of Thessaloniki, Greece*
[2] *National and Kapodistriako University of Athens, Greece*

The conquest of reading acquisition represents an indispensable skill for the enhancement of learning during academic life, both for students with typical development and students with Learning Disabilities (LD). The aim of the current study was to highlight the evolutionary nature of the skill of reading and the detection of turning points in the reading competence for students with typical development and Learning Disabilities across elementary school grades. An additional goal was to highlight the importance of pseudoword and real word decoding for students' fluency across grades.

Participants were 1207 typically developing students and 305 students with LD across grades 1 to 6, educated in the Greek educational system. Word, pseudoword decoding and fluency were measured with the standardized Test of Reading Competence and Difficulties (Padeliadu, Antoniou & Sideridis, 2019). Multiple regression and mediation analyses were conducted to reveal the predictive role of word and pseudoword reading to reading fluency.

The analyses showed that in typically developing students the decoding and fluency development do not follow a common path. Decoding grows exponentially during the first three grades of the elementary school for typical students. On the contrary, for students with LD, decoding skills keep developing throughout the elementary grades. With regard to the second research question, it was revealed that in both populations, word decoding predicted positively and significantly fluency competence. However, predictions were stronger for the group of students with LD than for the typically developing one, while reading real words appeared to mediate significantly these predictions.

The results are interpreted in terms of their importance for detecting reading difficulties as well as for their instructional implications. Furthermore, the discussion focuses on the issue of variable reading development profiles depending on the specific demands of each language.

S 35 – 2

COGNITIVE AND LINGUISTIC ABILITIES IN BILINGUAL CHILDREN WITH DEVELOPMENTAL LANGUAGE DISORDER

Stavrakaki S., Talli I.

Aristotle University of Thessaloniki, Greece

The present study investigates the verbal short-term memory (vSTM) abilities in bilingual children with Developmental Language Disorder (DLD) and its relation to the lexical and syntactic abilities of these individuals. Specifically, it explores whether a vSTM advantage holds for bilingual children with DLD and, if so, whether it affects lexical and syntactic abilities.

Sixteen monolingual and 16 bilingual children with DLD, with Greek as L2 and Albanian or Russian as L1 were compared with two control groups of 20 monolingual and 18 bilingual (L1: Albanian or Russian, L2: Greek) TD children on receptive vocabulary, vSTM (non-word repetition, forward and backward digit span, sentence repetition) and syntactic comprehension (relative clauses, reflexives and passives). Results showed that both clinical groups were worse than mono-TD group. Bi-DLD performed at the same level as mono-DLD on all tasks except for the vocabulary and passives, where their performance was significantly lower. Furthermore, regression analyses showed that bilingualism predicted mostly performance on vocabulary, and vSTM was a significant predictor for receptive syntax. Individual analysis revealed selective deficits in syntax or STM for a few children.

Based on our results, it is suggested that no bilingualism advantage for vSTM exists in DLD, while syntactic comprehension is predicted to a large extent by vSTM. Consequently, exposure to a second language for children with DLD does not appear to significantly affect in a positive or negative way their language and STM abilities with the exception of receptive vocabulary performance. Finally, for a few individuals with DLD, low performance in vSTM and syntax was not systematically co-occurred.

S 35 – 3

PRESCHOOL CHILDREN'S ACQUISITION OF TEMPORAL RELATIONS IN COMPLEX SENTENCES: THE INFLUENCE OF MEMORY AND GENERLA LANGUAGE ABILITY

Spanoudis G., Theodorou N.

University of Cyprus, Cyprus

Temporal relations between events expressed linguistically is a fundamental part of understanding the meaning of oral or written communication. Due to its potential, development of temporal relations has received a considerable amount of interest in fields related to language study.

The present study investigated 4- to 6-year-olds' (N=45) comprehension of two-clause sentences containing the temporal connectives *before, after* or *when* in relation to executive functioning and general language ability. The preschool children used an order of mention strategy to interpret the relation between clauses, that is, they were more accurate when the presentation order matched the chronological order of events: "The cow drank water, before she ate grass" (chronological) versus "Before the cow ate grass, she drank water" (reverse). Between 4 and 6 years, performance was influenced by a combination of factors that influenced processing load: connective type and presentation order. The independent measure of working memory and measure of general language ability was predictive of performance. The study concludes that general language ability and memory demands of sentence structures limits preschool children's comprehension of structures containing temporal connectives.

Saturday, August 31st, 2019

Symposium 36

Vergina Hall 14:45 – 16:15

S 36

SCHOOL DIVERSITY CONTEXT AND STUDENTS' ACADEMIC, SOCIAL AND INTERGROUP OUTCOMES – INSIGHTS FROM SIX EUROPEAN COUNTRIES* PART 1

Schachner M.
Chair, University of Potsdam, Inclusive Education, Germany

Baysu G.
Chair, Queen's University of Belfast, UK

Phalet K.
Discussant, University of Leuven

*This is a two-part symposium. The first part will talk about school diversity context and students' academic outcomes and the second part will talk about school diversity context and students' intergroup attitudes.

Schools are a major context for intergroup contact and acculturation. The ways schools deal with diversity, that is, school diversity policies and climate, is an important characteristic of this context in our increasingly diverse societies and schools, and it can shape how intergroup contact and acculturation take place. In this symposium, we focus on different facets of school diversity context (ranging from assimilationism, equality to cultural pluralism) and their associations with various student outcomes, looking at both majority students of native background and minority students of immigrant background.

The first part of the symposium is concerned with academic (such as grades) and psychological adjustment (such as well-being) outcomes. Study 1 looks at how the language policies in primary schools in Belgium (mono- vs. multilingualism policies) are associated with achievement and adjustment of both minority and majority students. Study 2 looks as the school diversity climate in secondary schools in Germany (perceptions of equality vs. pluralism), and examines how its effects of on school engagement may vary with age, both among majority and minority students. The last two studies take a longitudinal approach and focus specifically on minority students. Study 3 looks at reciprocal relations between perceived discrimination in school and student adjustment over three years, and how these vary with classroom ethnic composition in public schools in Greece. Study 4 looks at trajectories of teacher-student relations over three years in secondary schools in Belgium, and investigates how teacher-student relationship quality is affected by school diversity climate (equality, multiculturalism and assimilationism) and in turn affect student academic and adjustment outcomes.

Overall, in this first part of the symposium, we look at different aspects of school diversity context and how these affect various academic and psychological adjustment outcomes of both minority and majority students.

The second part of the symposium looks at social and intergroup outcomes of school diversity context. Study 5 looks at the school diversity climate (specifically teacher support for pluralism) in secondary schools in Italy and shows that for both minority and majority students, teacher support for cultural pluralism was associated with higher prosocial behavior, which was facilitated by students' higher ethnic identity exploration. Study 6 looks at prosocial behavior and intergroup attitudes of students in secondary schools in Northern Ireland and shows that the effects of school and peer norms toward a traditional rival group (members of the Protestant or Catholic outgroup) also transcend to attitudes towards newer outgroups, such as refugees. Study 7 looks at intergroup attitudes of majority secondary school students in Sweden and shows that a general school climate of collaboration and fairness may buffer intergenerational transmission of prejudice between parents and children.

Overall, the second part of symposium highlights how positive diversity experiences at school have far-reaching consequences for social cohesion, also beyond the immediate context and groups in the classroom.

Taken together, the symposium over two parts looks at different dimensions underlying school diversity policies and climate (such as equality, pluralism, assimilationism) and compares their associations with student outcomes, employing student and teacher data as well as multilevel, multigroup and longitudinal analyses. By showcasing research on academic and social outcomes, as well as general adjustment, we present rich insights into effects of school diversity policies and climate amongst different student populations (different age groups, minority / majority) and in six different national contexts (Belgium, Germany, Greece, Italy, Sweden & UK).

S 36 – 1

EXPLORING SCHOOL LANGUAGE POLICIES IN LINGUISTICALLY DIVERSE SCHOOLS IN NORTHERN BELGIUM

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European countries are increasingly characterized by growing numbers of youngster being raised in social contexts where more than one language is spoken. Language minority pupils perform worse at school than native speakers, even when socioeconomic and/or migration factors are considered. Up to day, the dominant perspective about this achievement gap is a deficit perspective, where the linguistic deficiencies of language minorities are pointed as for the inequalities. However, less attention is paid on school policies that might increase or reduce these inequalities. Adding to the growing literature on Language Policy (that focus on policies at meso level and conceptualize it as language beliefs, practices and management), this study will examine School Language Policies (SLP) in primary schools and investigate how SLP is related to school adaptation of pupils.

A survey is conducted across 67 primary school in Northern Belgium, with 1.700 pupils and 1.255 teachers. Descriptive, bivariate and multivariable analyses are performed using SPSS. School Language Policies are measured with language beliefs, practices and management, as answered by pupils and teachers and aggregated at school level.

The results point out that SLP's in Northern Belgium are remarkably dominated by a deficit perspective on multilingualism in terms of school staff's beliefs, practices and management of linguistic diversity. On the other hand, almost no valorization of multilingualism is found (neither regarding teaching practice nor school management) and a strong focus on monolingualism is registered. For instance, the results show that punishing students for speaking their mother tongue is a very common school policy, although small variation occurs depending on the informant group (i.e. teachers, native speaking pupils and language minority pupils). However, SLP's that imposes monolingualism negatively correlates with student academic achievement and some indicators of school adaptation.

S 36 – 2

DIFFERENTIAL EFFECTS OF THE CLASSROOM CULTURAL DIVERSITY CLIMATE AMONG STUDENTS FROM DIFFERENT AGE GROUPS

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Background and aims: Both perceived cultural pluralism and equality have been linked with school engagement amongst students of immigrant and non-immigrant background. Yet, the specific effects of these two perspectives may vary in different age groups, from early to late adolescence. We hypothesized that equality would become less important and cultural pluralism would become more important in the course of adolescence.

Methods: We draw on a sample of 631 6th, 8th, and 10th graders in Germany (M_{age}= 13.69 years) of which 53% only identified with the majority (German) cultural group and 45% reported bicultural identification or only identified with a cultural minority group. Self-report questionnaires assessed the students' perceptions of two dimensions of classroom cultural diversity climate (equality and cultural pluralism) as well as their emotional school engagement.

Results: Multigroup SEM with six groups of students (self-identification by grade) indicated that equality and cultural pluralism were positively related to emotional school engagement in most groups of students. Among the students who (also) identified with a cultural minority group, the relation between a perceived equality climate and emotional school engagement was less strong among the 10th graders than among the 8th graders. No age differences were observed for cultural pluralism.

Conclusions: These findings suggest that students of all age groups (from early to late adolescence) benefit similarly from equality and cultural pluralism as two prominent approaches to cultural diversity. Age-specific effects also seem to be more pronounced amongst students of immigrant background. Findings will be discussed in the light of processes of moral and ethnic identity development.

S 36 – 3

LONGITUDINAL INTERPLAY BETWEEN PERCEIVED DISCRIMINATION AND IMMIGRANT YOUTH ADAPTATION MODERATION BY ACCULTURATIVE TASKS AND CLASSROOM-LEVEL VARIABLES

Motti-Stefanidi F.[1], Pavlopoulos V.[1], Papathanasiou N.[1], Asendorpf J.[2]

[1] National and Kapodistrian University of Athens, Greece
[2] Humboldt University, Berlin, Germany

Immigrant youth integration in the receiving society has a long-term significance for both immigrants and society. However, immigrant youth often live and grow in a social context replete with discrimination, which has been shown to have deleterious consequences on their adaptation (Marks et al., 2015). The goals of this study were to examine, first, the direction of effects between perceived ethnic discrimination and immigrant youth's adaptation, and second, the potentially protective (moderating) role of different acculturation variables, and of classrooms' ethnic heterogeneity. The sample consisted of 683 immigrant students in 14 public schools in Athens, followed for three years. Participants were 12.6 years (SD = 0.57) at wave 1. Perceived ethnic discrimination in the school context was self-rated (Motti-Stefanidi & Asendorpf, 2012). School adjustment indices were: a) school grades and absenteeism (school records) and b) behavioral school engagement and conduct (teacher-rated). Wellbeing indices were: a) depression (Salokangas et al., 1995), (b) self-esteem (Rosenberg, 1965) and (c) self-efficacy (Bandura et al., 1996), all self-rated. Moderators were: at the personal level: a) Involvement with the ethnic and host cultures (Nguyen & von Eye, 2004); b) Ethnic and host identities (Phinney & Ong, 2007); at the classroom level: a) Ethnic heterogeneity (Ethnolinguistic Fractionalization Index; Alesina et al., 2003). We used cross-lagged panel modelling in Mplus 7.0. Key findings are that perceived discrimination predicted over time changes in different adaptation/wellbeing indices but that the latter also predicted over time changes in immigrant youth's perceptions of discrimination. Furthermore, different acculturative tasks and classroom-level variables moderated links in both directions. The results will be discussed in light of acculturation and developmental literatures.

S 36 – 4

HOW DO CULTURAL DIVERSITY APPROACHES AFFECT MINORITY SCHOOL OUTCOMES? TRAJECTORIES OF POSITIVE AND NEGATIVE RELATIONS WITH TEACHERS

Baysu G.[1], Hillekens J.[2], Deaux K.[3], Phalet K.[2]

[1] Queen's University of Belfast, UK
[2] University of Leuven, Belgium
[3] City University of New York, US

Schools differ in the way they manage and accommodate cultural diversity, that is, cultural diversity approaches. How do cultural diversity approaches in schools affect minority school outcomes? One way could be through affecting minority students' teacher-student relationship quality. Focusing on Muslim minority adolescents in Belgian secondary schools (N=1445, M: 15.07), this paper seeks to (1) identify trajectories of change and continuity in teacher-student relationship quality (teacher support and discrimination) over three years, (2) to predict the distinct trajectories from cultural diversity approaches (focusing on equality, multiculturalism and assimilationism) and (3) to investigate the associations of these distinct trajectories with various school outcomes over time (such as grades and school belonging)

Via Latent Growth Mixture Models, we found three trajectories: (1) Normative-positive trajectory (high teacher support and low discrimination over three years), (2) decreasing-negative trajectory (moderate teacher support, initially high but decreasing discrimination over time), and (3) increasing-negative trajectory (moderate teacher support, initially low but increasing discrimination over time). Secondly, we find that cultural diversity approaches matter: Fairness as perceived by both minority and majority students and multiculturalism as perceived by both students and teachers increased minority students' chances to be in the normative positive trajectory, while teacher reports of assimilationism had the opposite effect. Finally, adolescents in the normative-positive trajectory had better school outcomes over time. Age-related differences in the trajectories were also observed so that older minority students were less likely to be in the normative positive trajectory.

To sum up, cultural diversity approaches in schools may affect minority students' outcomes through changing the quality of relations with their teachers.

Saturday, August 31st, 2019

Symposium 37

Makedonia Hall A 14:45 – 16:15

S 37

CHILDREN'S PERSPECTIVES ON GROUP-BASED PEER EXCLUSION AND BULLYING

Strohmeier D.

Chair, Discussant, University of Applied Sciences Upper Austria, Linz, Austria, University of Stavanger, Stavanger, Norway

Children worldwide are bullied and excluded from peer groups and friendships All of these experiences have negative effects on children. For example, children who are rejected by peers report loneliness, depression, internalising problems, low academic performance, and lower cognitive functioning. Unfortunately, peer exclusion and bullying often occur based on group membership (e.g., ethnicity, gender, nationality).

In the present symposium, the four presenters will discuss research on bullying and exclusion based on group membership in different communities. In the first talk, the presenters will discuss findings in Cyprus and the UK demonstrating that identification of the bystander and targets of social exclusion are important for bystander decision-making. In the second talk, different characteristics of Italian majority young who engage in ethnic-based bullying will be identified. The third talk will discuss evaluations and reasoning of group-based exclusion in Saudi young people and their mothers residing in Saudi Arabia and the UK. The fourth talk addresses Nepalese children's expectations about intergroup friendships based on wealth. Finally, an expert on bullying will serve as a discussant.

These findings suggest cultural differences and similarities in bullying and peer exclusion in childhood.

S 37 – 1

"THEY'RE NOT LIKE US": BYSTANDER RESPONSES TO THE SOCIAL EXCLUSION OF IMMIGRANTS IN CHILDHOOD AND ADOLESCENCE

Palmer S.B.[1], Ketzitzidou-Argyri E.[2], McGuire L.[1], Killen M.[3], Rutland A.[1]

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[3] Department of Quantitative Research and Human Development, University of Maryland, USA

Intergroup social exclusion (e.g., based on nationality) is prevalent in schools internationally (Mulvey, Hitti & Killen, 2013). In contrast to interpersonal social exclusion (e.g., based on personality characteristics) it indicates wider issues of prejudice and discrimination (Palmer & Abbott, 2017). Bystanders (students who witness the act) who challenge the negative act can be very effective at reducing conflict in schools (Mulvey, Palmer & Abrams, 2016). In this paper we present two studies (with children aged 10-14), conducted across two countries, focussing on the role of identity in predicting bystander responses to intergroup social exclusion.

Study 1 (N=367) was conducted in Cyprus. Majority-status participants (Greek Cypriot) and minority-status participants (immigrants to Cyprus; "non-Cypriot") read about the hypothetical social exclusion of a Cypriot student, Non-Cypriot student, or Control (no mention of nationality). Identity of the participant influenced evaluations of the social exclusion. Cypriot participants viewed the social exclusion of Cypriots as most wrong, whereas Non-Cypriots viewed the social exclusion of Cypriots and Non-Cypriots as similarly wrong, and more wrong than in the Control condition. Moreover, negative evaluations of exclusion predicted the likelihood of challenging it. This study showed how majority-status participants differentiate more strongly between ingroup and outgroup members when evaluating and responding to intergroup social exclusion.

To extend these findings, a second study examined how British (majority-status) children's and adolescents' bystander evaluations and responses varied based on the target of social exclusion being British (ingroup), Turkish (outgroup condition 1) or Australian (outgroup condition 2). Together, these studies demonstrate how identification of the bystander and targets of social exclusion are important for bystander decision-making. Results will be discussed in line with recent theoretical developments (Mulvey, 2016; Palmer & Abbott, 2017) and implications for school policy and practice.

S 37 - 2

PROFILES OF BULLIES WHO BULLY CLASSMATES OF MINORITY ETHNIC GROUPS

Caravita S. C. S., Papotti N., Pilia R.

C.R.I.d.e.e., Department of Psychology, Catholic University of the Sacred Heart, Italy

Discriminatory bullying is a phenomenon spreading throughout Europe, strongly characterized by the imbalance of power, since the victim belongs to a minority group (Elamè, 2013). A type of discriminatory bullying is bullying peers who belong to minority ethnic groups. Research on ethnic bullying has highlighted the damage to victims: greater suicidal ideation, consumption of alcohol, tobacco and drugs (Russell et al., 2012). Less is known about the profile of ethnic bullies.

We aimed to investigate which characteristics differentiate young people of the society majority group who conduct ethnic bullying, by considering risk factors related to the individual adjustment and the peer-group.

Two hundred and sixty-four high-school students (77.3% girls; age: M=17.11, SD=0.95; non-Italians: 5.3%) answered self-report measures assessing: traditional and ethnic bullying, implicit prejudices, school climate, self-perception of peer-status, psychological adjustment (SDQ).

In the analyses we considered only the 250 Italian pupils. Ninety-two youths have bullied at least occasionally: 49 bullied only Italians, 43 bullied also non-Italians, i.e., were ethnic bullies. Fifty-three were frequent bullies whose 23 were ethnic bullies. Controlling for the proportion of non-Italians in classroom (ANCOVAs), ethnic bullies showed higher implicit prejudices against non-Italian and disabled peers, and perceived to be more popular among peers than other bullies and non-bullies. In comparison to non-bullies, ethnic bullies were also less empathic and prosocial, had more problematic behaviors, and perceived to be more well-liked. In multilevel regressions, implicit prejudices towards non-Italians and perception of being popular distinguished ethnic bullies from the other bullies, furthermore perceived popularity buffered the association between prejudices towards disabled peers and being an ethnic bully, which was stronger for higher popularity.

Having implicit prejudices emerges as the characteristic mostly distinguishing the profile of ethnic bullies. This result indicates that traditional anti-bullying programs, mainly focusing on group dynamics, can be not enough to fight ethnic bullying.

S 37 – 3

ADOLESCENTS EXPECT THAT PARENTS WILL DISCOURAGE CROSS-GROUP FRIENDSHIP BETWEEN LOW-WEALTH AND HIGH-WEALTH PEERS: IMPLICATIONS FOR SOCIAL INCLUSION

Killen M.[1], Grütter J.[2]

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[2] Jacobs Center for Productive Youth Development, University of Zurich, Switzerland

Exclusion from opportunities for intergroup friendship has negative consequences for reducing prejudice and bias. Intergroup contact between individuals from different social groups fosters positive intergroup attitudes. Yet, extensive research reveals that cross-group friendships decline with age (Rutland & Killen, 2015). Most research on wealth status has focused on stereotypes about wealth, but not the potential for friendship among high- and low-wealth status peers. This study addressed this gap by investigating adolescents' expectations about whether parents would encourage or discourage intergroup friendship based on wealth.

The study was carried out in Nepal, a country with a long history of wealth inequalities. Adolescents (N = 389) (M_{age}=14.13) evaluated a peer dyadic encounter in which one peer was high-wealth and the second peer was low-wealth (marked by clothes). The assessments included *Judgments about high-SES parental expectations*; ("Do you think their parents want the two children to be friends?"; no = 0, yes = 1); *Judgments about low-SES parental expectations*; ("Do you think their parents want the two children to be friends?"; no = 0, yes = 1); and *Reasoning for high- and low-SES parental expectations* ("Why do you think that his/her parents want/do not want them to be friends?").

Findings from multinomial logit models revealed that with central confidence intervals (Fay, 2018), which was significant $x^2(1)$ = 180.66, p < 0.001, odds ratio = 0.04[CI$_{95}$ = 0.02, 0.08], Φ = 0.18. 81% of adolescents thought that the low-SES parents would encourage interwealth friendship, while only 30% of the adolescents reported that the high-SES parents would approve. Participants from a high-SES background were significantly less positive about the expectation of high-SES parents than students from a low-SES background. Reasons included social hierarchies, reputation, social mobility and moral reasons. The results provide novel findings regarding how parents can promote or hinder social inclusion in adolescence.

Saturday, August 31st, 2019

Symposium 38

Makedonia Hall B 14:45 – 16:15

S 38

PROMOTION OF POSITIVE DEVELOPMENT, HEALTH, AND WELLBEING ACROSS THE LIFE SPAN

Weichold K.

Chair, University of Jena, Germany

During the past decades, developmental scientists have become increasingly interested in the identification of factors predicting positive developmental pathways in children adolescents, and adults. In its application, programs were developed to promote positive development, health, and wellbeing at different life stages with a focus on normative and at-risk populations around the globe. These initiatives not only adheres to the goals of overarching institutions, such as the UNESCO and the UN, to activity support individuals to develop their personality and socio-emotional competencies, or to prevent negative developmental outcomes, it also relates to the aims of European and International scientific societies (such as EADP and ISSBD) to actively translate scientific knowledge into practice. This symposium brings together a group of international scientists that worked on translating findings in basic research to the development, implementation, and evaluation of intervention programs at different life stages.

S 38 – 1

SOCIAL-EMOTIONAL DEVELOPMENT IN REFUGEE CHILDREN: TOWARD TAILORED INTERVENTIONS

Malti T.

University of Toronto, Canada

Exposure to early adverse experiences can have detrimental effects on children's development and health across the lifespan. Since 2015, over 40,000 Syrian refugee families have immigrated to Canada, creating the need to understand and nurture their social-emotional development and well-being. Drawing on developmental, clinical, and biosocial theoretical perspectives, I will explore how refugee experiences, including exposure to war, violence and displacement, affect early social-emotional development and mental health outcomes. Using longitudinal data from an ongoing study of Syrian refugee families who have resettled in Canada, I will present social-emotional profiles of the children and identify links to mental health. Next, I will explore how this information can inform psychological interventions designed to address the needs of conflict-affected children. Lastly, I will elaborate on the implications of this work for tailored intervention practices.

S 38 – 2

ADOLESCENTS' SOCIAL MEDIA USE AND ACADEMIC WELLBEING - RANDOM-INTERCEPT CROSS-LAGGED PANEL MODEL APPROACH

Salmela-Aro K.

University of Helsinki, Finland

The aim of the present three wave longitudinal study was to examine adolescents' social media use and academic wellbeing among 1726 (43.7% female) upper elementary school students (T1 = 7th grade, age 13-14, T2 = 8th grade, age 14-15, and T3 = 9th grade, age 15-16). Primary multiple-indicator random intercept cross-lagged panel model (RI-CLPM) and follow up models for each component of school burnout, exhaustion, cynicism towards school and inadequacy as a student were used. The results indicated a positive reciprocal effect between social media engagement and school burnout. The models indicated that the reciprocal influence between social media engagement and school burnout was driven by exhaustion component. Cynicism towards school and inadequacy as a student showed only a one-directional positive relation to social media engagement. The findings here add to the previous findings demonstrating reciprocal relations between digital media use and school burnout and shed new light on the direction of effects suggesting that digital participation practices need to be considered also as an outcome regarding issues of school well-being.

S 38 – 3

LIFE SKILLS EDUCATION IN SCHOOL AND THE SUCCESSFUL TRANSITION INTO ADULTHOOD

<u>Weichold K.</u>, Blumenthal A.

University of Jena, Germany

Life Skills programs have been shown to facilitate children and adolescents' personal and interpersonal skills to deal more effectively with age-related developmental tasks and challenges of their everyday life, and to promote healthy and competent development. Little research, however, has focussed on the investigation of the long-term effects of Life Skills programs on young people's psychosocial development, well-being and health up to the threshold to adulthood. Based on that gap, the Life Skills program IPSY (Weichold, 2014) investigates intervention effects up to thirteen years after the start of program implementation. IPSY (Information + <u>Psy</u>chosocial Competence = Protection) is a Life Skills program using interactive, resource-oriented methods that aims at promoting generic life skills, substance specific skills, school bonding, and preventing substance misuse. The program was implemented over three years in grades 5 to 7 (from age 11 to 13) by trained teachers provided with a structured manual. Results based on a German 4.5-year-longitudinal large-scale intervention trial (quasi-experimental design with intervention and control group, 6 assessments in classrooms, N_{T1}=1.675, 53% female) showed general positive program effects on Life Skills, school bonding, legal and illegal drug use (Weichold & Blumenthal, 2016). The current study will report on the results of two individually conducted postal follow-ups of this sample 10 and 13 years after the start of program implementation in order to test the usefulness of Life Skills programs not only to prevent problematic substance use throughout adolescence but also to equip youth with essential socio-emotional skills to effectively deal with challenges at the transition to adulthood.

S 38 – 4
POSITIVE PATHWAYS TO SUCCESSFUL AGING

Antonucci T.C., Ajrouch K.J., Webster N.J.

University of Michigan, USA

In this paper, we report on how social relations can help or hinder positive aging. We examine if and how social relations are associated with Positive Aging, defined as overall health and wellbeing. We use cross-sectional and longitudinal regionally representative US data to examine the best social relations predictors of health and well-being among older people. Data from the Social Relations and Health (SRS) study included 1703 people aged 8 to 93 in 1992, 721 of these, now aged 30 and above were reinterviewed in 2015. People were asked about their social network, the support they provided and received; and the quality of their support relationships. Preliminary analyses indicate several general patterns of social relations profiles including: Diverse Distal, Varied Family, Close Family, and Friend-Focused. The majority of adults reported either Varied Family and Friend Focused Network while fewest people identified Diverse Distal and Close Family. Pathways to positive aging were defined as fewest chronic illnesses, and depressive symptoms, and better self-reported health. Varied Family and Friend focused networks were associated with the most positive pathways to aging while diverse distal and close family networks were associated with the least positive pathway to aging.

Saturday, August 31st, 2019

Symposium 39

Mycenae Hall 14:45 - 16:15

S 39
EARLY RESEARCHERS UNION SYMPOSIUM - THE ROLE OF PEER RELATIONS IN ADOLESCENT DEVELOPMENT

Lo Cricchio M. G.
Chair, University of Palermo

Skoczeń I.
Chair, Cardinal Stefan Wyszyński University in Warsaw

Schachner M.
Discussant, University of Potsdam

Adolescence is a period of life when parental influences seem to gradually diminish, whereas the interactions and relationships with peers assume a progressively stronger importance (Rubin et al., 2010). Adolescents' relationships with peers offer a crucial context through which they learn self-determination, social, and other functional skills that have impact on their psychological and behavioral development (Huang et al., 2013). While research has shown strong correlations between peer experiences and adolescent development, some areas are still not fully understood.

The aim of this symposium is to present research findings on adolescents' peers relationships from four European countries: France, The Netherlands, Poland and Italy. The first paper presented by Carrizales and Lannegrand-Willems will focus on the role of peer groups in empathy and prosocial behavior development across two different peer group contexts (class and extracurricular peer group). The second paper by Laninga-Wijnen, Harakeh, Dijkstra, Veenstra, and Vollebergh is aimed at examining whether the aggressive popularity norm (the within-classroom correlation between aggression and popularity) can be predicted by the classroom composition of students. The third paper by Skoczeń and Głogowska will focus on attachment and the differences in the relationships with peers and romantic partners among early and late adolescents. In the fourth paper, Lo Cricchio, Musso, Inguglia, Lo Coco, and Liga aimed to identify different profiles of peer-perceived social behavior and to investigate the differences in friendship prevalence and quality related to them.

S 39 – 1

THE ROLE OF PEER GROUPS IN EMPATHY AND PROSOCIAL BEHAVIOURS IN ADOLESCENCE

Carrizales A.[1], Lannegrand-Willems L.[2]

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[2] *Université de Bordeaux, Laboratoire de Psychologie de Bordeaux, Bordeaux, France*

Understanding which factors influence prosocial behaviours has gained increased attention in recent years across a range of disciplines. Besides the family context, a growing body of research supports the idea that peers may be important socialisers of prosocial behaviours (Laible, Carlo, & Roesch, 2004; Wentzel, 2014). Peer relationships unlike parent-child relationships, provide qualities such as unique equality, mutuality and reciprocity, which offer rich opportunities where adolescents can explore their interest in others, experience social exchanges and social learning and an opportunity in which to develop empathy and prosocial behaviour competencies (Eisenberg & Fabes, 1998; (Laible et al., 2004; Nichols, Svetlove, & Brownell, 2009; Roth-Hanania, Davidov, & Zahn-Waxler 2011). However, the literature review highlighted the scarcity of studies focusing on the role of peers, taking into account peer group features such as warmth, rejection and coercion.The purpose of this study was to examine an integrative model using the same theoretical approach across two different peer group contexts (class and extracurricular peer group). Thus we tested: (a) the relation between living environment features, group prosocial behaviours and adolescents' prosocial behaviours through empathy; (b) a combination of different models across contexts from the most complex to the most specific; and (c) multigroup analyses across gender and age.

French adolescents (N=1640) completed questionnaires about peer group environment features, group prosocial behaviours, self-empathy and prosocial behaviours.

Indirect effects suggest that extracurricular peer group as social context negative was negatively related to adolescents' prosocial behaviours. Moreover, class and extracurricular peer group prosocial behaviours and class as social context positive were positively linked to adolescents' prosocial behaviours. These same patterns were found across gender and age, except for some specificities across age.

Discussion focuses on the implications of these findings and suggestions for future research are presented.

S 39 - 2

WHO SETS THE AGGRESSIVE POPULARITY NORM IN CLASSROOMS? IT'S THE NUMBER AND STRENGTH OF AGGRESSIVE, PROSOCIAL, AND BI-STRATEGIC ADOLESCENTS

Laninga-Wijnen L.[1], Harakeh Z.[1], Dijkstra J. K.[2], Veenstra D. R.[2], Vollebergh W. A. M.[1]

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[2] University of Groningen, Department of Sociology, Groningen, The Netherlands

Aggression in classrooms remains a persistent problem. Classrooms vary largely in the extent to which aggressive behaviors proliferate. Previous work demonstrated that aggression mainly flourishes in classrooms where it is associated with popularity (the *popularity norm*); but how this popularity norm emerges remains unknown so far. This longitudinal study aimed to examine whether the aggressive popularity can be predicted by the classroom composition of students. Based on social impact theory and resource control theory, we examined the role of the classroom percentage of six student types: (non-) socially dominant prosocial, aggressive, and bi-strategic adolescents.

We collected peer-nominated data at three secondary schools in the Netherlands (SNARE-study); $N_{students}$ = 2,843; $N_{classrooms}$ = 120; 51.4% girls; M_{age} = 13.2.

Classroom-level regression analyses in M*plus* indicated that a higher percentage of aggressive students predicted higher aggressive popularity norms, but only when these aggressive students were socially dominant. Instead, a higher classroom-percentage of non-socially dominant aggressive students contributed to *lower* aggressive popularity norms. Next, despite their high prosocial behavior, socially dominant bi-strategic students enhanced the aggressive popularity norm. Only when socially dominant prosocial students abstained from aggression, they contributed to lower aggressive popularity norms. Moreover, socially dominant prosocial students buffered against the role of socially dominant aggressive adolescents in the aggressive popularity norm (moderation), but not against the role of socially dominant bi-strategic adolescents. Socially dominant aggressive and bi-strategic adolescents contributed to higher aggressive popularity norms by enhancing the classrooms' popularity hierarchy (strong classroom asymmetries in popularity; mediation effects) whereas the percentage of socially dominant prosocial adolescents was unrelated to popularity hierarchy.

Interventions that aim at improving the classroom climate (e.g., reduce aggressive popularity norms) should not only encourage prosocial behavior, but also actively discourage aggression.

S 39 – 3

ATTACHMENT TO PEERS AND ROMANTIC PARTNERS IN EARLY AND LATE ADOLESCENT BOYS AND GIRLS

Skoczeń I.[1], Głogowska K.[2]

[1] *Cardinal Stefan Wyszyński University in Warsaw, Poland*
[2] *Kazimierz Wielki University in Bydgoszcz, Poland*

According to attachment theory, close relationships with others play an important role in psychosocial development (Bowlby, 1969). Especially during adolescence, young people start investing more time in forming relationships oustide their families, i.e. with peers and romantic parters (Gorrese, Ruggieri, 2012). The present study aimed to assess the differences in attachment to peers and romantic partners among early and late adolescents.

In total $N = 638$ Polish youth aged 12-19 years ($M = 16{,}47$; $SD = 1{,}70$), 58% females, took part in this study. The participants were asked to nominate a person that they consider as currently close to them. Out of the whole group, $n = 192$ selected a friend, and $n = 63$ chose a romantic partner (girlfriend/boyfriend). They completed the *Experiences in Close Relationships Scale-Revised Adolescent Version* (ECR-RA; Skoczeń, 2018), a 36-item self-report questionnaire which assesses attachment related anxiety and attachment related avoidance. Several measures on psychosocial functioning were also distributed.

The results have shown that on overall girls nominated their peers (mainly a female friend) more often when compared with boys and romantic partners were chosen more frequently among late adolescents than early adolescents. Attachment anxiety was experienced more in romantic relationships. Boys scored significantly higher in attachment avoidance when compared to girls.

Possible links with other areas of psychosocial functioning and implications for further studies will be discussed.

S 39 – 4

PROFILES OF PEER-PERCEIVED SOCIAL BEHAVIOR IN EARLY ADOLESCENTS: ASSOCIATIONS WITH FRIENDSHIP CORRELATES

Lo Cricchio M.G.[1], Musso P.[2], Inguglia C.[1], Lo Coco A.[1], Liga F.[3]

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[2] Department of Culture, Education and Society, University of Calabria, Italy
[3] Department of Clinical and Experimental Medicine, University of Messina, Italy

Experiences at both dyadic (as friendship) and group (as perceived behavior) level in adolescents' peer relationships are considered central in affecting psychological and behavioral development (e.g., Véronneau et al., 2010). The present study was planned at identifying different profiles of peer-perceived social behavior and investigating the differences in friendship prevalence and quality related to them.

Participants were 426 adolescents (Mean age = 12.06 years; SD = .55) randomly selected from several schools in Sicily (Italy). They were administered the Extended Class Play (ECP; Burgess et al., 2003), the Teacher-Child Rating Scale (T-CRS; Hightower et al., 1986), the Best-Friendship Nominations (Bukowski et al., 1994); and The Network of Relationships Inventory (NRI; Furman & Buhrmester, 1985).

Four profiles of perceived social behavior were identified using cluster analytic approach: Positive, Negative, Aggressive and Undifferentiated. Adolescents in the Positive configuration were considered more popular and prosocial in peer experiences than members of the other profiles. Adolescents in the Negative configuration were generally more refused and isolated by classmates. Adolescents in the Aggressive configuration were particularly characterized by aggressive and boasting behaviors. Adolescents in the Undifferentiated profile were to some extent ignored and unnoticed. Prevalence and quality of friendship were related to these profiles. Specifically, adolescents in the Positive profile showed higher prevalence of friendships and generally judged their relationship with their best friends as qualitatively higher than those in the other profiles. However, adolescents in the Aggressive profile tended to perceive their friendship relationships as higher satisfying and supportive than those in the Negative and Undifferentiated profile.

Findings from this study indicated that studying peer relationships from a person-centered approach is meaningful due to the evidence that specific profiles of peer-perceived social behavior may have important impact and influence on the adolescents' friendship prevalence and quality.

Saturday, August 31st, 2019

Papers 28 – Parenting across Cultures

Pella Hall 14:45 – 16:15

OP 162

PARENTING STRESS, EMOTIONAL STATES, AND PARENTING COMPETENCES OF RUSSIAN MOTHERS OF 4-9 YEAR OLD CHILDREN

Anikina V.O., Pshonova K.A.

Saint-Petersburg State University, Department of Psychology, Russia

For the last several decades the families in Russia have been undergoing a number of significant changes - the number of divorces is increasing, men are getting more involved in the caregiving, family style is changing, there is an increasing interest of both professionals and families to the upbringing of the child in terms of his mental health. The research of the parenting context, i.e. parenting skills, parenting stress and the emotional states of the parents seems to be important for Russian families. A lot of international studies show that mother's emotional state influences her ability to interact sensitively with her child (Belsky, 1984; Potharst E.S., et al., 2017; Radke-Yarrow M., et al., 1985). Parenting stress is connected to mother's ability to perceive her child, react to his behavior, self-regulate and help the child to self-regulate (Anthony, L.G., et al., 2005; Crnic et al., 2005; Deater-Deckard 2005; Williford A.P., et al., 2007). Mother's anxiety and depression are connected to parenting stress and parenting skills (Campbell et al., 2004; Civic, Holt, 2000, Easterbrooks et al., 2000; Ewell Foster et al., 2007; Horwitz et al., 2007; Oztop and Uslu, 2007).

We have studied 59 mothers of 4-9 year old children with the following measures: STI (Spielberger 1968), BDI-II (Beck, 1988), PSI-IV (Abidin, 2012), and Method of unfinished situations for studying parenting competencies (Mikheeva, 2009). We have found that the level of parenting stress is negatively correlated with the level of parenting competencies; and separately but positively with mothers' emotional states; but parenting competences were not connected to mothers' emotional states. We see those as different groups of mother characteristics. Supported by Russian Fund for Fundamental Research, grant № 19-013-00594.

OP 163

BLIND MOTHERS' PARENTING EXPERIENCES WITH THEIR SIGHTED CHILDREN IN HUNGARY

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Researches of physically disabled parenting revealed a number of adaptive parenting skills (e.g. Eden, et al., 2017). Parents with visual impairment are able to use adaptive communication strategies to develop healthy, secure relationships with their sighted children (Senju, 2013). Our research focuses on blind mothers' accounts, how they experienced early parent-child interactions. Other objective of our study was to discover maternal characteristics of these women, how they reflect on memories considering their children's emotional states.

Semi-structured interviews with questions based on Stern's clinical window theory (Stern, 1995) was used in our research. Topics regarding feeding, mutual play, development of motor skills were included. Additionally, mothers were asked to recall situations when they attributed different emotional states (happy, sad, irritated) to the baby. 10 blind mothers and 10 sighted mothers (25-40 years) who have sighted children (2,5-10 years) took part in our research. The interviews were analyzed by thematic analysis developed by Braun and Clarke (2013).

Results show that blind mothers tend to be more overprotective than sighted mothers in different situations. Adaptive parenting skills, non-verbal communication techniques during infants' first few years were found, which emphasize the role of other sensory modalities (hearing, touching) within blind mother-sighted infant dyads. Differences in difficulties in infant-care could be detected in the accounts of blind and sighted mothers. Emotion-memories are expected to be thematically similar in both group of mothers.

Present results serve as a basis for our next study of blind mother - sighted children interactions, in which we aim to confirm that sighted children of blind parents are able to develop typical social-communication skills.

OP 164

DIFFERENCES IN RELATIONS BETWEEN MATERNAL DISPLAY OF POSITIVE AND NEGATIVE FEELINGS AND CHILD ATTACHMENT IN NETHERLANDS, POLAND, AND TURKEY

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Display of emotions in interpersonal relationships is evidenced to be culture dependent regarding the form of display, as well as its frequency. Cross-cultural differences may be also related with rules of positive and negative feelings display. The present study aims to analyze cross-cultural differences in relations between maternal display of positive and negative feelings and child attachment. The study is a part of the cross-cultural project "Combination of emic and etic approach to parenting and attachment" carried out in Netherlands, Poland and Turkey. Results of the pilot study were analyzed in the sample of 30 mothers and their children between the ages of 8 and 12 in each of three countries. An emic scale assessing forms of maternal positive feelings display (e.g., by kissing, love verbalization, spending time together) and negative feelings display (e.g., by verbalization of disappointment, ignorance) were developed based on prior emic qualitative study carried out in Poland, Turkey and Netherlands. Child's attachment was assessed using etic standardized scales assessing attachment avoidance, anxiety (attachment insecurity indicators), as well as treating mother as safe haven and secure base (attachment security indicators). Results of the pilot study revealed that culture moderates mostly relations between forms of maternal positive feelings display and child attachment, indicating less differences in relation of negative feelings display with child's attachment. Whereas maternal positive feelings display was revealed to be related negatively with attachment avoidance and anxiety in Poland and Netherlands, its relation with child's attachment avoidance and anxiety was positive in Turkey. Furthermore, maternal positive feelings display was associated with treating mother as safe haven and secure base in Poland and Netherlands and not related with these attachment indicators in Turkish sample. Results are discussed in the light of cross-cultural research on parenting, attachment theory and the cultural fit hypothesis.

OP 165

DIFFERENCES IN DISTANCED PARENTING OF MOTHERS AND ITS RELATION TO CHILD ATTACHMENT IN THE NETHERLANDS, POLAND, AND TURKEY

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Distanced parenting is related with lack of maternal warmth expression, controlling of child behavior and low maternal interest in her own child. Such maternal behaviors may be related to risk of negative child developmental outcomes. However, this pattern of parenting is also evidenced to be culture-dependent and as such may be differently related with child attachment across cultures. The present study aims to analyze cross-cultural differences in distanced parenting of mothers and its relation to child attachment. The study is a part of the cross-cultural project "Combination of emic and etic approach to parenting and attachment" carried out in the Netherlands, Poland and Turkey.

Results of the pilot study were analyzed in the sample of 30 mothers and their children between the ages of 8 and 12 in each of the three countries. An emic scale assessing distanced parenting indicated by lack of maternal warmth expression, controlling of child behavior and low maternal interest in her own child was developed on the grounds of prior emic qualitative study carried out in Poland, Turkey and the Netherlands. Child attachment was assessed using etic standardized scales assessing attachment avoidance, anxiety as well as treating mother as a safe haven and a secure base.

Results of the study revealed cross-cultural differences in the level of controlling distance as well as low maternal interest in her own child. Controlling distance was lower in Turkey than in Poland and the Netherlands, whereas low maternal interest was higher in the Netherlands than in Poland and Turkey. Furthermore, results revealed that culture is moderating relation between low maternal interest in her own child and child attachment avoidance. This relation was significant in Poland and the Netherlands but not in Turkey. Results are discussed in the light of cross-cultural research on parenting, attachment theory, and the cultural fit hypothesis.

OP 166

CROSS CULTURAL COMPARISON OF ADOLESCENTS' PERCEPTIONS ON PARENTAL CONTROL IN THREE CULTURES

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This study aimed to compare Turkish, Belgian-Turkish and Belgian adolescents in regard to their perceptions on parental behaviors. 433 Turkish, 431 Belgian and 218 Belgian-Turks adolescents summing up to 1082 were participated. Participants for the research were students studying in three different schools in Ankara, Turkey and students studying in three different schools in Ghent, Belgium. Participants were given "Dependancy Oriented and Achievement Oriented Psyholocigal Control Scale", "Other Parenting Dimension Scale" and a "Personal Informaation Form". The data were analyzed by t-test, ANOVA, Kruskal-Wallis test and Pearson Product-Moment Correlation techniques. The results indicated that Belgian-Turkish adolescents perceive the highest level of dependency and achievement oriented pyschological control. Spesifically, Turkish and Belgian-Turkish adolescents reported more dependency oriented psychological control, yet Belgian adolescents reported more on achievement oriented pscyhological control. The results also showed that Turkish parents got higher scores on autonomy support and responsiveness behaviors. In addition to this, Belgian and Turkish male adolescents reported higher scores on dependency and achievement oriented psychological control and female adolescents reported more parental responsiveness and autonomy support. The results also indicated that the age and paternal responsiveness are inversely proportional in Turkish sample. Correspondingly, the age and paternal autonomy support are directly proportional in Belgian sample. Only Belgian sample reported that the educational level has an impact on parental behaviors, which was the higher paternal education level promotes higher paternal autonomy support.

OP 167

DEVELOPMENT OF THE REPRESENTATIONS OF THE MOTHER-CHILD ATTACHMENT RELATIONSHIP IN WESTERN LITERATURE FROM 1945-2018

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The nature, origins and social/emotional consequences of the mother-child attachment relationship have been extensively investigated in developmental psychology. However, little is known, beyond the transgenerational transmission, about the history of this relationship. The main goal of this study is to examine the development of the mother-child attachment relationship from the end of WWII to the present days where adults and children's literature is used as a "Time Machine" to have access to past and present representations of the mother-child attachment relationship. By integrating developmental psychology and cognitive literary studies, we aim to analyze a large corpus of adults and children's books from two Western European linguistic / cultural groups: Germanic (English, Norwegian, Danish and German) and Latin (Spanish, Portuguese, French and Italian). In this paper, content analysis is used to examine the representation of the mother-child attachment relationship during two time periods: 1945-53 and 2010-18. The following main axes are examined: (i) vertical versus horizontal relationship; (ii) behavioral versus mental-state oriented communication; (iii) emotional coaching versus emotional dismissing intervention. Preliminary analyses indicate that the mother-child relationship became more horizontal and emotion coaching oriented over time in the two linguistic groups. We foresee larger changes in the Germanic group than in the Latin group due to cultural factors related to child versus adult centered societies. Analyses seem also to show both similarities and differences between adults and children's literature. The results of this study could suggest that the representations of what it means to be a "good" mother and to have a "healthy" mother-child relationship are relative and have to be put in a historical and cultural perspective. Future studies could include other languages, cultures, literatures, and time periods, as well as, additional analyses such as the relation between scientific and social discourses about the mother-child relationship.

Saturday, August 31st, 2019

Papers 29 – Math and Science

Florina Hall 14:45 – 16:15

OP 168

THE INFLUENCE OF WORKING MEMORY, ANXIETY AND STEREOTYPES ON MATH ACHIEVEMENT IN STUDENTS OF THIRD AND FIFTH GRADE OF PRIMARY SCHOOL

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In the past, various studies have highlighted importance of cognitive factors (working memory, attention, processing speed) and emotional factors (general anxiety and mathematical anxiety) for math achievement, but a very few studies investigated the relationship between cognitive and emotional factors and gender stereotypes (Jacobs, 1991; Tiedemann, 2002; Passolunghi, Ferreira, and Tomasetto, 2014). Tiedemann (2000) showed that teachers thought that girl's students were less talented than boy's students and that teachers rated mathematics as more difficult for average achieving girls than for equally achieving boys. Tiedemann (2002) showed that teachers beliefs can be more detrimental to girl's achievement than to boy's, and an important influence of gender stereotypes on achievement of medial and low achieving students. Beilock and colleagues (2010) showed that teacher's math anxiety had significant negative effect on girl's math achievement at the end of the school year, and, also, significant effect on girl's endorsement of common gender ability beliefs.

The aims of the present study were to investigate the influence of gender stereotypes on cognitive and emotional factors, and influence of all these factors on math achievement on the end of the school year. In particular, we aimed at studying: a) how cognitive and emotional factors are correlated with gender stereotypes, and b) how cognitive factors, emotional factors, and gender stereotypes can influence math achievement on the end of the school year.

In this study participated 134 students of third and fifth grade from primary schools. Seventy participants were from third grade (37 boys and 33 girls) and sixty-four from fifth grade (31 boys and 33 girls), M_{age}= 9.872

Our findings confirmed the relation between emotional factors (general and math anxiety) and cognitive factors (working memory, inhibition and attention) and the influence of these factors on math achievement at the end of the school year. Regarding the explicit gender stereotypes and self-confidence towards math, our results showed their influence on math achievement (calculation, in particular) at the end of school year. In conclusion, explicit gender stereotype, meaning that "boys are better in math than girls" can influence math achievement in primary school children.

OP 169

MONITORING THE DEVELOPMENT OF MATH SKILLS ACROSS THE PRIMARY SCHOOL YEARS IN GREECE

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Students graduate primary school without reaching the mathematics level expected, increasing the risk of experiencing difficulties with mathematics through their secondary school years. Since mathematical achievement is not a uniform construct, it is imposed to monitor the development of a wide range of numerical processes. To do this we used an interactive numerical battery which is based on the four-pronged classification model of basic mathematical skills under the criterion of underlying cognitive skills (Karagiannakis, Baccaglini & Papadatos, 2014).According to this model, weaknesses might either relate to the specific number domain, also called the core number domain, or to the general cognitive domain, and more specifically, to the visual-spatial, memory, and reasoning domains (Karagiannakis, Baccaglini & Roussos, 2017).

This study examines the sensitivity of the numerical measures along school grade, gender, area and difficulty level of the items. Participants were 2,417 children in Grades 1-6 from 48 primary schools across seven regions of Greece. The numerical battery includes 18 tasks modelled according to the aforementioned four domains. The numerical tasks were administered online in groups. The software calculated both accuracy and response time.

Results indicated a significant grade effect for the speed and accuracy measures in all the tasks of the battery. Gender had an effect on performance with girls outperforming in four tasks while boys did so in five of them. Region differences were found in 9 out of the 24 measures. Finally, in each of the tasks where item difficulty was manipulated a significant decrease of performance was found as the difficulty of the items increased.

The above results bring forward new methods of conducting and monitoring assessment of children's numerical development. The latter can contribute to the early identification of children who underachieve in mathematics providing targeted intervention, given the important societal and economical impact of this problem.

OP 170

THE RELATIONSHIP BETWEEN MATHEMATICAL ABILITIES AND PHONOLOGICAL AWARENESS SKILLS IN GREEK CHILDREN

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Background: Research indicates that phonological awareness is correlated to mathematical abilities. There are, however, little evidence in Greek language. More specifically, only 5 relevant studies have been conducted in Greek population (with only two of them examining specifically the association between PA and mathematical skills).

Aims: The purpose of this research is to identify whether there is a relationship between phonological awareness (PA) and mathematical skills in monolingual Greek 1st Graders. Although Greek language differs from English in morphology and phoneme-grapheme correspondence, similar findings are expected as in international literature.

Furthermore, the researcher seeks to investigate what other factors (age, RAN, reading fluency non-verbal IQ) may contribute to mathematical achievement.

Method: The present study assessed 45 children (21 males and 24 females, age in months: between 76 and 87 months), students of 1st Grade in non-verbal IQ, reading, Rapid Automatized Naming (RAN), Phonological Awareness (PA) and mathematical skills.

Results: Correlation analysis showed that there is a significant correlation between mathematical abilities and PA, and RAN (p<.01). In addition, mathematical skills correlate to reading abilities and age of the participant (p=.033, and p=.026, respectively). Regression analysis also revealed a correlation between mathematical abilities and PA, and RAN.

Conclusions: The findings of this research give direction for future studies in Greek-speaking children, as it is one of the few researches conducted in Greek population. Furthermore, the results can be used as a guideline to investigate more effective intervention programmes in math difficulties.

OP 171

THE EFFECT OF SOCIAL INTERACTION ON CHILDREN'S SCIENCE KNOWLEDGE WITHIN INFORMAL SCIENCE LEARNING SITES

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Developmental research suggests that social interaction facilitates children's conceptual understanding in science within formal education settings (e.g., Leman et al., 2016). Yet, we know little about the effect of collaboration between adolescents and children on science learning in informal science learning sites (ISLS; e.g. museums, zoos, aquariums, science centres). ISLS provide opportunities outside of the school context to foster science, technology, engineering and mathematics (STEM) learning (Informal Science Learning, 2009). Some ISLS offer opportunities for adolescents to become educators and so allowing them to share scientific knowledge with children. The present study examines factual and conceptual science learning among children following an interaction with either an adolescent educator, an adult educator, or no educator.

Participants ($n = 1203$; female $n = 694$, $M_{age} = 9.44$, $SD = 2.92$) were recruited in five ISLS in the US and UK following their visit to a pre-selected exhibit (either in the presence or absence of an educator). They completed a questionnaire including measures of self-reported learning and questions assessing knowledge takeaway (measured at the factual and conceptual levels). The results of this study demonstrated that children reported learning more after interacting with an adolescent educator than an adult educator or no educator ($p's < .001$). Not only this, but they also answered more factual content questions correctly in the adolescent educator interaction condition compared to the adult educator or no educator conditions ($p's < .001$).

This study emphasizes the important of social interaction with adolescents within ISLS in improving children's science knowledge and understanding. These results will be discussed in the context of collaborative learning literature in developmental psychology in order to further understand why adolescents educators are efficient communicators of science concepts to children.

OP 172

DEVELOPMENT OF ENUMERATION PROCESSES DEPENDING ON AGE, NUMEROSITY, CONFIGURATION AND COLORS OF ELEMENTS

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Children can enumerate small number of elements by several processes like subitizing or counting. Several parameters can influence the enumeration processes like the configuration of elements. Some studies concluded that subitizing and counting are distinct processes although this point is still in debate. Moreover few studies have been conducted with young children in a developmental perspective and the effect of color of the elements has not been considered in this context.

In this study, we analyze how kindergarten children enumerate elements, presented on a computer screen and the influence of several parameters on their answers: the numerosity [1-6]; the configuration and the colors of the representations and the age of the children. We record time responses (TR), accuracy of answers and eyes tracking data during the enumeration processes.

Our results highlight that 1) five years old children perform better in enumeration tasks than 4 years old in random configurations and in the counting range; 2) TR exhibit a sudden change in slope between numerosity 3 and 4; 3) errors are more frequent with random representations than organized; 4) TR are longer when elements are presented with two colors instead of one in the subitizing range while shorter in the counting range. Eye tracking data confirm behavioral results and highlight a more important number of fixations associated to longer scan paths with random than dice configurations.

We can conclude that for kindergarten the limit between subitizing and counting is observed at numerosity 3 and confirm that the two processes are distinct. Moreover, dice representation facilitates enumeration in the counting range and counting is developmental. Regarding the color effect, we propose to take into account in teaching programs, the positive bicolor effect observed in the counting range, to help the acquisition of enumeration processes for numerosities larger than 4.

Saturday, August 31st, 2019

Papers 30 - Developmental Disabilities II

Kozani Hall 14:45 - 16:15

OP 173

PARENTING STRESS IN MOTHERS OF CHILDREN WITH ASD AND INTELLECTUAL DISABILITY: ASSOCIATIONS WITH SOCIAL IMPAIRMENT, EXECUTIVE FUNCTIONS AND ADAPTIVE SKILLS

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Background and aims: Parents of children with autism spectrum disorders (ASD) report higher stress than those of typically developing children. The role of adaptive skills and executive functions in the relationship between autism spectrum symptoms and parenting stress is still unclear. The goal of the current study was to examine the unique contribution of specific child factors (i.e. social impairment, executive functioning, and adaptive skills) in parenting stress of mothers of children with ASD and comorbid intellectual disability.

Methods: Participants for this study included 113 children (*M age* = 7 years, 4 months) with a DSM5 diagnosis of ASD and intellectual disability (ASD-ID) confirmed by a comprehensive clinical diagnostic assessment. Mothers completed the Parenting Stress Index-Short Form, the Behavior Rating Inventory of Executive Function, the Vineland Adaptive Behavior Scales, and the Social Responsiveness Scale.

Results: Mothers reported elevated parental distress, stress related to parent-child interactions, stress related to the child's behaviour, and a total parenting score. All of these domains were predicted by children's social impairment. No associations were found between parenting stress domains and adaptive skills of children. Results also showed that metacognitive executive processes predicted total parenting stress and stress related to the child's behaviour domain, above and beyond social impairment in ASD-ID.

Conclusions: Our study contributes to literature by showing that social impairment and metacognitive executive functions contribute to specific domains of parenting stress above and beyond ASD severity. While it is not surprising that ASD severity contributes to parenting stress, our findings demonstrate that children's executive functioning and particularly metacognitive difficulties can also be stressful to parents and should be considered during evaluations and treatment monitoring.

OP 174

THE GIODI-2 PROJECT. THE USE OF ROBOTIC TOYS TO SUPPORT PLAY IN CHILDREN WITH INTELLECTUAL AND PHYSICAL DISABILITIES

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Background and aims: Play is the main drive for development (Piaget, 1945; Vygotskij, 1976) and children with disabilities are often prevented from playing for the sake of play, because of environmental and contextual barriers (Besio, 2017). The project GioDi-1 (2014-2015) showed that robotic toys, as environmental facilitators, could support play in children with physical impairments (Bulgarelli et al., 2018). The project GioDi-2 (2018-2019) aims at testing the efficacy of robotic toys in supporting play, by comparing them to traditional toys, to verify if robotic toys' attractiveness and characteristics may increase the children's play skills. In fact, children with intellectual disabilities mainly perform practice play, in shorter sessions (Lender et al., 1988).

Methods: The sample consisted in 10 children (7 girls, 3 boys; mean age in months = 110.90, SD = 31.51; max = 6 years, min = 12 years and 8 months) with intellectual disabilities; three children had also physical impairments. Children were observed during three sessions, playing with six different toys (three traditional and three robotic) with an educator. Data were collected in November and December 2018; each session was videotaped. Two independent observers will code the types of play performed by the child (cognitive: practice, symbolic, constructive and rule play; and social: solitary, parallel, associative and cooperative play) and will register the duration of each play type. Inter-rater agreement will be measured and disagreements will be solved.

Results: Data analyses of "types of play x types of toy" and "duration of play x types of toy" will be presented, to verify if robotic toys support more complex types of cognitive and social play, and longer play interactions.

Conclusions: The use of robotic toys is supposed to better support play in terms of cognitive and social complexity and duration in children with intellectual disabilities.

OP 177

PARENTING STRESS AND CHILD BEHAVIOR PROBLEMS AMONG MOTHERS OF CHILDREN WITH DEVELOPMETAL DISABILITIES

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Research has shown that parents of children with developmental disabilities experience more parenting stress than parents of typically developing. Research also indicates that the degree of stress parents experience varies by child disability and child behavior problems.

The aim of the present study is to investigate predictors and correlates of parenting stress among mothers of children with developmental disabilities.

Methods: This was a cross-sectional study conducted in 7 different cities in Albania on 209 mothers of 3-17 years old children with developmental disabilities. To explore the relation between the type of disability, children behavior problems and parenting stress, data on the Parenting Stress Index- Short Form (PSI-SF) (Abidin, 2012) demographic information and data on the Aberrant Behavior Checklist-Comunity (ABC-C) (Aman & Sing, 1994) were collected from a purposive sample of mothers of three cohorts of children: children with Intellectual Disabilities, children with Autism Spectrum Disorder (ASD), and children with Down Syndrome.

Results: 42% of the mothers in the present study reported experiencing clinically significant levels of stress. Child behavior problems were significantly correlated to parental stress. Simple linear regression analyses revealed that child behavior problems were significant predictors of parental stress. Statistical tests showed significant differences between mothers of children with ASD, Down Syndrome and Intellectual disabilities in stress levels.

Conclusions: Early interventions, professional support and treatment programs are necessary to reduce the burden of behavioral problems in children with developmental disabilities and to address parenting stress among their families. Identifying the behavior problems that are most difficult for parents to handle may allow clinicians to tailor interventions to the specific needs of families.

OP 178

THE EFFECTS OF A SCAFFOLDING CURRICULUM ON CHILDREN'S DEVELOPMENT IN AN INCLUSIVE PLAY GROUP

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This study aimed to investigate the effects on preschoolers' development through an intervention curriculum. The intervention was developed according to a curriculum based on the scaffolding theory by Vygotsky, Tools of the Mind. Intervention strategies were designed to improve preschoolers' performance in an inclusive play group. This study adopted a pre-post quasi-experimental design. Children with developmental delays were recruited from a local early intervention program and typical peers were recruited from the community. Participants included ten preschoolers with developmental delays with a mean age of forty-two month, and their age-matched typical preschoolers with a mean age of frothy-four months in the inclusive play group. Intervention of the play group lasted for eight weeks, two days a week, two hours each day. The group was held in a university affiliated Early Intervention Research Center in a Department of Special Education in northern Taiwan. The play group was run by two lead teachers trained by the researcher who was then the director of the center. One teacher graduated from the Department and had many years of experience in teaching children with special needs. The other teacher was a graduate student in the department. There were also several undergraduate students served as the assistants. The intervention curriculum follows a group time, planning time, work time, review time, and sharing time. Teachers would observe each preschooler's learning strength and needs, and provide individualized learning mediators and supports during the process. Measurements included an executive function questionnaire, Vineland adaptive Behavior Scale, and qualitative observation. Results showed the efficacy of the intervention to improve the executive functions as well as development of both the typical as well as the delayed preschoolers. We found that teachers only needed to play a leading role in the beginning. After preschoolers learned and acquired the supports and mediators, they became totally independent in applying and expanding them.

Saturday, August 31st, 2019

Papers 31 – Prevention and Interventions II

Edessa Hall 14:45 – 16:15

OP 179

EXPOSURE OR COGNITIVE RESTRUCTURING? EFFECTIVE TRAINING COMPONENTS TO DECREASE SOCIAL ANXIETY

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Social anxiety has been related to negative child outcomes, such as loneliness, depression and poor school performance (e.g. Biedel, Turner, Morris, 1999). Two key components of cognitive behavioral training program aimed at reducing social anxiety are cognitive restructuring (i.e. transforming unhelpful thoughts into helpful ones) and gradual exposure, both of which have shown positive results. We aim to identify whether one of these two training components or a combination of the two components leads to greater reduction of social anxiety in elementary school aged children.

Study participants were 175 students from 16 Dutch primary schools that scored above their class average on social anxiety. Schools were randomized into a condition offering a program with 1) exposure exercises only, 2) cognitive restructuring exercises only and 3) both components combined. All three programs consisted of a 60-minute, 4 session program provided by a certified professional. Questionnaires were completed on four occasions: 5 weeks before the start of the training (screening), in the week prior to the start of the program, one week after the training program ended and three months after the program ended.

Results will be presented on the effects of the three conditions on social anxiety, anxious behavior, approach and avoidance of anxiety provoking situations and automatic thoughts. Additionally, the change in depression, social skill behavior and self-esteem will be presented. Finally, the moderating role of participant motivation will be discussed.

The present study will provide better understanding of the effectiveness of exposure and cognitive restructuring as individual training components, as well as their combined effectiveness in decreasing social anxiety. This will contribute to further development of social anxiety training programs; it increases the cost-effectiveness and the feasibility to tailor programs to individual needs.

OP 180

EVALUATION OF THE EFFECTIVENESS OF KIVA ANTIBULLYING PROGRAM IN CHILE

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Bullying is a phenomenon that affects the psychosocial development of children and adolescents, and it produces severe consequences. Effective bullying prevention programs are necessary in order to provide secure and positive environments for learning.

KiVa antibullying program has been implemented worldwide showing positive results in reducing the levels of victimization and aggression, and improving socio-emotional development of students. The primary goal of this program is to empower and involve bystanders in stopping bullying situations. KiVa program includes universal (13 Students' lessons, a digital game, KiVa vests worn by school staff during recess, kick-off meetings for students, school staff and tutors, and Parents' Guidelines send to the tutors) and indicated (protocols to deal with cases of bullying used KiVa teams at schools) actions.

The aim of this study was to evaluate the effectiveness of KiVa in reducing victimization among 5th and 6th graders in low-income schools in Chile. Additionally, we wanted to assess the added-value to the effectiveness of the digital component of the KiVa Program. We culturally adapted KiVa to Chile and conducted a Cluster Randomized Controlled Trial, with three arms: 1) KiVa Program with the digital component; 2) KiVa Program without the digital component, and 3) Control Group.

Thirty-nine schools participated in the research: 13 in each arm. Bullying assessment using the Chilean version of the Olweus Bully/Victim Questionnaire-Revised, was carried out before and after the intervention. The digital game in 13 schools was played in 3-5 sessions at school to assure internet access by students.

Results indicated that after one year of implementing of KiVa, there was a higher reduction of victimization (by 25%) and a lower prevalence of bystanders (by 35%) among 5th graders compared with controls. No effect was observed among 6th graders, and the digital game makes no differences between intervention groups.

OP 181

EFFECTS OF THE PRIMA ANTI-BULLYING PROGRAM ON VICTIMIZATION, DEFENDING BEHAVIOR AND CLASSROOM CLIMATE

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Victimization among children is associated with adverse effects on their physical and psychological health and many schools attempt to reduce bullying. The Dutch school-wide anti-bullying program 'Prima' was developed based on techniques and scientific insights that are known to be effective. We investigate the effects of the Prima anti-bullying program on students' victimization, defending behavior, and the classroom peer context in Grades 3-6.

The study participants included 4,368 students from 32 primary schools. The schools were randomly assigned to three conditions. Condition A was offered a teacher-training, an online screening tool for bullying behavior, and a set of practice- and evidence-based guidelines to deal with difficult bullying situations. Condition B included all of condition A plus a series of eight student lessons. Condition C was the control group. A questionnaire was filled out by the students before and after the intervention. Program effects were based on self- and peer-reports.

Prima reduced students' peer-reported victimization and the level of isolated students in the classroom. Students in the intervention conditions also reported significantly higher levels of self-efficacy to defend victimized students in their classroom compared to students in the control condition. A trend effect of Prima was observed for students who were nominated as defender of victimized students by peers. The intervention condition with student lessons showed larger effects.

Our results suggest that Prima reduced victimization in intervention schools, especially in intervention schools that provided student lessons about bullying. The positive outcomes support previous findings on the effectiveness of Prima. Furthermore, our study underlines the importance to include student lessons in whole school anti-bullying programs that focus on creating a positive group norm and pro-social and defending behaviors.

OP 182

IMPROVING THEORY OF MIND IN MIDDLE CHILDHOOD: A STUDY OF NEAR AND FAR TRANSFER EFFECTS OF A COGNITIVE AND AFFECTIVE THEORY OF MIND TRAINING

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Recent research on Theory of Mind (ToM), the ability to understand people's mental states, has showed that it is possible to promote children's ToM skills in middle childhood via conversation-based programs. However, transfer effects of exisiting ToM training in middle childhood have rarely been studied. The current research aimed at addressing this gap in the literature. First, we wanted to test the efficacy of a 10-sessions group-based ToM training on children's ToM. Second we examined the transfer effect of our ToM training on chidren's executive functions (EFs) and prejudice. Third, we examined whether motivation to control expression of prejudice modulates the effect of training.

Participants were assigned to a ToM training condition (N = 22. Mean Age = 103.82 months, SD = 3.25 months; 11 boys) or to a ToM control condition (N = 22. Mean Age = 104.82 months, SD = 3.38 months; 12 boys). Stories for the ToM training condition were about complex mental states (e.g., guilt, beliefs). Stories for the ToM control condition where about physical events. In both conditions, characters' ethnicity was established to depict both intragroup and intergroup interactions. Measures of EF, ToM and prejudice were taken at the pre- and post-test. Motivation to control expression of prejudice was assessed at the pre session only.

The ToM training group outperformed the ToM control group in ToM measures. No transfer effect to EF was observed. On prejudice, no direct effect of training was obtained. Interestingly, motivation to control the expression of prejudice modulated changes in prejudice over the training period.

Our results support the efficacy of ToM training to increase children's understanding of complex mental states and contribute to understand transfer effects of ToM training. Moreover, our findings highlight the impact of motivational processes on the efficacy of the intervention.

OP 183

AN EVALUATION OF THE EFFECTIVENESS OF A SCHOOL-BASED DEPRESSION LITERACY INTERVENTION IN SCOTLAND

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Background and aims: Research on adolescent Mental Health Literacy (MHL) has been increasing, deriving from an interest to promote emotional well-being and timely help-seeking for mental health difficulties in adolescence. To date, the evidence base on school-based interventions is limited, however research indicates promising results. The purpose of this study is to evaluate the effectiveness of a single session psycho-educational session on depression designed to improve adolescent depression literacy.

Methods: The study follows a controlled before and after design. Participants were 339 students (mean age M = 13.4 years, 49.3% female, intervention group N=171) from two secondary schools in Scotland. The intervention is based on the MHL framework and the Common Sense Model, including: knowledge about depressive symptoms, effective treatments, help-seeking options, maintaining positive mental health and mental health first-aid skills to support others.

Measures: The Adolescent Concepts of Depression Questionnaire (ACDQ) was developed for this study. It includes 21 Likert items measuring agreement with aspects of depression literacy. Exploratory Factor Analysis revealed a four-factor structure: comprehension, attitudes, treatment and curability. Further, desired social distance, help-seeking and help-providing intentions were measured.

Results: Mixed ANOVA between groups and time points on the ACDQ scores showed that the intervention was effective in informing participants' depression literacy (ACDQ total score), and specifically in young people's knowledge of treatment options and perceived curability, symptom recognition, help-seeking and help-providing intentions. Non-significant changes were found for desired social distance, perceived helpfulness of sources of help, and two of the ACDQ subscales.

Conclusions: This is the first study to explore the effectiveness of a school-based depression literacy intervention in the UK. The results are promising in that a low-cost single-session intervention has an effect on adolescents' knowledge and beliefs about depression. Subject to wider evaluation, this intervention could be manualised and used in high schools across Scotland.

OP 184

SKILLFUL CLASS APPROACH AS A SOLUTION-BASED INTERVENTIONAL METHOD FOR SOCIAL-EMOTIONAL CHALLENGES WITHIN PRIMARY AGED STUDENTS IN THE INTERNATIONAL SCHOOL OF HELLERUP

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The aim of the study is to reveal the effect of peer group support and positive reinforcement in a classroom setting. The sample of students consists of Primary 5th grade (age 10) students and kindergarten (age 5) students. The identification of the skills that need to be taught is based on teachers' observations and a checklist provided by Ben Furman (Skillful Class Programme, 2003). This checklist includes 22 school skills that are vital for successful school performance, in addition to emotional awareness, and the selected students work towards reaching two of these skills. The student chooses two/three peers as his helpers and the support methods will vary depending on the chosen skill. The programme implementation has the following stages: 1) converting problems into skills, 2) teacher assessing the student skills, 3) agreeing about the skill 4) naming the skill 5) peer group selection, 6) daily evaluation together with the chosen mentor using a notebook format from the Skillful Class programme and 7) the final evaluation and celebration together with all the supporters (teacher, peer and home supporters). The study has taken place in the previous months in the form of in-class support for the students who needed extra support in their selected school skills. A second part of the study is scheduled for the rest of the spring term and will include interviews of the students and teachers about the impact of the programme and their views on the intervention. The main importance of the study is to investigate peer support strategies in reaching the goal of social-emotional competence. Teachers function as facilitators, but the student and peers take the ownership of the implementation. Mentors help the peer groups to reflect and focus on the strategies that helped them use effectively the skills they have been learning. The positive aspects of the programme as well as the challenges are discussed in order to shed light on more useful ways of implementation.

Saturday, August 31st, 2019

Papers 32 – Developmental Psychopathology II

Naoussa Hall 14:45 – 16:15

OP 185

ADOLESCENT CRUELTY TO ANIMALS: THE ROLES OF ATTITUDES TOWARDS CRUELTY, EMPATHY AND CALLOUS UNEMOTIONAL TRAITS

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Background and aims: Adolescent cruelty to animals is an under-researched area of developmental psychopathy. To date, research has focused on retrospective reports of adult forensic samples, but children and adolescent research is scarce. The aim of the study was to explore adolescents' reports of their cruelty behaviour and to use mediation analysis to examine the predictive value of attitudes towards cruelty, human-directed and animal-directed empathy and callous unemotional traits in animal cruelty behaviour.

Methods: The study employed an online survey, distributed to the general population of adolescents and promoted through social media. Participants were 203 adolescents aged 12-22 years (161 females and 42 males). The survey included: items on demographic characteristics and pet ownership, the Cruelty to Animals Inventory (Dadds et al., 2004), items on intentional and unintentional animal cruelty and neglect, the Animal Empathy Scale (Paul, 2000), the Interpersonal Reactivity Index (Davis, 1980), Inventory of Callous-Unemotional (CU) Traits (Kimonis et al., 2008), and a measure of attitudes towards animal cruelty.

Results: Three separate mediation analyses were performed using 5000 bootstrapped samples. The first included CU traits as the independent variable, human-directed empathy as a mediator and cruelty as a dependent variable. CU traits predicted empathy $(F(1,201)=47.08, p<.0001)$ but empathy did not predict cruelty. The second model repeated the analysis but with animal-directed empathy as the mediator. Again CU traits predicted empathy $(F(1,201)=26.71, p<.0001)$, but animal directed empathy did not predict cruelty. The third model found that CU traits indirectly predicted cruelty behaviour through attitudes to cruelty (b = .0004, 95% BCa CI [0.0001, 0.0009]).

Conclusions: This is the first study to explore mediation effects between CU traits and animal cruelty, and highlights the important role of attitudes towards cruelty in cruelty behaviour. Cruelty prevention interventions should attend to psychological risk factors for cruelty and promote attitudinal change.

OP 186

THE ROLE OF GENDER IN A RELATIONSHIP BETWEEN REINFORCEMENT SENSITIVITY AND TYPES OF AGGRESSION CONSIDERING ITS FORM AND FUNCTION

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A multidimensional approach to studying aggressive behavior is based on a distinction between the various forms and various functions of aggression. Therefore, distinction is made between proactive open aggression, proactive relational aggression, reactive open aggression and reactive relational aggression. Biological factor which is often connected with mentioned types of aggression is reinforcement sensitivity. Namely, proneness to reward motivated behavior is related to proactive aggression while, disposition for anxiety and sensitivity to aversive stimuli is related to reactive aggression. Likewise, open aggression is related to low sensitivity to punishment while relational aggression is related to high sensitivity to punishment. Since gender differences in aforementioned types of aggression as well as in reinforcement sensitivity are not consistent, the goal of this research was to determine the role of gender in a relationship between reinforcement sensitivity and various types of aggression. The respondents were pupils of the third grade of secondary schools in the City of Zagreb (N=656). The data were collected through the method of self-completion questionnaire.

The data were processed by using the following analyses to obtain statistics indicators: testing for significant differences, correlations, regression analysis, analysis of variance.

Results have shown that relation between sensitivity to reward and proactive open aggression is higher among men while relation between sensitivity to punishment and reactive relational aggression is higher among women. The obtained results are explained within the reinforcement sensitivity theory and theory of social learning.

OP 188

DOES HE LOOK SAD OR SCARED? AN INVESTIGATION INTO THE PSYCHOPHYSIOLOGICAL UNDERPINNINGS OF THE EMOTION PROCESSING DIFFICULTIES OF INCARCERATED OFFENDERS

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Besides the display of anti-social behavior, one of the core facets of psychopathy is emotional processing dysfunction (Blaire, 2001). Some psychopaths particularly appear to struggle with the processing and identification of negative emotions, such as fear and sadness (Habel, Kuhn, Salloum, Devos, & Schneider, 2002). The development and manifestation of these emotional processing difficulties - and its relationship with psychopathy - is unclear (Iria, Barbosa, Paxao, 2011). In the last several decades, research has focused its attention on the identification of physiological underpinnings of psychopathologic symptoms, as this might ultimately improve early identification and treatment. This is an interesting avenue for research to explore, as resting heart rate variability (HRV) can be used as an (objective) index of an individual's emotional responding ability (Appelhans & Luecken, 2006).

The aim of the present study is to examine to the relationship between HRV levels, psychopathic traits (i.e., callous unemotional (CU) traits), and emotional processing difficulties in a sample of incarcerated offenders. In total, 220 juvenile and adult offenders, residing in correctional facilities in the Netherlands, participated in the study. Participants filled in a questionnaire to measure CU traits and completed an Emo Go/No-Go task, to assess their emotional processing ability. They also watched a relaxing aquatic sea-life movie clip, during which their resting HRV was assessed.

It is expected that offenders who score high on psychopathic traits are impaired in terms of their performance on the Emo Go/No-Go task, compared to detainees with lower levels of CU traits. It is hypothesized that HRV moderates the relationship between CU traits and performance on the Emo Go/No-Go task, as an intact psychophysiological stress system (i.e., as measured by HRV) is crucial for emotional processing. Therefore, it is expected that offenders who score high on HRV (indicative of well-functioning emotion regulation) are not to be impaired in terms of their processing of negative emotions, despite their (high) levels of CU traits.

Findings of the present study will be discussed.

OP 189

PROBLEM BEHAVIORS OF CHILDREN UNDER PROTECTION: THE MODERATING ROLE OF TEMPERAMENT AND SOCIAL SUPPORT

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Although being under protection has negative influences on children's development, studies indicated that some environmental and individual factors play a protective role. Present study examined moderating role of social support as an environmental factor and temperament as an individual factor in the relationship between problem behaviors and rearing condition.

Participants were children (8-12 years of age) under protection (N= 129) and their classmates (N= 221).

Results suggested that children in care had both higher internalizing (β= .17, p =.003), and externalizing problems (β= .09, p = .014), than their family raised classmates. Perceptual sensitivity negatively associated with internalizing (β= -.15, p = .009), whereas, effortful control negatively associated with externalizing problems(β= -.61, p =.000). Negative affect and care group interaction was significant (β= .18, p =.008). Children with higher negative affect had higher externalizing problems if they are in care (b= 1.50, t= 3.44, p =.001). However, no effect of support has been found, which promted us to conduct further analysis only with children under protection.

This time, there was a marginal interaction between teacher support and perceptual sensitivity on externalizing problems (β= .12, p =.090). Children tended to have lower externalizing problems if they are also low on perceptual sensitivity and reported high caregiver support (b= -0.14, t = -1.84, p =.068), however, there was no significant difference in high perceptual sensitivity group. This result suggests a possible protective effect of perceptual sensitivity on externalizing problems. A similar condition appeared for the effortful control and underlined this temperament characteristic as a protective factor for externalizing behaviors, as well (β= .14, p =.044). Perceived support from caregiver tended to protect children from developing externalizing problems if they had low effortful control (b= -0.13, t = -1.90, p =.060).

Results will be discussed in the light of the literature.

OP 190

DEPRESSION, ANXIETY AND STRESS: SYMPTOMS SEVERITY AND PREVALENCE ESTIMATES IN A GREEK SAMPLE OF PRIMARY SCHOOL CHILDREN

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Background and aims: It is unanimously agreed that anxiety, depression and stress are considered to be the most common forms of psychopathology that can be detected in childhood, causing important impairment in various areas of functioning even across the lifespan. The aim of the present study was to assess self-reported symptoms of anxiety, depression and stress, both independent and comorbid, in 11 to 12-year old preadolescent children.

Method: Our survey involved 200 children, attending fifth (n=100) and sixth grade (n=100) of primary school. All children completed the Screen for Child Anxiety and Related Emotional Disorders (SCARED), the short version of the Depression, Anxiety and Stress Scale (DASS$_{21}$) and the Revised Children's Manifest Anxiety Scale (RCMAS).

Results: The results showed high levels of reported symptoms. More specifically, up to 44% of our sample scored above the thresholds for anxiety symptoms. Similar were the findings for depressive (57.8%) and stress symptomatology (45%). In addition, strong sociodemographic and family correlations were made, in terms of gender and aspects of parental and family influences. Girls showed higher levels of anxiety symptoms compared to boys. Moreover, children living in single-parent families showed greater levels of anxiety, depressive and stress symptoms, compared to children living with both parents. Finally, strong correlations have emerged between depression and anxiety, highlighting the common etiology that they share. At the same time, depression and stress were either found to be strongly correlated, especially concerned stressful life events, such as parental divorce. Again, the excessive stress symptoms reported by children living in single-parent families were strongly correlated with the presence of depressive symptomatology.

Conclusion: In conclusion, our findings support high prevalence of anxiety, depressive and stress symptoms, both independent and comorbid, and highlight the importance of early screening and intervention.

Saturday, August, 31st, 2019

Symposium 40

Olympia Hall A 16:45 – 18:15

S 40

INNOVATIVE APPROACHES TO "WHOLE CHILD" DEVELOPMENT IN EDUCATION AND SCHOOLS

Kiang L.
Chair, Wake Forest University, Department of Psychology, Winston-Salem, NC

Malin H.
Discussant, Stanford University

Mainstream education is evolving towards a personalized and comprehensive learning experience that supports students as whole people-recognizing that academic success is important, but so are physical, social, psychological, and emotional outcomes (Stafford-Brizard, 2018). This symposium will bring together three innovative programs that promote such comprehensive student development. In the first presentation, a research-based curriculum centered on boosting identity and purpose among adolescents in a U.S. public high school system will be described, with students' pre- and post-survey data evaluating its success. The second presentation will discuss a unique cross-curricular approach that uses food education as a method to build knowledge and skills in students' academic, social, health, and well-being outcomes. The third presentation describes an in-school intervention focusing specifically on enhancing ethnic-racial identity among youth. Based on an intervention developed in the U.S., the authors will discuss recent pilot efforts to adapt this program to 7th grade students in Berlin, Germany. Our discussant, a developmental psychologist with expertise in adolescence, education, and positive youth development, will serve as our fourth presenter, synthesizing the presentations and providing additional information on the value of teaching purpose and character in schools and of promoting the "whole child." The symposium will be grounded around issues related to context and culture, implementation, measurement, and guidance for researchers, educators, and practitioners in designing programs and interventions to improve and foster youth development. We will incorporate ample time for group discussion, which will be ideal for facilitating interactive conversation on the best practices and strategies for student engagement and for maximizing diverse aspects of students' success.

S 40-1

PROMOTING IDENTITY AND PURPOSE IN SCHOOLS: EVALUATING THE EFFECTIVENESS OF AN INNOVATIVE PUBLIC SCHOOL CURRICULUM

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[2] Summit Public Schools, Research & Development, Redwood City, CA

Background and aims: Summit Public Schools is a leading school system in the U.S. with an innovative, personalized approach to teaching and learning. Research-based instruction targets multiple dimensions of self-directed growth including not only cognitive skills and content knowledge, but also aspects of the "whole child" (e.g., growth mindset, perseverance) and purpose. The aim of this presentation is to evaluate the effectiveness of a new curriculum centered on one of these crucial components-sense of purpose.

Methods: Data from 200 10th to 12th graders (50% low GPA; 43% female; 55% receive free/reduced price lunch; 14% have an individualized education plan; 11% English Learners; 49% Hispanic/Latino, 17% White, 15% 2 or more races, 10% Asian, 6% Black, 2% Native Hawaiian or other Pacific Islander, 1% American Indian or Alaskan Native) will be used to examine changes in pre-post outcomes, defined multidimensionally and including indices of purpose, identity, and well-being (e.g., school belonging, efficacy) drawn from established scales. Pre-test measures were collected at the program's start in September 2018. Post-test measures will be collected in April 2019. Open-ended responses will provide further insight. The degree of change in outcomes will also be compared with control group data from adolescents from other schools who have not yet participated in the program.

Results: Our presentation will first describe the scope and sequence of the school-based curriculum, sharing lesson plans as illustrations. Although the post-curriculum survey data is still pending, we anticipate testing for changes in key outcomes (e.g., sense of purpose, identity, well-being) among students. A small pilot test of select aspects of program that was conducted last year (N = 12) suggests that adolescents clearly articulated strong evidence of identity formation and personally-meaningful sense of purpose, presumably as a result of the program.

Conclusions: Multidisciplinary implications will be discussed, as well as ideas on how our work can inform theory, future research, and practical ways to promote adolescent purpose and character. We will also consider how the curriculum might be adapted and applied to cross-cultural and international settings.

S 40-2

PILOT LIGHT: SUPPORTING THE WHOLE CHILD THROUGH FOOD EDUCATION IN CHICAGO SCHOOLS

Colvin K., Merges M., DeSorbo Quinn A.

Pilot Light, Chicago IL

Background and aims: In the U.S., the critical public health issue of childhood under-consumption of wholesome foods coupled with the link between WApoor nutritional status and lower academic outcomes underscore the need for today's youth to acquire the knowledge and skills necessary to make informed eating choices that promote healthy growth, development, and academic success. To address this need, Pilot Light (PL) is a Chicago-based nonprofit grounded in the Whole Child model that improves student outcomes and healthy development through food education (FE) integration into the core-curriculum. This presentation will further describe PL's delivery model and its results in the 2018-2019 school year.

Methods: In 2018-2019, PL enrolled 66 K-12th-grade teachers from 15 Chicago schools, reaching a 90% low-income and 80% minority student population. Teachers are provided with 28 hours of professional development, 50+ FE lessons, and FE Standards designed to support classroom instruction by increasing teacher capacity to integrate FE into core content and to engage parent/community resources related to FE. Teachers completed baseline surveys in August 2018 and will complete a post-program survey in June 2019 reporting confidence and efficacy with FE integration and community collaboration.

Results: This presentation will explore PL in greater depth and present its findings from the 2018-2019 school year, from which post-program data is pending. Anticipated results include an increase in confidence/self-efficacy to integrate FE into classroom instruction and engage parents/communities in classroom learning. Projections are based on 2017-2018 (N=46), where 98% of PL teachers reported that FE helped their students think more critically across curriculum and 16% reported more regular parent/community engagement in the classroom as a result of PL.

Conclusion: PL is a novel approach to improve student outcomes related to the Whole Child through FE integration into classroom instruction. This presentation will summarize PL's 2018-2019 findings.

S 40-3

ADAPTING THE IDENTITY PROJECT INTERVENTION IN GERMANY: PROMOTING CULTURAL IDENTITY DEVELOPMENT AMONG 7TH GRADERS IN BERLIN

__Juang L.P.,__ Moffitt U., Schachner M.

University of Potsdam, Germany

Background and aims: Ethnic-racial identity (ERI) is related to positive adolescent adjustment in terms of feeling well and doing well (e.g., Rivas-Drake et al., 2014). Hence, it makes sense to test interventions that promote its development. The Identity Project (Umaña-Taylor & Douglass, 2017) is an 8-week classroom intervention designed to promote ERI among ethnically diverse adolescents. Initial findings of a randomized control efficacy trial with 215 U.S. 9th graders show that, compared to controls, students in the intervention reported greater ERI exploration and resolution, greater general identity cohesion, and better adjustment (e.g., higher self-esteem, lower depressive symptoms, more positive other-group orientation, greater academic engagement) one year post-intervention.

The purpose of the current study was to adapt and test the Identity Project in a German context. Given Germany's unique historical and immigration contexts, we adapted the program by replacing discussions of skin color, genetics, and race with discussions of heritage culture and migration, and creating examples relevant to Germany regarding issues of discrimination and stereotyping. Because our target group was younger (7th graders) we also adapted the intervention to be developmentally appropriate by simplifying language and modifying activities.

Methods: Our sample includes ~100 7th graders in four classrooms in an ethnically diverse Berlin high school. Two classrooms were randomly chosen to receive the intervention and two are wait-list controls. Baseline data were collected regarding pre-intervention cultural identity and adjustment.

Results: We are currently in Week 6. Follow-up data will be collected one week and six weeks post-intervention. We hypothesize that adolescents in the intervention group will show higher ERI and self-esteem, lower depressive symptoms, greater sense of school belonging, and better academic adjustment.

Conclusions: If results support the original Identity Project findings, it will demonstrate the feasibility of adapting the project to be relevant in another cultural context and younger age group.

Saturday, August, 31st, 2019

Symposium 41

Olympia Hall B 16:45 – 18:15

S 41

NEW INSIGHTS IN THE DEVELOPMENT OF ANALOGICAL REASONING: INVESTIGATIONS INTO THE ROLE OF CONCEPTS, WORKING MEMORY AND INHIBITORY CONTROL

Slocombe M.

Chair, Discussant
Developmental Neurocognition Lab, Birkbeck College, United Kingdom

Analogical reasoning plays a central role in children's development. The ability to make inferences based on seeing how things are similar by analogy provides children with a highly flexible problem-solving and learning tool. Furthermore, the process of analogical reasoning has been proposed as a developmental mechanism for generating the abstract structures central to conceptual and linguistic development.

Various lines of research have identified that concepts, working memory and inhibitory control play key roles in development. However, there is debate as to what the roles of these processes are? Do they provide scaffolding and processing power to allow specialised reasoning mechanisms to function, or are they 'component' pieces of the mechanism itself? In this symposium, we will explore these questions using data collected from converging empirical methods. We will discuss how our data supports hypothesised roles of concepts, inhibitory control and working memory and how these processes might interact with each other across development.

In the first presentation, Slocombe, Thomas & Tolmie focus on the role of conceptual development. They used a cued-recall priming task to probe children's conceptual associations for the concepts used in analogy problems. They found that individual differences in conceptual associations predicted different types of responses in analogy problems. In the second presentation, Thibaut & French used eyetracking methods to examine differences in strategy between children and adults when reasoning. Their work reveals that children use a less well-controlled process compared with adults, highlighting the developmental role of executive control in children's reasoning ability. In the final presentation, Gotseva-Balgaranova & Mutafchieva demonstrate that working memory and inhibitory control training can increase children's performance in analogical problem-solving tasks. Their work further elucidates the role that executive functions play in the development of analogical reasoning, whilst also providing insight into potential strategies for improving children's real-world reasoning abilities.

S 41-1

HOW DOES THE STRENGTH OF CHILDREN'S CONCEPTS AFFECT THEIR REASONING DECISIONS?

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Background: Development of analogical reasoning rests upon the acquisition of relational-concepts and maturing cognitive control. In the current study, we focused on the role of conceptual acquisition using neuroscience findings to guide our hypotheses. A growing literature suggests that relational-concepts such as 'offspring' are instantiated in Action Perception Circuits (APCs): Distributed neural circuits representing objects in relational structures (Pulvermüller, 2018). APCs form through Hebbian learning and grow in strength as a function of increasing neural connectivity. We hypothesized that as APCs for relational-concepts become stronger, children are more likely to spontaneously conceptualize objects as relational systems. Furthermore, we hypothesized that the strength of relevant APCs can be indexed by measuring how much relevant object-concepts prime each other.

Methods: 84 children (4-8 years old) completed 10 A:B::C:D analogy problems (e.g., dog[A] goes with puppy[B] like cat[C] goes with ???[D]). Problems offered four responses: (1) analogical match, (2) semantic-associate error, (3) category match error and (4) perceptual distractor error. To measure individual differences in A-B and C-D concept association strength, children completed a cued-recall task comprising the analogy problem concepts. Semantic inhibition, rule-based inhibition and working memory were also measured.

Results: Regression analyses revealed different predictors for each of the analogy problem response types. Analogical matches were predicted by A-B concept association strength and working memory. Semantic-associate errors were predicted by A-B concept association strength, rule-based inhibition, sematic inhibition and working memory, as well as an interaction between A-B strength and semantic inhibition. Category match errors were predicted by C-D concept association strength, rule-based inhibition and semantic inhibition.

Conclusions: The results demonstrate that strength of A-B and C-D concepts differentially guide children's reasoning responses, with semantic inhibition moderating conceptual strength. The results provide insight into the equilibrium that takes place between conceptual development and cognitive control as children acquire their reasoning abilities.

S 41-2

DO CHILDREN AND ADULTS ADAPT THEIR PROBLEM-SOLVING STRATEGY TO ANALOGICAL REASONING TASK REQUIREMENTS? AN EYETRACKING EXPLORATION

Thibaut J-P., French R.

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Background: Analogical reasoning tasks are complex tasks that require multiple comparisons within and between Base and Target domains in order to find analogous terms (mapping). Eyetracking provides information regarding the when and where of the comparison processes. We hypothesized that (1) both groups will first explore the Base then the Target domain, (2) adults would be more focused on the Base domain in early moments in both conditions, and (3) children would gaze more at distractors. An open question (4) was whether each group would adapt their search to different analogy formats.

Methods: Participants were 24 six-year-old children and 20 adults (19-25 years old). Materials: Scene analogy tasks, where participants find an item in the Target scene playing the same role as the item highlighted in the Base scene, and classical analogy tasks (A is to B as C is to ???), where participants find the analogical match in a set of options.

Results: An ANOVA was performed with factors of Group (children or adults), Format (scene or classical), Time slice (beginning, middle or end of trial) and Area of Interest (AOI) (AOI 1-7). DVs: (1) time spent on the AOI and (2) key switches (e.g., A-B, A-C). The main results are that children and adults followed the same general strategy (H1) by first exploring the Base domain before the Target domain. H2 and H3 were confirmed: Children were less focused than adults with more gazes or transitions towards distractors than adults. Open question (4): Both groups adapted their search to the specifics of the task.

Conclusions: We will contrast strategies elicited by each format and interpret differences between children and adults in terms of control processes (EF) arguing that children's lack of selectivity might be due to difficulties to inhibit distractors rather than a lack of knowledge.

S 41-3

IS THERE AN EFFECT OF EXECUTIVE FUNCTION TRAINING ON ANALOGICAL REASONING PERFORMANCE IN YOUNG CHILDREN?

Gotseva-Balgaranova K., Mutafchieva M.

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Background: The current study explored the effect of inhibitory control and working memory training on four-year-old children's analogical reasoning ability. Halford (1993) and Zelazo & Frey (1998) claimed that young children's difficulties in analogical reasoning could be related to (a) limitations in ability to store conflicting information in working memory and (b) immature inhibitory control. Supporting this view, correlational studies have demonstrated associations between inhibitory control and analogical reasoning (Thibaut et al., 2010), and early executive functioning and later analytical thinking (Richland & Burchinal, 2012). In previous work, we found an effect of inhibitory control and working memory training on analogical reasoning ability when the same analogy tasks were used in pre- and post-tests (Gotseva-Balgaranova & Mutafchieva, 2018). In the current study, we tested the generalisation of this training effect when different analogical reasoning tasks were presented at post-test.

Methods: 61 four-year-old children took part in the study. Each child completed pre- and post-test analogical reasoning tasks containing both classical (A:B::C:D) and problem-solving tasks. Between pre- and post-test, executive function training was provided. Children were divided into three groups according to the type of training: (a) inhibitory control training, (b) working memory training, and (c) a control group who completed conservation tasks. Each child completed seven 25-minute training sessions taking place over seven days (one session per day).

Results: We observed a significant increase in post-test problem-solving task score in both the inhibitory control and working memory training groups. No such effect was found in classical analogy task scores.

Conclusions: The results clearly indicate a generalisation of inhibitory control and working memory training on young children's analogical problem solving. Further studies are needed to clarify why the training effect was only observed in classical tasks when the same tasks were used in pre- and post-tests, as per our previous work.

Saturday, August, 31st, 2019

Symposium 42

Ilissos Hall 16:45 – 18:15

S 42

INTERVENING IN VIOLENCE AGAINST CHILDREN: FORENSIC INTERVIEWING APPROACHES TO INVITE DISCLOSURES

Lavoie J.

Chair, University of Cambridge, Institute of Criminology

Integrative Statement: Violence against children is a weighty societal concern that has been highlighted by the United Nations as a global challenge to be eradicated by 2030. There are many forms through which violence can occur, such as physical or sexual abuse, and one key way through which this violence can be stopped at the individual level is through inviting detailed disclosures from the child that provide enough detail to intervene in the situation. Because of the high stakes that rest on obtaining children's reports, how to best invite children's disclosures has been a long-standing question for researchers, policy-makers, and professionals who interview children. This symposium draws together leading research on child forensic interviewing approaches and the effect of such approaches on inviting truthful disclosures with children who have experienced, or have suspected experiences, of violence. Paper 1 examines the dyadic effect of interviewer question types and children's detailed responses. Results suggest open-ended questions elicit more enriched communication, with the reverse pattern also found. Paper 2 explores police perceptions of effective strategies for interviewing child witnesses, and describes a four-fold role of the child forensic interviewer that emphasizes information-gathering, credibility assessment, empowering the child, and a focus on the final testimony. Paper 3 evaluates the impact of protocol training on police officer's forensic interviews with children, and found substantial improvements in the effectiveness of the interviewing questions used. Finally, Paper 4 compares allegation rates according to the interviewing approaches used to elicit disclosures. The authors found that emphasizing strong initial rapport with children early in the interview and providing emotional support throughout the interview was associated with higher disclosure rates. Collectively, the four papers provide evidence for effective interviewing practices to invite disclosures with children. Implications for future research and for professionals interviewing children will be discussed.

S 42-1

IS A FRIENDLY INTERVIEW ALWAYS A FRIENDLY ONE?

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Background and aims: Researchers have over the past decades recognized a need to develop more suitable forensic interview protocols to meet younger children's need for improved and adapted communication, at times with mixed success. This study examines to what extent a child friendly protocol that includes communication aids (e.g., emotional cards, pictures, and drawings) conducted by highly educated police investigators, helps children to report more detailed information from a criminal allegation. In addition, we investigated the dynamics between interviewees and interviewers. We predicted that children's spontaneous recollection would elicit more open-ended and focused follow-up questions from interviewers, and increase the likelihood of posing more open questions. We expected wh-questions to produce more central details regarding the abuse, and support the interviewers to resist suggestive and leading questioning.

Method: Transcripts from 33 children (18 girls, $\underline{M}$ = 9.42, $\underline{SD}$ = 3.85), who underwent a forensic evaluation regarding sexual abuse, were coded and analyzed for interviewer type of questions and children's responses. For the analyses of the dynamics between child and interviewer, we employed sequential analyses to predict behaviour from child to interviewer, and from interviewer to child.

Results: Data confirm an enriched communication after open-ended questions compared to suggestive and closed questions in terms of mean transitional probability. Specifically, the children reported more detailed central information regarding the abuse after cued recall and wh-questions ($ps < .001$), and interviewers followed up with more facilitators when children reported details ($ps < .001$). When the child was reluctant (e.g., said no) or a brief yes, interviewers produced more suggestive questions but fewer off topic comments about the interview situation ($ps < .01$).

Conclusions: Younger children need more communicative aids than what traditional interview protocols provide. The present study shows that children's report do not necessarily suffer from the use of non-verbal material. If communicative aids are used together with suggestive questioning however, then the interview is not a friendly one any longer.

S 42-2

POLICE INTERVIEWERS' PERCEPTIONS ON PROMOTING CHILDREN'S TRUTHFUL DISCLOSURE IN FORENSIC INVESTIGATIONS

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Background and aims: In England and Wales, it is mainly the role of a police officer to conduct forensic interviews with child victims of maltreatment. These forensic interviews give the child an opportunity to disclose formally what has happened to them and for it to be recorded. It is particularly important to elicit a truthful disclosure during these recordings because they can act as the child's evidence-in-chief in any subsequent court proceedings. To date, police interviewers' perceptions regarding how to promote children's truthful disclosure during forensic investigations have been overlooked.

Method: We conducted a qualitative study that examined data from three focus groups with sixteen English police officers, who regularly interview children.

Results: The focus group transcripts were analysed using thematic analysis, and four main themes were identified - the *4E's*: *Eliciting* information, *evaluating* credibility, *empowering* the interviewee, and a high-quality *end product*. Our interviewers prioritised enabling child witnesses to tell their story, rather than falsely denying it, through information-elicitation and interviewee empowerment, with less emphasis placed on evaluating the credibility of potential false allegations.

Conclusions: The implications of our findings suggest a continued focus on interview protocols that facilitate truthful disclosure from child witnesses and a review of the professional relationship between those who interview children and prosecutors.

S 42-3

EVALUATION OF THE QUALITY OF INTERVIEWS AFTER COMPLETING A TRAINING PROGRAM FOR INVESTIGATIVE INTERVIEWERS

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Background and aims: Previous research has shown police officers do not follow international recommendations on how to interview children to receive as accurate reports as possible. The Swedish training program is inspired by the NICHD protocol and includes extensive training and participants continuously receive supervision and feedback on actual forensic interviews. In the previous study of the quality of the Swedish training program (Cederborg, Alm, DeSilva & Lamb, 2013), it was shown that participants were able to reduce not-recommended interview techniques and increase their use of open-ended questions. However, we do not know if participants' improvement maintained after the 6-month course. In this study we evaluate how 70 participants, in four different courses between autumn 2013 and spring 2015 retained their competence at least three months after the courses were finished.

Method: As in the previous study this evaluation mainly focuses on the quality of question types. The coding of the police interviews distinguished between open-questions: invitations and directive prompts and focused questions: option-posing and suggestive prompts.

Results: To determine whether interviews conducted before, final interview in the course, and after training interview differed systematically, a 3 (time [before, last interview in the course, two-three months after], X 4 (type of question [invitation, directive, option-posing, suggestive]) ANOVA with repeated measures on both factors was performed on the number of questions asked during each of the three interviews. The analysis revealed significant decreases in the number of directive, option-posing, and suggestive questions, and an increase in the number of invitations from the interviews before training to the final and after training interviews. The final and the after training interviews did not differ generally.

Conclusions: The findings from the analysis shows that the participants made major progress in the police officers' interview behavior and the participants also maintained good practice after the courses were completed.

S 42-4

DISCLOSURE RATES IN FORENSIC CHILD ABUSE INVESTIGATIONS: COMPARING THE REVISED AND STANDARD NICHD PROTOCOLS

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Background and aims: The NICHD Standard Protocol (SP) proved to help cooperative children report information about experienced events (see Lamb et al., 2018, for a review), but it paid little attention to the important and complicated motivational factors that make some children unwilling to talk about their experiences. In response to research on interviews with reluctant children, the SP was revised in ways designed to help interviewers both build better rapport with children at the outset and provide children with more emotional support throughout the interview. The current study explores whether use of the Revised Protocol (RP) increases the likelihood that children will make allegations of abuse when formally interviewed.

Method: We addressed this question in the present study using administrative data by comparing rates of allegations in the years immediately before and after the Israeli government mandated use of the RP, rather than the SP, in official investigative interviews nationwide.

Results: Proportionately more of the children made allegations of abuse when interviewed using the RP rather than the SP. As in previous studies, younger children, males, suspected victims of physical abuse, and those alleging abuse by a family member were less likely to make allegations. A GLMM model accounting for these correlates as well as for the nesting effects of children within interviewers revealed that the odds for obtaining an allegation raised by over 14% when the RP rather than the SP was employed.

Conclusions: The study showed that interviewer behavior was associated with the likelihood that children would make abuse allegations. Better rapport building and the provision of emotional support seemed to have enhanced the children's motivation and engagement with their interviewers.

Saturday, August, 31ˢᵗ, 2019

Symposium 43

Vergina Hall 16:45 – 18:15

S 43

SCHOOL DIVERSITY CONTEXT AND STUDENTS' ACADEMIC, SOCIAL AND INTERGROUP OUTCOMES – INSIGHTS FROM SIX EUROPEAN COUNTRIES* PART 2

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Chair, University of Potsdam, Inclusive Education, Germany

Baysu G.
Chair, Queen's University of Belfast, UK

Phalet K.
Discussant, University of Leuven

*This is a two-part symposium. The first part will talk about school diversity context and students' academic outcomes and the second part will talk about school diversity context and students' intergroup attitudes.

Schools are a major context for intergroup contact and acculturation. The ways schools deal with diversity, that is, school diversity policies and climate, is an important characteristic of this context in our increasingly diverse societies and schools, and it can shape how intergroup contact and acculturation take place. In this symposium, we focus on different facets of school diversity context (ranging from assimilationism, equality to cultural pluralism) and their associations with various student outcomes, looking at both majority students of native background and minority students of immigrant background.

The first part of the symposium is concerned with academic (such as grades) and psychological adjustment (such as well-being) outcomes. Study 1 looks at how the language policies in primary schools in Belgium (mono- vs. multilingualism policies) are associated with achievement and adjustment of both minority and majority students. Study 2 looks as the school diversity climate in secondary schools in Germany (perceptions of equality vs. pluralism), and examines how its effects of on school engagement may vary with age, both among majority and minority students. The last two studies take a longitudinal approach and focus specifically on minority students. Study 3 looks at reciprocal relations between perceived discrimination in school and student adjustment over three years, and how these vary with classroom ethnic composition in public schools in Greece. Study 4 looks at trajectories of teacher-student relations over three years in secondary schools in Belgium, and investigates how teacher-student relationship quality is affected by school diversity climate (equality, multiculturalism and assimilationism) and in turn affect student academic and adjustment outcomes.

Overall, in this first part of the symposium, we look at different aspects of school diversity context and how these affect various academic and psychological adjustment outcomes of both minority and majority students.

The second part of the symposium looks at social and intergroup outcomes of school diversity context. Study 5 looks at the school diversity climate (specifically teacher support for pluralism) in secondary schools in Italy and shows that for both minority and majority students, teacher support for cultural pluralism was associated with higher prosocial behavior, which was facilitated by students' higher ethnic identity exploration. Study 6 looks at prosocial behavior and intergroup attitudes of students in secondary schools in Northern Ireland and shows that the effects of school and peer norms toward a traditional rival group (members of the Protestant or Catholic outgroup) also transcend to attitudes towards newer outgroups, such as refugees. Study 7 looks at intergroup attitudes of majority secondary school students in Sweden and shows that a general school climate of collaboration and fairness may buffer intergenerational transmission of prejudice between parents and children.

Overall, the second part of symposium highlights how positive diversity experiences at school have far-reaching consequences for social cohesion, also beyond the immediate context and groups in the classroom.

Taken together, the symposium over two parts looks at different dimensions underlying school diversity policies and climate (such as equality, pluralism, assimilationism) and compares their associations with student outcomes, employing student and teacher data as well as multilevel, multigroup and longitudinal analyses. By showcasing research on academic and social outcomes, as well as general adjustment, we present rich insights into effects of school diversity policies and climate amongst different student populations (different age groups, minority / majority) and in six different national contexts (Belgium, Germany, Greece, Italy, Sweden & UK).

S 43-1

PROSOCIAL BEHAVIOR IN MULTICULTURAL CLASSROOMS: THE ROLE OF ADOLESCENTS' PERCEIVED TEACHER SUPPORT FOR CULTURAL PLURALISM AND ETHNIC IDENTITY

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Prosocial behavior is key to successful peer interactions, especially in multicultural settings (Spivak et al., 2015). Previous research indicates that a school context actively supporting cultural diversity boosts adolescents' academic and psychosocial adjustment (Schachner et al., 2016). Furthermore, ethnic minority youth with a well-defined ethnic identity (EI) tend to exhibit increased cooperative and helping behaviors due to their focus on others' needs as a result of frequent intergroup interactions (Rivas-Drake et al., 2014). Yet, little is known about the direct and indirect associations of teacher attitudes and adolescents' EI to prosocial behavior in ethnically diverse classrooms. The current study compared levels of prosocial behavior between students with and without a migration background, and examined whether EI dimensions (exploration and commitment) mediated the expected association between teacher support for cultural pluralism and adolescents' prosocial tendencies.

Participants included 997 adolescents aged 14-18 years (51% girls, 44% with immigrant background), who were attending 47 ethnically mixed classrooms within 12 secondary schools in Italy. Immigrants were mostly first-generation (76%) and represented 24 nationalities. Students completed self-report measures of prosocial behavior (Goodman, 2001), teacher support for cultural pluralism (Brand et al., 2003), and EI (Phinney & Ong, 2007).

Results indicated that adolescents from immigrant families reported more prosocial behavior than mainstreamers. In multigroup-multilevel analyses controlling for age, gender, SES, and classroom ethnocultural diversity, higher levels of perceived teacher support for cultural pluralism (individual level) were linked to more prosocial behavior. Moreover, EI exploration - but not commitment - partially mediated this association. Specifically, teacher support was positively associated with exploration which, in turn, was related to increased prosocial behavior. This pattern was invariant across groups.

The findings underscore the critical role of teachers in adolescents' EI and prosocial behavior, and suggest that interventions facilitating exploration processes may be beneficial for engagement in prosocial activities within multiethnic classrooms.

S 43-2

SCHOOL AND PEER NORMS TOWARD TRADITIONAL RIVALS: IMPLICATIONS FOR ADOLESCENT ATTITUDES AND BEHAVIOURS TOWARD SECONDARY OUTGROUPS

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[2] University of Bristol, United Kingdom

Perceptions of school and peer norms influence adolescent attitudes and behaviours. Moreover, research indicates that positive outgroup attitudes are related to prosocial behaviors across group lines. However, in conflict settings, less is known about how norms toward the traditional rival may extend or relate to attitudes and behaviors toward secondary or novel outgroups. Extending the research on this secondary transfer effect, we test if perceived school and peer norms toward the traditional rival influence behaviors toward a novel outgroup, and if this link is mediated by secondary outgroup attitudes. We situate this study in Northern Ireland, a society divided along Catholic / Protestant lines, but with an increasing number of ethnic minority immigrants and refugees following the 2015 crisis.

Youth (aged 15-16) living in Northern Ireland (N = 383, evenly split by religion and gender) were recruited through their school as part of a larger study in 2016. They completed a series of survey measures including perceived school and peer norms toward contact with the traditional outgroup (i.e., Catholic/Protestant), attitudes toward ethnic minorities, and responded to a range of outcomes related to refugees.

Results suggest that attitudes mediate the link from school and peer norms toward a traditional rival to attitudes and behaviours toward a secondary outgroup. That is, controlling for gender and Catholic/Protestant background, school (b=3.84(.80), $p<.001$) and peer (b=3.10(.89), $p<.001$) norms positively related to ethnic minority attitudes, which in turn, related to helping behaviour intentions toward a (fictional) Syrian refugee youth who would be coming to their school (b=.022(.002), $p<.001$), as well as signing a petition (b=.042(.006), $p<.001$) and collective action to help refugees in general (b=.025(.003), $p<.001$). All indirect effects were significant.

Findings suggest that improving conflict-related intergroup relations through schools may have ripple effects, more broadly promoting positive intergroup attitudes and behaviours among adolescents.

S 43-3

CAN SCHOOLS PREVENT PARENTAL INFLUENCE ON THE DEVELOPMENT OF YOUTHS' NEGATIVE ATTITUDES TOWARDS IMMIGRANTS?

Özdemir M., Özdemir S. B., Espling L., Wilson E.

Center for Developmental Research, Örebro University, Sweden

Young people form their social identity during adolescence, and develop opinions about other people from different cultural, religious, and ethnic background. During this period, they are also open to the influences from their social contexts. Family and school are two of the important socialization contexts. School has special importance for the development of young people's views about others because they experience most of their social interactions with peers who have different ethnic background in school. In addition, schools are places where positive opinions and behaviors are systematically promoted for all children.

In this study, we examined whether school social context (i.e., cooperative and socially cohesive classroom environment; teacher fairness) plays a role in the development of attitudes toward immigrants among youth coming from families with different views about immigrants.

The sample of the current study was taken from the Political Socialization Project, aiming at understanding the development of adolescents' interest and involvement in civic and political issues. The sample included 7th and 10th grade Swedish adolescents ($N = 835$; 50.8% girls), and they were followed over a year.

Our findings showed that parents' negative attitudes predicted youths' attitudes overtime when youth perceived their classroom environment as less cooperative and socially cohesive. In contrast, students in more cooperative classrooms were not significantly influenced by their parents' negative attitudes. Furthermore, parents' attitudes predicted youths' attitudes only when youth did not perceive their teacher as fair. When youth perceived that they were being treated fairly by their teachers, parents' attitude did not predict youths' attitudes. Together, these findings suggest that schools may have the power of interfering with the intergenerational transmission of prejudice by providing a collaborative and cooperative environment for students, and ensuring fair and respectful treatment of all children by their teachers.

Symposium 44

Makedonia Hall A 16:45 - 18:15

S 44

CURRENT DEVELOPMENTS IN THE STUDY OF PARENTAL MENTALIZATION; FROM NORMATIVE TO ADVERSE FAMILY CONTEXTS

Hanetz Gamiel K.

Chair, Discussant, School of Behavioral Studies, Academic College of Tel Aviv Yaffo, Israel

Parental mentalizing (PM) - the capacity of the parent to think about the child's mind and to treat the child ad a mental agent- is considered an essential contributor to sensitive and attuned parenting (Slade, 2005). Studies from the past two decades indicated a significant relationship between parental mentalization and parental emotional availability and underscored the role of parental mentalization as a potential buffer against adverse parenting circumstances. In the current symposium, we ask to take this line of research further and to examine how parental mentalization affects parenting in three different contexts: parental involvement in schoolwork, marital conflict, and foster care families. By comparing the three different contexts, we will attempt to illuminate the role of parental mentalization as a relationship 'facilitator' in the case of normative development and as a relationship 'protector' in the case of adverse circumstances. Based on this formulation, we will discuss different paths for mentalization-based preventative interventions with parents.

S 44-1

THE CONTRIBUTION OF MATERNAL MENTALIZATION TO PARENTING AUTONOMY SUPPORT

Gershy N.

School of Education, the Hebrew University of Jerusalem

Background and aims: Parental autonomy support is considered a substantial contributor to children's socio-emotional development and academic success during the school years. While the contribution of autonomy support was broadly studied, little is known about the mental process enabling parents to tailor their involvement level to the child's particular abilities and autonomy needs. In the current study, we ask to evaluate the role of parental mentalization- the capacity to think about the child's mind- as a prerequisite for the parents' ability for autonomy support. We were interested in using the ecological context of parental involvement during homework preparation to evaluate the relationship between parental mentalization and autonomy support.

Methods: 70 parent-child dyads of 1-6th graders were recruited from the community. Parental capacity for mentalization was assessed using the mind mindedness interview and coding scheme (MM; Meins et al., 2003) and the parental reflective functioning questionnaire (PRFQ; Lyuten et al., 2017). Parental autonomy support was coded on videotapes of parental involvement during homework (Bernier et al., 2010; Grolnick et al., 2002).

Results: The results indicated a significant correlation between non-mentalizing mode and parental control but no significant correlation between parental MM and autonomy support. Additional analysis showed that parental MM predicted the level of parental control with children in 2-6th grade but not with 1st graders.

Conclusions: A developmental framework for understanding the relationship between parental mentalization and parental autonomy support is proposed. According to this framework, when children gain more academic mastery, the type and intensity of parental homework support changes. The ability of parents to amend their involvement and fit it to the child's changing autonomy needs may rely on the parents' capacity for mentalization.

S 44-2

CAN PARENTAL MIND-MINDEDNESS PROTECT CHILDREN FROM EXPOSURE TO MARITAL CONFLICT?

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Background: Mind-mindedness (MM), a form of parental mentalization, is defined as a parent's ability to treat the child as an individual with own mind and to "tune in" into what the child may be experiencing. Exposure of children to marital conflict during early childhood is associated with increase in children's internalizing and externalizing behaviors. Mothers' MM has been found to be negatively associated with children's internalizing and externalizing behaviors. Parents higher in mentalization are generally effective in self-regulating and responding sensitively to their children's signals even under high arousal conditions.

Aims: (a) to test associations between children's exposure to marital conflict, parents' MM, and preschoolers' internalizing and externalizing behaviors and (b) to examine whether parental MM moderates the link between children's exposure to marital conflict and internalizing and externalizing behaviors.

Methods: 70 Israeli mothers and fathers with a 3-6 years old child participated. Each parent was individually interviewed with the Describe Your Child Interview (Meins et al., 1998). MM was determined based on the parent's tendency to use mental attributes to describe the child. Parents also completed questionnaires regarding the child exposure to marital conflict (OPS, Porter & O'Leary, 1980), and child internalizing and externalizing behaviors (CBCL, Achenbach & Rescola, 2000).

Results: As predicted, mothers' MM was negatively correlated with child externalizing behaviors, however, no associations were found between mothers' or fathers' MM and internalizing behaviors or between fathers' MM and externalizing behaviors. Maternal MM moderated the link between OPS and CBCL externalizing behaviors so that positive associations between the two were present under low and moderate MM but not under high MM.

Conclusions: Mothers who are high in MM can accurately identify their child's distress when exposed to marital conflict and may offer the child appropriate comfort and reassurance, thus protecting the child from developing externalizing behaviors.

S 44-3

A MENTALIZATION-BASED INTEGRATIVE INTERVENTION FOR LOOKED-AFTER-CHILDREN AND THEIR FOSTER-CARERS

Lassri D.[1,2,3], **Fonagy P.**[1,2], **Midgley N.**[1,2], **Asen E.**[2] , **Luyten P.**[1,2,4]

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Background and aims: More than 45% of Looked-after-children (LAC) have a diagnosable mental health disorder-five times the prevalence of mental health disorder among children in the general population. However, despite the significant necessity to reduce the risk of emotional and behavioural problems in LAC-particularly as such difficulties increase the risk of instability of foster care, which in turn is associated with poor outcomes-evidence suggest that there is still an urgent need for the development and evaluation of evidence-based interventions for LAC. Contemporary mentalizing theory offers a potential integrative framework, given its focus on the role of social learning associated with secure attachment and solid mentalizing, and the considerable empirical support found among individuals characterized by severe early adversity.

Methods: First, we discuss meta-analyses and qualitative reviews of existing interventions for LAC, with the aim of identifying strengths, weaknesses, and potentially effective components. Building on the above, we present an integrative stepped-care, modular, multi-componential intervention for LAC and their foster-carers, rooted in mentalizing theory.

Results: The proposed intervention consists of four modules, aimed at empowering and facilitating strengths and resilience in LAC and their foster-carers, with an assessment component that defines criteria to be referred to the next module: Module-1: A psycho-educational programme-foster-carers' initial training; Module-2: Multi-family groups; Module-3: A brief family-based intervention; Module-4: Individual psychotherapy for children and/or foster-carers with complex difficulties, and high risk for placement breakdown.

Conclusions: Contemporary mentalizing theory offers a comprehensive integrative framework for a potentially widely implemented intervention for LAC and their foster-carers.

Saturday, August, 31st, 2019

Symposium 45

Makedonia Hall B 16:45 – 18:15

S 45

SOCIAL INEQUALITY AND CHILDREN'S EVALUATIONS OF PEERS FROM DISADVANTAGED GROUPS WITHIN DIVERSE INTERGROUP CONTEXTS

McGuire L.

Chair, University of Exeter

Children and adolescents experience inequality in diverse intergroup contexts (e.g. gender identity, immigrant status) which has serious psychological consequences for disadvantaged groups. In this symposium, international research is described which explores how social inequality influences children's and adolescents' evaluations of peers from disadvantaged groups within diverse contexts.

The first paper examines children's and adolescents' evaluations of transgender and cisgender peers who deviated from gender norms. The influence of gender identity on their evaluations showed a developmental decline, since with age participants expected their group to evaluate cisgender peers and transgender peers more equally. Whereas the role of gender group norms increased with age, especially amongst male participants. A second paper examines developmental trends and gender inequality around science in the USA and UK. One study showed a decline in explicit gender stereotyping about science between childhood and adolescence. Yet, another study suggests that with age individuals reflect social inequalities by showing gender biases around science less explicitly through excluding peers who deviate from gender norms.

A third paper shows how German adolescents' social inclusion judgements about Syrian refugees reflect social inequalities. An asymmetry was apparent between their different judgements. Adolescents were inclusive, and also thought their group 'should' be inclusive towards refugee peers, whereas they thought their group 'would' be less inclusive. The final paper discusses the need to consider social inequalities within developmental research. To support this claim it reviews studies examining how children and adolescents in the USA and Nepal rectify social inequalities in the areas of resource allocation and social exclusion. They show children's and adolescents' evaluations and friendship choices are dependent on age, theory of mind, and group status (i.e., advantaged/wealthy).

Together these papers demonstrate how children's and adolescents evaluations of their peers are embedded in and influenced by social inequalities prevalent in diverse intergroup contexts.

S 45-1

CHILDREN'S AND ADOLESCENTS' EVALUATIONS OF TRANSGENDER AND CISGENDER PEERS: THE ROLE OF GENDER GROUP NORMS

McGuire L., Palmer S., Rutland A.

Goldsmiths, University of London, UK

Transgender people (individuals who do not identify with their natal sex) face prejudice in childhood and adolescence with negative consequences extending throughout the lifespan (Horn, 2018; Leppel, 2016). Research has begun to examine *when* a preference for cisgender (individuals who identify with their natal sex) over transgender peers emerges (Gülgöz et al., 2018). The present study aims to understand whether deviancy from gendered group norms can help to explain less positive evaluations of transgender peers in childhood and adolescence.

269 participants (children, n = 118, M^{age} = 10.01, SD = .58; adolescents, n = 132, M^{age} = 13.32, SD = .62) recruited in the south-east of the UK were inducted in to simulated groups based on gender, and informed that their group wanted to take part in an activity (male = paintball, female = sleepover). A deviant in-group member who challenged the group norm was introduced. The gender identity of this peer was identified as either cisgender or transgender. Participants evaluated the in-group deviant individually and from their group's perspective (1 = dislike a lot, 5 = like a lot).

Children believed that their *group* would evaluate a transgender peer less positively than adolescents did (p = .05). There was no age-related difference for evaluations of a cisgender deviant. However, deviant gender identity did not have an effect on *individual* evaluations. Instead, in adolescence, female participants positively evaluated a peer who challenged a gendered group norm. By contrast, male participants evaluated deviancy less positively than female participants (p < .001). These findings emphasise the weight boys give to gender norms in late childhood and adolescence, whilst girls come to approve of challenges to traditional gendered expectations. The influence of peer group norms in evaluations of peers who challenge traditional gender group identity expectations will be discussed.

S 45-2

DEVELOPMENTAL TRENDS AND SOCIAL INEQUALITY AROUND SCIENCE: CHILDREN'S GENDER STEREOTYPES AND EVALUATION OF GROUP DEVIANTS

<u>Rutland A.</u>[1], McGuire L.[1], Jefferys E.[2], Goff E.[3], Mulvey K.L.[3], Irvin M.[4], Winterbottom M.[5], Hartstone-Rose A.[3]

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There is a gender gap in Science, Technology, Engineering, and Mathematics (STEM) education. This presents a worldwide problem of inequity. Developmental research demonstrates that engagement in STEM can wane, especially for girls, from middle childhood into adolescence. This research also shows that stereotypes associating STEM with males act as barriers that prevent girls from developing interests in STEM. Study 1 examined the development of these STEM stereotypes among 896 participants (5 - 16 years) in the UK and USA. They completed an explicit STEM gender stereotype measure and indicated whether they thought 'boys', 'girls' or 'both boys and girls' were usually good at STEM. Participants with age increasingly gave egalitarian responses (i.e. "both boys and girls") to the stereotype measure. In middle to late childhood (5 - 11 years) participants showed the most male bias (i.e. "boys" are usually good at STEM). These findings suggest gender inequality around STEM may decrease from childhood into adolescence.

Yet, developmental research suggests with age individuals begin to express their biases less explicitly by excluding peers who deviate from group norms (e.g., Killen & Rutland, 2011; Rutland et al, 2015). In Study 2, 207 British participants (7 - 11 years) read a scenario about an ingroup gender after-school STEM club that either wanted to do a computer programming or biology activity. Then they stated how they and their group would evaluate an in-group deviant who wanted to do the activity their group had not chosen. Male participants' evaluations of the ingroup deviant who challenged the group norm of programming were more negative in late childhood (9 - 11 years) than in middle childhood (7 - 8 years). Similarly, these male participants believed their group would negatively evaluate this ingroup deviant. These findings demonstrate developmental changes in how gender inequity around STEM engagement is articulated from childhood into adolescence.

S 45-3
SOCIAL INCLUSION OF REFUGEE YOUTH IN GERMANY

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Threatening the strong human need to affiliate with others and be socially accepted, social exclusion is a central issue in the development of children and adolescents as they frequently experience exclusion or observe others engaging in exclusion. Although children generally reject social exclusion as morally unacceptable, with age, group dynamics become more important in this context. Thus, examining inclusion decisions in intergroup contexts is an important area for research. The present study examines social inclusion of refugee youth in Germany.

Participants (N=100 German adolescents, grade 5-10, M_{age}=13.65 years, SD=1.93; 51% female) completed a paper-pencil-assessment including a hypothetical scenario in which a group of peers is planning a social event. Two additional peers (one native German, one refugee from Syria) want to join them, but there is only room for one of them.

Participants answered three measures (individual likelihood of inclusion, descriptive group inclusion evaluation, and prescriptive group inclusion evaluation) with a Likert-type scale(1=Very Unlikely to 6=Very Likely).

As expected, there was a main effect of gender (F(1, 84)=6.91, p=.010, η_p^2=.08) with girls being more inclusive than boys. Further, an interaction effect of measure and target person was found (F(2, 88)=49.72, p<.001, η_p^2=.36) revealing that participants were more inclusive, and also expected their group to be more inclusive towards the refugee peer than towards the native peer, whereas for the descriptive group evaluation, the reverse pattern was the case: Participants expected their group would be more likely to include the native peer than the refugee peer. That is, adolescents' expectations about what their peers would do differ from what they think their peer group should do and what they think they themselves would do. Interestingly, no age effects were found implying that this pattern holds throughout adolescence. Results will be discussed in light of research on social exclusion and intergroup relations.

S 45-4
SOCIAL INEQUALITIES IN CHILDHOOD

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Creating a just society involves balancing social hierarchies with the value of social equality of persons. The goal of social equality is fairly recent in philosophical discourse (Anderson, 1999) in contrast to theories of distributive justice (Rawls, 1971). Over the past few years, developmental psychologists have investigated how children and adolescents evaluate social inequalities (Elenbaas, 2018; McGuire, et al., 2019), and challenge unfair treatment of others (Mulvey, 2016). This paper will review recent findings that demonstrate how children and adolescents rectify inequalities in the area of resource allocation and social exclusion.

Study 1 is a report on how theory of mind enables children to reject gender stereotypes, N = 67, 4 - 6 year olds (USA). Using a 2 X 2 design, children heard about characters who either worked hard or were lazy, and who made toys that were stereotypic or non-stereotypic, and were asked to allocated rewards. Study 2 involved distributing resources at the group level, with N = 185, 5- and 10-11 year olds, to groups that are advantaged or disadvantaged (USA). Study 3 involved interviewing 389 adolescents, ages 13 and 15 years, who evaluated interwealth peer encounters (Nepal).

The findings from Study 1 revealed that participants were more likely to allocate resources equally to children who made toys in the non-stereotypic condition when they passed theory of mind tasks, (r_s =.28, p=.022), but not in the stereotypic condition (r_s = .09, p =.45). For Study 2, children gave more resources to the disadvantaged groups than the advantaged groups, and referred to past inequality, Ms = .21 and .36 for 5- and 10-year olds). Finally, for Study 3, participants expected that the interwealth peers could not be friends, nor would parents desire it. These findings will be discussed in terms of children's and adults' conceptions of inequality.

Saturday, August, 31st, 2019

Symposium 46

Mycenae Hall 16:45 – 18:15

S 46

ROMANTIC RELATIONSHIPS IN EMERGING AND YOUNG ADULTHOOD: PRECURSORS AND FUTURE ADAPTATION

Shulman S.

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The symposium includes presentations from Germany, Czech Republic and Israel that longitudinally examine precursors of romantic relationships of emerging and young adults, and explore their implications for the close relationships and psychosocial adaption of individuals.

The first study examined how first romantic experiences shape subsequent partnerships in adolescence and young adulthood by longitudinally following German youth. Though emotional insecurity and destructive conflict behaviors across partnerships reoccurred in repeated assessments, there were also changes revealed that indicated the possibility of resilience and of recovery in new beginning.

The second study examined the contribution of parental and romantic relations to the individuation and romantic relationships of Czech emerging adults. Different characteristics of current romantic relationships (contemporary involvement and length) are associated with emerging adults' autonomy, self-definition and relationships with mothers.

The third presentation follows different romantic pathways of Israeli emerging adults, and examines the contribution of parental support during adolescence, as well as romantic attachment, ability to express one's views and coping with tension to individual's pathways. It appears that instability in romantic relationships characterizes many individuals as they develop their partnerships.

The fourth presentation longitudinally examines the contribution of parental marital relationships, parent-child relationships and romantic relationships during adolescence to young adulthood romantic relationships and adaptation of Israeli females. Observing and experiencing different models of close relationships shape young adults' behaviors and emotions while creating their own families.

The symposium will shed light on the complexity and non-linear progression of individuals' romantic maturity during emerging and young adulthood and will indicate various earlier indicators that might contribute to distinctive pathways, as well as current different characteristics and psychosocial qualities that might accompany various types of romantic relationships. Suggestions for gaps in our knowledge that call for future research, as well as practical implications for professionals working with emerging and young adults, will be discussed.

S 46 – 1

CHANCES FOR NEW BEGINNINGS? LONGITUDINAL LINKS BETWEEN FIRST AND LATER ROMANTIC RELATIONSHIPS AT THE TRANSITION TO ADULTHOOD

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Background: Developmental research suggests that first partnership experiences in adolescence may be particularly important for the acquisition of relationship skills (e.g. Shulman & Connolly, 2013), but also bear the risk of negative experiences like dating violence (Flatley, 2016) and distress after breakup (Davis, Shaver, & Vernon, 2003). With increasing age, romantic relationships become less short-term and seem to play a key role in adolescent functioning. However, only few longitudinal studies have addressed the impact of first relationship experiences on subsequent partnerships pointing to the unique importance of earlier romantic experiences beyond relationship experiences with parents and peers (Madsen & Collins, 2011). The present study investigates how first romantic experiences shape subsequent partnerships in adolescence and young adulthood.

Methods: Covering a time frame of eight years, our analyses are based on data from a subsample of the adolescent cohort (15-17 years old at baseline) of the German Family Panel pairfam. We identified 965 young people reporting on the relationship quality in the first year of at least two different partner relationships. Information regarding the developmental timing of both relationships, young people's personality and the quality of parent-adolescent relationships was also included in the analyses.

Results: In line with the learning hypothesis, positive regard and autonomy increased, but constructive conflict behavior decreased. As suggested by the continuity hypothesis, we found moderate associations of emotional insecurity and destructive conflict behavior across partnerships, but low correlations prevailed. Continuity could neither be explained by parent-adolescent relationships or adolescents' personality.

Conclusions: Findings point to the chances for improvement or new beginnings, but also to the risk of solidified conflict tactics with a later partner. The need for further longitudinal research across adolescents' partnerships will be discussed.

S 46 – 2

EMERGING ADULTS WITH AND WITHOUT ROMANTIC RELATIONSHIPS: ITS LINKS TO PARENTAL INFLUENCE, SELF-DEFINITION AND FUTURE PLANS

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Institute for Research on Children, Youth, and Family, Masaryk University, Czech Republic

This paper documents how different experiences in romantic relationships among Czech emerging adults relate to social and emotional support from parents, self-perception, and future commitments. Research has shown that warm and supportive parenting is related to "true" romantic relationships of young people (Nosko et al., 2011). However, life pathways of emerging adults are more complex and romantic relationships are closely connected to experiences and future plans in different domains (Shulman & Connoly, 2013; Macek et. al., 2016). Hence, we do not expect direct link between parental support and stable, long-term romantic relationships of their children. We want to explore the specific nature of parental influence on different history of romantic relationships and consider the differences in self-definition and self-evaluation among emerging adults.

We employed data from four year longitudinal study "Path to adulthood" (3 waves: July 2013, 2014, 2015; N=502; M_{age}= 21.5 during the first wave, 78% female). Based on information about the length of relationship, we created four subgroups: (a) currently in long-term relationship (min. two years; 50 % of total sample), (b) currently in the relationship (min. one year; 21%), (c) history of short-term (less than a year) relationship that has ended (8%), and not in romantic relationship in past two years (21%).

Preliminary results suggest that respondents with different experiences in romantic relationships differ more in their self-evaluations, and less so in their perception of parent behavior. Those in long-term relationship reported greater autonomy and clearer self-definition compared to others. Those with history of short-term relationship scored higher on identity diffusion and need for exploration in romantic relationships and also reported higher level of perceived parental control. People with no relationship experienced lower trust and more attachment anxiety toward mothers. Further results will point out how different relationship history relates to plans and expectations in other life domains.

S 46 – 3

INFLUENTIAL MODELS: THE CONTRIBUTION OF MARITAL, PARENT-CHILD AND ROMANTIC RELATIONSHIPS IN ADOLESCENCE TO YOUNG ADULTS' PSYCHOSOCIAL ADAPTION

Scharf M.[1], **Shulman S.**[2]

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[2] Department of Psychology, Bar Ilan University

The aim of the current work was to examine longitudinally the associations between parental marital relationships, inadequate boundaries within parent-child relationships and romantic relationships during adolescence, and the quality of young adulthood romantic relationships and their adaptation. Observing parents' marital interactions might be useful when individuals build their own intimate and reciprocal couple relationships (Simon, Bouchey, & Furman, 2000). Positive inter-parental relationships have consistently been associated with offspring's positive adjustment (Cowan & Cowan, 2002). Harmonious marital relationships are also more likely to support parents' relationships with their children.

In the present study, 120 late adolescent females and their parents were followed longitudinally. The first assessment took place during their high school senior year. At this time, adolescents and their parents reported on the parental marital relationships, and adolescents reported on the inadequate boundaries in the parent-child relationships: guilt induction, psychological control, parentification and triangulation. In addition, they reported on attachment anxiety and avoidance in their romantic relationships. 15 years later, at age 32, 90 females completed questionnaires regarding the characteristics of their romantic relationships - capitalizing, sacrifice, work-family balance, as well as their self-esteem and depression.

Preliminary data analysis reveals that inter-parental intimacy is associated positively with willingness to sacrifice in the current relationships, while marital conflict is associated negatively with sacrifice and with poorer family-work balance in young adults' relationships. Marital intimacy and conflict were also associated with depression and self-esteem. Guilt induction and parental psychological control are associated with less family-work balance and depression, while triangulation in adolescence is associated with less capitalization in the current relationships, and with higher levels of depression. Finally, attachment is also associated with the quality of the current relationships and with adaptation. The contribution of the different relationship systems during adolescence to young adult adaptation in different domains will be discussed.

S 46 – 4

PATTERNS OF ROMANTIC PATHWAYS AMONG EMERGING ADULTS: THEIR ADOLESCENT ANTECEDENTS AND FUTURE OUTCOMES

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Observation of the romantic lives of the majority of young people shows that they might move between transitory and inconsistent states, being in and out of relationships (Cohen et al., 2003).While emerging adults' romantic instabilities have been widely documented less is known whether they might serve a developmental function.

As part of a longitudinal study that followed 144 Israeli adolescents from the age of 16 till 25, at the age 23 participants were given in depth interviews where they were asked to describe their romantic history in the previous three years. Qualitative analysis demonstrated four distinctive romantic pathways: *Sporadic and Casual Encounters, Sporadic Encounters in Response to a Stressful Romantic Experience, Steady Non-Intimate Involvements, and Progression toward Steady Intimate Involvements*. Among more than half of the participants romantic fluctuations served as means to progress toward intimate involvements thus representing an adaptive developmental process.

A multinominal regression was conducted to examine predictors of pathways affiliation. Progression toward steady intimate involvement was explained by greater secure attachment, greater capacity to face tension and to express one's views, and greater parental support measured seven years earlier at age 16.

Members of the different pathways significantly differed with regard to level of perceived partner support, tendency for self-concealment, secure and avoidant romantic attachment as well as the likelihood to be involved in casual encounters or cohabiting with a partner. Interestingly, those fluctuating due to earlier stress showed that they were in a process of recovering from earlier stress and which might lead them to progress toward greater stability.

In sum, embedded within the Developmental System Theory and employing a multi-method longitudinal design, the current study sheds new light on the variety of patterns of romantic behavior among emerging adults at age 23, their developmental function, their adolescent antecedents and their effect on future outcomes.

Saturday, August 31st, 2019

Papers 33 – Mother – Child Interaction

Pella Hall 16:45 – 18:15

OP 192
EFFECTS OF MOTHER AND CHILD RELATED FACTORS ON CHILD'S BEHAVIORAL PROBLEMS

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Background and aims: Ecological Systems Theory suggests that both individual and environmental factors play critical roles in child development, and these factors are associated with behavioral problems. The adverse effects of internalizing (i.e., withdrawal from being with others) and externalizing (i.e., insisting for needs to be met immediately) behavioral problems may be observed from early childhood to adulthood. The studies indicated that high level maternal stress, mother's negative perception toward child's intentionality, mother's high level developmental expectation, and high emotionality and activity as temperamental characteristics of child are significant risk factors, whereas maternal perceived social support may play protective role for child's behavioral problems during early childhood period. The research investigating the risk and protective factors for internalizing and externalizing behavioral problems are limited in Turkey. Therefore, we examined the relationship between maternal stress, mother's negative perception toward child's intentionality, mother's developmental expectation and child's temperament, and internalizing and externalizing behavioral problems.

Methods: 67 mothers (M_{age}=33 years) of children age ranged 19-to-51 months old (M_{age}=32 months) participated in the study. Mothers filled a pack of questionnaire including, Parenting Stress Index–Short Form, Multidimensional Scale of Perceived Social Support, Infant Intentionality Questionnaire, Developmental Expectation Questionnaire, EAS Temperament Survey, and Child Behavior Checklist: Ages 18–60 months.

Results: A series of hierarchical regression analyses were conducted to analyze the relationships between variables. The results indicated that child's emotionality ($F_{(1, 65)} = 41.30$, ß = .62, $p < .001$) and maternal stress ($F_{(5, 61)} = 13.04$, ß = .43, $p < .001$) positively predicted internalizing problems, whereas child's emotionality and activity ($F_{(2,64)} = 11.30$, $p < .001$) and maternal stress ($F_{(6,60)} = 9.69$, ß = .57, $p < .001$) positively predicted externalizing problems. In addition, maternal stress partially mediated the relationship between emotionality and internalizing behavioral problems (Sobel test statistic = 4.57, $p < .001$), and fully mediated the relationship between emotionality and externalizing behavioral problems (Sobel test statistic = 5.76, $p < .001$).

Discussion: Child's high emotionality and mother's high level parenting stress are important risk factors for internalizing problems. Moreover, child's high emotionality and activity and high maternal stress are significant risk factors for externalizing problems during early childhood period. The intervention studies targeting to decrease mothers' stress level might be effective to eliminate the adverse influence of temperament on child's behavioral problems.

OP 193

PARENTING BEHAVIORS AND MOTHER-CHILD VALUE SIMILARITIES: THE MEDIATOR ROLES OF MOTHERS' EMOTION SOCIALIZATION BEHAVIORS

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In recent years, there is an increase on studies about value acquisition during childhood and parent-child value similarities. Showing the factors that predict this socialization process and the role of parents have become important. In this context, the current study aimed to show the factors that predict the similarity between mothers' and their children's values.

To achieve this aim, the direct and indirect relationships between parenting, emotion socialization behaviors and mother-child value similarity were examined. Our sample consisted of 172 mothers (M = 37.22, SD = 4.85) and their children (M = 8.45, SD = 1.20) who were in 1st, 2nd, 3rd and 4th grades in primary schools in Ankara, Turkey. Mothers completed Alabama Parenting Questionnaire, Coping with Children's Negative Emotions Scale and Portrait Value Questionnaire. To test children's value priorities, Picture Based Value Survey for Children (PBVS-C) was applied to children. PBVS-C contains 20 pictures which represent 10 values of Schwartz's value theory. Pictures are given to children into sticker format, thereby children can easily select the values according to importance.

Data was analyzed through path analysis by AMOS 18 software package. The results of the study showed that there was an indirect relationship between mothers' inconsistent behaviors and mother-child value similarity via nonsupportive emotion socialization behaviors. Moreover, there was an indirect relationship between positive parenting behaviors and mother-child value similarity via supportive emotion socialization behaviors.

It was though that the differentiation of values during childhood and adulthood was not surprising and our results showed that positive parenting and supportive emotion socialization behaviors make this process easier for children to get appropriate values for childhood period. The current study contributed to literature to reveal the role of parental behaviors on value acquisition during childhood.

OP 194

SPEECH INTERACTION IN PAIRS «MOTHER-TWINS» AT THE AGE OF THE 4-6 YEARS

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Background and aims: Present study is a part of research of mother-child speech interaction in conditions of typical and atypical development. The aim of the study is to investigate the specificity of mother - twin's speech interaction at the age of 4-6 years, to compare features of mother-child interaction due to the order of the birth.

Methods: The subjects of the study are 4 triads «mother - dizygotic twins» at the age of the children 4-6 years. Mother-child interaction was audio and video recorded in home conditions. Perceptive analysis of mother-child speech interaction was performed, using developed method (Lyakso, Frolova, 2018). Audiotests with 184 fragments of interaction for each child and his mother were created. 8 professional experts listened to tests and marked features of mother and child behavior in special questionnaires. Spearman correleation and multiple regression statistical methods were used to analyse the results.

Results: The results of perceptive analysis revealed that mother initiates interaction with both children. When mother refers to a child she spells sounds loudly and clearly. First-born twins pronounce different types of replicas, such as one word, simple sentence, complex sentence. Second-born twins speak by one-word replicas. So mother needs to stimulate them additionally to get an answer: repeats the same question or word, marks her replicas by voice. Mother repeats sounds after the second-born twin to improve his sound articulation. When mother stimulates children to answer all the children interact with mother and answer, but the first-born twins demonstrate positive emotions and the second-born twins positive or negative emotions.

Conclusion: Correlations between features of maternal and children's speech are revealed. Differences between maternal speech adressed to the first-born and the second-born twin in pair are presented.

OP 196

SHYNESS AND PLAY BEHAVIORS: THE ROLE OF MOTHER - CHILD RELATIONSHIPS

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Shyness refers to social fear and anxiety in the presence of peers that inhibit the child's desire to engage in social interaction (Coplan, Prakash, O'Neil, & Armer, 2004). Shy children are at increased risk for adjustment difficulties at school such as peer-relationship difficulties and socio-emotional adjustment. Mother- child relationships can influence serve as a secure base from which children can interact with their peers and their socialization. The quality of the relationship between mother child relationships plays an important role for opening a communication channel between them. The quality mother -child relationships also appear to be moderators between play behaviors and shyness.

The purpose of the present study was to examine the moderating role of mother-child relationship quality (i.e., closeness and conflict) in the association between social withdrawal and play behaviors. We hypothesized that the relation between children shyness and play behaviors (reticence play and social play) would be moderated by mother - child relationships (conflict and closeness). Participants were 211 three to six-year-old children (M= 60.3 months, SD = 2.26, 94 girls, 117 boys). All analyses were conducted using R and moderating effects were tested using path analysis. The model displayed a significant two way interaction between the standardized continuous variable shyness and the categorical variable mother's closeness in predicting the standardized continuous outcome social play. In contrast, the model used to specify the relationship between variables did not reveal a significant two-way interaction between the standardized continuous variable shyness and the categorical variable mother's closeness and conflict (i.e., 0: low and 1: high) in predicting the standardized continuous outcome reticence play and social play. The findings suggest that a close mother-child relationships appeared to be a moderator of shyness and social play behaviors. Thus, it is needed intervention program to improve mother child relationships for shy children.

Saturday, August 31st, 2019

Papers 34 – Father – Child Interaction

Florina Hall 16:45–18:15

OP 197

THE ROLE OF THE FATHER INVOLVEMENT IN CHILD DEVELOPMENT: THE RELATIONSHIPS WITH MATERNAL, PATERNAL, AND CHILD CHARACTERISTICS

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Background and aims: In recent years, the role of the father in child development has been increasingly emphasized. Father's involvement in his child's developmental process provides many benefits for both child and father and mother. The aim of this study was to examine father involvement's role on physical, cognitive, social-emotional development of preschool children and evaluate father involvement's a mediatory role between maternal gatekeeping, gate opening, children's temperament and marital satisfaction, parenting competence, child development with proposed research models.

Methods: Turkish fathers and mothers with a child aged 2-6 years (N = 216) and their children's teachers were included in the study. Mothers assessed their children's physical development (fine motor skills) and language-cognitive development and teachers assessed children's social and emotional development (aggressive, hyperactive, asocial, anxious-fearful, prosocial and excluded by peers). Mothers also rated father involvement, children's temperament (reactivity, persistence, approach and rhythmicity), maternal gatekeeping, marital satisfaction. Fathers assessed father involvement, paternal parenting competence, maternal gatekeeping, maternal gate opening, and marital satisfaction.

Results: The correlation between father and mother reports for father involvement is very high (r = .72 p<. 001). Two research models were proposed that is based on father and mother's reports for father involvement. In the first model is based on father-report, maternal gatekeeping, maternal gate opening, children's approach and rhythmicity predicted the father involvement, which in turn predicted mother and father marital satisfaction, paternal parenting competence, children's prosocial behavior, exclusion by peers, anxious-fear. In the second model is based on mother-report, maternal gatekeeping, maternal gate opening, children's approach and reactivity predicted the father involvement, which in turn predicted mother and father marital satisfaction, paternal parenting competence, children's anxious-fear and language-cognitive development.

Conclusions: In conclusion, this study shows that father involvement is related to maternal and child characteristics, and father involvement improves marital relations, parenting skills and children development.

OP 198

THE EFFECT OF MATERNAL GATEKEEPING ON SHARED PAST CONVERSATIONS THROUGH FATHER INVOLVEMENT

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Background and aims: Personal life stories and memories individuals tell is a way of defining themselves within families, contexts, and cultures. Memory conversations about shared and unshared past events have a critical role in their cognitive development in terms of recognition, remembering, and narrating. In addition, reminiscing about shared and unshared memories with parents lead children to adopt a particular narrative style, that was theorized to remain stable over life span. In previous research about reminiscing style that parents, and children develop and share, parent involvement has been generally referred to as mother involvement, and only a few studies examined fathers' contribution in these conversations. This lack of research on fathers' role might be due to mothers' attributed role as the main caregiver which can lead to maternal gatekeeping behavior. The current study explored the relationship between maternal gatekeeping behavior and the characteristics of father-child memory conversations through the mediator role of father involvement.

Methods: Father-child dyads were invited Middle East Technical University Child and Adolescent Lab to reminisce about a shared past event. Those conversations were audio-recorded and afterwards both fathers' and children's level of elaborativeness in conversing about the shared past event was coded. Mothers filled out mother involvement and maternal gatekeeping scales, while fathers filled out father involvement and perceived maternal gatekeeping scale.

Results and conclusion: Results revealed that maternal gatekeeping, perceived maternal gatekeeping, or mother involvement did not predict father involvement, or participants' elaborativeness. However, father involvement significantly predicted child elaborativeness in the shared past conversation. The overall mediation model was not significant. Further analyses showed effects of child's gender on some of the relationships in the model. In those terms, results revealed that maternal gatekeeping and father involvement affect father-child dyad's memory characteristics in shared past conversations in a different way, as a result of gender socialization roles.

OP 199

PARENTHOOD PLANNING AND THE PRESENCE AT CHILDBIRTH AS PREDICTORS OF THE SENSE OF EFFECTIVENESS AND SATISFACTION WITH LIFE IN YOUNG FATHERS

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The coming of the firstborn to the world stimulates a new cycle of family life and initiates taking up the roles of parents. The undertaking the role of a parent produces certain effects in psychological and social development. The hitherto life must be reorganized and subordinated to the needs of the child (Liberska, Deja, Janicka, Dąbek, 2016). Although the problem of mother-child relation during pregnancy and after childbirth has been widely explored, not much attention has been paid to the effect of childbirth, especially to the coming of the firstborn, on men. Nowadays many men want to prepare to the role of father and want to take part in the childbirth.

The problem considered in our work concerned certain aspects of psychological condition of young fathers, that is those who have become fathers for the first time, in relation to their plans regarding parenthood and the presence during childbirth.

We invited for the study 178 men who in the period of 24 weeks prior to filling the questionnaire became fathers of their firstborn. The fathers were divided according to the two variables: the presence at childbirth and the fact if the pregnancy had been planned or not. None of the fathers participated with their partners in antenatal classes.

The tool applied was the GSES (*Generalized Self-Efficacy Scale*; Schwarzer, 1993) and SWLS (*The Satisfaction with Life Scale*) written by Diener, Emmons, Larson and Griffin (1985) and the questionnaire.

As follows from the results, the sense of effectiveness and satisfaction with life in young fathers differ depending on the fact if the pregnancy was planned or unplanned and the presence at the childbirth.

The type of pregnancy (planned vs unplanned) and the presence at the childbirth were found to be significant predictors of the sense of effectiveness and satisfaction with life in young fathers.

OP 200

INFANT SELF-REGULATION BEHAVIORS DURING FATHER-INFANT DYADIC INTERACTIONS: ASSOCIATION WITH PATERNAL PRENATAL ANXIETY AND DEPRESSIVE SYMPTOMS

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Background and aims: Infant's self-regulation behaviors (SRB) in the context of father-infant dyadic interactions (FIDI) are under-explored, especially attending to paternal mental health. The aim of this study is to examine the association of paternal prenatal anxiety and depression symptoms in the prenatal period with infant's SRB during early FIDI.

Methods: 135 fathers and their 2 months old children participated in the study. The fathers were aged between 18 and 48 years ($M = 32.7$, $SD = 5.5$). Infants were male (57.4) and female (42.6%). Gestational ages ranged from 36 to 41 weeks ($M = 39.2$, $SD = 1.2$). The recruitment of fathers-to-be was conducted when they were accompanying the mother-to-be in a pregnancy routine medical appointment at 35 weeks of gestation. In the first assessment moment, at 35 weeks of gestation, sociodemographic data was collected and the Edinburgh Postnatal Depressive Scale (EPDS) and the Hospital Anxiety Depression Scale (HADS) were filled in. Five minutes face-to-face interactions were conducted and video recorded 2 months after childbirth to assess infant behaviors during free dyadic interactions with the fathers using the Global Rating Scales (GRS) procedure.

Results: Paternal depressive symptoms in the prenatal period are associated with infant's increased avoidance (hads: r=-.247, p=.005; epds: r=-222, p=.010), increased self-absorbed (hads: r=-.201, p=.023) and increased inertness (epds: r=-.172, p=.046) behaviors, as well as with decreased positive vocalizations (hads: r=-.247, p=.005), and decreased happy (hads: r=-.301, p=.001; epds:r=-.218, p=.011) behaviors. Paternal anxiety symptoms in the prenatal period are associated with infant's decreased positive vocalizations (r=-.178, p=.045) and happy (r=-.213, p=.016) behaviors.

Conclusion: Infant SRB during FIDI are associated with paternal prenatal depressive and anxiety symptoms. Public health policies should attend to the paternal mental health even during the prenatal period in order to provide adequate care and to promote healthier child socio-emotional development.

OP 201

FATHERS OF ONLY CHILDREN: CHILDREN'S TEMPERAMENT AND FATHERS' COPING WITH STRESS STRATEGIES AS PREDICTORS OF PARENTAL ATTITUDES

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Parental attitudes have a significant influence on parent–child relationship (Lipowska, Lipowski, & Pawlicka, 2016). Temperament, as an innate predisposition of a child can shape above attitudes (Belsky, 2014). Furthermore, being a parent can be very stressful, therefore parents' coping strategies could have significant impact on their attitudes towards children (Bielawska-Batorowicz, 2006; Murray, Cooper, 2003).

The aim of this study was to investigate how child's temperament and father's coping strategies predicted paternal attitudes towards their only child. Child's gender and father's age influence were also examined.

The research group constituted of 176 fathers ($M_{father's\ age}$= 35.07, SD= 5.71) of the only children ($M_{children's\ age}$= 5.6, SD= 0.21; 88 girls and 88 boys). The following research tools were used: *EAS Temperament Questionnaire - Parental Ratings* (EAS-C; Buss & Plomin, 1984; polish adaptation by Oniszczenko (1997), *Brief COPE* (Carver, 1997, polish adaptation by Juczyński & Ogińska-Bulik, 2009) and *Parental Attitudes Scale* (SPR; Plopa, 2008).

The analysis reavealed that, the older the father, the higher acceptance ($β$= 0.24; p= 0.027) and demanding (ß= 0.25; p= 0.021), but less autonomous (ß= -0.23; p=0.034) attitudes towards sons. Furthermore, results indicate that child's sociability promotes demanding attitude towards sons (ß=0.34; p=0.019), whereas shyness predicts autonomous attitude towards daughters(ß= -0.29; p=0.024). Emotionality (ß= 0.29; p=0.026) and shyness (ß= -0.26; p=0.041) are significant predictors for inconsequent attitude towards daughters. Active coping (ß= 0.23; p= 0.045) and use of support (ß= 0.29; p= 0.015) promote accepting attitude towards daughters. Importantly, active coping decreases autonomous (ß= -0.22; p= 0.05) and overprotective attitude towards sons (ß= -0.31; p= 0.003). Finally, helplessness predicts higher overprotective attitude, both for daughters (ß= 0.41; p= 0.003) and sons (ß= 0.33; p= 0.014).

Child's temperament and father's coping strategies are important factors in shaping fathers' parental attitudes. The results indicate, however, differences depending on child's gender.

Saturday, August 31st, 2019

Papers 35 – Sociocultural Aspects of Parenting

Kozani Hall 16:45 – 18:15

OP 203

THE ROLE OF CULTURALLY RELEVANT PARENTING PRACTICES IN CHILDREN'S COPING WITH PEER STRESS

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The present study aimed to investigate the role of parenting including culturally relevant parenting practices like deceiving and evading in children's coping strategies about peer stress. It was also displayed that the role of parenting on child outcomes moderated by child's own characteristics like temperament. Therefore, the second aim of the current study was to test moderator role of temperamental characteristics of reactivity and perceptual sensitivity, based on differential susceptibility theory.

A total of 299 Turkish children (M_{age}=9.27, SD_{age} = .52) and their mothers participated in the study (179 girls and 120 boys). Children were asked to fill out perceived maternal behaviors while mothers were asked fill out demographic, temperamental scales and their child's coping strategies regarding peer stress. Coping strategies were **engagement** (*primary:* problem solving, emotion regulation, emotional expression; *secondary:* positive thinking, cognitive restructuring, acceptance) and **disengagement** strategies (*primary:* avoidance, denial; *secondary:* wishful thinking, distraction).

Regression analysis showed the interaction effect of reactivity and maternal warmth was significant for predicting primary (b=.58, p<.001) and secondary disengagement strategies (b=.51, p<.01). Among children with low reactivity, children whose mothers showed higher levels of warmth used high primary and secondary disengagement strategies. The interaction effect of perceptual sensitivity and maternal deceiving was also significant for predicting primary engagement strategies (b=-.32, p<.05). Among children with high perceptual sensitivity, maternal deceiving was negatively related to children's primary engagement strategies.

The results show the interaction between parenting and temperament affects child's coping with peer stress. In Turkish culture, for children whose mothers deceive them, high perceptual sensitivity is a risk factor for functional coping strategies, that supports differential susceptibility approach.

OP 204
SOCIAL CONTEXT AND CHILD REARING

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Much research has been conducted on parental educative attitudes and children's socioemotional development was studied with mothers and, with school-aged children. There are limited studies from non-industrialized countries which examine factors such as parental trait anxiety, parental care, household chores shared by the couple and diverse support (i.e., daily care of the child) provided by the extended family to the preschool aged parents. The aim of the present study was twofold: first, to explore whether parental educative attitudes towards their children are associated with the children's socioemotional responses towards their parents as reported by Turkish Cypriot parents, and second, to explore whether socioemotional responses of children are related to the social support provided by the extended family to the nuclear family.

The participants were mothers and fathers of 144 children whose ages varied between 12 and 60 months. A questionnaire was used which included the Turkish versions of the "Baby's Day Test" (Mertan, 1995), the "Trait Anxiety Inventory" (Oner & Le Compte, 1985), Extended Family Support Scale and Household Chores Scale was used in data collection.

The findings of the study suggest that socioemotional responses of children are related to the parental daily educative attitudes (e.g., affectionate parental attitudes, affectionate child behaviour).

We found that the socioemotional development of children has a significant relationship with household chores shared by the parents and social support which is provided by the extended family to the parents.

OP 205
THE BIDIRECTIONAL RELATIONSHIPS BETWEEN PARENTAL PSYCHOLOGICAL CONTROL AND PARENT-CHILD CONFLICT IN CHINESE ADOLESCENTS: A THREE-YEAR LONGITUDINAL STUDY

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Adolescence is a period characterized by increasing conflict in parent-child relationships. The need for children to gain psychological autonomy increases during adolescence. Psychological control is one component of parenting characterized by the use of internally controlling and manipulative strategies to inhibit children's psychological autonomy (Barber 1996; Barber and Harmon 2002). Hence, the association between parental psychological control and parent-child conflict is worth investigating. Developmental theories indicate that there may be bidirectional relationships between them (Sameroff, 1975). However, few existing studies have explored their bidirectional relationships (Steeger & Gondoli, 2013). Chinese culture is deeply influenced by Confucianism, which emphasizes filial piety to parents (Hwang, 1999). The association between psychological control and parent-child conflict in China may be different from Western society.

To explore the direction of effects between parental psychological control and parent-child conflict in Chinese adolescents, a 3-year longitudinal design was employed. The participants were recruited from 13 junior high schools in Beijing, China. They were asked to fill in the Parental Psychological Control Questionnaire and Parent-child Conflict Questionnaire. Cross-lagged structural equation modeling were used. The results indicated that there were bidirectional relationships between parental psychological control and parent-child conflict. Specifically, parent-child conflict at Grade 7 significantly predicted the increase in parental psychological control at Grade 8. At the same time, parent-child conflict at Grade 8 significantly predicted the increase in parental psychological control at Grade 9. However, only the path from parental psychological control at Grade 8 to parent-child conflict at Grade 9 reached a significant level. No child gender differences were found in the relationships between parental psychological control and parent-child conflict. These findings suggest that there is a vicious circle between parental psychological control and parent-child conflict which should be paid attention.

OP 206
THE ASSOCIATIONS OF PARENTING BEHAVIORS AND CULTURAL SELF-ASPECTS WITH SOCIAL ANXIETY

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The association of four different strategies of maternal and paternal behaviors (warmth, autonomy granting, strict control and psychological control), and the cultural self-aspects (individual, collective, and related) with social anxiety were analyzed in Turkey. The sample of the study mostly included university students aged 18-25 (N = 353). The results indicated that (i) parental psychological and strict control increased the level of social anxiety; (ii) individual and collective self-aspects negatively whereas related self-aspect positively predicted social anxiety; (iii) the parental autonomy granting behaviors and cultural self-aspects interactively predicted social anxiety. The major contributions of the current study were to investigate the effects of different maternal and paternal behaviors on individual social anxiety in Turkish context with studying the independent and interactive effects with the cultural self-aspects. These findings highlighted the importance of studying samples from diverse cultural contexts in order to validate and enrich the models to understand social anxiety.

OP 207

ROMA AND NON ROMA HOME ENVIRONMENTS: PROCEDURAL AND STRUCTURAL CHARACTERISTICS, FAMILY DYNAMICS AND CHILDREN'S REARING

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Due to the high levels of marginalization of Roma population in Europe, policy makers and practitioners have recognized the need to support Roma children with particular emphasis to psychosocial and academic domain. Nonetheless, the research regarding the proximal environment of Roma children, the provided activities at home, the way their parents organise children's everyday life, and their parents' values and beliefs is very limited. Those elements constitute the children's developmental niche (DN) following Super and Harkness' theoretical approach. In the present paper, based on the European research project "ISOTIS", which examines the educational inequalities and social support for 3-6 and for 9-12 year-olds in 11 European countries, we aim to examine how parenting of native Greek Roma parents differs from that of parents from non Roma native low-income families that live in the same areas, sharing the same community resources, in broader Athens. The presentation attempts a description of the physical and social settings of daily life which refers to children's environment and the way it is organized in terms of location, people that are involved, the household's size, the offered activities etc., in relation to a number of critical questions such as "what kind of activities do parents provide to their children?", "are there any differences in the type of activities, when the socioeconomic status of the families is taken into account?", among others. The analysis is based on semi-structured individually conducted interviews with 202 indigenous Greek Roma and 129 non-Roma low-income mothers who live in the same 4 regions of the greater Athens area that includes a high percentage of both target groups. This comparison is of great importance as it enables to reveal potential differences and similarities of these two contexts regarding parenting and cultural characteristics and to provide, in turn, more efficient approaches of social-educational interventions.

OP 208

INTERGENERATIONAL RELATIONS IN IMMIGRANT FAMILIES: ROLE REVERSAL, INDIVIDUATION, AND PARENTING REPRESENTATIONS

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Parent-child role reversal, when a child assumes functions in the relationship usually assumed by the parent, is a common phenomenon in immigrant families; however, its long-term implications are yet not fully understood. The aim of this study was to investigate intergenerational transmission of role reversal among immigrant families from the former Soviet Union in Israel, using both quantitative and qualitative methods. In the first stage, the association between role reversal and individuation was examined among 150 immigrants, aged 19 to 35 years, compared to 73 young adults living in Russia. Participants reported their childhood relationships with parents (parental care and autonomy encouragement), family obligations (instrumental and emotional roles, as well as perceived unfairness), and current individuation from the family (conflictual independence, emotional cutoff, and fusion with others). Immigrant participants also reported language and culture brokering roles - transplanting and interpreting the new language and culture for their parents. Immigrants revealed a higher level of role reversal than their nonimmigrant counterparts, which was related to poor individuation. In the second stage, 50 immigrant mothers of young children were administered the Parenting Representations Interview (Scharf & Mayseless, 2002). Adopting parental roles in the family of origin, including roles specific to immigration, predicted mothers' role reversal and negative emotions in the relationship with their child. Low levels of individuation were associated with role reversal and inappropriate boundaries with the child. These findings demonstrate intergenerational transmission of role reversal for the first time in the context of immigration. Case examples of such transmission are presented.

Saturday, August 31st, 2019

Papers 36 - Emotion Regulation and Self-regulated Learning

Edessa Hall 16:45 - 18:15

OP 209
INTERPERSONAL EMOTION REGULATION IN CHILDREN: AGE, GENDER, AND CROSS-CULTURAL DIFFERENCES USING A SERIOUS GAME

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Interpersonal emotion regulation entails a wide array of strategies aimed at influencing others' emotions. Despite its importance for successful social interactions, only few studies have evaluated interpersonal emotion regulation in children. In particular, the study of developmental changes in the use of emotion regulation strategies overlooked age, gender and cultural differences across different emotions.

To address this gap, the present study used the serious game Emodiscovery, a simulation game targeted at 8-10 year-olds, which measures the strategies selected by children to improve the emotions of anger, sadness, and fear displayed by 3D virtual characters. One-hundred British (M = 9.10 years; 39% girls) and 108 Spanish (M = 9.04, 44% girls) 8-10 year-olds played three different levels or scenarios of the game. In each level, the character displayed a negative emotion (i.e., sadness, anger, and fear, respectively) and children were first asked to indicate what emotion the character was feeling and afterwards to interact three times with the character to improve his/her mood. In each interaction, four possible regulation strategies (two adaptive and two maladaptive) were displayed for the child to select.

Results showed that in the scenario where the character was displaying sadness, 8-year-olds chose significantly less adaptive strategies than 10-years-olds. In the scenario where the character was angry, males who accurately recognized the emotion of anger chose more adaptive strategies than those who did not recognize the emotion. For the scenario depicting fear, males chose less adaptive strategies than females.

The obtained results highlight the importance of looking at specific emotions when researching interpersonal emotion regulation as the strategies used may be emotion-specific. Finally, future studies should be conducted to evaluate if there are cross-cultural differences in interpersonal emotion regulation and what factors may modulate them.

OP 211

THE RELATIONSHIPS BETWEEN COMPONENTS AND MARKERS OF OLDER PRESCHOOLERS' EMOTIONAL COMPETENCE

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Present research aims to analyze the correlations between components of the older preschooler's emotional competence (identification of emotions, empathy, expression, reflection and emotional self-regulation) and its markers (self-esteem, anxiety and fears).

The study involved 2 parts on the total sample of 173 preschoolers from Saint-Petersburg: 5-year-olds (n=85) and 6-7-year-olds (n=88); 89 boys and 84 girls. Part 1 included study of interpersonal competence (n=80), Part 2 - study of intrapersonal competence (n=93).

Methods: Test «Emotional identification» and questionnaire for parents by E.Izotova, Empathy test by T.Gavrilova, Techniques for study of emotional self-regulation by S.Savenysheva & N.Smirnova, Self-esteem test by V.G.Schur, Anxiety test by R.Temml, M.Dorci, V.Amen and Fears test by A.Zakharov & M.Panfilova.

Results of the part 1. On the total sample expression is positively correlated with overall index of fears. On the sample of 5-year-olds correlations weren´t revealed. On the sample of 6-year-olds emotional identification is positively correlated with fears. Empathy is positively correlated with self-esteem, expression - with anxiety. On the sample of boys knowledge of emotional markers is negatively correlated with fears. Empathy is negatively correlated with anxiety and overall index of fears. Expression is positively correlated with anxiety. On the sample of girls as opposed to boys empathy is positively correlated with anxiety. Overall index of interpersonal emotional competence is positively correlated with anxiety too.

Results of the part 2. On the total sample and on the sample of boys reflection is positively correlated with anxiety. On the sample of boys overall index of intrapersonal emotional competence is positively correlated with anxiety. On the samples of 5-year-olds, 6-7-year-olds and girls correlations weren´t revealed.

Thus, the structure of correlations of components and markers of emotional competence in overall is more integrated in 6-year-olds compared with 5-year-olds and in boys compared to girls.

OP 213

LONGITUDINAL RELATIONS BETWEEN ADOLESCENTS' PROSOCIAL BEHAVIOR AND SELF-EFFICACY IN SELF-REGULATED LEARNING

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A small number of studies has found that Prosocial Behavior (PB; i.e. voluntary actions aimed to benefit others, like helping, consoling, donating; Eisenberg, et al., 2006) was associated with academic achievement across adolescence (e.g., Gerbino et al., 2018; Wentzel, 1993). It was hypothesized that prosocial adolescents may be more motivated and engaged with school, because they experience a supportive social and learning environment (e.g., Jennings & Greenberg 2009). Findings have also showed that Self-efficacy in Self-Regulated learning (SE-SRL) is crucial for students' motivation and persistence (Bandura, 1997). SE-SRL reflects perceived capacities in self-monitoring, in setting goals and using self-motivational strategies for learning. So, our study is aimed to identify the role of PB in supporting adolescents' learning self-regulatory capacities during middle school, when students' capacities of autonomous self-management of study are crucial, but also strongly taxed.

We analyzed reciprocal relations between PB and SE-SRL across middle school years. Participants were 450 adolescents (48.5% boys; mean age = 12) attending at T1 6th grade of junior high school. Participants were drawn from the Genzano Longitudinal Study conducted in Italy. PB was assessed by peer nominations on three items (i.e. sharing, comforting and helping; Caprara & Pastorelli, 1993). SE-SRL was evaluated through 11 items measuring adolescents' self-efficacy to plan and organize their academic activities, to structure environments conducive to learning and to motivate themselves to do their school work (Caprara et al., 2008). We tested a cross lagged model through path analysis in which peer-reported PB at 6th grade and 7th grade predicted SE-SRL one year later, and SE-SRL at 6th and 7th grades predicted PB one year later, controlling for the longitudinal stability of the two constructs and for socio-demographic characteristics.

Findings showed that PB at 6th and 7th grade predicted higher level of students' SESRL one year later (beta=13 and beta=.12), beyond the high stability of SE-SRL (beta =.60), and the effect of sociodemographic characteristics. Differently, SE-SRL did not predict later PB. Our study corroborates the hypothesis that being perceived prosocial by peers in adolescence may give students a greater chance to be motivated and to experience successful school experience.

OP 214

PREDICTIONS OF EMOTIONALITY AND SELFREGULATION ON ADOLESCENTS' ADJUSTMENT: A CROSS-CULTURAL LONGITUDINAL STUDY

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Research emphasizes the crucial role of negative-emotionality (NEG-EMO) and self-regulation (SR) in the development of emotional/behavioral problems during adolescence (Eisenberg & Morris,2002; Rothbart & Bates,2006; Oldeinkel et al.,2007): different levels of NEG-EMO and SR can be differently associated to internalizing/externalizing problems, or to school adjustment across different cultures. Despite the importance of the combined effects of NEG-EMO and SR, to our knowledge there are no previous studies focused on this issue, considering the role of culture. The present contribution examined: (a) temperamental profiles in a cross-cultural sample of preadolescents, based on NEG-EMO and SR; and (b) longitudinal relations among profiles, anxiety/depression, aggressive-behaviors, and school performance, controlling for adolescents' culture and gender.

Participants were 527 mother-child dyads from 3 different countries (Italy, Colombia, and USA), taken from a wider cross-cultural longitudinal study (Lansford, 2011). At Wave1 (ageM=12) youths' NEG-EMO and SR were collected through mothers' evaluation (EATQ - Capaldi & Rothbart,1992). After 3 years (Wave2 - ageM=15), we considered adolescents' anxiety/depression and aggressive-behaviors using self-report and mother report, and adolescents' school performance using mother-report (CBCL and YSR - Achenbach,1991).

Latent Profile Analysis at Wave1 identified four culture-invariant profiles: Regulated (low NEG-EMO/high SR); Average (average NEG-EMO/SR); Over-reactive/dysregulated (high NEG-EMO/low SR); Over-reactive/regulated (high NEG-EMO/average SR).

At Wave2 analysis of variance, controlling for youths' gender and culture, showed that: Regulated and Average were not anxious/depressed and aggressive; Over-reactive/dysregulated and Over-reactive/regulated were anxious/depressed and aggressive; moreover, despite the specific impairment of Over-reactive/regulated, they showed good school adjustment, as for Regulated; Over-reactive/dysregulated showed lower school adjustment.

Overall, the study corroborated the importance of considering patterns of NEG-EMO and SR in the development across adolescence. Our findings highlight that, beyond youths' culture and gender, if the impairment is limited to the emotional area and is combined with good self-regulation, adolescents' self-regulative abilities can support their academic developmental pathways.

OP 249

STUDENT ENGAGEMENT AS A DYNAMIC DEVELOPMENTAL SYSTEM IN CLASSROOMS, SCHOOLS AND COLLEGES

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In this paper, we will present a novel conceptualization of student engagement as a momentary process occurring in classrooms, schools and colleges, applying a dynamic systems perspective to older models. We specify engagement in terms of its content (the functions comprised in engagement), structure (how these functions co-act as a system), and process (how this co-action occurs over interconnected moments in time). This perspective builds on the classroom engagement framework, and transfers notions of behavioral, cognitive, emotional and agentic aspects of engagement into a holistic, dynamic model. In 2019 we will present the final version of the model, built across several years of comments and contributions from the scientific community.

In addition to presenting the model, we will explain how momentary engagement is situated in a broader developmental framework, distinguishing engagement as a momentary action (e.g., I am absorbed in this lesson right now) from other phenomena such as the self-system (e.g. I tend to invest effort in school), and identifying the developmental dynamics between these. We will review quantitative and qualitative methods suited to investigating engagement as a momentary process and discuss implications for intervention. The paper will conclude by calling for a necessary paradigmatic shift in the developmental psychology of student engagement.

Saturday, August 31st, 2019

Papers 37 – Family Adversity

Naoussa Hall 16:45 – 18:15

OP 215

"EVEN THE ROUGHEST HOME IS STILL A HOME": TEACHERS' DILEMMAS ABOUT REPORTING PARENTS' PHYSICAL VIOLENCE TOWARDS THEIR CHILDREN

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The present study examined the dilemmas of elementary school teachers in dealing with parents' physical violence towards their children. The study's purpose was to examine how the teachers perceive children who experience violence in their homes at the hands of a parent, and which obstacles arise from the mandatory reporting requirement. In order to examine this, a qualitative study was conducted using a phenomenological paradigm, in which 17 elementary school teachers were interviewed in northern Israel.

The study findings show that the teachers face complex emotional coping issues as a result of dealing with the children and families' difficult stories, and with the school administration. An additional problem is the teachers' not uncommon lack of appropriate training to identify children who experience violence and the sources of support that facilitate mental coping. The main barriers found in the study were a lack of knowledge, fear of erroneous reporting; maintaining teacher-child confidentiality, fear of betraying the family's trust, fear of the school management's response and uncertainty about the continuation of the case. It was also found that the dilemmas the teachers deal with often arise before they submit the report, and even more frequently, after they submit it. These dilemmas instill general feelings of helplessness, uncertainty and frustration in teachers, which often accompany them home after work hours.

The study indicates the need to raise awareness among educators about the scope of the violence phenomenon in all its forms. Educators must receive training and instruction regarding the characteristics of children who experience violence in the family, and suitable coping methods for dealing with such problems. They must also receive instruction about reporting requirements and coping with related dilemmas before and after reporting.

OP 217

'MOM AND HER INTERNET': ADOLESCENTS' TECHNICAL SUPPORT AND FAMILY ROLE REDISTRIBUTION - INTERACTIONS IN MIGRANT AND NATIVE FAMILIES IN SWITZERLAND

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In adolescence, adopting responsibilities within the family is a normative and frequently examined phenomenon. A related phenomenon is role redistribution in immigrant families: Adolescents often adapt more quickly to new societies, start acting as language/culture brokers in their families and generalize this behavior to other general responsibilities. Less clear is whether role redistribution is an immigration-related phenomenon based on culture brokering or whether similar behaviors occur in native families if they also develop inter-generational competence gaps. One domain of potential competence gaps in native families can emerge in skills with communication technologies. However, communication technologies may play a particular role in immigrant families to keep a connection with family members in the heritage country. Based on theories of parent-adolescent relations and acculturation processes, we expected higher technical brokering among migrant and male adolescents as compared to native and female adolescents. Further, we assumed that role redistribution (i.e., adolescents' instrumental and emotional support for their parents) is predicted by higher levels of technical brokering in native and migrant adolescents, and, in addition, by higher levels of culture brokering in migrant adolescents. The sample comprised 136 high SES German migrant (mean age = 15.3, 64.7 % female) and 167 native Swiss adolescents (mean age = 15.9, 60.6 % female) in Switzerland. As hypothesized, German migrants reported higher technical brokering than native Swiss adolescents and males reported higher technical brokering than females in both samples. Hierarchical regression analyses confirmed technical and culture brokering as predictors of role redistribution in German migrants whereas only the number of siblings and adolescents' age showed a significant association in native Swiss adolescents. Supporting associations of general competence gaps with role redistribution, this study highlights the interplay of migration-specific and universal developmental aspects in the understanding of migrant family interactions as well as the value of group-comparative research.

OP 218

LISTENING TO CHALLENGING LOW-INCOME FAMILIES THROUGH FOCUS GROUP AND CLINICAL HISTORIES

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Low-income families with recurrent problems frequently depend on social services and are considered at psychosocial risk. While participating in intervention programs, are often considered to be a challenge, by practitioners, due to high dropout rates. This cross-sectional qualitative exploratory study aims to deepen the knowledge about family history, characteristics and necessities of 32 low-income families. Semi-structure clinical interviews to access families' clinical background were conducted. A focus group with 13 family members was also implemented by two facilitators and one observer, to collect family needs and concerns. Both were recorded and transcribed.

Quantitative lexical analysis of interviews identified main classes: Harsh life experiences and traumas, complex family structures, economic constrains, dependency of social support and daily life difficulties. Results from the Interpretative Phenomenological Analysis (IPA) of focus group debate, executed by three experts, revealed mainly parenting concerns. Parents expressed the need to acquire more information about child development and parenting competences to manage daily life hassles. Parenting themes were common to other families, enhancing the motivation to learn more about themselves and their children.

Self-consciousness, information and development of parenting skills can empower family members as individuals, as parents and as active participants in the community. Although referenced as challenging and multi-problem families, there's a desire to out-come harsh life situations. Results showed that these families struggle to focus on positive aspects of their lives. They try to achieve stability and to provide to their children the life conditions that themselves lacked in their childhood. Qualitative data enables to learn more about the family life cycle, family dynamics, difficulties and strengths. Whereas results from lexical analysis showed common family background of trauma, struggle, constrains and troubled relationships; IPA revealed primarily common parenting concerns. The baseline auscultation of families' necessities is crucial for designing a tailored family centered intervention, enhancing positive results, participants' involvement and motivation.

OP 219

CHILDREN'S PERCEPTIONS AND RESPONSES TO INTERPARENTAL CONFLICT

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Background and aims: Exploring family dynamics from the children's own perspectives has been increasingly acknowledged in recent years. Still, we need more knowledge about how the children themselves perceive different family dynamics characteristics as well as how they react to interparental conflicts. The primary aim of the current presentation is to investigate the relationship between different conflict characteristics (i.e. frequency, intensity and child content), children's responses to interparental conflicts and their wellbeing.

Methods: The data is derived from the Dynamics of Family Conflict-study. Children aged 7-15 are included as participants in the study. Measurements include the newly developed short versions of the The Security in the Interparental Subsystem (SIS), The Children's Perception of the Interparental Conflict Scale (CPIC), and the The Strengths and Difficulty Questionnaire (SDQ) and the Mood and Feeling Questionnaire (MFQ). Regression analyses will be conducted to investigate the relationship between children's perceptions, reactions, and wellbeing.

Results: By August 2019, preliminary results from approximately 800 children and youth will be available. Findings about the degree of which children's reactions are related to their perceptions of interparental conflict characteristics and whether their perceptions and reactions influence their wellbeing will be presented. Further, the researchers will investigate whether these relationships vary according to the type of family constellation i.e. families where the parents 1) are still living together 2) have been living apart ≤ 6 months or 3) have been living apart > 6 months.

Conclusions: The advantages of investigating children's own perspectives on family dynamics and interparental conflicts together with clinical implications of the findings will be discussed.

OP 313

RISK BEHAVIOR PREVENTION AMONG ADOLESCENTS IN DIFFERENT CULTURES

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Tel- Aviv University- School of education

Preventive intervention is a central aspect of working with youth in general and youth in risk in particular.

The field of knowledge that deals with prevention- now called science of prevention- is gaining momentum, in light of the theoretical and practical knowledge accumulated. While in the past researchers dealt with how to build a prevention program that will yield useful results, today, much attention is paid to how to introduce and implement programs in different social and educational settings. Among other things, the growing awareness of the possibility of the existence of inter-cultural differences is taken into account when building a prevention program and when it is implemented. This subject is gaining various references; the center claim indicates that every prevention program that is developed in a certain cultural context needs to be adapted to the other cultural context in which it is intended to be operated, before its implementation and dissemination. However, there is a possibility, that has not been studied yet, that the difference between cultures exists not only in how to translate the principles of prevention in question, but also a more basic level of the degree of belief of the ability to actually prevent problems. In other words, there can be inter-cultural differences aside to other probable differences (between - species, ages, classes, etc.), in how people think and believe that it is possible to avoid various phenomenon, such as risk behavior.

The present study will basically deal with the following research questions: (1) Is there a difference in beliefs of humans (adults and adolescents), concerning the extent to which one can avoid problems associated with risk behavior? (2) What characterizes those whose belief of the ability to prevent problems is lower than that of others? Is that related to inter-cultural differences? And (3) what is the basis for the lack of belief of the ability to prevent problems?

To answer these questions, the proposed research plan includes construction of three successive studies:

* Study 1 will discuss the construction and validation of a questionnaire designed to examine the extent to which the respondent believes of the ability to prevent problems among teenagers. This study will be first conducted among students of behavioral science, and then among youth and adults; the tools that will be to be built will be used as the basis for studies 2 and 3. The tool

will be built based on the model shown in the questionnaire "Cultural Health Attributions Questionnaire - CHAQ", Developed by Murguia and colleagues (2000). Originally, this questionnaire includes health episodes in which the exponent ranks the degree of responsibility of various elements that forms a problem. In the present study the questionnaire will include episodes related to risk behaviors (Such as use of psychoactive substances, violence, suicide, etc.). The episodes will be built on the basis of researches conducted on undergraduate and graduate students studying behavioral sciences, and the findings of the researches will be processed according to the CHAQ questionnaire style. To complete study 1 - pilot study - the questionnaire that will be built, will be given to a group of 100 adolescents and 100 adults as a pilot. According to their responses and to the reliability findings, the final wording will be updated, which will be used for study 2, as described below.

* Study 2 will examine whether differences in gender, age, religion and other personal characteristics can explain the different beliefs regarding the ability of prevention of problems. This study will be conducted among youth, parents and teachers, belonging to the Jewish and Arab sectors, and examine the differences between and within the responses of participants to episodes that appear in the questionnaire study. Based on findings reported in the literature regarding gender and inter-cultural differences in the perception of risk behaviors, one assumes the existence of significant differences in the beliefs of the participants concerning the ability to prevent risk behaviors, and that part of these differences will be explained by cultural, gender and age differences. Practically, the questionnaire (that will be built in study No. 1) will be given to a representative sample of about 960 participants, divided into four groups of religion (Jews, Christians, Muslims and Druze) and in each of the three study groups: 80 parents, 80 teachers, and 80 adolescents. General hypothesis would be that among all adults, belonging to all sectors, and among Muslim adolescents the level of belief in the ability to prevent risk behavior will be lower than adolescents who belong to the Jewish, Christian and Druze sectors.

* Study 3 will attempt to point out the sources from which youngsters derive their belief of the ability to prevent - or not prevent - typical adolescence problems, as represented by the episodes that will appear in questionnaire No. 1. As mentioned earlier, these episodes represent some of the domains in which prevention activities are currently taking place in the education system in Israel. The study will be carried out among 15 teenagers and will include interviews whereby an attempt will be made to reproduce the judgment and the system of values and beliefs, which activate youth in assessing the extent to which they can prevent various problems presented to them. Four episodes will be selected from the questionnaire that will be built for the study (see Research No. 1 above). These episodes will be chosen due to the (relatively) largest received difference (see Study No. 2 above) in the ages and/or the largest inter-cultural difference as regard to the level of belief in the ability to prevent problems. As mentioned above, throughout the interviews we'll try to understand why these episodes are perceived by adolescents as able or not able to be prevented.

The theoretical basis for the general research question and the three studies performed, lies in two models, one from cultural models and the second from medical models. From the study of cultural models the research will be based on the development of the model that distinguishes between the etic and the emic approaches (Morris, Leung, Ames, and Lickel, 1999). In general this development parallels distinguishing universal characteristics of the individual from culturally-dependent and situation-dependent characteristics of the individual. From the field of medical research models, the study will be based on a model that distinguishes between different levels of acceptance of responsibility when a medical problem arises (Vaughn, 2011). The research findings may advance the understanding of the prevention topic in general and will especially shed light on the possibility of having to move from working with general models, of preventive interventions, to differential models, relating to the basic beliefs of the object of preventive interventions regarding the actual chances of avoiding the behaviors in question. In addition, the findings may contribute to a better understanding of cultural differences, both in the arousal of phenomenon that should be prevented and in the degree of the actual invested efforts and resources to prevent the phenomenon in different cultures. Thus, the findings of the three offered studies may have theoretical and practical /applicable contribution to the advancement of the prevention science.

OP 336

ADOLESCENT'S PERCEPTION AND BEHAVIOR AS BYSTANDERS OF SEXUAL HARASSMENT AMONG THEIR FRIENDS

Zinn D., Walsh S. D.

Department of Criminology, Bar Ilan University, Ramat Gan, Israel

Bystanders play a crucial role in situations of distress due to their ability to stop/prevent the escalation of the event, and a "Bystander approach" focuses on expanding their prosocial influence. However, there is a gap in literature when it comes to adolescents as bystanders of sexual harassment. Existing knowledge among adolescents mainly focuses on bullying situations or, in the case of sexual harassment, on college students and adults. Based on Latané and Darley's five stages situational model the current study developed and tested a model to explain adolescent's perception and behavior as bystanders of sexual harassment among their friends. The study involved 699 adolescents (8th,10th, and 12th graders, 55% male, mean age 15.56 years) that attended one of 10 different Israeli public schools at different socioeconomic levels. Participants self-reported on social self-efficacy and empathy questionnaires together with a new questionnaire, developed for the study, examining bystanders' decision making in sexual harassment scenarios. Findings showed that participants' interpretation of the events as an emergency was higher than their perception that it is their responsibility to intervene. Actual intervention willingness was even lower than perception. Regression analysis showed significant positive associations between levels of empathy and the interpretation of the event as an emergency. The findings also indicated a better chance for taking responsibility when adolescents feel a strong sense of social self-efficacy. Having the knowledge/ skills for successful intervening was significant to actual intervention willingness. The practical recommendations rising from the study are important for developing effective intervention programs in order to prevent sexual harassment among adolescents by increasing their ability to intervene successfully as bystanders.
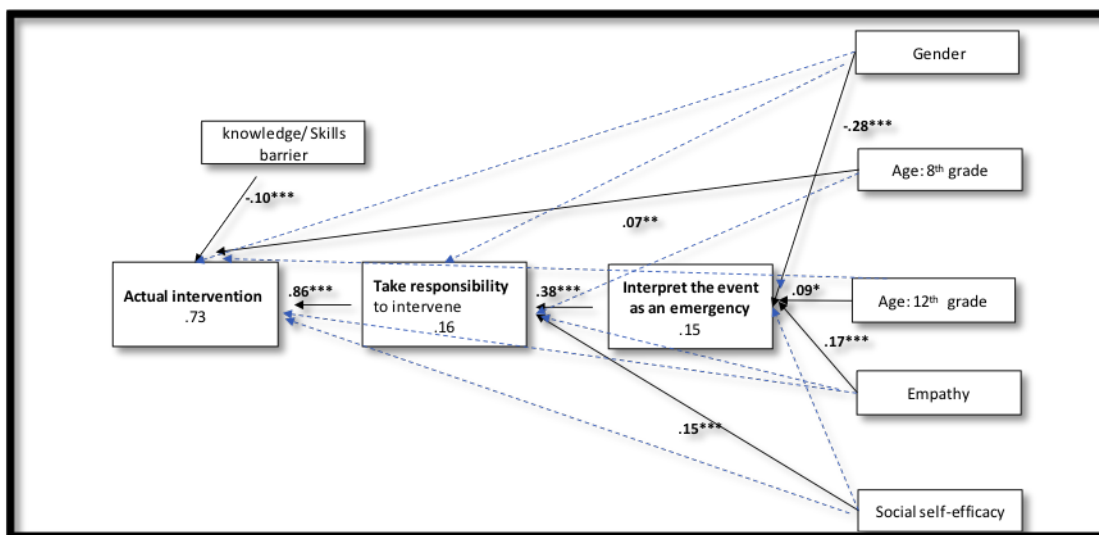
Figure 1: Path analysis of the research model

Sunday, September 1st, 2019

Invited Symposium 5

Olympia Hall A & B 09:00 - 10:30

IS 05

EVIDENCE-BASED BULLYING PREVENTION IN LOW - AND MIDDLE INCOME COUNTRIES

Strohmeier D.

Chair, University of Applied Sciences Upper Austria, Linz

Although there is an ongoing scientific debate about the cross-national transportability of evidence-based anti-bullying programs, the manifold challenges of implementing prevention programs in low- and middle-income countries (LMICs) have not been adequately addressed yet. Research on school bullying predominantly originates from high-income countries (HICs), although 80% of school-aged children and adolescents live in LMICs. In LMICs, schools can be used as platforms to address the social and mental health of students more systematically. However, most of the schools and teachers in LMICs struggle to cope with basic infrastructural problems that need to be taken into consideration when implementing a prevention program.

The ViSC program is a socio-ecological anti-bullying programs that was original developed in a high income country (Austria) and that consists of a variety of measures on the school, class and individual level. To be able to implement the ViSC program in low resource settings, it was necessary to adapt the program. The adaptations were guided primarily by available resources, but also by theoretical considerations to overcome several practical obstacles.

In Cyprus (presentation 1) and Turkey (presentation 2), it was possible to train existing multipliers. However, these multipliers needed several follow-up trainings in their native language in addition to the training that was provided by the program developers.

In Romania (presentation 3) and Kosovo (presentation 4), the program developers trained volunteer assistants who were undergraduate students of the Universities of Oradea and Prishtina, instead of training professional multipliers who were not available in the educational systems of these two countries. A team consisting of two volunteer assistants then implemented a shortened class project to not overburden the schools and the volunteer assistants.

In all four countries, the national scientific partner had an important role to ensure a program adaptation fitting to the national circumstances and a high quality program implementation.

IS 05 - 1
THE ViSC PROGRAM IN CYPRUS: IMPLEMENTATION, EVALUATION, SUSTAINABILITY

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The goals were to implement, to evaluate and to maintain the ViSC program with the highest possible program fidelity in Cyprus. In collaboration with the Ministry of Education and Culture of Cyprus a pilot study and evaluation took place between 2012 and 2014 in secondary schools in Cyprus. The encouraging evaluation results were presented to the Minister of Education and a grant were given for the official implementation of ViSC in more schools from September 2015. Since then two more grants maintain the program until 2020.

To investigate the effectiveness of the program, data from students of three intervention and three control schools was collected via self-assessments at pre-test (October-November 2012), post-test (April-May 2013) and follow-up (March-April 2014). In total, 1,752 grade 7 and 8 students (602 intervention, 1150 control group) with a mean age of 12.6 (SD = 0.60) at pre-test, nested in 82 classes and 6 schools participated. To investigate the program effectiveness regarding the reduction of victimization and aggressive behavior, multilevel growth models were applied (time points at level 1, individuals at level 2, and classes at level 3). The analyses revealed that the program effects differed depending on the grade level of the students. Overall, the program was more effective for grade 7 compared with grade 8 students. To investigate the program's effect on teachers' use of intervention strategies, the Handling Bullying Questionnaire was used (N=212, 77% female). Results showed that the ViSC program successfully increases teachers' knowledges, and their overall likelihood to intervene.

Official implementation is materialized in three consecutive grants. (a) 2015-2017 in four schools, (b) 2017-2018 in eight schools, (c) 2019-2020 in three schools. The challenges of managing the sustainability of the program are discussed in relation to strengths, weaknesses, opportunities and threats that this process provides. The experience of implementing an evidence based program for 8 years is very useful for other implementers.

IS 05 - 2
EVALUATING THE EFFECTIVENESS OF VISC SCHOOL-BASED BULLYING PREVENTION PROGRAM IN TURKEY

Dogan A., Keser E., Şen Z., Tunay Aytekin S., Tilki B., Kızıltepe R., Dürdane Gümüşten

Ege University Izmir, Turkey

Bullying is a form of aggressive behavior performed repeatedly and over time by one or more students against another student, and characterized by an inequality and power imbalance (Olweus, 1993). Research shows that school-based intervention programs were successful in substantially reducing bullying and victimization (Ttofi & Farrington, 2011). The Viennese Social Competence (ViSC) program is the first evidence-based bullying prevention program implemented in Turkish schools since 2015. The aim of this research was to investigate the effectiveness of ViSC program from students' and teachers' perspective as well as to describe challenges faced with during the implementation of the project in a low income country.

ViSC program was implemented in 4 different schools at 13 classes (N= 307, Mage= 9.08, SD=0.64) and 14 classes (N= 319, Mage= 9.06, SD=0.48) served as control group. Thus, a total of 626 children and 27 teachers participated in this study. Both qualitative and quantitative (e.g., demographics, bullying and cyberbullying questionnaire, difficulties and strengths questionnaire, empathy scale) data from children were collected before and after the implementation of the program. Moreover, teachers evaluated the children's behavior (e.g., bullying, victimization, prosocial/communication skills, emotion regulation skills).

According to teachers' reports, aggression scores of intervention group had significantly lower than the scores of the control group from pre-test to post-test (Wilk's λ = .99, $F(1, 624) = 14.157$, p <.001, n2 = .02). Moreover, the interaction effects between group and time was significant for emotion regulation skills. Intervention group had significantly higher score from pre-test to post-test compared to control group (Wilk's λ = .99, $F(1, 624) = 6.380$, p = .012, n2 = .01). However, the interaction effect was not significant for communication skills (Wilk's λ = .99, $F(1, 624) = 1.298$, p > .05). The analyses of student are ongoing. The findings of the project have implications for both intervention research and social policy in Turkey.

IS 05 - 3

IMPLEMENTATION OF THE ANTI-BULLYING REBE-ViSC PROGRAM IN ROMANIA

Trip S., Bora C., Sipos-Gug S., Tocai I.

University of Oradea, Romania

The REBE Program (Bora & Trip, 2010) is based on rational emotive behavioral theory (Ellis, 1994). According to emotive behavioral theory, information processing determines the way in which people feel and behave. The presence of anger and self-control problems (aggressive behaviors) in peoples' lives is due to a specific cognition called frustration intolerance. Frustration intolerance is the belief that reality must be as one wants it to be-easy, effortless, perhaps pleasurable, and comfortable.The main purpose of the REBE Program is to teach students how to identify, challenge and change their low frustration tolerance beliefs in order to control their anger and aggressive behaviors. To develop the combined REBE-ViSC Program, only the ViSC class level component has been used because it best fits the original REBE program. The combination of the main theoretical ideas of the REBE and the ViSC Programs led to an extension of the original underlying theoretical model of the ViSC program. Implementation of the REBE-ViSC Program in Romania started in 2012 along with a small research grant for bilateral cooperation between Romania and Austria. All activities were delivered by 12 students trained in the ViSC and REBE Programs by the program developers.

The experimental group consisted in 8 schools, 23 classes (sixth grade), and the control group contained 3 schools, 11 classes (sixth grade). From the eight experimental schools, five (14 classes) started with REBE activities and three with ViSC (9 classes). Three groups could be compared: ViSC-REBE, REBE-ViSC and control, altogether 965 students participated at least in one measurement occasion.

Data were collected in schools at pre-test, midpoint and post-test. The assessment tools measure emotions (overt and internalizing), cognitions (learning and entitlement) and behaviours (bullying perpetration and bullying victimization). To examine the effectiveness of the REBE-ViSC program, HLM models were applied (time points at level 1, individuals at level 2, and classes at level 3). The analyses revealed that the program effects differed depending on the order of the programs. The REBE-ViSC condition was more effective to change negative emotions than the ViSC-REBE condition; both experimental conditions were effective to reduce dysfunctional cognitions. The mechanisms of change were also investigated being provided evidence for the relationship between frustration intolerance beliefs, anger and aggression/bullying behaviours.

IS 05 - 4

EMPOWERING THE PEER GROUP TO PREVENT SCHOOL BULLYING IN KOSOVO: EFFECTIVENESS OF A SHORT AND ULTRA-SHORT VERSION OF THE VISC SOCIAL COMPETENCE PROGRAM

Arënliu A.[1], Strohmeier D.[2], Konjufca J.[1], Yanagida T.[3], Burger C.[3]

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[2] *University of Applied Sciences Upper Austria, Austria*
[3] *University of Vienna, Austria*

Evidence-based anti-bullying programs are predominantly implemented in high-income countries, although there is a clear need for bullying prevention also in low- and middle-income countries. The present study reports the effectiveness of a short and ultra-short version of the ViSC Social Competence Program that was implemented in nine Kosovar schools. The ViSC program aims to empower adolescents to recognize bullying and to intervene in bullying situations. A quasi-experimental longitudinal control group design was realized to examine the effectiveness of the two program versions regarding different forms of self-reported perpetration and victimization. The short program version was implemented in 10 classes (N= 282, 52% girls, Mage = 13.45), the ultra-short program version was implemented in 13 classes (N=354, 46% girls, Mage = 13.28), and 23 classes (N=613, 50% girls, Mage = 13.31) served as control group. Multilevel growth models revealed intervention effects in favor of the ultra-short version when compared to the control group regarding physical victimization. All other effects were not significant. Results are important for both bullying research and social policy in in low- and middle-income countries.

Sunday, September 1st, 2019

Symposium 47

Ilissos Hall 09:00 – 10:30

S 47

THE ASSESSMENT OF DEVELOPMENTAL DISABILITIES AND IMPAIRMENT IN SUB-SAHARAN AFRICA

Kipkemoi P.

Chair & Discussant, Neurosciences Unit, Clinical Department, Centre for Geographic Medicine Research, Coast, KEMRI-Wellcome Trust Collaborative Research Programme, Kilifi, Kenya

Children in sub-Saharan Africa (SSA) make up an estimated 45% of the general population, in contrast to Europe and Northern America's estimate of 10-15% (Bakare, Munir, & Bello-Mojeed, 2014). According to the Early Childhood Development Index by UNICEF, roughly 80.8 million children in LMICs between 3-4years have low cognitive or socioemotional development. A study by Olusanya et al. (2018) found that globally, 52.9 million (95% uncertainty interval [UI] 48.7-57.3) children younger than 5 years (54% males) had developmental disabilities in 2016, an estimated 95% of whom lived in LMICs. Moreover, the number of children with developmental disabilities increased significantly in SSA (71.3%). To address this challenge, adequate preventative measures such as early screening, diagnosis and intervention efforts need to be scaled up. Unfortunately, there is a lack of culturally relevant and easy-to-administer range of assessments to screen and diagnose developmental disabilities and impairments in SSA. This symposium brings together four presentations from research carried out in a rural SSA setting exploring the reliability, validity, feasibility, discriminant value and clinical utility of assessments of developmental disabilities and impairments. The first presentation will provide evidence of the use of Event Related Potentials (ERPs) as possible biomarkers for neurocognitive and neurobehavioral impairments in perinatally infected HIV adolescents in Kilifi County, Kenya. The second presentation will discuss the impact of neonatal insults on mental health and the associated quality of life of the survivors in a rural setting in SSA. The third presentation will explore the effectiveness of two widely used diagnostic assessments in discriminating between children with autism spectrum disorders from typically developing children. The fourth presentation will explore measures of neurocognitive and neuropsychiatric outcomes that can be used to evaluate executive functioning among chronically ill adolescents including those that are HIV Infected.

S 47 – 1

EVENT RELATED POTENTIALS AS POSSIBLE BIOMARKERS OF NEUROCOGNITIVE AND NEUROBEHAVIORAL DEFICITS IN HIV INFECTED ADOLESCENTS IN KILIFI COUNTY, KENYA

Miano E.[1,2] , Van De Vijver F.J.R.[2], Newton C.[1,3,4] , Abubakar A.[1,3,4,5]

[1] Pwani University, Department of Social Sciences, P.O Box 195-80108, Kilifi, Kenya
[2] Tilburg University, Department of Culture Studies, Tilburg, Netherlands
[3] University of Oxford, Department of Psychiatry, Oxford, UK
[4] KEMRI-Wellcome Trust Research Programme, Neurosciences Unit, Kilifi, Kenya
[5] Aga Khan University, Institute for Human Development, Nairobi, Kenya

Background and aims: Enhanced access to ARVs has contributed to improved longevity among children perinatally infected with HIV; which in turn has led to an increased emphasis on examining HIV associated developmental delays and disorders. In Africa, the region with the highest HIV burden, there is a lack of adequately standardized measures to measure functional and developmental domains. The study seeks to explore the use of Event Related Potentials (ERPs) as possible biomarkers for neurocognitive and neurobehavioral impairments in perinatally infected HIV adolescents in Kilifi County, Kenya.

Methods: The research takes on a case-control study design with a sample of adolescents between the ages of 12-17 (N=130) consisting of three groups; 44 HIV Infected, 53 Exposed but uninfected and 33 community control sample. Measures assessing neurocognitive functioning include the trail making task, Stroop task, Ravens Progressive Matrices, backward digit span and Beck's Depression Inventory (BDI) as well as ERPs.

Results: We observed a significant difference in several neurobehavioral measures for the HIV infected, exposed uninfected and adolescents community controls including BDI (mean scores [M=18.4, SD=8.3] vs. [M=16.8, SD=7.3] and [M=12.0, SD=7.9]) respectively, (p= 0.002) and backward digit span (mean scores [M=5.68, SD=3.0] vs. [M=6.90, SD=2.73] and [M=8.53, SD=3.7]) respectively, (p=0.002). On-going analysis aims to establish if there are significant differences in ERP components between the three groups as well as to establish if there is a correlation between ERP scores and scores from traditional measures of neurocognitive functioning.

Discussion: Technological advancement implies that measures such as ERPs and EEGs will become more accessible to people in resource poor setting such as Kenya. Understanding how these measures could potentially be used to identify, and monitor at risk adolescents is highly relevant.

S 47 - 2

ASSESSING MENTAL HEALTH PROBLEMS AND QUALITY OF LIFE OF AT-RISK CHILDREN IN A RURAL SETTING

Magai D.N.[1,2]

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[2] Department of Clinical, Neuro- and Developmental Psychology, Vrije Universiteit Amsterdam, the Netherlands

Background and aims: Millions of children in sub-Saharan Africa experience birth complications and severe ill-health such as neonatal jaundice (NNJ) and hypoxic-ischemic encephalopathy (HIE), in the first 28 days of their lives which potentially exposes them to various developmental impairments. While it has been shown that neonatal insults are associated with neurodevelopment impairments, little is known about the impact of neonatal insults on mental health and the associated quality of life of the survivors.

Method: We followed-up 375 participants aged 6-12 years (134 survivors of NNJ, 107 survivors of HIE, and 134 controls) within the Kilifi Health Demographic surveillance system. The diagnosis of NNJ was based on clinical laboratory measurement of total serum bilirubin on admission, HIE diagnosis was based on the clinical diagnosis recorded by the clinicians at death or discharge. The mental health outcomes were assessed using the Child Behavior Checklist (CBCL) while quality of life was assessed using the Pediatric Quality of Life Inventory (PedsQL).

Results: Preliminary analyses indicate that survivors of NNJ and HIE had elevated but statistically insignificant (p>0.100) externalizing problems [NNJ, M= 4.82, SD = 4.37; HIE M=4.63, SD= 5.20 versus controls M= 4.36, SD= 4.37)] and internalizing problems [NNJ, M= 5.54, SD = 4.72; HIE M=6.43, SD= 5.51 versus controls M= 5.51, SD= 4.41)] compared to the controls. Moreover, there were no statistically significant differences (p>0.100) in quality of life functioning between the NNJ, HIE and the control group. Excellent Cronbach's alphas were found for the three CBCL's broad-band scales (internalizing 0.78, externalizing 0.81, and total problems 0.98). Further analysis will be conducted to determine the validity of CBCL and PedsQL.

Conclusion: School-aged children who survived HIE and NNJ have comparable mental health outcomes and quality of life functioning to the controls. The CBCL assessment tool has sound internal consistency for the Kenyan sample.

S 47 - 3

CHALLENGES OF AUTISM SPECTRUM DISORDERS DIAGNOSTIC ASSESSMENTS: USING THE 3Di AND THE ADOS IN A RURAL SUB-SAHARAN POPULATION

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[2] Department of Psychiatry, University of Oxford, Warneford Hospital, Oxford, UK
[3] Department of Public Health, Pwani University, Kilifi, Kenya
[4] Institute for Human Development, Aga Khan University, Nairobi, Kenya

Diagnosis of autism spectrum disorders (ASDs) is challenging in sub-Saharan Africa in part due to lack of culturally appropriate and adequately standardized screening and diagnostic tools. Children with ASDs in Africa are on average diagnosed 4 years later than children in America (8 years old) (Zeliadt, 2018). The Developmental, Dimensional and Diagnostic Interview (3Di) is an assessment tool used in ASD diagnosis in clinical and general populations (Skuse et al., 2004). This study explores the effectiveness of the 3Di in comparison with the Autism Diagnostic Observation Schedule (ADOS), in discriminating between children with ASD from typically developing children.

A large community study was carried out to determine the prevalence and risk factors of NDDs through a cross-sectional survey with a nested case control. The study recruited 15,000 randomly selected children (6-9 years old) within the Kilifi Health and Demographic Surveillance System (KHDSS) in Kenya. Children were categorized as NDD cases or not through screening followed by diagnosis. 2100 children (Male=53%) went through the 3Di assessment, and of those, 245 children also went through the ADOS assessment.

Preliminary analysis found the sensitivity of the 3Di as below threshold (25.3%, 95% CIs [0.16-0.37]) when compared with the ADOS. As the 3Di has not been previously validated for use in our context, cultural influences were posited to potentially have impacted the reporting of symptoms, therefore, adaptation of optimal cut-off points was recommended. This will be carried out using receiver operating characteristic (ROC) curves and the Youden index. Revised cut off scores will then be used to develop a new scoring algorithm for the 3Di.

Results of this analysis will determine the effectiveness of the 3Di as an ASD diagnostic tool in Kilifi, which will in turn enable a final diagnosis of ASD, thereby providing prevalence estimates of ASD in children in Kilifi, Kenya.

S 47 – 4

THE DEVELOPMENT AND VALIDATION OF MEASURES OF EXECUTIVE FUNCTIONING FOR USE WITH HIV INFECTED ADOLESCENTS IN KILIFI, KENYA

Abubakar A.[1,2,3,4]

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[4] Aga Khan University, Institute for Human Development, Nairobi, Kenya

Background and aims: There is a dearth of research evidence on developmental outcomes of adolescents living with HIV in sub-Saharan Africa (SSA). There is emerging evidence of poor mental health outcomes in this population. However, there are no published studies on cognitive outcomes. In addition, there is an absence of adequately standardized measures of adolescent neurocognitive and neuropsychiatric outcomes, which hampers research in many low and middle-income countries (LMICs). There is evidence, largely among adults, that executive functioning (EF) is affected among HIV positive adults, little is known however, if the same is true for HIV positive adolescents. Additionally, there have hardly been studies investigating whether EF would be associated with key outcomes such as risk-taking behaviour, scholastic outcomes, mental health and medical adherence among adolescents affected by HIV.

Methods: To further explore this, we adapted and standardized measures of neurocognitive and neuropsychiatric outcomes that can be used to evaluate EF among chronically ill adolescents including those that are HIV Infected. Specifically, we evaluated trail making tests, digit span, letter number sequencing and Stroop test. 538 adolescents (340 from the community and 198 chronically ill adolescents) were involved in this study.

Results: Initial estimates indicate good internal consistency and re-test-reliability for these measures. Furthermore, the measures appear to have discriminant validity as we observed differences in the performance between those who were HIV Infected and those who were not. Further analysis will examine confirmatory factor analysis and convergent validity will be carried out and presented.

Conclusion: This study will provide us with a set of measures of adolescent neurocognitive and neuropsychiatric functioning that could potentially be used in the future for both research and clinical purposes in Kilifi and other similar settings in Africa.

Sunday, September 1st, 2019

Symposium 48

Vergina Hall 09:00 – 10:30

S 48
THE LONGITUDINAL INTERPLAY OF MATERNAL AND INFANT FACTORS IN PRETERM CHILDREN EMOTIONAL DEVELOPMENT

Spinelli M.

Chair, Discussant, University G. D'Annunzio, Chieti-Pescara

Preterm birth (birth <37 GA) is a condition that places the infant at risk for failure to achieve emotional developmental outcomes both in infancy and in childhood. Preterm infants are reported as less emotionally competent, with lower interactional abilities and with higher behavioral and social problems. In addition, the many complications associated with the birth of a preterm infant often represent stressful experiences for mothers who report anxiety, depression and stress and show less sensible and responsive interactions.

While it has been widely hypothesized that maternal difficulties interact with preterm infant characteristics in conferring vulnerability for later development, there is a paucity of longitudinal studies examining both individual and dyadic factors.

In the present symposium we aim to fill this gap by giving a comprehensive picture of the phenomena in order to take a closer look at the complex individual variability of preterm children development and their mothers wellbeing.

The symposium brings together four longitudinal studies from various countries, with various samples, measurement instruments and analysis methods, all considering prematurity as a complex and multi-dimensional phenomenon that impacts on the whole dyad. The first paper (Spinelli et al.) examines the interplay between 3 months-old infants characteristics and maternal wellbeing and sensitivity on 24 months child socio-emotional development. The second paper (Harel-Gadassi et al.) explores mother-child interaction at 18 and 36 months considering temperament and child cognitive and motor abilities. The third paper (Dimitrova et al.) explores the long-term effect, from 4-months to 9 years of age, of stress and of parenting on emotional outcomes in children born very preterm. The fourth paper (Yaari et al.) examines trajectories of distress from 2 to 13 years of child age in mothers of children born very preterm and predictors of distress over time.

S 48 – 1

DYADIC CO-REGULATION, MATERNAL SENSITIVITY, AND INFANT CHARACTERISTICS: INTERACTION EFFECTS ON PRETERM INFANTS EMOTIONAL DEVELOPMENT

Spinelli M., Fasolo M., Ponzetti S., Garito M.C., Aureli T.

University G. D'Annunzio Chieti-Pescara, Department of Neurosciences, Imaging and clinical science, Chieti, Italy

Background and aims. Although prematurity is widely considered a complex condition associated with difficulties in child socio-emotional adjustment, an integrated picture of the phenomena that considers both the role of infant and maternal factors is still not clear. The present longitudinal study explored the interplay of infant's abilities and characteristics with maternal parenting and wellbeing and their longitudinal effects on child socio-emotional adjustment.

Methods. Eighty preterm and full-term infant-mother dyads participated. At 3 months of infant age, dyadic co-regulation and maternal sensitivity during mother-infant interaction were assessed. Mothers completed a series of questionnaires to report the parenting stress, the infant temperament and neonatal infant risk. Infant's regulatory competences were evaluated with the Still-Face Procedure. At 24 months, mothers reported child socio-emotional adjustment with the Child Behavior Checklist.

Results. No group differences on the single variables were found, while interesting findings emerged when considering prematurity as an individual factor in interaction with maternal and dyadic variables. Having a sensitive and less stressed mother and experiencing a more co-regulated dyadic interaction is associated with better emotion regulation abilities and these aspects predict a more positive socio-emotional adjustment at 24 months. These effects are stronger for preterm infants who seems to be more affected by dyadic and maternal risk factors.

Conclusions. These findings confirmed the necessity to investigate preterm infant development considering the interaction of infant and the environment characteristics. Prematurity is confirmed to be a risk factor that affects not only the infant but also the whole mother-infant system and preterm infant's development is the result of the interaction of infant characteristics with the characteristics of the environment.

This description of the pathways and origins of poor socio-emotional adjustment provide valuable information for the development of specific interventions for children born preterm and their families.

S 48 – 2

MOTHER- CHILD INTERACTION AMONG PRETERM CHILDREN

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Background and Aims: Parent–child interaction begins immediately after birth, and form the basis for future relationships. There are contradicting findings regarding differences in mother- child interaction of infants born premature compared to full-term. The aim of this study is to investigate the quality of mother- child interaction between mothers and their preterm and full-term children, and the developmental and behavioral characteristics associated with mother- child interaction among preterm.

Methods: Participants included 110 preterm children and 39 full- term children assessed at ages 18 and 36 months. Mother- child interaction during free play were coded for maternal sensitivity, maternal intrusiveness, child involvement, child withdrawal and dyadic reciprocity, using the Coding Interactive Behavior. The Mullen Scales of Early Learning (MSEL) and the Early Childhood Behavior Questionnaire (ECBQ) were also administrated.

Results: At 18 months, maternal sensitivity, child involvement and dyadic reciprocity patterns were significantly lower among the group of preterm children, whereas maternal intrusiveness was significantly higher ($p \leq .01$). The difference between preterm and full- term children regarding child withdrawal was non- significant. The MSEL composite score and the ECBQ Effortful Control scale were significantly lower among the preterm children, ($p < .01$). Non- significant differences emerged for the Surgency and the Negative Affect scales. At 18 months, premature birth predicted the mother- child interaction characteristics after controlling for the MSEL composite score and the ECBQ Effortful Control scale. At 36 months, the differences between preterm and full- term children regarding mother- child interaction characteristics, MSEL composite score and the ECBQ scales were no longer significant.

Conclusion: Existing differences in the mother–child interaction of preterm born children at age 18 months as well as temperamental and cognitive differences are no longer evident at age 36 months when prematurely born children catch up with their peers.

S 48 – 3

ROLE OF STRESS AND PARENTING ON EMOTIONAL SYMPTOMS IN CHILDREN BORN VERY PRETERM: A 9-YEAR LONGITUDINAL STUDY CHILDREN BORN VERY PRETERM: A 9-YEAR LONGITUDINAL STUDY

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Children born very preterm (VPT) are at heightened risk for developing emotional difficulties, such as anxiety and depression. Key factors explaining the association between VPT, emotional difficulties, and psychopathology include early life adversities and parenting style. As an early life adverse event, VPT birth may be experienced as an acute stressor both for the infant (e.g., dystimulations, pain) and for the parents (e.g., death anxiety, fear for child outcomes). Furthermore, infant's VPT birth could deeply affect parenting sensitivity, such as parents may be more intrusive or distant when interacting with the infant. Both heightened stress and non-contingent parenting are major mechanisms linked to emotional difficulties. However, to date, no study has examined both the effect of stress and of parenting on long-term emotional outcomes in children born VPT.

We followed a cohort of 61 children born VPT along with 11 full-term born children. The infant's stress was assessed with the Perinatal Risk Inventory and in parents with the Perinatal PTSD Questionnaire. Parenting was assessed when infants were 4 months old (corrected age) using the Coding Interactive Behavior. At 9 years of age, children's emotional symptoms were evaluated using the Revised Children's Manifest Anxiety Scale and the Child Behavior Checklist.

Analyses of the link between stress, parenting and emotional difficulties are ongoing. However, previous findings revealed that stress increases rates of internalizing scores and anxiety/depression symptoms (Dimitrova et al., 2017) and decreases parental sensitivity (Muller-Nix et al., 2004), which in turn influences internalizing symptoms (Faure et al., 2016).

Findings from this study will have both theoretical and clinical implications. Providing a comprehensive account of factors influencing socio-emotional development would unravel the mechanisms underlying emotional psychopathology. An understanding of those mechanisms could in turn inform clinical practice, in terms of early detection and intervention, for the follow-up of VPT.

S 48 – 4

PRETERM BIRTH AND MATERNAL MENTAL HEALTH - LONGITUDINAL TRAJECTORIES AND PREDICTORS

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Background: Being born preterm may have long-lasting effects on child outcome and parental well-being. It is important to identify and support parents of preterm children at risk of prolonged distress. While distress of parents may persist years after preterm birth, the evidence is inconsistent and there is a paucity of long-term data.

Aims: to compare trajectories of distress from 2 to 13 years in mothers of children born very preterm (VPT) and full-term and examine predictors of distress over time.

Methods: Mothers of children born VPT (n=159) and full-term (n=71) completed questionnaires assessing distress at child's 2, 7 and 13 years of age. Mixed models were used to examine differences between groups over time and association with family and child predictors. Family social risk, child neonatal medial risk, child sex, multiple pregnancy and child's neurodevelopmental impairment in early childhood were examined as potential predictors of maternal psychological distress within the VPT group

Results: Mothers of children born VPT displayed consistently elevated distress compared with mothers of children born full-term, adjusting for social risk. This difference remained rather constant over time. Higher family social risk was associated with overall elevated maternal psychological distress throughout childhood. Child neonatal medical risk was associated with increasing maternal distress over time.

Conclusion: Mothers of children born VPT show prolonged psychological distress and may require ongoing support. Mothers from socially disadvantaged background and those whose child has medical complications may require more extensive support, to prevent prolonged distress and promote optimal outcomes for children and families.

Sunday, September 1st, 2019

Symposium 49

Makedonia Hall A 09:00 – 10:30

S 49

FROM CHILDREN TO ROBOTS: ROLE OF JOINT ATTENTION IN SOCIAL INTERACTIONS. EVIDENCE FROM DIFFERENT LINGUISTIC AND CULTURAL ENVIRONMENTS

Guidetti M.

Chair, CLLE, Université de Toulouse, CNRS, Toulouse, France

Bulgarelli D.

Discussant, Dipartimento di Psicologia, Università degli Studi di Torino, Torino, Italy

The establishment of joint attention, through the triadic relationship between a child, an adult and an object or an event, paves the way for a complex set of social skills, which develop rapidly from the end of the first year. These skills are the essential component of social cognition, communication, theory of mind and language acquisition. Joint attention is of course crucial for joint activities and could be modeled for human-robot interaction.

The aim of the symposium is to present cutting edge research on joint attention and joint activities in young children at different ages and in different cultural environments. Three papers will be presented. Two of them examine data collected from children evaluated with the ECSP (French version of the Early Social Communication Scales; Guidetti & Tourrette, 1993/2017), which has also been translated in Spanish (Colombian) and Italian. Built from both a socio-constructivist and a neo-piagetian background, this set of scales is designed to assess three communicative functions: social interaction (SI), joint attention (JA), and behavior r0egulation (BR). They are generally administered to children aged 3-30 months, but they can also be used in older children with atypical development. The first talk compares JA and BR results in Italian children and shows that JA items were more difficult that BR items, both for sharing gaze and pointing gesture items. The second talk analyzes the influence of socio-economic context and sex on the development of JA skills in Colombian children, revealing that children who live in lower socio-economic contexts have a lower level of development of these skills. The third talk underlines the importance of the synchronization between the different elements of communication (e.g., gestures, gazes, verbalizations) and between the partners for the fluidity of the cooperation and thus the achievement of a collaborative task.The results will be discussed by our discussant in the light of cultural variation in the development of communication and social interactions.

S 49 – 1

ORIGIN OF JOINT ATTENTION ANALYSED BY ECSP-I IN ITALIAN CHILDREN

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Università degli studi di Torino, Dipartimento di psicologia

Joint Attention, Behaviour Regulation, ECSP-I

Background and aims. The Joint Attention appears in the children's second half of the first year, when they become able to share the attention to a common external object with the adult. Mainly, children use the gaze direction and the pointing gesture to share the attention, but these behaviours perform two different functions: ask the adult to perform an action (imperative) or share the attention of adult on an external event (declarative). Regarding human development, we find discordant opinions on the emergence of these two functions. For instance, concerning the pointing gesture, most authors consider that the two functions emerge simultaneously, but some researches show a décalage between the two functions: longitudinal observation shows that the imperative function appears before the declarative function. We aim at describing the development of the two different functions using data from the ECSP-I standardization sample.

Methods. The ECSP Scale (Guidetti and Tourrette, 1993/2017) is a useful tool to verify the development of the two functions, imperative and declarative, because these two functions are evaluated by different subscales of the instrument: that of Behaviour Regulation (BR) and that of Joint Attention (JA). Because BR items encompass a multiple and composite situation and JA items only consider the sharing the attention to objects or images interesting for the child, we didn't consider the mean scores of the scales, but we analyzed the single items by the Homogeneity Index (van Schuur, 2003) procedure.

Results and conclusions: We found a clear difficulty trend: JA items were more difficult that BR items both for sharing gaze and pointing gesture items, confirming that the two functions have two different developmental trends. These results may be useful in the early detection of autism spectrum disorders.

S 49 – 2

JOINT ATTENTION IN CHILDREN FROM DIFFERENT SOCIOCULTURAL CONTEXTS

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Joint Attention, Culture, Socio-economics Contexts, ECSP-C

The triadic relationship between a child, an adult and an object allows the establishment of joint attention, a complex set of social skills and interactions, which develop rapidly between 12 and 18 months. These skills are the essential component of social cognition, communication and language acquisition. However, are these skills universal? In recent years, developmental studies have investigated the influence of culture and social context on child development. These studies search, on the one hand, for canonical processes qualified by some researchers as universals, emphasizing the variety of these processes; and, on the other hand, for an explanation of the links that may exist between culture, the empirically described contexts and children' behaviour. Our objective was to analyse the influence of socio-economic context and sex on the development of joint attention in children under three years of age.

Forty-five Colombian children from four different socio-economic contexts were evaluated with the ECSP (Guidetti and Tourrette, 1993/2017 - Spanish version). This is a useful tool to verify the development of early social communication skills in children under three years of age. We use the statistical program R to analyse the interactions between sex and socio-economic group, and the age of development of the 3 functions of social communication.

We found interactions between socio-economic context, sex and children's developmental age. In particular, in terms of joint attention, we found that children who live in lower socio-economic contexts have a lower level of development of these skills. Regarding sex, we find a lower level of development of these skills in boys. These results will be discussed in a cultural and social perspective in the light of the current debate about the influence of these factors on children' communicative development.

S 49 – 3

FROM CHILDREN TO ROBOTS: DEVELOPMENT OF MULTIMODAL COMMUNICATION FOR JOINT ACTIVITIES

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Joint activities are an integral part of our daily lives. Indeed, we are regularly confronted with situations in which we must collaborate with our interaction partner in order to carry out a task and achieve a common goal. With the development of service and teammate robots, we will also need to be able to engage in such interactions with a robot partner. In order to make collaboration with a robotic partner as natural and effective as possible, we first need to determine what steps are necessary to develop collaborative capabilities.

Among the mechanisms involved in collaborative situations, joint attention can be considered as a key component, allowing from early on the emergence and maintenance of mutual understanding. Our study therefore plans to investigate different elements of multimodal communication involved in a joint activity between children and adults. We confronted children from 2 to 5 years old with a collaborative task of building stacks of cubes, in which the need to collaborate with the experimenter was either implicit or explicit from the instructions. We also manipulated the level of complexity of the constructions to be carried out, as well as the levels of cooperation constraints depending on the cubes available to the partners. This study will thus accurately describe several characteristics of the verbal and nonverbal communication modalities in a context of joint action.

The early observations underline the importance of the synchronization between the different elements of communication (e.g., gestures, gazes, verbalizations) and between the partners for the fluidity of the cooperation and thus the achievement of the task. In-depth analyses for this study are currently in progress and will enable us to identify the ingredients necessary for the emergence of joint activities in children, whose characteristics can be directly implemented in the context of HRI.

Sunday, September 1st, 2019

Symposium 50

Makedonia Hall B 09:00 – 10:30

S 50

WHAT DOES IT TAKE TO STOP SCHOOL BULLYING? THE COMPLEX INTERPLAY BETWEEN INDIVIDUAL, DYADIC AND CONTEXTUAL FACTORS IN UNDERSTANDING PROSOCIAL AND ANTISOCIAL BEHAVIOR OF YOUTH

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Chair, Utrecht University, Utrecht (The Netherlands)

Caravita S.C.S.
Discussant, CRIdee, Department of Psychology, Catholic University of the Sacred Heart, Milano (Italy)

This symposium brings together four large-scale studies from the Netherlands and Finland using a variety of advanced analytical methods to help better understand the occurrence and development of prosocial (defending victims and helping) and antisocial behavior (bullying and aggression) among school youth. The first study combines an individual and a network approach to investigate the extent to which defending victims of bullying depends on liking and disliking, and its relation with classroom-level bullying norms. The second study focuses on the moderating role of classroom-level bullying norms in associations between individual-level reading difficulties, bullying, and victimization. The third study examines how peer norms around prosocial behavior and aggression vary between classrooms, by focusing on the influence of classroom popularity hierarchies. The fourth study examines the effectiveness of an anti-bullying program in enhancing students' empathy towards victims, and whether bullying perpetrators are as responsive as others to these empathy-raising efforts.

S 50 – 1

DEFENDING VICTIMS WHEN BULLYING IS NORMATIVE: AN INDIVIDUAL AND SOCIAL NETWORK APPROACH

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Background and aims: Previous research suggests that children avoid defending victims of bullying because they fear to become the next target (Pozzoli et al., 2012; Pozzoli & Gini, 2010), particularly in a classroom context where bullying is high (Meter & Card, 2015). This study investigates to what extent defending depends on liking and disliking of victims, and whether such relations depend on the amount of bullying in a classroom.

Methods: Classrooms were drawn from wave 1 of KiVa Netherlands (Huitsing et al., 2018; Kaufman et al., 2018). Two types of analyses were performed in a sample of 1,272 grade 5 students (50.8% boy; 11-12 years olds) in 48 classrooms: an individual approach (multilevel Poisson regression analysis; Bates et al., 2015) and a social network approach (ERGMs; Wang et al., 2009).

Results: Multilevel Poisson regression analysis showed that children who received more liking nominations of victims also received more defending nominations of victims, and that relation was stronger in a classroom with a higher degree of bullying. In contrast, children who received more disliking nominations of victims also received less defending nominations of them, and that relation did not depend on classroom degree of bullying. Additionally, social network analysis (ERGMs) showed that children defended victims who they liked, but not victims who they disliked. There was no indication that these relations depended on classroom degrees of bullying.

Conclusions: In both types of analyses, we see a similar pattern at the individual level and the dyadic level: children who are liked by victims, either via a direct nomination from them or via the accumulation of nominations, defend victims. Moreover, the findings suggest that there is no indication that children defend fewer victims in a classroom context where bullying is high.

S 50 – 2

READING DIFFICULTIES, BULLYING AND VICTIMIZATION DURING THE TRANSITION FROM ELEMENTARY TO MIDDLE SCHOOL

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Background and aims: Students with reading difficulties (RDs) seem to be at elevated risk for bullying involvement in elementary school (i.e. Singer, 2005; Turunen et al., 2017, 2018). It is not known whether they are at risk also later in adolescence, and whether classroom characteristics influence the risk. This study looks at the interplay between RDs, victimization and bullying during and after the transition from elementary to middle school, controlling for externalizing and internalizing problems, and the classroom-level moderators of the risk RDs pose for bullying and victimization in the beginning of middle school.

Methods: The sample consists of 1715 students (47.3% girls, Grade 6 mean age 12 years 9 months) from 150 classrooms, whose reading skills (accuracy and fluency), self-reported externalizing and internalizing problems, and self-reported victimization and bullying were measured in Grades 6, 7, and 9. Classroom-level variables in the beginning of middle school (Grade 7) were classroom size, gender ratio, average level of reading skills, and average level of bullying.

Results: A cross-lagged SEM model indicated that weaker reading skills in Grade 6 predicted bullying perpetration in Grade 7, and weaker reading skills in Grade 7 predicted bullying perpetration in Grade 9. Reading skills were not associated with victimization longitudinally. The results from multilevel model indicated that the negative associations between reading skills and victimization, as well as RDs and bullying, were strongest in classrooms with low levels of bullying. None of the other classroom-level variables were significant moderators of the associations.

Conclusions: RDs increase the risk of bullying, but not the risk of victimization. Students with RDs are more likely to be involved in bullying in classrooms with lower levels of bullying, but there is no indication that the reading skills of the classmates, classroom size, or gender ratio influence the risk.

S 50 – 3

CLASSROOM POPULARITY HIERARCHY PREDICTS PROSOCIAL AND AGGRESSIVE POPULARITY NORMS ACROSS THE SCHOOL YEAR

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Background and aims: During adolescence, the proliferation of aggression (e.g., bullying) and prosocial behavior (e.g. helping) may depend upon the extent to which these behaviors are associated with popularity in classrooms (the popularity norm; Dijkstra & Gest, 2015). This longitudinal study aimed at explaining previously found between-classroom differences in aggressive and prosocial popularity norms, by focusing on the degree to which popularity is unequally distributed in the classroom: the within-classroom popularity hierarchy (Koski, et al., 2015). Following a functionalist approach, a popularity hierarchy would result in a well-established, orderly and harmonious environment where prosocial behaviors are highly valued and rewarded with popularity whereas aggression is not (i.e., high prosocial and low aggressive popularity norms). In contrast, the balance of power perspective argues that strong popularity hierarchies may evoke a power battle - competition for popularity - as resources associated with popularity are unequally divided among classmates. In such a competitive context, aggression may be seen as a valuable tool rewarded with popularity, resulting in high aggressive and low prosocial popularity norms. We examined which of these theories was supported by our data.

Methods: Longitudinal cross-lagged-panel analyses were conducted on 2,843 secondary school students (Nclassrooms = 120; Mage =13.17; 51.3% girls; 3 waves; peer-nominated data).

Results: Popularity hierarchy predicted relative change in popularity norms over time (but not vice versa). That is, classrooms with few highly popular and many unpopular students increased in aggressive popularity norms at the beginning of the school year and decreased in prosocial popularity norms at the end of the year. Also, strong within-classroom asymmetries in popularity predicted higher aggressive popularity norms.

Conclusions: Our findings may indicate, in line with a balance of power approach, that hierarchical contexts elicit competition for popularity, with high aggression and low prosocial behavior being seen as valuable tools to achieve popularity.

S 50 – 4

EFFECTS OF THE KIVA ANTI-BULLYING PROGRAM ON EMPATHY: ARE BULLIES AS RESPONSIVE AS OTHERS?

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Background and aims: As school bullies tend to lack empathy (van Noorden et al., 2015) and low empathy may increase bullying (Stavrinides et al. 2010), many anti-bullying interventions aim to increase empathy for the victim. However, their effectiveness is assessed by decreases in bullying, and little is known about their impact on empathy. First, the type of empathy that anti-bullying programs successfully increase remains unclear. While a lack of affective empathy is clearly linked to more bullying, findings on cognitive empathy are inconsistent. Some studies even show that young bullies tend to surpass their peers in cognitive empathy (Gini, 2006), which may faciliate their negative actions (Garandeau & Cillessen, 2006). Second, it is important to determine among which children such programs enhance empathy. Bullying perpetrators may not only lack affective empathy but a capacity for affective empathy, and therefore may remain unaffected by attempts to raise their empathy. Thus study examined 1) the effects of the KiVa anti-bullying program on increases in both affective and cognitive empathy; 2) whether high engagement in bullying behavior lessened students'responsiveness to empathy-raising efforts.

Methods: Data from 14,697 fourth- and eighth-graders from 75 intervention and 59 control schools was used at T1 (pretest) and T2 (post-test after 9 months of program implementation). Measures of peer-reported bullying, self-reported empathy - affective (4 items) and cognitive (3 items) - were obtained.

Results: Regression analyses conducted separately for each type of empathy showed that controlling for age, gender and T1 empathy, the KiVa program predicted higher affective empathy, but not higher cognitive empathy at T2. These effects were not moderated by levels of bullying.

Conclusions: The KiVa progam has a positive influence on the type of empathy that is most essential to hinder bullying, and children high in bullying are not less responsive than others to this effect.

Sunday, September 1st, 2019

Symposium 51

Mycenae Hall 09:00 - 10:30

S 51

CHALLENGES FOR HEALTH-RELATED QUALITY OF LIFE AND MENTAL HEALTH PROBLEMS IN ADOLESCENCE AND YOUNG ADULTHOOD

Cohrdes C.

Chair, Robert Koch Institute, Epidemiology and Health Monitoring, Mental Health Unit

This symposium brings together researchers from the fields of child and adolescent psychiatry and public health, addressing questions of the prevalence and course of different facets of psychosocial well-being as well as interrelations with significant risk and protective factors. Based on cross-sectional and longitudinal national survey data, the symposium highlights opportunities as well as challenges for the development and measurement of Health-Related Quality of Life (HRQoL) and mental health problems in adolescence and young adulthood.

Results show several associations between adolescents' psychosocial health and well-being related to the social and family climate, offering potential starting points for intervention and prevention. However, considering the changes in social and family climate during the course of adolescence, questions on how to deal with instrument modifications over time need increased attention. The overarching aims are to derive recommendations for the promotion of psychosocial health in the critical phases of adolescence and young adulthood as well as to point out research gaps and future directions.

The first speaker, Christiane Otto, summarizes results from four studies on psychosocial risk and protective factors of depressive symptoms, generalized anxiety, ADHD and well-being in children and adolescents. Caroline Cohrdes focuses on the role of parenting style and personality and their interrelation for adolescents' HRQoL and mental health. Ann-Katrin Meyrose illustrates methodological challenges regarding method breaks and instrument comparability in the measurement of HRQoL in children, adolescents and young adults and discusses possible solution approaches.

S 51 – 1

THE ROLES OF PARENTING STYLE AND PARENT PERSONALITY FOR THE HEALTH-RELATED QUALITY OF LIFE AND MENTAL HEALTH PROBLEMS OF 11 TO 17-YEAR-OLD ADOLESCENTS

Cohrdes C., Göbel K.

Department of Epidemiology and Health Monitoring, Mental Health Unit, Robert Koch Institute Berlin, Germany

Personality has been discussed as one important topic of public health research because it is robustly correlated with various mental and physical health problems and psychopathology. Previous findings suggest that differences in health behavior explain a significant proportion of variance in relations between personality and physical and mental well-being. In how far parent personality traits as well as parenting behavior might also affect the well-being of their children needs increased attention.

Thus, the present research investigates relationships between parent personality traits (BFI-10), perceived parenting styles (ZKE) and different aspects of health-related quality of life (HRQoL; Kidscreen-27) as well as mental health problems (SDQ) in a subsample of 4,258 adolescents (48.6% male) aged between 11 and 17 years from the German Health Interview and Examination Survey for Children and Adolescents (KiGGS2, 2014-2017).

Results suggest that parent personality traits manifest in parenting styles which moreover affect multiple aspects of the children's well-being. Of particular note are parenting styles of psychological pressure (PP) and warmth and support (WS): high neuroticism is positively related to the parenting style of PP affecting HRQoL and SDQ of children negatively while high conscientiousness is positively related to the parenting style of WS affecting HRQoL and SDQ positively. Moreover, few personality traits such as extraversion seem to manifest less in parenting styles and affect children's well-being via unconsidered paths. Parenting styles characterized by rules and control seem to be beneficial for the children independent of parent personality as they experience less emotional problems.

The present findings can be interpreted in line with previous indications of different sets of personality traits influencing behavior and well-being and moreover can be extended to parent-child interactions. Based on the results, implications for promoting several aspects of adolescent's well-being via parenting styles can be concluded.

S 51 - 2

RISK AND PROTECTIVE FACTORS OF MENTAL HEALTH AND WELL-BEING IN CHILDREN AND ADOLESCENTS: RESULTS OF THE LONGITUDINAL BELLA STUDY

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Mental health problems in children and adolescents are frequent and can persist into adulthood. Further, over the last years Health-Related Quality of life (HRQoL) became an important outcome in health research and clinical studies reflecting the subjective well-being. Knowledge and information on risk and protective factors of child and adolescent mental health and well-being are crucial for planning targeted intervention and prevention programs. Research provides corresponding findings from cross-sectional studies, but longitudinal results are rare.

Psychosocial risk and protective factors of depressive symptoms, generalized anxiety, ADHD and HRQoL in children and adolescents (aged 11-17 years) were investigated in four studies. Each study investigated longitudinal data of the population-based German BELLA study (n = 1,384 to 1,643) gathered at three measurement points covering two years. Standardized established measures were administered (e.g., the CES-DC for depressive symptoms, and the KIDSCREEN-10 for HRQoL), and individual, social, and familial protective factors were considered. For cross-sectional and longitudinal analyses, latent growth modeling and linear regression models were used.

Longitudinal findings showed for instance that decreasing depressive symptoms were associated with increasing scores in self-efficacy, social support, and family climate (protective factors) over time; further, family climate and social support moderated the detrimental influence of parental mental health problems (risk factor) on

depressive symptoms. Moreover, increasing HRQoL was related to decreasing mental health problems in children and adolescents (another risk factor), increasing self-efficacy and increasing social support over time.

The presented studies provide important information for clinical practice, further research, and for planning targeted prevention and intervention programs. For instance, prevention and intervention programs focusing on depression in children and adolescents should - especially in children of parents with mental health problems - aim to strengthen self-efficacy and social support. To support the well-being, prevention programs should consider potential mental health problems in children and adolescents.

S 51 - 3

HEALTH-RELATED QUALITY OF LIFE IN CHILDHOOD, ADOLESCENCE AND EARLY ADULTHOOD – THE CHALLENGE OF SOLVING METHOD BREAKS

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Children and adolescents have to meet important developmental challenges during the transition into adulthood. To monitor their wellbeing during this period, the construct of health-related quality of life (HRQoL) can be used. A number of established HRQoL instruments are given, but these measures are not necessarily comparable across age groups. Thus, in surveys, cohort studies and clinical trials different measuring instruments are often used for different age groups and trajectories from childhood to adulthood can be hardly investigated. The aim of this talk is to show how these method breaks can be addressed to allow a detailed investigation of this important developmental phase.

Based on scientific literature a content-related comparison of HRQoL questionnaires (versions of KINDL, KIDSCREEN, SF) focusing on the structure of dimensions, item content, response options, time frame, age of target group and psychometric properties was conducted. Subsequently, longitudinal data of the German KiGGS and BELLA cohort studies were used to test different statistical approaches (e.g., categorization, transformation) that promise to allow the comparison of HRQoL across age and instruments.

The content-related comparison revealed that instruments measuring HRQoL (KINDL, KIDSCREEN, SF-36) include similar dimensions and items across age groups (e.g., physical wellbeing, psychological wellbeing), but also differing ones (e.g., SF focusses especially on functioning, KINDL/KIDSCREEN include wellbeing in terms of family, school, social support and peers). A statistical comparison of HRQoL across age groups and instruments was thus only appropriate for physical and psychological wellbeing. The detailed results of the different statistical approaches to solve these method breaks including strengths and limitations will be discussed.

Overall, it is very important to measure subjective wellbeing age-appropriately but comparable over age groups. The investigated statistical approaches are promising, but also have limits. More complex approaches (e.g., mapping, IRT-based computer adaptive testing) provide further opportunities.

Sunday, September 1st, 2019

Papers 38 – Family Processes

Pella Hall, 09:00 – 10:30

OP 220

EXPLORING THE RELATIONSHIP BETWEEN CHILDHOOD SIBLING AGGRESSION AND DECISION MAKING

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Experiences of childhood sibling aggression have been shown to have an effect on the development of the cognitive functions of individuals when they reach adulthood. These high-order cognitive processes take place in the human prefrontal cortex. It is accepted that prefrontal connectivity and organisation undergoes a prolonged period of development and can be influenced by factors experienced during developmental phases. It remains unclear how commonly experienced childhood aggression can contribute to high-order processes in adulthood, specifically in terms of the role of sibling aggression in childhood in decision making exhibited during adulthood.

We conducted two studies to establish a relationship between experiences of childhood sibling aggression and (1) decision making styles and (2) decision making abilities in adulthood. Study one used self-reports from 142 participants over 25 years old, and revealed that using sibling aggression to maintain dominance was linked to avoidant and spontaneous decision making styles. The findings reported here indicate a possible role of sibling aggression in the development of avoidant decision making styles. In study two, 75 participants with experience of childhood sibling aggression completed the IOWA gambling task to assess their decision making abilities. Results from this study will be presented, considering their implications for future research.

OP 221

TRAJECTORIES OF PARENTAL DEPRESSED MOOD IN THE FIRST YEAR AFTER CHILDBIRTH: EXAMINING THE CONTEXTUAL FACTORS AND GENDER DIFFERENCES

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Background and aims. Transition to parenthood is an essential phrase in the life course. The adjustment toward the transition varies greatly among individuals. Many studies have focused on the maternal depression after childbirth, but men's psychological change after childbirth and the trajectories of depressed mood beyond postpartum warrants more investigation. This study analyzed parental depressed mood at 3, 6, and 12 months after childbirth, and examined the impact of contextual factors, such as organizational support and family relationship, and gender differences.

Methods. Data was retrieved from a nationwide longitudinal study of child development and care in Taiwan. Final data included 4332 women and 396 men who were married at wave 1 and participated in the follow-up interview. Latent Growth Curve Modeling was used to identify the trajectories of depressed mood. Wave 1 covariates were added for examining the impact of the contextual factors on the trajectories. All models were analyzed separately for men and women.

Results. Although all parents reported reductions in depressed mood over time, women reported more depressed than men across all three waves. Among women, taking parenting leave, having the first child, having complications at delivery, and living with the parents-in-law were associated with more depressed mood; while having enough help at home, satisfied with the marriage, and working together with their spouse in raising the child were linked to less depressed mood among women. For men, only having enough help at home, financially secured, satisfied with the marriage were significant factors associated with less depressed mood.

Conclusions. The result indicated that the transition to parenthood has a different effect on men and women's mood over time. The associated factors are also different among men and women. This study provided further understandings on the experiences of being parents and how contextual factors influence the experience.

OP 222

HOW PARENTS' DEPRESSIVE SYMPTOMS ARE RELATED TO THE LEVEL OF THEIR CHILDREN'S DEPRESSIVE SYMPTOMS 10 YEAR LATER?

Vasalampi K.[1], Aunola, K.[1], Torppa M.[2], Lerkkanen M.-K.[2], Poikkeus A.-M.[2]

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Considerable evidence indicates that not only intrapersonal factors but also interpersonal context can serve as antecedent of adolescents' distress. Therefore, it can be assumed that also depressive symptoms transmit from parents to their children. The aim of the present study was to examine with longitudinal data lasting over 10 years, first, whether parents' depressive symptoms are related to the level of their adolescent children's depressive symptoms and, second, are there gender differences in this association.

For the analyses, approximately 800 mothers and 500 fathers completed twice questionnaire concerning their depressive symptoms: when their child was 7 years old and again when the child was 13. Parent's questionnaire included four questions from The Depression Scale (DEPS; Salokangas et al., 1995) and mean score of the questions was used to assess the level of parent's depressive symptoms. Their children (n= 997, 516 girls and 481 boys) completed depressive symptoms questionnaire at age 16. The adolescents' questionnaire included 10 questions from DEPS-scale and mean score was used to assess level of adolescent's depressive symptoms.

The recursive path model was conducted separately for mothers and fathers. Differences between boys and girls in the studied associations were examined with multi-group analysis. The preliminary results indicated that both mothers' and fathers' depressive symptoms were very stable from child's age 7 to 13. The results further showed that mothers' depressive symptoms, assessed when the child was 13, were significantly related to their adolescent children's depressive symptoms when the adolescents were 16 years old. There were no gender differences in this association. Fathers' depressive symptoms, already those assessed when their child was seven, were related particularly to adolescent boys' depressive symptoms at age 16. The findings suggest that depressive symptoms are likely to transmit from parents to adolescents.

OP 223

"A BROTHER IS A FRIEND GIVEN BY NATURE": THE IMPACT OF SIBLING RELATIONSHIP QUALITY ON DISPOSITIONAL EMPATHY

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Background and aims: Our research objective was to further examine the role of the family context in the development of empathy, with a focus on siblings. Recent findings suggest that siblings indeed contribute to empathy formation in young children (Jambon, Madigan, Plamondon, Daniel, & Jenkins, 2018) however, few studies have measured the quality of the sibling relationship, and whether a warm and supportive relationship with one's siblings predicts higher levels of empathy.

Methods: Three hundred and forty-three students at McGill University (Mage = 20.82) participated in an online study investigating empathy formation, family relationships, and cyberbullying perpetration and victimization. Empathy was measured using the IRI (Davis, 1980) and parent-child and sibling relationship quality were measured using the PAQ (Kenny, 1987) and the LSRQ (Boer, 1990).

Results: Multiple regression analyses were conducted to examine how parent-child and sibling relationship quality contribute to empathy development - and whether siblings play a role above and beyond that of parents. Results revealed that after controlling for gender, parent-child relationship quality was a significant predictor of higher empathy scores, $R2 = .06$, $F(1, 340) = 10.96$, $p = .001$. Furthermore, with the addition of sibling relationship quality into the model, we accounted for a further 1.1% of the variation in Empathy, a small but significant contribution, $R2 = .08$, $F(1, 339) = 4.08$, $p < .05$.

Conclusions: Our findings suggest that a warm, positive relationship with one's sibling can contribute to one's level of empathy, above and beyond the support they may receive from their parents. This study is one of few examining the unique role of sibling relationship quality on empathy development and the expression of empathy in emerging adulthood. We plan to further examine whether certain characteristics, such as sibling quantity, order, or gender, have any additional impact on students' reported levels of empathy.

Table 1

Summary of Hierarchical Regression Analysis for Family Variables Predicting Empathy (N =343)

Variable	B	SE B	β
Step 1			
Constant	51.98	2.07	
Gender	3.76	1.08	0.19**
Step 2			
Constant	34.07	5.76	
Gender	3.41	1.07	0.17**
Parent Quality	0.12	0.04	0.18**
Step 3			
Constant	31.98	5.83	
Gender	3.18	1.08	0.16**
Parent Quality	0.11	0.04	0.15**
Sibling Quality	0.03	0.02	0.11*
Quality			

Note. $R^2 = .03$ for Step 1; $\Delta R2 = .03$ for Step 2 ($p < .01$); $\Delta R2 = .01$ for Step 3 ($p < .01$)

*p < .05. **p < .01

OP 224

CHILDREN AS PARTICIPANTS IN RESEARCH ON AND DECISION MAKING IN FAMILIES

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Background and aim: To identify the most important aspects of family dynamics for child wellbeing, family relationships must be investigated from children's own perspective. Still, most previous studies have relied solely on parental reports. Research with children about sensitive topics raise ethical concerns that require specific consideration. The aim of this presentation is to increase the knowledge-base on how children can be involved in research and decision making on family dynamics in ways that are methodologically and ethically justified.

Methods: Data are derived from the ongoing Dynamics of Family Conflict-study, including about 2000 families thus far. Families are recruited from family counselling centers across Norway. Parents and children from both intact and dissolved families are invited to participate. Children aged 7-11 years are interviewed by trained interviewers, whereas youth aged 12-15 answer electronic questionnaires. Interviews and questionnaires contain structured questions about family relationships, wellbeing and children's involvement in custody decisions. The children report to what degree answering the questions evoked emotional reactions (anger/sadness/distress); felt relevant for their situation and; contributed to a feeling of helping others. These answers together with their answers about decision making will be investigated in relation to age, child wellbeing and interparental conflicts.

Results: Preliminary results indicate that whereas half of the children reported feeling upset by answering the questions, the other half did not. About 2/3 reported that being involved in the decision about custody arrangements was important. About 63% had informed their parents about their opinions. By August 2019, results from a larger sample will enable more nuanced investigations of relationships between conflict levels, children's age and wellbeing and their experience of involvement in the research and in the decision making process.

Conclusion: Findings might guide practitioners and future research projects about important aspects on children's involvement in research and decisions on custody arrangements.

OP 225

GRANDCHILD-GRANDPARENT RELATIONSHIPS IN THE UNITED KINGDOM AND IN ITALY: A QUALITATIVE INVESTIGATION FROM THE ADULT GRANDCHILD'S PERSPECTIVE

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The relationship between grandparents and grandchildren is usually quite close and satisfying, rather than conflictual, and is considered positive by both generations. This relationship continues to play an important role later in life when the grandchild has reached adulthood and can still be beneficial for both generations. Grandparents could have their grandchildren as part of their support network (Geurts, Van Tilburg, & Poortman, 2012) and could be a source of support for their adult grandchildren (Monserud, 2011; Ruiz & Silverstone, 2007). The present study explores the nature of the relationship between grandparents and grandchildren in the United Kingdom and in Italy. The aim of the study is to investigate adult grandchildren's perspectives on the grandparent- grandchild relationship and its transition from childhood to adulthood. Using a Grounded Theory approach twenty young adults, ten in the UK and ten in Italy, aged 20-30, were interviewed about the relationship with their grandparents. Results showed that adult grandchildren perceive the relationship to continue from childhood to adulthood and to transition in terms of support, contact, attitude and emotion. Support in childhood was reported as being more practical such as caregiving or help with education, whereas in adulthood as being more emotional. Contact changed from more frequent and face-to-face in childhood to less frequent and more telephone or internet based in adulthood. In childhood contact was often influenced by parents whilst in adulthood it was generally initiated by the grandchild intending to provide support to the grandparent. As to attitude and emotion participants reported a change in how they felt towards their grandparents from childhood to adulthood, with feelings such as excitement being replaced with appreciation and respect. Similarities and differences between the two national groups were identified. Implications of the transitions within grandparent- grandchild relationships are discussed.

Sunday, September 1st, 2019

Papers 39 - Early Years

Florina Hall 09:00 - 10:30

OP 226
TURKISH PRESCHOOLERS' EMOTION REGULATION: FATHERS' INVOLVEMENT IN CHILD CARE AND MOTHERS' WORKING STATUS

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Background and aims: With mothers' more frequent involvement in labor, fathers' traditional breadwinner role has been shifted to equal co-parenting role in which they have involved in child caring duties as well as domestic chores. Therefore, the aim of the current study was to examine whether different types of father involvement make differences in preschoolers' emotion regulation (ER) abilities. Further, mothers' working status was also considered.

Methods: Participants were 99 Turkish mother and father dyads who have children aged between 30 and 84 months old. Fathers were asked to explain their responsibility in child care via open-ended question. Responses were coded by two researchers and inter rater reliability was calculated (Cohen's Kappa = 0.802, p < .001). Accordingly, the responses were grouped into three categories. The first group was involved in only basic child care (n = 22) (e.g. feeding, bath, toilet, dressing up). The second group took place more in interactive entertaining part (n = 32) (e.g. playing games, reading books, going to the cinema) and the last group was involved in both basic care and interactive entertaining part (n = 45). In order to measure children's ER, mothers completed the Emotion Regulation Checklist.

Results: 3 (Father Involvement) X 2 (Mothers' work status) two way ANOVA was performed. Results showed that the main effect of father involvement was statistically significant. Accordingly, children in the first group (M = 3.01) in which fathers were involved in only basic child care, showed lower ER scores than the second (M = 3.27) and the third groups (M = 3.26). However, children did not show significantly different ER scores in the second and third groups. Moreover, the main effect of mothers' work status and the interaction effect were not statistically significant.

Conclusions: In conclusion, parallel with the literature findings revealed the importance of fathers' involvement in children's emotional development.

OP 227
NANNIES, CARED CHILDREN AND THE FAMILY DYNAMICS

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Babies are born into and grown up in a social environment. This environment includes mainly the mother and the father, as well as other caregivers like nannies. Live-in or live-out, nannies enter the routines of the employer families and they gradually become a family member. Nevertheless, the relationship dynamics between the nannies and the family members are mostly unknown, as well as the effects of these dynamics on the cared child's well being. The present research has been conducted with the aim of understanding how nannies contributed to the family dynamics, and uncovering the direct and indirect effects (i.e. through changing family dynamics) of the employment of nannies on the cared children's well being. Towards this aim, mothers of 1,5-5 year-old children, who employ nannies, have been administered an online survey created by the authors, which included questions regarding the family dynamics and time spent with the child. The survey also included Perceived Partner Responsiveness Questionnaire as well as CBCL 1,5-5. The primary results showed that the time that the mothers spent with their children affected their perceptions of the child, of the nanny and of the father. Moreover, the mothers who spent more time with the cared child evaluated father-child and nanny-child relationships more negatively. The data collection for the present research is ongoing, the full set of results are to be presented in the conference. The present research is aimed to add to the literature twofold: First, widening the literature about children's well being through investigating the nanny-child relationship, a long-neglected relationship which might have implications for healthy child development, and second, including the family in the analyses as to draw a more holistic picture about the possible effect of nannies on the cared children.

OP 228
ACCESS TO CHILDCARE QUALITY IN A UNIVERSAL CONTEXT: THE ROLE OF PARENTAL EDUCATION AND INCOME

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Background and aims: There is consensus about the positive effects of high quality Early Childhood Education and Care (ECEC) on children's development, particularly for children from lower socioeconomic background. However, limited knowledge exists on potential selection/inequalities in the access to high quality ECEC in universal contexts, such as Norway. This study aims at investigating family and child-level factors that predict access into ECEC of higher quality (i.e. structural quality and child-teacher relationship quality), taking into account accessibility of information on different quality aspects.

Methods: We use data from the Norwegian Mother and Child Cohort Study (MoBa) linked with teachers reports on ECEC quality and Medical Birth Register of Norway (MBRN) (N=6900). We employed a structural equation modeling (robust Weighted Least Squares estimator WLSMV) to analyze selection/access to ECEC of higher quality by family level characteristics. We focus on socioeconomic status and control for other parental and child level factors (i.e. parents' cultural background, mother's age and mothers' depression/anxiety, child's biological and early developmental risk, child's temperament and birth month) to account for complexity of selection mechanisms into ECEC.

Results: We found indications of socioeconomic selection/inequalities in the access to higher quality ECEC for both structural and process quality (child-teacher relationship measured by the Student-Teacher Relationship Scale) in the context of universal access in Norway. Higher parental socioeconomic status was associated with higher teachers rating on developmental material, staff competence and stability and lower rating on child-teacher conflict.

Conclusion: The results suggest more efforts might be needed to ensure equal access to higher quality ECEC.

OP 229

IMPLEMENTING PRE-WRITING SKILLS IN KINDERGARTEN CHILDREN WITH A TRAINING PROGRAM (MOFIS)

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Background and aims. Studies on writing acquisition indicate that fine motor abilities and visual motor integration are considered as foundational skills for handwriting readiness. Kindergarten children with poor manual dexterity and lacking visual perceptual skills have been found to be at risk of handwriting problems in later school years as well as far-reaching consequences on academic success and self-esteem (Sharp & Titus, 2016). An intervention program aiming at training foundational skills in kindergarten children was set down and tested for efficacy.

Methods. A quasi experimental study design involved 192 preschool children (M=58.9%; F=41.9%) of Southern Switzerland (age range in months: 35-73) assigned to experimental and control group. Children were tested pre and post-intervention at a gap of eight months from initial assessment on the Visual Motor Integration (Beery & Buktenica, 2010) and on the three Manual Dexterity tasks of the Movement Assessment Battery for Children 2 (Henderson, Sugden, & Barnett, 2007). No statistical differences between groups have been found with respect to mothers' and fathers' educational level, parent actual employment and fathers' age. Mothers in the experimental group were significantly younger than in the control group (p<.05).

Results. Baseline comparisons with independent t test revealed no significant differences between groups at the beginning of the program in overall visual motor integration and total dexterity score. Significant changes were detected with paired sample t tests in the experimental group showing significantly higher mean scores after training respectively in VMI (p=.002), VMI Motor Coordination subtest (p=.009) and all MABC-2 subdomains (Manual Dexterity 1 p<.001; Manual Dexterity 2 p=.004; Manual Dexterity 3 p=.001).

Conclusions. Results of this study suggest the efficacy of this training on fine motor skills and eye-hand coordination in preschool children. The study sets a foundation for future in planning and developing kindergarten prewriting skills.

OP 230

TEACHERS' COMPETENCE MODERATE THE ASSOCIATIONS BETWEEN TEACHER CLOSENESS AND CHILD BEHAVIOUR. RESULTS FROM A NORWEGIAN POPULATION BASED COHORT STUDY

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Background and aims: A positive relationship to the teacher is important for child development. Still, we need more knowledge to uncover potential moderations to ensure such a relationship. This study will investigate the longitudinal association between closeness to the kindergarten teacher and children's externalising and internalising behaviour, and the potential moderation by specific competence among the kindergarten staff.

Method: The sample consisted of 7481 children from the Norwegian Mother and Child Cohort Study (MoBa). Mothers rated child externalising and internalising problems with items from the Child Behaviour Checklist at 3 and 5 years old, and the Rating Scale for Disruptive Behaviour Disorder, the Short Mood and Feelings Questionnaire, and the Screen for Child Anxiety Related Disorders at 8 years. Teachers responded to the Student-Teacher Relationship Scale - Short Form on perceived closeness in kindergarten (5years) and in school (8years). The teachers also rated their competence in children's behaviour problems.

Results: A cross lagged model (RMSEA=0.03, CFI/TLI=0.92/0.92) indicated that, when teachers reported high competence in behaviour problems, previous internalising and externalising problems did not significantly predict closeness at 5 years, however closeness at 5 years predicted reduced internalising (b=-.08) and externalising (b=-.04) behaviour at 8 years, weakly but significantly (p<.05). The reverse pattern was observed when teachers reported low competence in behaviour problems: internalising (b=.13) and externalising (b=-.14) predicting later closeness (p<.01), but closeness did not significantly predict later behaviour.

Conclusion: Teachers with more competence in behaviour problems seem to be more able to affect, and seem less affected by, children's externalising and internalising behaviour, through a close teacher-child relationship, compared to teachers with low competence. Importantly, specific child characteristics may also influence both the level and the associations of closeness, thus whether closeness is teacher-driven or child-driven is discussed.

OP 231

SOCIOECONOMIC INEQUALITIES AND SCHOOL READINESS IN LOW AND MIDDLE-INCOME COUNTRIES: DOES ACCESS TO EARLY YEARS EDUCATION MAKE A DIFFERENCE?

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[2] School of Psychological Sciences and Health, Faculty of Humanities & Social Sciences, University of Strathclyde, Glasgow, United Kingdom

Background and Aims: Studies from high, low and middle-income countries suggest significant associations between poverty and children's school readiness outcomes (Bornstein et al., 2012). While consistent evidence, mostly from high income countries, indicate that parental income influences school readiness through ability to afford educational resources as well as parenting behaviours (Sosu & Schmidt, 2017), our understanding of these mechanisms in low and middle income countries is poor (Wolf, & McCoy, 2019). Additionally, we know little about the extent to which current educational policies such as the introduction of universal early years education moderate the poverty and school readiness gap. In this ongoing study, we draw on family investment models to shed light on the relationship between poverty and school readiness outcomes. Further, we investigate the extent to which access to early childhood education moderate the relationship between poverty and school readiness.

Methods: We used data from the UNICEF's Multiple Indicator Cluster Surveys (MICS). Samples from a middle and a low-income country in sub-Saharan Africa were used (n= 9984). Predictors (SES), mediators (resources; parenting behaviours), and outcome variables (literacy and numeracy; social, emotional and behavioural; learning school readiness) were selected based on theoretical hypothesis. We controlled for several background variables (child age, gender, physical growth). Analyses were undertaken within the structural equation modelling framework.

Results and Conclusions: Preliminary results suggest significant SES differences in school readiness outcomes. Parental SES influences children's school readiness through educational resources and parenting behaviours. There were significant inequalities in access to early years education with high SES children having greater access. It appears that the moderating effect of early years education on the poverty school readiness gap may depend on the quality of early years experience. The policy and practice implications will be explored.

Sunday, September 1st, 2019

Papers 40 – Teachers' and Students Stress, Burnout and Coping

Kozani Hall 09:00 – 10:30

OP 233

SOCIAL, EMOTIONAL AND INTERCULTURAL LEARNING PROGRAM HAND IN HAND: INTERVENTION STUDY

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Students' enhanced social, emotional and intercultural (SEI) competencies can result in several positive outcomes, e.g., better educational outcomes, better mental health, improvement in prosocial behaviour, and on the other hand enhanced SEI competencies among school staff are of vital importance for the development of student' social and emotional competences, for students' behavioural and educational achievement as well as for teachers' own well-being. In the paper we will present two newly designed SEI programs: HAND in HAND program for students and HAND in HAND program for school staff developed as a part of a collaborative EU based policy experimentation project: HAND in HAND: Social and Emotional Skills for Tolerant and Non-Discriminative Societies (A Whole School Approach). The HAND in HAND programs have been tested using quays-experimental design with control group across 4 EU countries (Slovenia, Croatia, Germany, Sweden). Following a prior measurement of the SEI competencies, a group of students (and their school staff) was subjected to the HAND in HAND programme in several different conditions: the first is the implementation of two programs for school staff and students as a whole school approach, the second and the third is implementing only one component, either the student program or the school staff program. These three experimental conditions are further compared to a control condition where no training is implemented to establish which condition is most beneficial for SEI competencies. In the presentation a focus will be on Slovenian data (240 8th grade students; 100 of their school staff): comparisons of pre and post measurements of SEI competencies across conditions. This study brings a meaningful contribution in analysing the effectiveness of the SEI programs, especially with emphasizing EU perspective.

OP 234

EARLY ANTECEDENTS OF UPPER SECONDARY EDUCATION STUDENTS' SCHOOL BURNOUT

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Although school burnout is an alarming problem among students, very little is known about the early antecedents of the school burnout symptoms. Therefore, the aim of the present study was to examine whether psychological ill-being (i.e., internalizing symptoms and conduct problems) and school attitude (i.e., school enjoyment, behavioral engagement, and future educational aspirations) in the sixth grade (12-13 year olds) would predict school burnout symptoms (i.e., exhaustion and cynicism) four years later at the beginning of upper secondary education. The data (N = 1303) was drawn from the First Steps longitudinal study.

The results of regression analyses showed, first, that after controlling for the level of exhaustion in the 6th grade, three of the examined variables showed unique impact on exhaustion in the 10th grade: the higher the internalizing symptoms, school enjoyment, and future educational aspirations were in the 6th grade, the higher the symptoms of exhaustion were four years later. Secondly, the results of regression analyses showed that after controlling for the level of cynicism in the 6th grade, two of the examined variables showed unique impact on cynicism in the 10th grade: the higher the internalizing symptoms were in the 6th grade, the higher the symptoms of cynicism were four years later. On the contrary, the lower the school enjoyment was in the 6th grade, the higher the symptoms of cynicism were four years later.

The findings suggest that internalizing symptoms in childhood can have far-reaching consequences. Surprisingly, also the students who enjoy school and consider studying in the future to be important might be prone to school-related ill-being. In order to prevent school burnout, attention should be paid on the students who already in primary school indicate internalizing symptoms regardless of positive school attitude.

OP 235

COPING STRATEGIES AND LIFE TRAJECTORIES AMONG RUSSIAN ADOLESCENTS IN THE CONTEXT OF EDUCATIONAL DIFFERENCES

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School environment influences personality of a child in different ways, not only by education, but also by forming social roles, habits, expectations, etc. (Crosnoe, 2011). In the conditions of chronic social uncertainty, the question of forecasting the children's social and psychological future choices, partly, professionalization becomes especially important as complicated. We were interested in the adolescents' life trajectory planning and construction, so we examined the individual characteristics of the students due to their age and type of school they learnt. 646 adolescents 12-17 years old (Mage=14.93) participated in the study. They were divided into three age groups (12-13, 14-15, and 16-17 years old). In every age group, three types of schools were represented. First, the high-status schools oriented towards further university education chosen by the alumni; second, the low-status schools and vocational education institutions, oriented towards further trades chosen by the alumni; third, the school with the middle rating and mixed social structure. The Life Orientation Test by Carver & Scheier, Ways of Coping Checklist by Folkman & Lazarus, Zimbardo Time Perspective Inventory, and specially developed inquiry on adolescents' view of their future (partly their role models; their personal ideas towards their desired future; and their relatives' instructions towards adolescents' future) were used; the two-way analysis of variance (age-school) was conducted. The results show, that the high-status schools students significantly more often use Planning $(F_{(2,637)}=5,8, p=0,003)$ and Positive Reappraisal $(F_{(2,637)}=3,13, p=0,045)$ strategies of copying. It is shown the different dynamics of Confrontation over age in different types of schools $(F_{(4,637)}=2,92, p=0,02)$. A few tendencies of differences in coping strategies and time perspective over the age and schools are revealed. Also the results show that the optimism among the adolescents is growing over the age independently of the type of school $F_{(2,637)}=4,36, p=0,013)$. Ten types of parents' instructions from their children's perspective are elicited and described (two most frequently used ones are "Be like us!" and "I just want it"). The distribution of the parental instructions is the same for the adolescents from different schools. The results confirm that the imagination of their future is an equally difficult problem for the adolescents in different social groups, but there are significant differences in the ways they cope with it; their images of their future also differ; therefore, they need different psychological support in realization of their life course planning.

OP 236

BUILDING RESILIENCY AROUND SCHOOL TRANSITION: LINKS TO WELLBEING AND BEHAVIOUR

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Background and aims: Children's mental ill health and resiliency are a key issue that schools are focusing on, in particular around times when children may be experiencing transitions. This study aimed to evaluate a new intervention (Smart Moves) that is designed to build resiliency in year 6 and year 7 pupils to assess if it was effective in enhancing resiliency, and what impact this has on children's wellbeing and their behaviour.

Method: Year 6 (n = 277) and Year 7 (n = 587) in the United Kingdom took part at two timepoints (pre- and post- Smart Moves) approximately 5 months apart. Children completed a resiliency measure, the Kidscreen 27, and the Strengths and Difficulties questionnaire. In addition, we are currently collecting data from a control group of year 6 children (n = 239, time 1) and will have collected time 2 data by July (to include in our presentation).

Results: Findings support that there were no age group differences. Importantly, over the time period the children who were initially low in resiliency were more likely to become more resilient over the time period, were more likely to experience fewer internalising and fewer externalising behaviour, and were more likely to have improvements in wellbeing. Importantly, multiple regression analyses indicates that improvements in feeling about physical activity and health, general mood and feelings about the self, school and learning, as well as decreases internalising and externalising, and increases in prosocial behaviours predicts post-intervention resiliency. We will be exploring how these patterns differ in our control group to assess if it is the focus on building resiliency in Smart Moves.

Conclusions: Our findings indicate that focusing on building resiliency using the resiliency framework has benefits for those who are low in resiliency. Results will be discussed on the importance of such interventions.

OP 237

OCCUPATIONAL STRESS AND JOB SATISFACTION IN PRIMARY SCHOOL TEACHERS. THE ROLE OF SELF-EFFICACY

Kofa O., Antoniou A.-S.

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There is intense interest on teachers' occupational stress in the educational community in the recent years. Among the major teachers' occupational stressors are the working demands, the variety of school activities and the lack of professional recognition. One of the main consequences of the phenomenon is teachers' drop-out, due to the psychological and emotional pressures. The aim of the present study is to investigate occupational stress in primary school teachers in mainstream and special education schools and its relationship with self-efficacy and job

satisfaction. The sample consisted of 144 teachers working in mainstream and special education schools, mainly in Athens. Teachers' Occupational Stress Scale (Antoniou, 2006), Teachers' Self-Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001), Job Satisfaction Scale (Warr, Cook, & Wall, 1979) and demographical and work items were used for data collection. The findings of the research showed that the most important stress factors for teachers are teaching process, students' behavior and recognition of their value and available time. Moreover, mainstream school teachers report higher levels of stress in comparison to special education teachers. In addition, self-efficacy, as far as management of pupils with learning disabilities and use of a variety of teaching methods are concerned, is negatively related to occupational stress. Furthermore, job satisfaction is strongly negatively related to occupational stress, especially among mainstream school teachers. These correlations are also influenced by the demographics of the research, which include teachers' gender, education level, marital status, residence and school type. Gender does not affect the levels of teachers' self-efficacy. Job satisfaction levels show a significant difference between experienced and inexperienced teachers. The implications of these findings for the teaching profession will be discussed.

Sunday, September 1st, 2019

Papers 41 - Language Development I

Edessa Hall 09:00 - 10:30

OP 238

OBJECT-DIRECTED VOCALIZATION, EXPLORATION AND SYMBOLIC PLAY MILESTONES SPUR LANGUAGE DEVELOPMENT

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The dynamic approach to development posits that the innate interaction between close and far afield skills drive learning and development. The current study aims to explore which types of behaviors drive the ability to communicate with others in early infancy. The behaviors chosen for this purpose were the following: initial vocal outputs directed to an object (object-directed vocalization, babbling, and speech), oral and manual explorations that are used to gather information and that partially concur with vocalization, and symbolic play milestones (single-object and multi-object play).

Fourteen infants between the ages of 8 and 16 months old were treated in their natural home environments during monthly one-hour sessions while their mothers sat nearby. Their spontaneous play acts and pre-communicative forms usages were recorded, enabling the coding of vocalization, babbling, speech directed to objects and mother, two types of exploratory behavior (mouthing and fingering), and their symbolic play milestones.

Data gathered in the study were recalculated as a cumulative percentage with regard to each measurement. A general multivariate analysis was conducted, and a simple effects analysis showed that directing vocalization, babbling, and speech to object, examining the objects orally and manually and using single objects in a novel way in symbolic play all affected the later mother-directed speech production.

Conclusions: The results indicate that premature activities (directing vocalization to objects) and advanced acts with an object, such as during exploration and symbolic play, may facilitate language development for the following reasons. Such activities may improve the synchronization between vocal, auditory, and motor systems that are salient to later efficiently monitoring multiple cues for communication with others. Furthermore, an infant's tendency to vocalize while interacting with objects may establish paradigms according to multiple types of actions can used to articulated vocal outputs. Such paradigms consequently accelerate an action's impact and thus language development.

OP 240
DO MOTHERS AND FATHERS DIFFER IN THEIR USE OF CHILD-DIRECTED IRONY?

Siemieniuk A.[1], <u>Bosacki S.</u>[2], Banasik-Jemielniak N.[3]

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Irony is a social-communicative strategy that helps us to interact with others (Wampole, 2012). Although past research shows that approximately 8% of everyday adults' conversation consists of ironic utterances (Gibbs, 2000), few studies explore how ironic statements used by parents affect their children's social and emotional competencies.

To address this gap in the literature, in this study, we explored the types of irony that parents use towards their children, particularly if the use of irony differed between mothers and fathers. Also, we explored if parents' levels of ironic communication influence their children's ability to understand mental states in others of their Theory of Mind (ToM) and social competencies.

Data was collected from 46 monolingual families in Poland using Social Ambiguous Stories Task to measure ToM (SAS, Bosacki, 2000), and self-report parental questionnaires about using irony in conversations with their children - Attitude Towards Irony (ATI, Banasik, 2017).

Results showed null differences in Theory of Mind and social competencies between children whose parents reported greater use of irony in daily conversations with children and those who reported using few ironic utterances. Compared to children less proficient in irony comprehension, children with higher levels of Irony comprehension had mothers who reported high levels of irony usage with their children as (N= 25, t= 3.278). This relation was not found with fathers. Parents' responses reflected three distinctive types of ironic utterances: (1) other-based irony, (2) self-based irony, and (3) action-based irony . Mothers most frequently used action-based ironic utterances whereas fathers used irony in terms of mostly self and other. For example, when parents responded to receiving the same gift as last year, some mothers answered: I wonder what I'll receive next year" and fathers: "I'm so lucky"). Results are discussed in terms of implications for future research and practice.

OP 241
EXPRESSIVE VOCABULARY DEVELOPMENT AND SCREEN DEVICE USAGE OF THREE-YEAR-OLD CHILDREN

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Children's expressive vocabulary development has been extensively studied using the MacArthur-Bates CDI during the recent years. There are many studies that have looked into the effect prolonged screen time has on children's physical development and some that have looked into the effects on cognitive development. Our aim was to see if the usage of screen devices by young children was connected to their expressive vocabulary.

To his end we collected data from parents of 74 children (25 boys) at the age of 2;10 - 3;2 (M = 35.74, SD = 0.81). Children were acquiring Estonian as their first language. They were reported to be healthy and without developmental problems by their parents. Most of the families (80%) had middle or higher SES status. Parents filled in Estonian adaptation of CDI-III that includes a list of 101 words and questionnaires about screen devices usage.

The parents marked on average 58.38 (SD = 20.53, range 0 - 93) words as used by their child. Parents estimated that their child spent on average 1.21 hours (SD = 0.71) on a workday and 1.64 hours (SD = 1.04) on a day of rest using a screen device. About half of this time was spent with the parent present. According to Poisson regression model the more time a child spent with a screen device during a workday together with a parent the less words were in the child's expressive vocabulary (b = -0.125, SE(b) = 0.032, $p < 0.001$).

Longitudinal data would help to ascertain whether longer hours with screen devices harm vocabulary development.

OP 242

LEARNING SPACE THROUGH INTERACTION: A DEVELOPMENTAL STUDY WITH SIGHTED AND VISUALLY IMPAIRED CHILDREN AND ADULT

 Tartas V.[1], Jouffrais C.[2,3], Oriola B.[2], Chibaudel Q.[2], Fibigerova K.[1]

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[2] *Université de Toulouse 3, IRIT, France*
[3] *CNRS, IPAL, Singapour*

In the present study, we examined the way children and adults with visual impairments and without such impairment communicate verbal information about space and use it in three different communicative and cognitive tasks: (a) in a mobility task with the help of verbal aids given by an adult to orientate and move oneself appropriately; (b) in a verbal description task (describing a place and a route) individually and in dyadic situation and (c) guiding a peer and being guided by a peer in a game such as a "treasure hunt" mediated by an interactive map (IC tool) for the guide. This research is based on human centered conception. Thus, users are involved in the study: a group of elementary sighted and visually impaired children and a group of sighted and visually impaired adults participated to these tasks. The results analyzed the way the different aids (verbal and technological) are used in order to develop more appropriate spatial representations according to the types of tasks and level of spaces mobilized in these three tasks. We expect that the situations of cooperation with adult or peer will promote to use spatial terms and help to to clarify spatial representation for all the participants. The practical and theoretical implications for acquisition and construction of spatial cognition by sighted and visually impairments children will be discussed in relations with the role of verbalisation and ICT tool.

OP 243

GESTURE-SPEECH COMBINATIONS DURING SPONTANEOUS VERBAL REPETITION IN SPANISH TODDLERS

Casla M.[1], Murillo E.[1], Nieva S.[2], González-Ledesma M.[1], Rodríguez J.[1], Méndez-Cabezas C.[1]

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Spontaneous verbal repetition plays an important role on early stages of language development (Che et al., 2018). Verbal repetition scaffolds children's utterances and maintains joint attention enhancing social interaction. As children reach their second birthday adults decrease the rate of repeated utterances (Schwab & Lee-Williams, 2018), although it is not so clear what happens with children's repetitions.

Research about verbal repetition rarely takes into account multimodal speech-gesture combinations. Even beyond the two-word stage, children preferably use gesture-speech combinations when facing language-challenging tasks (Murillo, Galera & Casla, 2015). Nevertheless, little is known about the multimodal characteristics of verbal repetitions during the second birthday.

In this study we analyzed longitudinally 18 parent-child dyads at 21, 24 and 30 months-old in naturalistic settings. Transcriptions were coded using CLAN programs from the CHILDES project considering: type of utterance (source or repeated), type of gesture (deictic, conventional and symbolic), type of utterance-gesture combination (supplementary vs. complementary), speaker (child vs. adult) and age.

Results show that children produced frequently multimodal behaviors that are subsequently repeated by adults (i.e. at 21 months, 80% of children's source utterances were multimodal).

On average, 19% of children's and adult's spontaneous verbal repetitions are also multimodal. Children produced significantly more repeated multimodal utterances than adults at the three ages studied. When children produced repeated multimodal utterances, they used more deictic gestures than adults, while adults produced more repeated multimodal utterances with conventional gestures than children. Aldult's combinations of conventional gestures with repeated utterances predicted children's grammatical level.

Supplementary gesture-speech combinations were significantly more frequent than complementary ones, both in children's and adult's repetitions at the three ages.

These results suggest that gesture-speech combinations play a crucial role on grammatical development, and that multimodal information should be taken into account in order to analyze the role of spontaneous repetition on linguistic development.

Sunday, September 1st, 2019

Papers 42 - Cognitive Processes II

Naoussa Hall 09:00 - 10:30

OP 244

THE METACOGNITIVE DEVELOPMENT OF APPEARANCE/REALITY DISTINCTION IN PICTURES FROM ANIMATED CARTOONS AMONG CHILDREN AGED 6 TO 10

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Our previous work about Appearance / Reality tasks to study the child metacognitive development has shown that appearance enforcement diminishes when taking into account reality while attention to functional properties increases reality. Thus, a candle (reality) that has the shape of an apple (appearance) will be less or more facilitated according to the attention brought either to its surface properties (its color) or to its functional properties (lighting a candle).

In this research, we use cartoons that depict a main character A who (i) intentionally changes the appearance of a target object to deceive a secondary character B (image 1: painting a tennis court to look as a swimming pool), (ii) its use by the secondary character B according to its appearance (image 2: to dive in the swimming pool) and (iii) imitation by the main character A who is using the object according to its appearance and having reality as feedback (image 3: to dive in the pool and smash on the tennis court).

Results show that children aged 6 to 10 get a high score when asked what the target object is for A (between 55 % and 45 % of reality response) while the score decreased when asked what it was for B (84 % and 92 % of appearance response for the younger and the older, respectively). There was no age difference.

In opposite, when children were asked "what the target object is for yourself", there is an age difference when it was for A (77 % vs. 87 % of reality responses) and when it was used by B (57 % and 71 % of appearance responses). These differences were significant.

Discussion addresses the child's difficulty in mobilizing metacognitive abilities of a higher level in the case of fictional nature of the target object that is allowed by the cartoon.

OP 245

IN WHAT KEY DO CHILDREN TRUST TO JUDGE THE CORRECTNESS OF COUNTING: THE PROCEDURE FOLLOWED OR THE CORRECT RESULT?

Escudero A., Lago M.O., Dopico C.

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Counting is one of the major early acquisitions made by children, since it is a prerequisite for the basic arithmetic development. Previous research has shown that even primary school children have difficulties with recognising the optional nature of conventional rules of counting. Specifically, they usually consider unconventional but correct counts (also known as pseudoerrors) as incorrect procedures. A critical question when using detection tasks, where children have to judge different kind of counts, is whether children fail in identifying pseudoerrors as correct ways of counting because a lack of conceptual knowledge or because the testing situation itself. It could be hard to determine whether children judge on the basis of the final result or on the procedure followed to count, especially when they do not provide justification for their judgments.

To clarify this, the current study sought to explore kindergarteners' understanding of conventional rules of counting. 48 Spanish children (aged 5-6 years old) had to judge the correctness of several counting procedures presented by means of a computerised detection task. Participants watched four pseudoerrors (correct but unconventional procedures which gave correct results), three double-errors (incorrect procedures that violated the logic of counting but resulted in correct cardinality), and two control trials: a conventional correct count and an erroneous count. The findings showed that children performed significantly better when judging the double-errors than pseudoerrors. The analysis of participants´ justifications revealed that they focus more on the process of counting than on the result of the procedure since they highlighted the breaches of logical rules in double-errors and the violations of conventional rules in pseudoerrors. These data suggest that kindergarteners' low performance in detecting counting pseudoerrors is mainly related to conceptual misconceptions (they did not consider conventional rules as optional) and not to the experimental situation.

OP 246

DEVELOPMENTAL PROFILES OF READING FLUENCY AND READING COMPREHENSION FROM GRADE 1 TO 9: EXAMINING THE EFFECTS OF COGNITIVE SKILLS AND PARENTAL READING DIFFICULTIES

Psyridou M.[1], Torppa M.[1], Tolvanen A.[2], de Jong P.F.[3], Poikkeus A.-M.[1], Lerkkanen M.-K.[1]

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[3] *University of Amsterdam, Faculty of Social and Behavioural Sciences, Amsterdam, Netherlands*

Background and aim: In the present study, we examine the development of reading fluency and reading comprehension from grade 1 to 9 and the predictive value of several cognitive skills, parental education, and mother's and father's reading difficulties.

Methods: The present study is part of the Finnish longitudinal First Steps Study, a prospective follow-up of children from kindergarten to grade 9. Approximately 2000 children participated in the study and they were assessed at six time points, in grades 1 (Spring 2008), 2 (Spring 2009), 3 (Spring 2010), 4 (Spring 2011), 6 (Spring 2013), 7 (Spring 2014), and 9 (Spring 2016). There were three group-administered tests for the assessment of reading fluency: a word reading fluency task, a word-chain task, and a sentence reading task. Reading comprehension was assessed using a group-administered subtest of the nationally normed reading test battery. Children's phonological awareness, letter knowledge, rapid serial naming of objects, number counting, reading words, vocabulary and listening comprehension were assessed in kindergarten. In addition, we used information of mother's and father's education level and self-reports on reading difficulties.

Results: Data analysis is underway. A latent profile analysis is used to identify the different profiles of reading fluency and reading comprehension development among our participants. In addition, it is examined whether family risk has a direct effect on children's reading skills or indirect via the early cognitive skills.

Conclusions: The effects of kindergarten cognitive skills and parental reading difficulties on children's reading skills development are discussed.

OP 248

PREDICTORS OF RESPONSE INHIBITION IN PRESCHOOL CHILDREN: URBAN AND RURAL POVERTY

Okur Ş., Berument S. K.

Middle East Technical University, Turkey

Response inhibition (RI) is a component of executive function (EF). It is associated with restraining a dominant and automatic response, and inhibiting impulses (Miyake et al., 2000). Contextual factors influence the development of EF skills (Jaramillo, Rendon, Munoz, Weis, and Trommsdorff, 2017). Poverty is a risk factor for children's EF skills since it is associated with low income, low stimulation and high chaos at home, and poor parenting quality. However, differences in the living conditions of urban and rural poverty may differentially effect children's development. In addition to contextual factors, children's temperamental characteristics such as reactivity (Raver et al. 2013) influence children's EF skills.

Therefore, current study aimed to examine the effects of urban and rural poverty, specifically poverty indicators (mother education, income, food insecurity), parenting (autonomy support, inductive reasoning), home quality (stimulation, chaos), receptive vocabulary, and children's temperament (reactivity, perceptual sensitivity) on RI skills of children. Participants were 4 to 5 year-old children and their mothers living in urban and rural regions of Turkey. Data collection is still on progress. Preliminary analyses were conducted on 98 children (45 from rural, 53 from urban). Children's RI skills were assessed through Day-and-Night task.

Hierarchical regression analyses showed that income level ($\beta = .29$, $p = .01$) and children's receptive vocabulary ($\beta = .25$, $p = .01$) positively predicted children's response inhibition skills. Additionally, the effect of living in rural regions was marginally significant ($\beta = -.21$, $p = .07$). The analyses will be repeated with 240 participants, and predictors of response inhibition skills will be examined separately for urban and rural regions.

EF skills including response inhibition are critical for children's later academic achievement. Therefore, it is important to clarify the factors that contribute to the development of these skills. Understanding the mechanisms may guide the development of context-specific intervention programs.

Sunday, September 1st, 2019

Keynote Lecture 5

Olympia Hall A & B 11:00 – 11:45

TAKING A STAND AGAINST BULLYING: THE SOCIETAL AND INDIVIDUAL COSTS OF BEING BULLIED IN CHILDHOOD

Arseneault L.

King's College London, The Institute of Psychiatry, Psychology and Neuroscience

Bullying involves repeated instances of abusive behaviours between peers where it is more difficult for the victims to defend themselves. While such behaviours were commonly accepted only a few decades ago, there is a growing movement departing from the widely held assumption that bullying is just an inevitable part of growing up.

My presentation will review robust evidence that being bullied is a social experience that contributes to emotional problems at an early age and that can have a long-lasting and pervasive impact. It will also address research that identified sets of factors, both individual and contextual, that can make some young people more likely to be targeted by bullying behaviours.

Put together, the evidence suggests that if early interventions equip 'at-risk' young people with the right tools and social skills, we may be able to reduce bullying behaviours and mental health problems in schools. The presentation will raise the question whether it is possible to implement early interventions which aim to reduce and prevent mental health problems in young people by focusing on potential victims of bullying.

Sunday, September 1st, 2019

Invited Symposium 6

Olympia Hall A & B 11:45 – 13:15

IS 06
INTERACTIVE DYNAMICS OF NEURAL AND COGNITIVE DEVELOPMENT ACROSS CHILDHOOD

Werkle-Bergner M.

Chair, Max Planck Institute for Human Development, Berlin, Germany

Keresztes A.

Chair, Research Centre for Natural Sciences Hungarian Academy of Sciences Budapest, Hungary/ Department of Cognitive Psychology Faculty of Education and Psychology Eotvos Lorand University Budapest, Hungary

Recent progress in non-invasive neuroimaging technology has opened promising new routes for studies aiming to elucidate mechanisms of the dynamic and interactive development of cognitive and brain functioning. But still today, testing infants and young children with neuroimaging methods requires major efforts in developing meticulously engineered behavioral and neuroimaging protocols. On the long term, this enterprise promises a mechanistic understanding of the intertwined dynamics linking the accumulation of personal experiences and brain maturation across development.

The talks of the symposium will provide research examples that showcase the strengths of such an approach in understanding how infants and children develop abilities to learn culturally relevant information, to remember specific details of their personal lives, how language development supports socioemotional skill acquisition, and how developmental changes in the biological underpinnings of sleep relate to developmental changes in learning and memory. In addition to presenting first results, the talks also provide a glimpse into current best practices in developmental cognitive neuroscience.

IS 06 - 1

HIPPOCAMPAL CONTRIBUTIONS TO MEMORY SPECIFICITY ACROSS CHILDHOOD AND ADOLESCENCE

Keresztes A.

Research Centre for Natural Sciences, Hungarian Academy of Sciences, Budapest, Hungary

The developing child, like all adaptive learning systems, needs to meet two complementary and partially conflicting goals: detecting regularities in the world versus remembering specific events. The hippocampus (HC) – a bilateral brain region in the mediotemporal lobes (MTL) – keeps a fine balance between computations that allow us to extract commonalities of incoming information (i.e., generalization) and computations that enable us to encode highly similar events into unique representations (i.e., specificity). During early ontogeny, the rapid and cumulative acquisition of world knowledge through generalization contrasts slower improvements in the ability to lay down highly specific, long-lasting episodic memories. In this talk, I will highlight recent behavioral and neuroimaging evidence suggesting that maturational differences among subfields within the hippocampus contribute to the lead-lag relation between generalization and specificity during childhood and adolescence. I propose that developmental changes within the hippocampus affect the fine balance between specificity and generalization across development.

IS 06 - 2

EARLY DEVELOPMENT OF THEORY OF MIND IN CHILDREN: NEURAL CORRELATES, MENTAL HEALTH ASSOCIATIONS AND INTERGENERATIONAL CONSIDERATIONS

Raschle N.M., Borbás R., Stadler C., Fehlbaum L.V.

Department of Child and Adolescent Psychiatry, Psychiatric University Clinics Basel, Switzerland

Background: Brain development results from a complex interplay of dynamic and adaptive processes. It progresses from essential lower-order to higher-order structures, which is paralleled in behavior. One such example is the development of socioemotional and language skills, where early language abilities precede the successful development of socioemotional behaviors. However, the early neural correlates supporting this mechanism and the impact of environmental variables have rarely been studied directly.

Methods: Here we aim to overcome this gap in knowledge by: (I) developing a child-friendly Theory of Mind (ToM) neuroimaging task suitable for measuring the neural correlates of socioemotional skills from kindergarten on; (II) characterizing the state-of-the-art knowledge of the neural correlates of ToM in children and adults through meta-analytic procedures and using the ToM task in child-mother dyads (6-10y); (III) examining the effects of childhood psychiatric and/or language disorders on later socioemotional brain functioning.

Results: (I) Our ToM task was evaluated behaviorally in 60+ children (3-9y) and proved feasible for the MRI environment around 5y+. Whole-brain neuroimaging in 28 adults confirmed recruitment of ToM-related areas (dorsomedial/ventromedial prefrontal cortex, bilateral temporoparietal junction, parietal cortex, right temporal sulcus). (II) These findings were in line with meta-analytic evidence based on prior ToM fMRI-work in children/adults. First own evidence in children aged 6+ indicate that children employ similar brain areas as adults. Additionally, age-specific changes emerged (e.g., medial prefrontal cortex). (III) Preliminary data indicated significant differences in prefrontal and posterior brain regions during mentalizing in children with versus without a history of childhood psychiatric disorders.

Conclusion: Our work lays the foundation to further knowledge of the early neural development of socioemotional behaviors and sheds light on a time period that constitutes the peak age of onset of psychiatric childhood disorders. Future analyses of neural similarity patterns in mothers/children hold the potential to inform about intergenerational comparability.

IS 06 – 3
NEURONAL OSCILLATORY DYNAMICS OF MEMORY FORMATION IN EARLY DEVELOPMENT

Köster M.

Freie Universität Berlin

The wake human brain continuously samples novel information from the environment to retain a coherent representation of the environment. In the adult brain, memory formation is associated with increased theta oscillations (3-8 Hz), which reflect a mnemonic control processes, and desynchronized alpha oscillations (8-14 Hz), which reflect an attentional gating mechanism. From a developmental perspective, two central questions are, if similar neuronal dynamics guide memory formation processes in childhood and infancy, and which neuronal dynamics underlie the gradual changes in memory functions and the underlying neuronal architecture. In this talk, I will summarize the first steps of my colleagues and myself in pinpointing the neuronal oscillatory dynamics of early learning processes. These include the neuronal oscillations underlying intentional learning processes in school age, the updating of basic representations in the infant brain (in a violation of expectation paradigm), as well as the neuronal dynamics in the infant motor cortex that underlie infants imitation learning, as one of the earliest explicit markers for human memory formation. In summary, these findings highlight the utility to look at neuronal oscillatory dynamics to understand learning processes in childhood and infancy – a period of intense brain maturation and learning, we still know very little about.

IS 06 – 4
SLEEPING WELL, LEARNING BETTER? THE CO-DEVELOPMENT OF SLEEP AND MEMORY

Werkle-Bergner M.[1,2]

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Sleep, like breathing, arguably belongs to the most basic bodily needs. Accumulating evidence points to the importance of healthy sleep for learning, memory, and cognition in general. Obviously, a lack of sleep impairs the likelihood of successfully acquiring new knowledge. And after a full day of learning, sleep supports the stabilization and integration of new experiences into a framework of personal memories, while setting the stage for new learning during ensuing wakefulness.

Across the lifespan, sleep architecture (the regular succession of different sleep stages) and sleep physiology (the expression of neural activity patterns during sleep) undergo substantial changes. They are paralleled by massive knowledge gains and improved cognitive performance in child-development. However, due to a shortage of long-term observations, the developmental mechanisms that lead to changes in sleep patterns within a given child are fairly unknown. Even more importantly, very little is known about the neurocognitive mechanisms connecting learning, sleep, and memory in the course of childhood.

Over the past years, in our research group, we developed experimental approaches that allow the within-person tracking of learning histories for individual memory contents. By tracking the fate of individual memories, we can investigate how sleep contributes to memory enhancement and the protection against forgetting, respectively. We will present first results from cross-sectional studies pointing to age-differences in rhythmic neural activity during sleep that are linked to age-differences in memory maintenance and forgetting.

Overall, we will suggest a research strategy that combines experimental approaches with longitudinal follow-up assessments in order to determine true developmental changes in the cognitive and neural processing architectures that connect learning, sleep, and memory within individual children.

S 52

CAREGIVING OF TURKISH MOTHERS AND EMOTION REGULATION IN EARLY CHILDHOOD

Arikan G.

Chair & Discussant, Ozyegin University, Psychology Department, Istanbul, Turkey

Caregiving is defined as a goal-directed behavioral system that serves child's welfare (George & Solomon, 1993). The caregiving behaviors and parenting strategies can vary based on maternal characteristics and in different settings. These behaviors and strategies can influence children's development and school life. In this symposium, we will explore how Turkish mothers' caregiving and parenting strategies differ based on maternal characteristics in toddlerhood, and preschool years in dyadic contexts. Moreover, role of parenting in children's social competence during school years will be examined with mother and teacher reports. In the first study, the results of a latent profile analysis will demonstrate contribution of maternal risk factors of SES and mental health to emotion socialization strategies of mothers (N= 680) with toddlers (Age Range = 18-38 months). Preliminary results indicated SES is related to maternal depression, anxiety and problem-focused strategies. Anxiety is negatively associated with problem-focused strategies. The second study examines the influence of mothers' (N=52) caretaking experiences on their caregiving practices in relation to their children's (Age Range=3-4 years) novel food tasting/exploration context. Early findings showed not mothers' attachment avoidance, but attachment anxiety is related to mothers' memories of paternal overprotection and parental rejection. Both attachment anxiety and avoidance were positively associated with authoritarian parenting. The third study involves a disappointing gift paradigm and how mothers (N=50) of preschoolers' (M Age=57.76 months) vary in their responses. Turkish mothers showed warmth followed by information-seeking and problem-focused strategies, and distracted their children with positive affect. Also, mothers who neglected sadness were more likely to display positive affect. Last study consists of 140 children (M Age=62.59 months), their mothers and teachers from relatively low SES group. According to preliminary results parental conflict was negatively related to children's emotion regulation and social competence. Child lability mediated the relation between parental conflict and social competence.

S 52 – 1

TURKISH MOTHERS' EMOTION SOCIALIZATION STRATEGIES IN RELATION TO MATERNAL RISK FACTORS OF SES AND MENTAL HEALTH DURING TODDLERHOOD

Arikan G.

Ozyegin University, Istanbul, Turkey

According to Eisenberg et al. (1998) emotion-related socialization is associated with child's negative emotionality and competence level. The emotion socialization strategies that parents adopt when they deal with children's negative emotions can be supportive (i.e., constructive) or unsupportive (i.e., disapproval) (Spinard et al., 2007). Lack of education, low income and history of maternal mental health problems affect children's development (Fisher et al., 2012) and demonstrating effective parenting strategies (Levendosky, et al., 2006). The aim of the present study is to examine how Turkish mothers of toddlers vary in emotion socialization strategies based on different levels of risk factors, namely, SES and maternal mental health. Mothers (N= 680) of toddlers (Age Range = 18-38 months) reported their household income, education level, maternal mental health (Brief Symptom Inventory; Derogatis, 1992) and emotion socialization strategies (Coping with Toddlers' Negative Emotions Scale; Spinrad, et al., 2004). The preliminary analysis showed that maternal education and household income are strongly and positively associated (r=.79, p<.01) and they showed a similar pattern of associations with mental health and emotion socialization strategies. Therefore, a composite score of SES is used. SES is negatively associated both with maternal depression (r=-25, p<.01) and maternal anxiety (r=-.20, p<.01), and positively associated with problem-focused strategies (r=.14, p<.01). Maternal depression is positively associated with maternal anxiety (r=.85, p<.01). Maternal anxiety is negatively associated with problem-focused strategies (r=-12, p<.01). Emotion-focused strategies is positively associated with problem-focused strategies (r=.80, p<.01) but not related to SES and mental health variables. A latent profile analysis will be conducted in order to compare different profile solutions of maternal risk factors and emotion socialization strategies. Understanding how mothers vary in their emotion socialization strategies with respect to different levels of risk factors would enable person-tailored and group-tailored prevention and intervention programs.

S 52 – 2

ATTACHMENT, PARENTING STYLES AND NOVEL SITUATION EXPERIENCE – NOVEL FOOD ACCEPTANCE

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The maternal care-giving practices were shaped by mothers' attachment styles (George & Solomon, 1999), parenting styles (Collins & Ford, 2010) and child's temperament (Chang & Li, 2017). The mothers' reactions at the time of exploration can be an important indicator to understand their parenting characteristics (i.e., controlling and limiting) (Blissett, 2011). The present study thus examine the relationship between mothers' attachment styles, early memories of parenting experiences, current parenting styles and responses in the context of child's novel food experience. Mothers (N=52, Age Range= 24-46) filled a pack of questionnaires to measure mothers' attachment (ECR-R; Fraley, Waller, & Brennan, 2000) early memories of childhood (EMBU; Arrindell et al., 1999) and their parenting styles (Parental Attitude Scale-ETÖ; Karabulut-Demir & Şendil, 2008). A food plate including snacks and a novel fruit (Physalis) were presented to mothers and they were instructed to explore and feed their children (28 girls and 24 boys, Age Range= 3-4). Mother-child dyads will be coded in terms of exploration, novel food acceptance and novel food eating by two independent coders (Haycraft & Blissett, 2012). 25% of the mothers with high attachment anxiety and 43% of the mothers with high attachment avoidance found their children as 'difficult'. Anxious attachment found to be positively related with mothers' authoritarian parenting style (r= .42, p< .05), mothers' memories of paternal overprotection (r= .51, p< .01), and both maternal and paternal rejection (r= .33, p< .05; r= .60, p< .01, respectively). Whilst, mothers' attachment avoidance was only positively related with mothers' authoritarian parenting style (r= .43, p< .01). Preliminary findings showed that mothers' attachment dimensions are associated differently with early childhood experiences and parenting practices. In order to examine the role of mothers' attachment, early recollections of parenting and parenting styles, and child's temperament in food exploration, further analysis will be performed.

S 52 – 3

TURKISH MOTHERS' EMOTION SOCIALIZATION IN A DISAPPOINTING GIFT PARADIGM

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Caregivers play a key role in emotion socialization by engaging in conversations about feeling states, modeling their own emotion expressions, and providing specific responses in emotionally-charged situations. Using direct behavioral observations, the aim of the present study was to examine how Turkish mothers of preschoolers reacted to their children in an emotionally-charged situation. Fifty Turkish preschoolers (26 boys, M age = 57.76 months) and their mothers attended a laboratory session. Eighty percent of the mothers had at least high school degree. For the present study, observations of a disappointing gift paradigm were used: each child was asked to rank order his/her gift preferences among eight toys. At the completion of several tasks, child was presented his/her least-desired gift. Next, the mother, who was uninformed about the situation was asked to enter the room and stay with her child for two minutes. All sessions were videotaped. Mothers also completed questionnaires on emotion socialization and demographics. Based on recurrent themes of mothers' responses, twelve coding categories were created. The presence or absence of each code was rated in 5-second epochs. Results revealed that Turkish mothers most frequently displayed warmth (i.e., comforting and reassurance), followed by information-seeking and problem-focused strategies, which were followed by distraction and display of positive affect. Emotion labeling, minimization, and punitive responses were observed infrequently. Significant associations between mother ratings of emotion socialization and direct behavioral observations were also detected. Mothers who endorsed low rates neglecting sadness were more likely to display positive affect, and those who endorsed frequent punitive responses were more likely to scold their children in the laboratory. Results will be discussed with respect to similarities and differences in the patterns of relations derived from research in the West.

S 52 – 4

MEDIATIONAL ROLE OF EMOTION REGULATION BETWEEN THE QUALITY OF PARENTING AND SOCIAL COMPETENCE IN PRESCHOOL CHILDREN FROM TURKEY

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Social competence refers to the ability to form and maintain close relationship in adoptive ways in social settings. Interest in identifying the antecedents of early social competence has been increasing because studies have shown that if children cannot achieve minimal social competence by age 6 they are more likely to be at risk to develop serious adjustment problems in later life. Researchers have discussed that parental influence in social competence seem to be the most salient environmental influence because parents are the primary source of social and emotional support for children during the first years of life. Also, a considerable body of research has identified emotional and behavioral competencies as crucial components in children's social functioning. For instance, children who are able to regulate strong emotions are less aggressive, exhibit more prosocial behavior, and have higher social status with peers. Moreover, parenting is not only related to social competence but also emotion regulation skills develop initially within parent-child relationship. Thus, the aim of the study is to explore how the quality of parental closeness and conflict predict social competence through child's emotion regulation in relatively low SES families in Turkey. Total 140 children (81 males, 59 females, Mage=62.59 months, SD=8.52) and their mothers and teachers participated in the present study. Results showed that parental conflict was negatively related to emotion regulation and social competence, but positively related to emotional lability/negativity. Emotional lability/negativity was negatively related to social competence, but not emotion regulation. Parental closeness was not related to any of the variables. SEM analyses revealed that lability mediate the relation between parental conflict and social competence. These findings suggest that although there is a relation between child's emotion regulation and parental conflict but high emotional lability increases parental conflict with children which in turn decreases social competence in young children.

Sunday, September 1st, 2019

Symposium 53

Vergina Hall 11:45 – 13:15

S 53

PARENTING COGNITIONS: UNDERLYING PROCESSES AND CULTURAL DIFFERENCES

Lippold M.

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Parent cognitions, such as their efficacy, goals, and beliefs about parenting, have important implications for their parenting behavior. In these four papers, we examine parents' cognitions about their parenting role, how they relate to parenting behavior, and how they differ by culture. In paper 1, the authors examined how perceptions of parental competence were related to mindful parenting and parent-youth communication. Parents with higher competence engaged in more mindful parenting, which subsequently improved parental solicitation of information from their children. In paper 2, the authors test how mothers' goals for their children vary by SES and race. Latina mothers expressed more familial goals and respect for authority. Latina and African American mothers endorsed more goals for civic and religious engagement. SES predicted goals for respect toward authority only among European and African American mothers. In paper 3, the authors examined developmental correlates of cultural parental self-efficacy. Parental involvement was an important predictor of cultural PSE for both Lantix and Asian American parents. For Latinx parents, parental involvement interacted with grade; PSE decreased with grade, but more so if parents were not highly involved. In paper 4, the authors discuss the creation of a video series that aims to improve parent-efficacy and confidence in having conversations about race with their children. Videos with tips on how to have difficult conversations may reduce parenting stress and increase their perceptions of efficacy to engage in racial-ethnic socialization. Results underscore the importance of parent cognitions for parenting behaviors and as a salient intervention target.

S 53 – 1

PARENTAL COMPETENCE, MINDFUL PARENTING, AND PARENT-CHILD COMMUNICATION

Lippold M.[1], Jensen T. [1], Duncan L. [2], NiX R.[2], Coatsworth J.D.[3], Greenberg M.[4]

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[2] The University of Wisconsin at Madison; School of Human Ecology; Madison, WI; U.S.

[3] Colorado State University; Dept. of Human Development and Family Stuides; Fort Collins, CO; U.S.

[4] The Pennsylvania State University; Department of Human Development and Family Studies; State College, PA; U.S.

Background: Parent-child communication has been associated with positive youth outcomes, yet little is known about factors that predict communication. Parental perceptions of competence in their parenting and mindful parenting (marked by a present focus, compassion, and non-reactivity) are two potential influences on communication. This study (a) assesses the bidirectional linkages between mindful parenting and parental competence and (b) examines the mediational processes that link mindful parenting and parental competence with parent-child communication.

Method: The study used data from the Mindfulness-Enhanced Strengthening Families Program (n=432, youth mean age: 12.14). The cross-lagged model included three measurement occasions (a) mindful parenting and parental competence at baseline (T1) and post-test eight weeks later (T2) and (b) parent child communication (youth disclosure, parental solicitation) one year later (T3). Control variables included baseline levels of outcome variables, intervention condition, education, race, age, and gender.

Results: Mindful parenting had bidirectional linkages with parent cognitions. Higher levels of mindful parenting (Time 1) were associated with higher parental competence at Time 2 (b = .23). Higher levels of parental competence at Time 1 were associated with higher mindful parenting at Time 2 (b =.08). Tests of indirect effects found mindful parenting at Time 2 mediated the link between parental competence (Time 1) and parent solicitation (Time 3). Model fit was good (RMSEA = .04; CFI= .95; TLI = .95).

Conclusions: Parents who are more mindful may be more likely to pause before responding to child behavior and to have compassion for themselves and their child—which may help them feel more competent in parenting. Parents who feel competent may also be more likely to be mindful in their parenting behavior; parent cognitions may play an important role in parents' ability to be present, nonjudgmental, and compassionate with their children. Parental competence may improve parental solicitation through its effects on improving mindful parenting.

S 53 - 2

ETHNICITY, SOCIOECONOMIC STATUS, AND MOTHERS' GOALS FOR ADOLESCENTS

Buchanan C. M.

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Background: Parents' goals for children influence parenting behavior (e.g., Chao, 1995). Thus, we examined mothers' goals for adolescents related to notions of typical adolescent needs and development (e.g., risk-taking, personal autonomy). Because beliefs about what is normal, inevitable, or healthy at adolescence are culturally influenced (e.g., Brown et al., 2002), we hypothesized that ethnicity and socio-economic status (SES) would predict differential endorsement of individualistic vs. communal (including familial) goals, and goals concerning risk-taking and respect toward authority.

Methods: 60 European American (EA), 63 African American (AA), and 60 Latina mothers with at least one child between 11 and 18 years participated. SES varied within each ethnic group. Mothers ranked the importance of 18 goals related to adolescents' risk-taking, parent-child relationships, and civic engagement.

Results: Mixed-model ANOVAs predicting goals indicated several main effects of ethnicity, no main effects of SES, and two ethnicity X SES interactions. As expected, Latina mothers were most likely to endorse communal/familial goals (e.g., adolescents having a close relationship with parents) and respect for authority, and least likely to endorse individualistic goals (e.g., following personal interests) and goals related to peer orientation (e.g., being popular among peers). Latina and AA mothers ranked goals for civic engagement and for engaging in religious/spiritual activities higher than did EA mothers. Lower SES predicted higher emphasis on respect toward authority among EA and AA mothers.

Conclusions: Results suggest that cultural differences in individualistic vs. communal orientation predict different maternal goals for adolescence. Mothers' goals likely influence practices that differentially promote behaviors consistent with stereotypes. This might be one potential source of self-fulfilling prophecies at adolescence (Buchanan & Hughes, 2009).

S 53 – 3

DEVELOPMENTAL CORRELATES OF CULTURAL PARENTAL SELF-EFFICACY AMONG ASIAN AND LATINX PARENTS

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[2] University of Orebro; School of Law, Psychology, & Social Work; Orebro, Sweden

Background/Aims: Parents in diverse societies must contend with their confidence or efficacy in transmitting culturally-relevant messages to their children. Based on Bandura's (1997) work, the current study centers on cultural parenting self-efficacy (PSE), defined as parents' assessment of their ability to effectively teach or instill cultural knowledge, values, and pride. While earlier work implicated positive links between cultural PSE and parenting competence, and its protective role against the negative acculturation stress and parenting competence link (Kiang, Glatz, & Buchanan, 2017), it is yet unclear what predicts cultural PSE. We examine how Asian American and Latinx parents' reports of PSE related to heritage, American, and bicultural socialization is associated with key developmental correlates including child grade, parent-child involvement, and important demographic variables (e.g., gender, socioeconomic status).

Methods: Data were collected from 58 Asian and 153 Latinx parents (65% fathers) of children in grades 6-12. Three questions (1 = Nothing to 9 = A great deal) assessed cultural PSE: "How much can you do to… get your child to practice the customs of your culture of origin/help your child combine Hispanic/Asian and non-Hispanic/non-Asian ways of doing things/instill in your child a sense of what it means to be an 'American'?" Parental involvement and demographic measures were also assessed.

Results: For both groups, involvement was correlated with all three PSE domains. For Latinx parents, children's grade was negatively linked to bicultural PSE; however, parent-child involvement compensated for the negative consequences on parental efficacy that might be related to age-related autonomy bids and development.

Conclusions: Cultural PSE is an important, understudied facet of parental efficacy, linked to positive indicators of parent-child relationships. Deeper discussion will focus on further understanding and boosting the personal/ecological variables that promote or hinder this highly-salient and culturally-relevant parental cognition.

S 53 – 4

SUPPORTING PARENTS IN HAVING COURAGEOUS CONVERSATIONS: THE ONE TALK AT A TIME VIDEO SERIES

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Background/Aims: Parents play a crucial role in helping their children navigate our diverse and racially conscious world. Parent-child conversations about race related issues are needed to help children construct a strong foundation and to thrive. The way in which parents teach their children what it means to be a person of color and how to navigate racially salient interactions (e.g., racism, discrimination) is referred to as racial-ethnic socialization (RES). A key need is to support parents' management of their own race related experiences and parenting stress while promoting social, emotional and cultural development in their children via development of RES informational products. Such products may improve parents' self-efficacy to have conversations about race.

Methods: Data were collected via separate focus groups with 20 African American, 20 Mexican immigrant, 20 Chinese immigrant parents and their middle school children. Focus groups targeted understanding parental and youth perspectives on barriers to RES and coping with racially salient interactions. Data were analyzed to inform the development of conversation modules, conversation guide and creation of a video series to help parents have racially salient conversations.

Results: The video series One Talk at a Time is designed to reflect true, authentic conversations and scenarios between family members that resonate with each sub-group. The videos offer strategies to help parents to be more confident, efficacious and comfortable in having racially salient conversations. We call this approach - Ready Set Talk.

Conclusions: An overview of the conception of One Talk at a Time followed by description of the Ready Set Talk approach will be presented. Demonstration of video excerpts will be used for illustration purposes. Finally, findings from a randomized pilot testing the relative impact of the videos on individual and familial outcomes in a sample of Black, Latinx and Asian families will be presented.

Sunday, September 1st, 2019

Symposium 54

Makedonia Hall A 11:45 – 13:15

S 54
PROSOCIAL CHILD: CONTEXTUAL AND CULTURAL FACTORS THAT INFLUENCE CHILDREN'S PROSOCIAL AND MORAL BEHAVIOR

Myślińska Szarek K.

Chair, SWPS University of Social Sciences and Humanities, Faculty in Sopot

Prosocial behavior is one of the basic factors shaping social relationships. Research shows that children from very early age are willing to help and share resources with others. However many studies indicate that prosocial behaviors are also very highly biased. The symposium presents the results of research indicating a wide range of factors that affect the pro-social and moral behavior among young children. The first presentation shows how pro-social behavior depends on developmental factors such as emotion knowledge, theory of mind, and language. The second paper focuses on how cultural socialization goals influence on parental practices and how it affects pro-social attitudes, comparing results from Ecuador and Germany. The third presentation concerns how children understand distributive justice and how they distribute rewards and responsibility between themselves and other team members. Finally the last paper shows which of the two effects: social reciprocity or group affiliation is stronger in the context of pro-social behavior. Together, these findings shed new light on different mechanisms that shape children's prosocial attitude and moral behavior.

S 54 – 1
THE DETERMINANTS OF HELPING AND SHARING BEHAVIORS: A STUDY WITH TODDLERS AND PRESCHOOLERS

Conte E., Grazzani I., Pepe A.

Department of Human Sciences for Education, University of Milano

Recent studies on prosocial behaviors have proposed that young children's helping, sharing, and comforting behaviors are driven by particular social-cognitive skills that lead to successfully act towards another (Dunfield, 2014; Paulus, 2018). Because of such differences, it is important to understand whether and how these conducts differently rely on social cognition and language skills, which are all correlates of prosocial behaviors (Ensor et al., 2011; Girard et al., 2017; Imuta et al., 2017). Hence, the aim of this study was to investigate the role of emotion knowledge, theory of mind, and language in the occurrence of helping, sharing, and comforting behaviors in 2- and 3-year-olds, while taking into account age and gender.

Participants were 149 children (Mage = 35.6 months, SD = 6.77 months). A multitrait mixed-methods design was adopted, consisting of naturalistic observation of children's spontaneous prosocial behaviors toward peers (Prosocial Behavior Observation Grid, developed ad hoc) and directly administered tasks to assess emotion knowledge (AKT by Denham, 1986), theory of mind (Diverse-Desire Task by Wellman & Liu, 2004; True-Belief Task by Wellman, 1991), and language (PPVT-R by Stella et al., 2000).

Ordinal logistic regression analyses showed that emotion knowledge, theory of mind, and language, together with age and gender, contributed to explaining helping and sharing behaviors according to different patterns: Emotion situation knowledge (b = 0.22, p = .006) and gender (b = −0.90, p = .027) mainly accounted for the occurrence of helping behaviors; theory of mind (b = 0.93, p = .036) and language (b = 0.042, p = .019) mainly contributed to explaining sharing behaviors.

The present study adds key evidence to the recent literature on the independence of prosocial behaviors and their different associations with social cognition skills and language, supporting preventive interventions addressing young children's positive behaviors.

S 54 – 2

MOTHERS' SOCIALIZATION OF CHILDREN'S PROSOCIAL BEHAVIOR IN AN INDIGENOUS COMMUNITY IN ECUADOR AND IN MÜNSTER, GERMANY

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Helping behaviors that are intrinsically motivated at early ages (14-18 months) seem to be a struggle for older children in Western societies, who are rarely willing to contribute voluntarily at home. However, cross-cultural research shows that this is not the case in other parts of the world. For instance, older children in many indigenous communities contribute in household chores by their own initiative.

To better understand how these cultural differences emerge, we video-recorded 2-3-year-old children's contributions during a mealtime preparation at home, and analyzed their mothers' socialization practices in two different cultural contexts: the Kichwa indigenous community in Imbabura (Ecuador) and Münster (Germany). Additionally, we conducted interviews with the mothers regarding their socialization goals and practices and their children's contributions at home. Thirty-six families in each context participated in the study.

Based on an interval-coding system, we analyzed children's helping behaviors and mothers' practices before (e.g., requests) and after (e.g., praise) children helped. Preliminary results showed that indigenous children helped with more complex tasks than children in Münster. Indigenous mothers were more likely to formulate requests in an assertive way and were more like to employ relational praising (e.g, This is MY son!), whereas Münster mothers were more likely to employ autonomous praising (e.g., YOU did THAT great!). The interview data revealed that indigenous mothers expected their children to help in a wide variety of tasks and at an earlier age, and were more likely to interpret their children's attempts to participate as a motivation to help, whereas Münster mothers interpreted these attempts as a motivation to play.

Overall, the findings suggest that cultural-specific socialization goals and expectations have an influence on parental practices, that in turn, influence children's development of prosocial behaviors, and more specifically, their motivation to help at very early ages.

S 54 – 3

DEVELOPMENT OF ELEMENTARY SCHOOL STUDENTS' FAIRNESS JUDGMENTS ON DISTRIBUTION OF POSITIVE AND NEGATIVE RESOURCES

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Most research on distributive justice is concerned with allocation of positive resources such as rewards. Research on children's fairness judgments across distribution of positive and negative resources is limited. Hashimoto & Toda (2017) found that more 5-year-olds showed generous allocations across two distributions (rewards and responsibilities) than did the 4-year-olds, but the differences for age were not statistically significant.The aim of this study was to examine the developmental trends of elementary school children's fairness judgments on distribution of rewards and responsibilities.

The participants were attending a university-affiliated elementary school in western Japan: 99 2nd graders, 102 4th graders and 97 6th graders. A survey was conducted in class and participants were shown two scenarios. (1) Reward distribution: Either the participant or one classmate was more productive than the other in making decorations. (2) Responsibility distribution: Either the participant or one classmate played with toys. Participants were then asked how rewards/clean-up job after playing should be distributed. Four allocation types (Equity, Equality, Selfish and Generous) that can be applied to both distributions were used for analysis. The participants were also asked to write their reasons for each of their judgments.

For reward distribution, the number of children who showed Equity pattern was higher in older children (9.1% of 2nd graders, 15.7% of 4th graders, and 24.7% of 6th graders) but the Equality patterns were found less in older children (63.6%; 51.0%; 39.2%, respectively). Only small age differences were found for Generous patterns. For responsibility distribution, similar trends, as for reward distribution, were found for Equity and Equality patterns. However, the number of children who showed Generous pattern was higher in older children (48.5%; 54.9%; 58.8%, respectively). Children's reasons for their judgments were analysed qualitatively.

Findings suggest that the developmental trend of fairness judgments may vary due to what is to be distributed.

S 54 – 4

SOCIAL RECIPROCITY AND GROUP AFFILIATION AS FACTORS SHAPING PRESCHOOLERS' PRO-SOCIAL BEHAVIORS

Myślińska-Szarek K., Baryła W.

SWPS University of Social Sciences and Humanities, Poland

Numerous of studies on prosocial behavior among children show two main effects determining the direction of these behaviors: group affiliation and reciprocity of social relations. Research shows that children are more likely to help and share resources with members of their own group but preschoolers are more likely to help those who helped them before. The main aim of the study was to verify which of these two effects is stronger in the context of shaping prosocial behavior among preschoolers.

Two experiments were conducted in which 132 participants aged 4-5 years took part. During the procedure each child observed a show involving three dolls, in which one of the characters was a member of the main character's own group, the other was out-group member. The child's task was to choose from whom the main character should expect help, cooperation, comfort, or sharing resources, with a member of a foreign group or a socially invested character. Four prosocial behaviors were tested: helping and sharing resources (Study 1), comforting and cooperation (Study 2).

The effect of reciprocity in the context of prosocial behaviors turned out to be a stronger predictor of choices than group membership, but only in the case of helping (40% in-group choices in social investment condition vs 73% in-group choices in control condition), sharing resources (40% vs 66%), and cooperation (31% vs 31% vs 68%). In the case of comforting, the participants often indicated the in-group member (59% vs 83%).

The present studies show that the effect of reciprocity in the context of prosocial behavior is a stronger predictor of choices than group membership but only within a specific type of prosocial attitude. Moreover, the research provides further evidence for the different characters of the pro-social behaviors and the necessity to analyze them as separate social phenomena.

Sunday, September 1st, 2019

Symposium 55

Makedonia Hall B 11:45 – 13:15

S 55
COGNITIVE TRAJECTORIES IN LOW- AND HIGH-RISK PRETERM POPULATIONS FROM INFANCY TO ADULTHOOD

Sansavini A.

Chair, Discussant, University of Bologna, Department of Psychology, Bologna, Italy

Preterm children are at risk for persisting cognitive and learning difficulties, but they are characterized by a wide interindividual variability. Level of prematurity (extremely- EP, very- VP, and moderate- MP) has a relevant role on cognitive trajectories, but it explains only part of this variability. This symposium aims at presenting cross-sectional and longitudinal data on cognitive trajectories of wide preterm samples from four European countries, compared with full-term (FT) children and children with learning disorders (LD), in different developmental phases, from infancy to adulthood.

Significant association between general cognitive skills examined in the 2nd and 5th year of age with no significant effect of level of prematurity in low risk preterm children were found by Perez-Pereira et al. (Spain). Subtle deficits in processing speed in MP children at 6 years, negatively associated with attention skills measured at 18 months, were shown by Van Baar et al. (The Netherlands). Delays in basic-level numerical skills, documented by slower reaction times and different eye-movement patterns in VP children with respect to TD and LD children were found by Guarini et al. (Italy). Greater ADHD symptomology and poorer attention spans in two cohorts of very preterm and extremely preterm adults in adulthood, associated with general cognitive skills assessed at 6 years, were shown by Eves et al. (Germany and UK).

Taken together, these findings highlight the relevance of examining the preterm population, including MP children, longitudinally on both general and specific cognitive skills using experimental tasks, besides standardized tests, to better understand their cognitive weaknesses and support them with customized interventions in order to prevent long-term cognitive problems.

S 55 – 1

COGNITIVE DEVELOPMENT OF LOW RISK PRETERM CHILDREN: A LONGITUDINAL STUDY FROM 22 TO 60 MONTHS OF AGE

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[2] University of A Coruña, Spain

Background and Aims: The results of a longitudinal study on cognitive development of 4 groups of healthy children with different gestational ages are presented. Approximately 50-70% of very or extremely preterm children are estimated to have cognitive malfunction. Gestational age (GA) seems to be associated to cognitive development. However, evidence of cognitive delay in low risk preterm children is uncertain.

Methods: A total of 181 healthy children were classified into 4 GA groups: 1) Very and extremely preterm, 2) moderately preterm, 3) late preterm, and 4) full-term children. The aims of the study were: 1) To check if there are differences in cognitive development among the four GA groups. 2) To investigate biomedical, environmental and individual factors as possible predictors of cognitive development at 22 and 60 months of age. The Batelle Developmental Inventory was used to assess cognitive development at 22 and 60 months of age. Other tasks were administered to check the possible effect of the quality of home environment and working memory. Biomedical and environmental information was obtained from medical records and interviews to the mothers.

Results and Conclusions: Repeated measures ANOVA performed on the raw scores obtained with the BDI at 22 and 60 months of age clearly indicate that there was no significant difference among the four groups and that the trajectories that the four GA follow are similar. The linear regression analyses show that the effect of the different predictors changes in relation to the time of measurement of cognitive development. Biological factors have a modest effect on cognitive development as measured at 22 months of age, although these factors lose their effect on cognitive development at 60 months. The variables which have the greatest effect on cognitive development at 60 months are cognitive results obtained earlier in development. GA have no significant effect on the prediction of cognitive development.

S 55 – 2

MODERATELY PRETERM BORN CHILDREN SHOW LESS OPTIMAL SKILLS IN PROCESSING SPEED AT 6 YEARS

Van Baar A.L., Bogičević L., Verhoeven M.

Utrecht University, Child and Adolescent Studies, Utrecht, The Netherlands

Background and Aims: Many studies on development of preterm compared to term born children show group differences in attention capacities, which also reflect cognitive processes and may underlie development of other skills. To study development of specific attention capacities of moderately preterm (MP) and full term (FT) born children, the Utrecht Tasks for Attention in Toddlers using Eye tracking (UTATE) was designed and done at 18 months corrected age, showing less optimal functioning of MP in orienting and alerting attention. At school age, these groups were evaluated again, aiming to measure intelligence, behavior and specific attention capacities.

Methods: 86 MP and 83 FT children were examined at 6 years. The WPPSI-III-NL was used and the COgnitive Test Application (COTAPP) for attention, executive functions, information processing speed and working memory, and specific subtests of the NEPSY-II and the TEA-Ch. MANCOVAs with correction for maternal educational levels were used to test group differences. Correlations between these measures and with the UTATE were studied.

Results: No group differences were found for the NEPSY and the TEA-Ch. Differences showing less optimal scores for preterm children were found for processing speed IQ and at univariate level for COTAPP reaction time and variability in reaction time, which correlated -.313 and -.359 respectively with processing speed and -.22 and -.23 with UTATE alerting.

Conclusions: At 6 years of age MP children show less optimal attention and cognitive functioning than FT children, specifically slower and less stable processing speed, which relates to alerting attention shown at 18 months.

S 55 – 3

MATHS AND MAGNITUDE COMPARISON IN VERY PRETERM CHILDREN, CHILDREN WITH DEVELOPMENTAL DYSCALCULIA AND TYPICALLY DEVELOPING CHILDREN

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Background and Aims: Maths difficulties have been found in very preterm (VPT) children (Aarnoudse-Moens et al., 2009). However, little is known about basic-level numerical skills underlying them (Guarini et al., 2014). The present study compared VPT children with children with developmental dyscalculia (DD) and typical development (TD) on cognitive skills, maths and magnitude comparison tasks.

Methods: We included 103 Italian-speaking 4th-5th grade primary school children (30 VPT, 19 DD, 54 TD), assessing cognitive skills (IQ, attention, digit span, speed processing), maths (number knowledge, written calculations, accuracy, speed), magnitude comparison of dots and Arabic digits (accuracy and RTs). Eye movements were coded in the dot-comparison task (number and duration of fixations and dwells).

Results: No significant differences among groups were found in cognitive skills, except for speed processing, where DD resulted slower than VPT and TD children. On maths, VPT children showed more difficulties than TD peers in number knowledge; DD children performed worse than VPT and TD peers in all skills. In magnitude comparison tasks, no differences were found in accuracy, whereas different patterns were found in RTs. DD and VPT children were slower than TD peers in dots task, whereas DD were slower than VPT and TD peers in digits task. Different patterns of eye movements were found. VPT made a higher number of fixations, but shorter, to the target and the distractor compared to DD and TD children. DD made a lower number of dwells to the target compared to TD children; no difference in dwells was found between VPT and TD children.

Conclusions: VPT children had persistent delays in basic-level numerical skills that were highlighted by different patterns of eye movements. The profile of VPT children was different from that of DD and TD peers, suggesting the need of specific follow-up programmes and interventions for this population.

S 55 – 4

EXPLAINING ATTENTION DIFFERENCES OF VERY AND EXTREMELY PRETERM COMPARED TO TERM BORN ADULTS

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Background and Aims: Executive functioning has been proposed as a key predictor of attention problems. However, most studies have been cross-sectional rather than longitudinal. This two cohort study investigates the role of executive and cognitive functioning for Attention-Deficit/Hyperactivity Disorder (ADHD) symptoms in very preterm/very low birthweight(VP/VLBW) or extremely preterm (EP; <26 weeks gestation) adults.

Methods: A cohort of VP/VLBW, the Bavarian longitudinal study (BLS) and of EP, the EPICure Study, followed participants throughout childhood and into early adulthood (BLS N=194, EPICure N= 107). Both cohorts also followed a control group of fullterm born children (BLS N= 197, EPICure N= 60). Adult ADHD symptomology (26 and 19 years, respectively) was assessed in both cohorts and their attention span rated by trained observers. Executive functioning was assessed in adulthood with measures of inhibitory control and working memory; additionally intelligence in childhood (assessed at 6 years of age) was considered as a third factor and analysis controlled for sex. Hierarchical regression analyses were used to explore the association of preterm status on ADHD symptoms and ratings of attention span and whether specific executive function in adulthood or general cognitive ability measured decades before explain attention problems in adulthood.

Results: Very or extremely born preterms had greater ADHD symptomology, specifically inattention and were observed to have poorer attention span . Only a small part of the differences found between preterms and controls were explained by executive functioning measures. Childhood IQ had the greatest ability to explain the differences between groups in attention scores and was the most consistent predictor of adult inattention.

Conclusions: Preterm adults are at increased risk for problems with inattention. These appear to be primarily due to a general cognitive deficit, rather than a specific executive functioning deficit.

Sunday, September 1st, 2019

Symposium 56

Mycenae Hall 11:45 – 13:15

S 56
NEUROSCIENTIFIC INSIGHTS ON ATTENTION DEVELOPMENT

Wetzel N.
Chair & Discussant, Leibniz Institute for Neurobiology, CBBS Research Group Neurocognitive Development, Magdeburg, Germany/ Center for Behavioral Brain Sciences Magdeburg, Magdeburg, Germany/ University of Applied Sciences Magdeburg-Stendal, Applied Human Sciences, Stendal, Germany

Bidet-Caulet A.
Chair & Discussant, Brain Dynamics and Cognition Team, Lyon Neuroscience Research Center (CRNL), Université de Lyon, Lyon, France

Attention plays an important role in the acquisition of knowledge and academic achievement. Therefore, it is essential to understand attention mechanisms and their development in order to understand and improve the acquisition of cognitive, social, and emotional knowledge and skills. On the one hand, voluntary selective attention allows us to focus on relevant information and to ignore irrelevant information. On the other hand, attention can be involuntarily captured by salient unexpected stimuli, resulting in distraction, but also allowing acquisition of new knowledge of the world.

The Symposium introduces studies on the development of both voluntary and involuntary attention throughout childhood with a special focus on auditory attention. We introduce the developmental trajectory of auditory change detection and attention and its underlying neuronal mechanisms from infancy to school age. In addition, the Symposium provides neuroscientific insights on auditory attention in the classroom. The presented studies include innovative methodological approaches such as the use of mobile EEG systems or the analyzing of event-related pupil dilation responses. Results can contribute to adapt learning environments to the needs of children, can enhance knowledge on language processing, and can be applied in research on attention-related disorders.

S 56 – 1

AUDITORY ATTENTION IN THE CLASSROOM – NEUROSCIENTIFIC INSIGHT FOR LEARNING ENVIRONMENTS

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Classroom is a typical learning environment for pupils. There are several features in classrooms that affect attention allocation in the auditory system. Specifically, the background noise level and the acoustics (attenuation and reverberation properties) in classrooms vary, creating sometimes good but in other cases very challenging learning situations. This talk will present several examples of neuroscientific experiments that are relevant in order to understand the challenges met by the learners and the actions and the arrangements that can be done for making learning easier and less stressful.

The talk will cover the basic development of auditory streaming in infancy and childhood. The capability of dividing the auditory input into relevant streams on the basis of acoustic features in a Gestalt manner has already been shown in newborn infants (Winkler et al.). This capability, however, becomes challenged by the classroom environment in which the background noise is often generated by transient, separate noises that may carry relevance. The attentive skills of children vary, and those children whose attention is easily directed towards sounds suffer most from these transient events, interrupting their work.

The talk will also present some new pilot data from classroom EEG experiments that utilize the mobile EEG recording systems and semiautomatic acoustic analysis of background noise data. Our goal is to characterize the effects of noise on learning and to show which practical actions help pupils learn.

S 56 – 2

EARLY DEVELOPMENT OF NEURAL RESPONSES RELATED TO CHANGE-DETECTION AND ATTENTION IN INFANTS

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Preverbal infants are apt and efficient learners. This rapid ability to learn forms the basis for attachment, language development and facilitates the formation of other complex cognitive processes as infants rapidly start to familiarize themselves with their surroundings and caregivers. One important facet of early learning is infants' efficient ability to detect differences or changes between, usually auditory, stimuli, to divert their attention to these changes, and thus learn from them. As infants' efficient ability to learn is crucial for positive developmental outcomes, assessing the neural basis of infant change-detection and attentional processes has garnered much interest.

However, it has been abundantly clear that infants' neural processes associated with detection of changes in stimuli drastically differ from those of adults; indeed, it is still debated whether the neural responses observed are more indicative of attentional shifting or change detection, or both. Although various studies have assessed the ontogeny of change-related responses in infants, the studies have resulted in variable results and plethora of post-hoc explanations have risen to explain the variation.

In this brief presentation, I describe the morphology of change-related / attentional responses during the first year of life on basis of nearly all previous work. Second, I assess the factors underlying drastic variability and differences in polarity of the change-related responses. Third, I critically evaluate the hypotheses linking the change-related responses (and the variability or differences in polarity in these responses) to specific cognitive processes infants and suggest possible avenues and methods for further studies. I conclude by proposing possible avenues of future research on how the infant neural underpinnings of change-detection and attention might best be characterized and studied.

S 56 – 3

DEVELOPMENTAL TRAJECTORY OF VOLUNTARY AND INVOLUNTARY ATTENTION DURING CHILDHOOD

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Attention is a multi-facets process which permits to select relevant information from the environment. Attention can be voluntary oriented according to our goals (e.g. listening to the teacher), or involuntary captured by salient unexpected events that can be disturbing (e.g. a classmate laughs) but also vital (e.g. fire alarm). Therefore, a good balance between voluntary and involuntary attention is crucial to be task efficient while being aware of our surroundings.

We developed a new paradigm to assess this attentional balance, but also to measure sustained attention, phasic arousal, and inhibitory control.

We tested a large cohort of participants from 6 to 25 years old and found distinct developmental trajectories for the different facets of attention. While voluntary orienting of attention was already found mature at 6 years old, inhibitory control slowly improved from 6 to 25 years old. Moreover, the behavioral cost of involuntary attention orienting towards distracting sounds was found to drastically decrease at 7 years, while slowly reducing from 8 years to adulthood.

These results bring new insight on the origin of the increased distractibility observed in children and will be valuable to specify the diagnosis of children with attention disorders.

S 56 - 4

CAN'T IGNORE - ATTENTIONAL DISTRACTION IN EARLY CHILDHOOD

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Successful attention control is a prerequisite for many learning processes as it requires focusing on task-relevant information and inhibition of irrelevant information. The present studies focus on development of auditory-visual attention in young children.

In a behavioral study, four groups of children between the ages of four and ten years and adults performed an audio-visual distraction paradigm. The presentation of task-irrelevant novel sounds increased reaction times in a visual categorization task, demonstrating involuntary distraction of attention. This distraction effect significantly decreased with age. Results indicate a considerable maturation of attention control from the age of 4 to 6 years that continues until the age of 10 years.

To investigate involuntary attention mechanisms in even younger children, we tested the impact of environmental distractor sounds on the pupil dilation in 14-months old infants. Four types of distractor sounds, including an emotional sound, were presented within a sequence of repeated standard sounds while infants focused on a video clip. Distractor sounds elicited a strong pupil dilation response in infants and in an adult control group. A principal component analysis separated two components indicating parasympathetic inhibition and sympathetic activation of the two muscles controlling the pupil. The component scores evoked by distractor sounds with a high arousing potential differed between age groups. Results indicate that the pupil dilation response is a sensitive and specific marker of the development of involuntary attention in preverbal children.

Sunday, September 1st, 2019

Papers 43 – Education and Schooling II

Pella Hall 11:45 – 13:15

OP 250

BOY WONDERS: SCHOOLCHILDREN ASCRIBE EFFORT AND ACHIEVEMENT TO GIRLS, BUT EFFORTLESS ACHIEVEMENT TO BOYS

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Throughout their schooling, boys' achievement lags substantially behind girls', both in terms of performance and behaviour. Previous research suggests that this phenomenon is aggravated, through mechanisms such as stereotype threat and gender role conformity, by stereotypes that construct boys as less hard-working and even as less academically able (e.g., Hartley & Sutton, 2013). In contrast, recent research suggests that schoolchildren are more likely to see boys, rather than girls, as "brilliant" (i.e., extremely able: Bian, Leslie, & Cimpian, 2017). The present research addresses this paradox by investigating whether effort and achievement are stereotypically attributed to girls, but exceptional achievement (i.e., effortless achievement) is attributed to boys.

Children aged 9-11 (Study 1, n=137) and 6-9 years (Study 2, n=158) were presented with a series of six short scenarios describing a child in terms of their school effort and achievement. In each scenario, the level of effort (low/high) and achievement (low/average/high) displayed by the protagonist varied. Children indicated whether they perceived the child in each scenario to be a boy or a girl by selecting a silhouette image of either a boy or a girl, and then rated how confident they were with this choice (a little bit/quite a bit/a lot).

In both studies there was a significant interaction between children's attributions of effort and achievement. Children labelled the high-achiever as a girl when displaying high-effort, but as a boy when displaying low-effort. In addition, children labelled the low-achiever as a boy, particularly when displaying low-effort. Therefore, children identified girls as effortful achievers, but believed that boys were either effortless high-achievers or low-achievers regardless of effort.

Findings are consistent with cultural representation of brilliance as male and diligence as female and are discussed with regard to the current debate on the causes of boys' lower academic achievement.

OP 251

TOWARDS A REFINED INSIGHT IN THE SHIFTS IN ADOLESCENTS' MOTIVATIONAL PROFILES: A LONGITUDINAL STUDY

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Apart from students' level of motivation, also the type matters, as their motives can be rather controlled in nature, such as meeting external demands (external regulation) or bolstering one's ego (introjected regulation) or rather autonomous in nature, such as perceiving the learning materials to be personally relevant (identified regulation) or inherently interesting (intrinsic motivation). Rather unfortunately, a number of studies have suggested a steady decline in children's motivation across primary and secondary school. However, some of these studies are limited because of the use of a cross-sectional designs and the restricted number of motivational subtypes. In the present study, we sought to shed a more refined light on these longitudinal shifts in a group of N = 463 adolescents (Mage_time1 = 13.37 (3.06); 58.96% females), thereby identifying mean-level differences in motivational subtypes and examining whether and in what sense specific motivational profiles shift across a four-year period using Latent Profile Analysis. After LPA returned five different motivational profiles, cross-tabulating the shifts within every pair of waves indicated that adolescents in the good quality motivation profile had the least chance to shift towards the extremely low quantity motivation profile and vice versa. In addition, students in the first group only jumped to adjacent profiles (poor quality and high quantity group). Most of the variation was found for the low quantity group. In terms of profile stability, most students in the high quantitative profile remained stable over time. More advanced analyses will be performed at the time of the conference.

OP 252

CULTURAL INFLUENCES ON COUNTER INTUITIVE KNOWLEDGE DEVELOPMENT

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Knowledge acquisition and construction in astronomy is a difficult process, because the basic scientific concepts are counterintuitive. For instance, the earth appears to be flat, while it is a huge sphere in space. Knowledge in astronomy relies mainly on observation, testimonies and teaching that can give incongruent information. Few studies about knowledge construction in astronomy have taken into consideration as a possible developmental factor, the characteristic of the cultural context in which the child evolves.

In this study, we wanted to describe student knowledge about earth shape and night and day cycle in a cultural context where different and opposite viewpoints are available to children. 120 elementary and high school Burkinabe children (6 to 14 years old) took part in this study. They were individually interviewed with a semi directed questionnaire about their understanding of the Earth's shape and the day-night cycle. Characteristics of the cultural beliefs were precised from the additional interview of four adults of the community. Frequencies of answers were analyzed and a cluster analysis was added to identify main profiles in responses types.

Our results showed that 1) younger children's answers are mainly based on direct perceptions, traditional beliefs and observations like the flat Earth and the sun moving from west to east in the sky, 2) some scientific elements are observed in older children's answers without replacing intuitive beliefs, creating hybrid knowledge in astronomy.

We can conclude that the congruency of perception, observations and traditional beliefs (through testimonies) reinforces intuitive knowledge in astronomy. Moreover, when they are explicitly exposed to counter intuitive scientific explanations, Burkinabe children develop a worldview, mixing the scientific elements with their own initial one. This result illustrates how children build knowledge under the influence of different and sometimes incongruent information.

OP 253

ASSOCIATIONS AMONG PARTICIPANT ROLES, DOMINANCE AND PEER RELATIONSHIPS – A SHORTEN LONGITUDINAL APPROACH

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This study examined the associations among participant roles, peer relationships and dominance. Investigating bullying in relation to dominance and peer relationships is essential as bullying is involved to imbalance of power. This study aimed to examine the relations between 1) participant roles and dominance; 2) participant roles and peer relationships; 3) changes of participant role, and dominance and peer relationships.

Sixty-two kindergarten teachers in Z city, South Korea participated. They completed questionnaires of participant roles, social dominance, resource control strategies and peer relationships of children in their class (1324 children, aged 3-5). The data were collected twice in October, 2017 and January, 2018. Depending on the score of aggression, each child was assigned as aggressor, victim, aggressor-victim, and no role. Peer relationships were examined by peer likeability and perceived popularity. Dominance was investigated by social dominance and resource control strategies.

The results showed that 25-26% of the children were categorized into participant roles: 9-10% for aggressor, 7-9% for victim, 6-8% aggressor-victim. Aggressor was positively correlated to dominance whereas victim was not. Second, 'no role' children showed highest score in peer acceptance and perceived popularity, followed by aggressor, aggressor-victim, and victim. Third, about half of children (12%) assigned participant roles at time 1 maintained their roles at time 2. Role change or role maintenance was related to dominance; Children maintaining aggressor role kept their dominance level, and children losing aggressor role showed low dominance. Children became aggressor or aggressor-victim at time 2 increased their dominance. This study implies that social power or dominance is an important issue to prevent young children's bullying. Also, intervention should be implemented from early stage.

OP 254

UNIVERSITY-SCHOOL MENTORING: THE DEVELOPMENT AND IMPACT OF A 4-YEAR ACTION RESEARCH PROJECT BETWEEN STUDENT MENTORS AND PUPIL MENTEES

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Mentoring, educational transitions, widening participation

Background and aims: Cross-age mentoring has been used to promote educational aspirations amongst youth from disadvantaged backgrounds, and having pre-entry contact with university students can support young people's transition into higher education. Acting as a mentor has also been found to develop university students' employability and provide an authentic learning experience. This paper evaluates the development and impact of an action research project over 4 years, where Psychology undergraduate students in the UK mentored school pupils who met widening participation indicators of disadvantage.

Methods: A mixed-methods, action research approach explored the nature and impact of mentoring experiences. Mentoring activities and specific pre-post evaluation measures developed across the project, as findings from each year shaped the subsequent iteration. Across the project pupils in year 12 classes in 3 schools participated, with approximately 10 mentors each year. Questionnaires measured mentors' employability, self-efficacy, and self-identified goals, and mentees' aspirations, academic-related skills, and satisfaction with mentoring. Focus groups and open questions explored mentoring experiences.

Results: Project development across the years and factors affecting implementation will be described. Mentors' self-identified goals included experience working with young people, communication skills, career development, and leadership. Mentors' goal achievement, self-rated employability, and self-efficacy significantly increased. Mentors reported that their speaking skills and confidence developed, with benefits also seen for academic and career development. Benefits identified for mentees included enhanced insight into going to university, greater knowledge of Psychology, and gains in academic skills. Mentee satisfaction levels were generally high, but there was variation between cohorts in these and in changes in academic-related skills.

Conclusions: University-school mentoring can be a valuable experience for mentors and mentees, supporting students' employability and personal development and pupils' preparation for university transition. Multi-site research with a larger number of student mentors and pupil mentees would strengthen the evidence base.

Sunday, September 1st, 2019

Papers 44 - Happinness and Well-Being in the School Context

Florina Hall 11:45 - 13:15

OP 255

BALANCING YOU AND ME: THE MODERATING ROLE OF SELF-COMPASSION IN THE RELATIONSHIP BETWEEN EMPATHY AND WELL-BEING AMONG ADOLESCENTS

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Given the emphasis on enhancing adolescents' empathy in school-based settings, this calls for a closer investigation of the relationship between both empathy and well-being, especially focusing on the conditions behind this relationship. Involving taking a kind, accepting and non-judgmental stance towards oneself in times of failure, responding mindfully to the negative emotions arising from difficulties, self-compassion, as previous studies implied, is a promising factor that influences the relationship between empathy and well-being.

The present study examines the relationship between empathy and well-being (i.e., emotional/behavioural difficulties, perceived stress and life satisfaction) and studied the role of self-compassion as a moderator in this relationship. A set of questionnaires was presented to a sample of 742 adolescents - aged 14-17 years from two secondary schools and two high schools inThua Thien Hue Province, Vietnam. This helped to determine their empathy (Toronto Empathy Questionnaire), emotional and behavioural problems (Strengths and Difficulties Questionnaire), perceived stress (Perceived Stress Scale), life satisfaction (Life Satisfaction Scale) and self-compassion (Self-Compassion Scale). Instruments reflected satisfactory reliability and validity.

Results of a multiple regression analysis showed that empathy had a significant positive relationship with life satisfaction, but predicted higher stress and higher emotional/behavioural difficulties. Moderation analysis indicated that self-coldness significantly moderated the link between empathy and life satisfaction and emotional/behavioural problems, and self-kindness significantly moderated the link between empathy with perceived stress. Accordingly, adolescents in which a lack of self-kindness exists, increase the dark side of empathy; whereas those who mirror higher levels of kindness, can relieve stress from empathy. Overall, the findings suggest that the balancing act of being empathetic and not being touched by high stress-levels and emotional/behavioural problems, requires self-acceptance, mindful awareness and emotional self-regulation. The findings of this study also imply that efforts to enhance adolescents' empathy should be part of broader efforts to promote adolescents' self-compassion.

OP 256

FRIENDS OR NO FRIENDS IN THE CLASSROOM AND THE EFFECT ON PSYCHOSOCIAL WELL-BEING

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We investigated the depressive symptoms, self-esteem and classroom well-being of Dutch elementary school students in relation to having friends or not having any friends. In addition we investigated how psychosocial wellbeing changed when children developed at least one friendship during the course of the schoolyear.

As part of a large study on anti-bullying policy in Dutch schools we had a large number of elementary school students filling out a questionnaire in the fall of 2017 and spring of 2018. A total of 3864 children age 9-12 participated. Validated instruments for the measurement of depressive symptoms, self-esteem and classroom climate were included. The number of friendships was determined by reciprocal nomination of being ones friend.

Children who have no friends indicate much higher levels of depressive symptoms ($F = 22.78$; $p < .000$) and lower levels of self-esteem ($F = 20.90$; $p < .000$) compared to children who have at least one friend. Furthermore, children with no friends indicated a more negative well-being in their classroom ($F = 58,34$; $P < .000$), lower social acceptation ($F = 90,54$; $p < .000$), stronger feelings of isolation ($F = 43,78$; $P < .000$)) and conflict ($F = 18,48$; $p < .000$) and less feelings of cooperation ($F = 17,48$; $p < .000$) and lower feelings of cohesion ($F = 6,61$; $p < .05$). Children with no friends who developed at least one friendship during the course of the schoolyear indicated significant improvement on many of these outcome measures at the end of the year.

Social isolation and lack of friends can have a strong negative impact on children's psychosocial health and classroom wellbeing. Teachers should, besides focusing on preventing negative behaviors such as bullying between students, also focus on the strengthening of pro-social behavior and friendships between children.

OP 257

CHILDHOOD EXPERIENCES AND FEAR OF HAPPINESS: MEDIATING PATHWAYS VIA ATTACHMENT AND SELF-ESTEEM

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Aim: Experiencing positive emotions has been shown to associate with a range of salutary benefits, however some individuals, appear to limit these experiences out of fear. Fear of happiness has previously been associated with low self-esteem and attachment insecurity, however little is known about how these concepts relate to specific childhood experiences. The aim of this study was to explore relationships between fear of happiness, attachment, self-esteem and recalled childhood experiences.

Method: 343 adults (Mage = 31.70 , SD = 11.01) completed an online survey measuring fear of happiness, attachment anxiety and avoidance, self-esteem (self-liking and self-competence) and recalled childhood experiences of care, neglect and antipathy.

Results: Regression analyses confirmed that attachment anxiety (β =.14, p = .004) and avoidance (β=.40, p<.001) explain 20%% of variance in FOH. Childhood experiences explained 12%, with antipathy (β=.35, p<.001) as the sole independent predictor. Multiple mediation analysis revealed two significant serial mediation pathways, whereby the relationship between parental antipathy and fear of happiness was mediated by attachment avoidance, then self-liking (b = .10, BCa CI(.06, .15), and attachment anxiety then self-liking (b = .02, BCa CI(.01, .04).

Conclusions: This is the first study to test the relationship between childhood experiences and fear of happiness. The results suggest that those who experience higher levels of antipathy from caregivers are more likely to fear happiness and that this relationship is mediated by attachment insecurity dimensions, followed by low self-liking. These results support converging literature attesting to the negative impact of emotional abuse in childhood on later emotion regulatory capacity. They furthermore suggest that interventions focused on improving attachment security have the potential to increases positive emotion through improvement in levels of self-liking.

OP 258

SUBJECTIVE WELL-BEING OF GREEK ADOLESCENTS IN TIMES OF ECONOMIC RECESSION: THE PROTECTIVE ROLE OF SCHOOL CLIMATE

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Economic recession impacts school as well as everyday life of students in terms of psychosocial adjustment and learning performance. The present study explores the relationship between the adversities experienced by junior high school students as related to economic crisis and their perceptions of their subjective well-being and school climate. The sample consisted of junior high school students (N=746) in the broader area of Athens. Instruments included the California School Climate Survey (2009), the Questionnaire of Subjective Well-Being/Youth Form (Grob, et al., 1991), the Economic Crisis Difficulties Questionnaire (CRPSP, 2011) and demographic data. Findings suggested the existence of statistically significant relations between the changes in adolescents' life due to the economic recession and the variables included in the study. Furthermore significant differences were found in relation to gender, age, parental unemployment and family status. The results of the study provide a better understanding of adolescents' needs during unsettling times underscoring the protective role of school climate and contributing to the development of effective interventions for vulnerable groups of students.

OP 259

RECIPROCAL EFFECTS AMONG TEACHER LIKING, PEER INCLUSION, AND ADOLESCENTS' ACADEMIC ACHIEVEMENT IN A TWO-WAVE LONGITUDINAL STUDY

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Background and aims. The literature underlined that students who are liked by their teachers and who are included by their peers tend to perform better at school (Juvonen, Espinoza, & Knifsend, 2012). However, previous research did not analyze simultaneously the contribution of peer inclusion and teacher liking to children's academic achievement. In the present study, we aimed to address this gap by investigating the bidirectional associations among teacher liking, peer inclusion, and academic achievement. We also analyzed whether peer inclusion mediated the association between teacher liking and academic achievement.

Methods. Participants were 1209 Swiss students followed from fifth (Mage=11.54, SD=0.56) to sixth (Mage=12.58, SD=0.56) grades. Teachers reported the degree to which they liked each student and their academic achievement. Students also reported how much they would like to include each classmate into an academic activity.

Results. Results from a two-wave autoregressive cross-lagged model revealed that teacher liking at Grade 5 predicted higher peer inclusion at Grade 6 (ß=0.09,p<.01). Peer inclusion at Grade 5 was positively related to academic achievement one year later (ß=0.10,p<.001). We also found that peer inclusion mediated the associations between teacher liking and academic achievement. A bidirectional association among peer inclusion and teacher liking was also found (ß=0.17,p<01).

Conclusions. Our study indicated that teacher liking and peer inclusion predicted later students' academic achievement. Intervention programs should promote teachers awareness about their role in affecting students' decisions to include or exclude classmates from group activities. Additionally, improving peer inclusion could be an additional factor that could sustain academic achievement through school years.

OP 260

CHILDREN'S AND ADOLESCENTS' HAPPINESS CONCEPTUALIZATIONS AT SCHOOL AND ITS LINK WITH AUTONOMY, COMPETENCE, AND RELATEDNESS

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Background and aims: The study of happiness at school has been mainly focused on the quantitative link of autonomy, competence, and relatedness to children's well-being at school (Stiglbauer et al., 2013; Tsai et al., 2008). However, given that happiness conceptualizations at the qualitative level have been found useful to deepen our understanding of the experience of happiness (e.g., Freire, Zenhas, Tavares, & Iglésias, 2013), in this study we evaluated whether differences in autonomy, competence and relatedness could be explained by the happiness conceptualizations mentioned by children and adolescents.

Methods: A sample of 744 British children (n= 421; Mage= 10.75; 53% girls) and adolescents (n= 323; Mage= 13.37; 48% girls) reported on what happiness at school meant to them and their levels of autonomy, competence, and relatedness at school (Tian, Han, & Huebner, 2014). Coding of the responses showed thirteen conceptualizations (i.e., positive feelings, harmony/balance, leisure, friends, getting good grades, non-violence, moral actions, purpose, autonomy, competence, teachers, emotional support, and learning).

Results: Log-linear models showed age and gender differences. Adolescents mentioned more conceptualizations linked to the satisfaction of basic psychological needs, learning, and good grades compared to children. Girls mentioned more friends, receiving emotional support, and experience autonomy and competence. Latent class analysis showed that happiness conceptualizations could be classified in five different groups. Interestingly, whereas for children there were no differences, for adolescents there were differences between classes in their levels of autonomy and relatedness.

Conclusions: The number of conceptualizations in this study differed from the ones identified in previous literature with Spanish and Portuguese children and adolescents, which may signal possible cross-cultural differences. Our findings concerning developmental differences in the conceptualizations of happiness and the differences found in the characterization of the different classes may inform the design of developmentally appropriate school-based intervention programs to promote students' emotional wellbeing.

Sunday, September 1st, 2019

Papers 45 - Teachers' perceptions

Kozani Hall 11:45 - 13:15

OP 261

TEACHERS' PERCEPTIONS OF PEER REJECTION AMONG ADOLESCENTS IN JUNIOR HIGH SCHOOL

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This study aims to examine the perceptions of classroom teachers in the junior high schools about the phenomenon of social rejection at school. Using a phenomenological paradigm, this qualitative study examined the perceptions of 25 teachers about excluded adolescents and adolescents who cause social exclusion, the ways in which teachers cope, and the support of the educational staff at school. The study findings indicate that teachers perceive the excluded adolescent as having characteristics that provoke exclusion, while perceiving the adolescents who exclude others as having emotional difficulties, trying to compensate for their difficulties and loneliness by exploiting the weaknesses of the excluded adolescent within the peer group. It was also found that teachers tend to feel frustrated and helpless when dealing with cases of social exclusion. Despite the difficulties of coping with these types of cases, they do so - out of a sense of commitment to their position and moral responsibility. Teachers tend to perceive school counselors as a source of support when personal difficulties arise, as a result of being exposed to difficult phenomenon; counselors are expected to provide teachers with a professional response to the phenomenon of social exclusion.

The study findings indicate a need to train educators. This training should include: knowledge related to finding solutions for social issues and problems; improving inter-personal communication skills; and the ability to resolve conflicts, and collaborate with parents and other entities in an educational manner. Educators are recommended to actively attempt to prevent incidents of social exclusion by organizing activities that will foster consolidation among classmates, personal exposure, and the development of empathy towards the other. In addition, the study indicates a need to provide educators with emotional accompaniment and support throughout their dealings with the social exclusion process.

OP 263

CHILDREN'S AND TEACHERS' VIEWS ABOUT PLAY IN PRESCHOOL

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With increasing emphasis, play is viewed as an intrinsically social and cultural activity taking place in specific contexts. There is also increasing recognition that children should be approached as social agents with their own perceptions regarding their involvement in activities associated with their life experiences, such as play. As a consequence, when considering play in the preschool context, the emphasis is no longer on its use to achieve specific, adult-defined goals, but on supporting children's actions and developing abilities in play contexts that are meaningful to them. An important facet of such an understanding of play, involves awareness of children's perceptions regarding their play activity and how these relate to views and practices teachers hold. The presented qualitative study explores this relationship in the Greek kindergarten.

33 preschool children and 17 teachers from Kindergartens in Athens, Greece, formed a convenience sample and took part in 6 and 3 focus groups respectively. Thematic analysis was applied on interview data, using open coding.

Teachers' perceptions conform to a developmental perspective of play as a universal, internally motivated behavior associated with pleasure and leading to important cognitive, social and emotional outcomes. They recognize children's active role and autonomy in play and they view it as the ideal medium for learning. However, teachers seldom use meaningful play based on children's decisions and ideas in organized classroom activities and appear reluctant to participate in children's play.

Children classify play as a peer activity taking place during free time and recess, affording them the possibility to make choices, take decisions, follow their interests and fulfil their wishes. As a result, it may deviate from what is expected, violate rules and challenge adult authority. Children sharply distinguish play from classroom activities, while achieving mastery in play is its main benefit.

Results are discussed in the framework of socio-cultural approaches to play and the importance of achieving shared meanings of play between teachers and children.

OP 265

TEACHER-GUIDED COMPREHENSION-ORIENTED LEARNING STRATEGY INTERVENTIONS: EFFECTS IN GRADE 2 AND GRADE 4

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School of Natural Sciences and Health

Selecting, applying, and being aware of the effectiveness of cognitive learning strategies are important for learning with understanding. However, studies have shown that teachers rarely teach and students rarely use comprehension-oriented strategies. To support teachers, an intervention program 'Learning with understanding' for teaching, practicing, and raising metacognitive awareness of elaboration and organization strategies in primary school was developed and piloted. The aim of the present study was to test the effects of intervention on application and perceived effectiveness of learning strategies in second- and fourth-grade students using the intervention and control groups in a pre- and post-test design.

Participants included 302 second graders (72 in the intervention group) and 469 fourth graders (82 in the intervention group). Applying and evaluating perceived effectiveness of learning strategies was assessed with word list memorization task with reflection questions which was included in a larger online learning to learn competency test. All participants completed the tests before and four months after the intervention Materials for teachers and students were developed. Teachers were educated on psychology of learning and supported by university team throughout the intervention. Intervention included 9 lessons on memory, learning, and three comprehension-oriented learning strategies (visualization, elaboration, and categorization) with metacognitive discussions. Three strategies were applied in math, language, and science lessons.

More fourth-grade students in the intervention group used one of the comprehension-oriented strategy and perceived their effectiveness higher in post-intervention testing than in pre-intervention testing. This tendency was not found in the control group or in Grade 2. Between-teacher differences were also shown. Various reasons (students' cognitive level and persistence, different level of subject lessons' tasks, teacher motivation) that may be related to different findings and possible ways to modify the program in Grade 2 are discussed.

OP 266

INSTRUCTIONAL PRACTICES AND WRITING BELIEFS AMONG ITALIAN PRIMARY SCHOOL TEACHERS

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Background and aims. Cutler and Graham (2008) observed that paucity of information about how writing instruction looks like in schools reduces the potential of suggestions and recommendations to improve children's handwriting. Despite the evidence that atypical pattern grasps do not affect writing performance (Dennis et al., 2001), investigations on instructional practices show that 41% of teachers believe that an improper handgrip of a graphic implement may result in an illegible text (Graham, 2008). This study aimed at understanding primary school teachers' knowledge and beliefs about patterns grasps and their influence on text legibility and writing fluency.

Methods. A 24 items online questionnaire was filled in by 98 primary school teachers (F=96.2%; M=3.8%) of German schools in Northern Italy gathering information about preparation on handwriting instruction, actual teaching practices, beliefs about handgrip development through childhood and factors influencing text readability and writing fluency.

Results. First grade teachers were 46.2% of the respondents with about 20 years of teaching experience (mean years=19.32; SD=11.26). Participants reported a lack of preparation in handwriting instruction: 60.3% never took part to a course on graphomotor skills and 84.6% never received instruction on how to teach handwriting. About 42% of participants believe that children reach a mature grasp when five years old, and 19.1% between 1 and 4 years. Tripod grasp is considered the most functional for handwriting by 92.3% of the respondents who declare to spend more than one hour and half at week to teach a proper handgrip to their students, because of its influence on handwriting's legibility (44.9%) and fluency (60.3%).

Conclusions. Information about instructional practices and teachers' writing beliefs are useful to recommend solutions fitting early literacy problems at primary school. Moreover, studies on teachers' corrections of pattern grasps are needed to understand effects on children's writing motivation and perception of self-adequacy.

Sunday, September 1st, 2019

Papers 46 – Bullying and Victimization

Edessa Hall 11:45 – 13:15

OP 267
THE INTERPLAY BETWEEN PSYCHOTICISM AND RELATIONSHIPS WITH PARENTS IN THE PREVALENCE OF HOMOPHOBIC BULLYING IN ITALIAN ADOLESCENTS

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Background and aim: This study explores how the interplay of family relationships and psychoticism related to homophobic bullying in adolescence. Attachment theory may help to explain personality-related issues, because dysfunctional primary relationships can lead to the psychotic structuring of personality (e.g., Berry et al., 2006). Consequently, supportive relationships with one's parents can be a protective factor linked to the onset of bullying (Morris et al., 2017).

Method: Participants were 394 adolescents and young adults, (164 boys and 230 girls) aged from 15 to 20 years. Participants completed the Homophobic Bullying Scale (Prati, 2012) to investigate bullying towards gay and lesbian people, the Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987) to measure maternal and paternal trust, communication and alienation, and the Symptom Check-List-90-R (Derogatis, 1977) to evaluate psychoticism.

Results: In the first mediation model, psychoticism strongly mediated the impact of maternal trust and alienation on bullying toward gay people. Moreover, in the second mediation model, psychoticism strongly mediated the impact of paternal alienation on bullying towards gay people.

Conclusion: Studying the possible risk factors related to homophobic bullying is important for the promotion of inclusive policies and is therefore fundamental for the structuring of targeted interventions in school contexts.

OP 268
HOW DO GERMAN VOCATIONAL STUDENTS COPE WITH BULLYING IN SCHOOL AND AT WORK?

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In the dual system of vocational training in Germany, students attend vocational school and work in their company alternately. Therefore, they may have to deal with bullying in both environments. Against this background, it was analysed if vocational students participate in and cope with bullying in the same way in school and at work.

Therefore, a questionnaire-based survey was realised on a sample of 141 vocational students. Bullying was measured based on the Participant Role Questionaire (PRQ) (cf. Salmivalli et al. 1996). Furthermore, the Dutch test for conflict handling (DUTCH) was used (cf. de Dreu et al. 2001). Coping strategies were measured in orientation on Perrez and Reicherts (1996). It was distinguished between school and working place for every item of the different tests.

At school, 29.8% of the students report to behave as bullies, assistants or reinforcers regularly. 14.2% describe themselves as victims, 5.0% as being bullies and victims simultaneously. Regarding working place, the prevalence of bullying behaviour (23.7%) is significantly lower, whereas victims (17.0%) and victim-bullies (7.1%) are more common. Three out of four students who report to act as bullies, assistants, or reinforcers in school show the same behaviour at their working place. 93.9% of students who act this way at work show bullying behaviour in vocational school, too. 70.0% of students who are victims in school also suffer bullying at their workplace. Otherwise, 58.3% of vocational students being bullied at work are victims in school as well. Prosocial behaviour as a defender appears to be almost completely context-independent. This applies to the use of different coping strategies, too.

In comparison with studies about bullying in German secondary schools (cf. Knauf, Eschenbeck & Käser 2017), it becomes evident that the situation in vocational schools is even worse. Consequences regarding school politics and teacher training are discussed.

OP 269
DOES DISPOSITIONAL MINDFULNESS PREVENT ADOLESCENTS WHO HAVE BEEN VICTIMS OF BULLYING FROM BECOMING THE AGGRESSORS?

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Background and aims: A growing literature on dispositional mindfulness with youth has shown its positive association with psychological health, but few studies have focused on the role of mindfulness to protect from aggressive behavior in youths. Bullying can worsen in the adolescence, and being a victim of any of them is a risk factor for perpetrating them. Nevertheless, research on the mechanisms through which mindfulness buffers youth victims of bullying from perpetrating it is scarce. Thus, the present study examined the longitudinal direct and indirect effects of dispositional mindfulness dimensions in attenuating the relationship between the victimization of bullying and its perpetration one year apart in adolescents. The role of age and gender were analyzed. Methods: The sample consisted of 953 students (mean age = 14.30; SD = 1.05; girls = 48.2%) from the Basque Country (Spain). Results: when controlling for age, observe and act with awareness domains predicted directly less bullying perpetration at the follow-up, while only describe dimensions buffered the relationship between bullying victimization at T1 and bullying perpetration at T3. Direct and indirect associations worked differently depending on the gender. Conclusions: mindfulness showed to attenuate bullying perpetration over time in adolescents victims of bullying.

OP 270
BULLYING AMONG SCHOOL CHILDREN AND ADOLESCENTS: DOES THE APPEARANCE OF MY TEETH MATTER?

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Decades of research as shown that children and adolescents judge each other on physical attractiveness and unattractive individuals are more likely to be social excluded and bullied by their peers (Langlois et al., 2000; Fox & Farrow, 2009). Psychological research also shows the face is central to notions of attractiveness, in particular whether the teeth show a malocclusion (i.e., crooked, crowded, or protruding teeth).

This study, for the first time, examined the nature of the relationship between having a malocclusion and bullying among school children. Participants (n = 389) included British school children and adolescents aged between eight and fifteen years. They completed the revised Olweus Bully/Victim Questionnaire (Olweus et al, 1996) to measure bullying and the Strength and Difficulties Questionnaire (SDQ: Goodman, 1999) to assess emotional and behavioural problems. The teeth of the participants were also physically examined for malocclusion by a Consultant Orthodontist. Each participant's teeth were rated according to the Index of Orthodontic Treatment Need (IOTN), ranging from grade 1, 'no need' (no malocclusion) to grade 5 'very great need' (very high malocclusion).

Multiple regressions were conducted controlling for the participant's age and gender. Results showed a significant relationship between higher malocclusion and more reported bullying at school in the past couple of months. A significant relationship was also found between higher malocclusion and more emotional and behavioural problems as indicated by the SDQ. Finally, the participant's SDQ score fully mediated the relationship between higher malocclusion and more school bullying. These findings suggest that higher malocclusion was related to more emotional and behavioural problems, which in turn was associated with more school bullying. The implications of these findings for bullying prevention within schools and need to consider psychological factors when assessing the need for orthodontic treatment will be discussed.

OP 271

PREDICTORS OF PREJUDICE - BASED BULLYING AND DEFENDING BEHAVIOUR: GATEBULL PROJECT'S FINDINGS FROM FOUR EUROPEAN COUNTRIES

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Prejudice- based bullying is an increasingly alarming phenomenon in Europe with scarce literature on the issue. Peer defending behaviour effectively decreases school- bullying but a limited number of child bystanders actually intervene in bullying situations. Literature on school bullying has mostly focused on intrapersonal (e.g. personal responsibility) and interpersonal factors (e.g. perceived peer norms) that facilitate or decrease peer bystander intervention. A small amount of research has explored intergroup variables (e.g. intergroup contact) involved in prejudice- based bullying and prejudice- based defending behaviour and even fewer studies have investigated these topics considering actual peer relations at school. The present study, part of the EU-funded GATE BULL project, intended to provide empirical evidence about prejudice-based bullying, prejudice-based defending behaviour and their intra-, inter-personal and inter-group determinants examining actual peer relations among children from ethnic majority and minority groups in four European countries.

A cross-sectional study focused on general and prejudice- based bullying and defending behaviour was conducted in Scotland (UK), The Netherlands, Slovakia and Greece. Eight-hundred and eighteen children between the ages of 10-12 years completed a questionnaire. Children's peer victimisation, peer perpetration and defending behaviour in general, and perceived as motived by prejudice, were measured. Intra-personal, interpersonal and intergroup potential predictors of general and prejudice- based peer bullying and defending behaviour were also evaluated.

Data analyses were run per country and on aggregated data from all of the European sample. The contribution of individual, interpersonal and intergroup determinants of general and prejudice-based bullying and defending behaviour for ethnic- majority and minority children were examined and different patterns emerged.

These results underlined how whole school- interventions for preventing and prejudice- based bullying should consider needs and issues distinctively concerning ethnic majority and minority children. Challenges about investigating prejudice base bullying, measures and definitions of this construct will be discussed.

OP 272

MOTOR SKILLS IN PRESCHOOLERS PREDICTS SCHOOL AGE PEER-VICTIMIZATION AND EMOTIONAL PROBLEMS: RESULTS FROM A LARGE LONGITUDINAL COHORT STUDY

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Background and aim: Poor motor skills are associated with co-occurring emotional difficulties and increased risk of peer-victimization. However, little research has investigated the dyadic longitudinal interplay between them. The aim of this study was to investigate the longitudinal interplay between pathways of poor motor skills, emotional difficulties and peer-victimization.

Method: The sample was drawn from the Norwegian Mother and Child Cohort Study (MoBa). MoBa has collected population-based data on children's health and development for 114 500 children. For the present study, we included 43 254 children whose mothers completed the 8- year questionnaire.

Preliminary results: Results from structured equation modeling showed high stability for emotional difficulties from three to five (.733 p<.001), and from five to eight years of age (.579 p<.001), and for poor motor skills from three to five years of age (.900 p<.001). We found that poor motor skills at five years had a direct link to emotional difficulties at eight years (.119 p<.001), and that poor motor skills at three and five years was linked to peer-victimization at five years (.082 p=.001; .453 p<.001), respectively. In addition, peer-victimization at five years was linked to peer-victimization at eight years (.399 p<.001), which in turn was linked to emotional difficulties at eight years (.759 p<.001).

Conclusions: Poor motor skills at three and five years predict peer-victimization at five years, which in turn is linked to peer-victimization and emotional difficulties at school age.

Sunday, September 1st, 2019

Papers 47 - Parenting

Naoussa Hall 11:45 - 13:15

OP 273

PARENTAL ALMOST PERFECT SCALE (PAPS): THE QUESTIONNAIRE FOR MEASURING CHILDREN-ORIENTED PERFECTIONISM IN PARENTS

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Perfectionism is usually defined as setting for oneself very high, often unrealistic standards and a tendency to be overly critical of oneself (Fleet & Hewitt, 2002). However, this personality characteristic has also another aspect, related to the strong demand for perfection from other people (Hewitt & Fleet, 1990). Other-oriented perfectionism is the dark side of perfectionism, connected positively with narcissism, Machiavellianism, psychopathy, low interest in other people and the pursuit of domination over others (Stoeber, 2014, 2015). There are two popular questionnaires that allow for measuring other-oriented perfectionism: the Hewitt Multidimensional Perfectionism Scale (HMPS; Hewitt & Fleet, 1990) which allows for measuring a general tendency to demand perfection from other people without specifying particular person and the Dyadic Almost Perfect Scale (DAPS; Shea, Slaney, & Rice, 2006) which was created to study perfectionism oriented toward a partner in an intimate relationship. The present study was aimed at the adaptation of the Dyadic Almost Perfect Scale to measure perfectionism oriented toward a child/children. As far as I know there is no such scale published in the scientific literature.

307 mothers took part in the present study (age from 21 to 61 years M = 34.43, SD = 5.43). The Parental Almost Perfect Scale (PAPS) turned out to have a good factorial validity and high reliability (<.80). Mothers who were characterized by higher children-oriented perfectionism turned out to be more narcissistic, more stressed and had more conflicts with a spouse.

This first study suggests that the PAPS is a valid and reliable measure which can be useful in filling important gaps in our knowledge about parenting in modern, perfection-driven times. Potential areas in which this new measure can be useful will be presented and discussed.

OP 274

ASSESSMENT OF A BRIEF PARENT-DELIVERED THERAPY FOR NIGHTTIME FEARS IN YOUNG CHILDREN

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Nighttime fears are frequent among children, and are often related to internalizing and externalizing problems and sleep disorders. Parent-delivered cognitive behavioral therapy (CBT) and bibliotherapy found to be an effective tool in the treatment of childhood anxiety and nighttime fears, however little is known about related moderators and mediators. The aim of the present study was to evaluate the efficacy of a specific book, designed to treat nighttime fears, and to determine for whom and why the treatment works.

Seventy-three children between 3 and 8 years of age with significant nighttime fears were enrolled into a bibliotherapy intervention group (N = 36) or to a waitlist control group (N = 37). The intervention involved parents reading the Hungarian translation of Uncle Lightfoot, Flip that Switch: Overcoming Fear of the Dark with their children over 5 weeks, while engaging in recommended CBT based activities. Assessments took place at baseline, post treatment, and 20 weeks following baseline. Intervention activities (story reading and applied games) were daily administered during treatment.

Compared with the control group, the intervention group achieved a significant improvement in the degree of nighttime fears and related phobic symptoms which increased in the 20 weeks follow up. Children's age was unrelated to treatment outcome, however the more time children spent with desensitization games, the more their phobic symptoms and separation anxiety were reduced.

The present study provides support for the use of parent-delivered therapy in the treatment of childhood nighttime fears and highlights the importance of the actual duration of the desensitization activity performed at home. Further research is needed to identify the parental and family variables allowing successful parent-delivered treatment.

OP 276

THE CONTRIBUTION OF RELATIONSHIPS WITH PARENTS AND PEERS TO ADOLESCENTS' SUBSTANCE USE

Michael K.

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Background and Aims: Adolescents are considered in general as a population at risk, due to their tendency to act in ways that might jeopardize their physical and psychological health. Specifically, adolescents' substance use is often associated with early dropout rates in school, unprotected sex, and unemployment. A range of contextual systems shapes adolescents' behavior, including parents and peers, who act as role models who provide opportunities and reinforcements to risk or protective behaviors. The present study examined the contribution of relationships with parents and peers to adolescents' substance use.

Methods: Data were collected from 173 Arab participants aged 13-18 (M=15.53; SD=1.38) in Israel (50% boys), through quantitative cross-sectional study. The participants completed self-reported questionnaires, which measured substance use, relationships with parents, relationships with peers, parents' attitudes toward drugs, and peers' attitudes toward drugs.

Results: A path-analytic-model, based on multiple regressions, revealed that positive parent-adolescent relationships only predicted negative parental attitudes toward drugs. Negative peer-adolescent relationships predicted higher substance use, as well as positive parental/peers' attitudes toward drugs. Positive peers' attitudes toward drugs predicted higher substance use.

Conclusions: The results indicated differential influences of adolescents' relationships with their social agents, with stronger and more negative effect from peers. Prevention and intervention programs should be aimed at establishing positive and responsible relationships with their peers since they shape both adolescents' attitudes and actual behaviors.

OP 277

RESOURCE HOLDING POTENTIAL COMPREHENSION IN EARLY CHILDHOOD AND ITS ASSOCIATION BETWEEN RESOURCE CONTROL AND SOCIAL DOMINANCE

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Resource holding potential (RHP) comprehension - appreciation of a resource opponents ability to obtain/maintain resource control - has scarcely been studied in humans to date. This study had three main aims. To investigate the relationship between RHP comprehension scenario responses and the teacher-rated resource control strategy usage, resource control success and social dominance of children in their first school year. To examine the effect of scenario opponent characteristics on RHP comprehension scenario child responses. To examine the effect of theory of mind, empathy and emotion comprehension on those relationships outlined in aims 1 and 2.

Children (N = 92; 4-5 years old) completed verbal ability, ToM, empathy and emotion comprehension assessments and responded to 12 RHP comprehension stickfigure vignettes, in which resource control opponents varied in 'toughness', 'physical size' and whether or not they were accompanied by friends. Teachers completed online behavioural surveys assessing social dominance and resource control strategy for each participating child in their class.

Correlations were marginally significant between RHP scenario response and empathy for both genders. Regardless of empathy, analyses of RHP comprehension responses found no significant differences between the controller subtypes grouping or for the continuous-type resource control variables. Girls responded prosocially more often than boys, and boys more coercively than girls. 'Not very tough' scenario opponents received more prosocial responses from both genders compared to 'very tough' opponents, which received more coercive responses, regardless of their other characteristics.

The response pattern to tough/not tough opponents was the opposite of what RHP theory predicts - that aggressive strategy is more likely to occur against weaker opponents - this may due to an underdeveloped RHP comprehension capability in this age group, or that the children treated the vignettes less seriously than a real-world contest scenario. Empathy and ToM may also be more significant factors in actual day-to-day contest situations.

OP 278

WHY DO SOME PEOPLE REGRET BECOMING A PARENT? THE ROLE OF PERSONALITY CHARACTERISTICS IN PARENTAL IDENTITY FORMATION AMONG MOTHERS AND FATHERS

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Does becoming a parent give people happiness? Does parenthood contribute to the development of parents' personality? Do adults who have a child are satisfied with it? When we hear questions of this kind, we almost automatically respond: yes (or at least: rather yes). In contemporary societies, in which children are usually treated by parents as the most precious value, it is sometimes difficult for us to notice and accept the existence of different facets of parenthood. Yet, it turns out that there are individuals who regret becoming a parent (Donath, 2015; Piotrowski, 2018). The results of the four cross-sectional studies aimed at an exploration of the relationships between the feeling of regret about parenting and parental personality characteristics will be presented and discussed.

In those four studies, in sum, more than 1 200 parents, both mothers and fathers, took part. Regret about being a parent was measured with the Utrecht-Management of Identity Commitments Scale (U-MICS; Crocetti, Rubini, & Meeus, 2008) that was recently adapted by Piotrowski (2018) for measuring the three dimensions of identity in the parental domain (commitment, in-depth exploration, and reconsideration of commitment). In the conducted studies such personality constructs as the Big Five, perfectionism, indecisiveness, shame proneness, anxiety, narcissism, adult attachment, and optimism have been also measured.

The most important results indicated that the parents who are characterized by higher regret are less agreeable and more perfectionistic and narcisstic, had more difficulties with decision making, and were more anxious. In general, the obtained results support the hypothesis that some personality traits in parents can be seen as risk factors in the process of adaptation to parenthood and in the realization of this social role. It also seems that in some cases they can result in higher regret about being a parent.

Sunday, September 1st, 2019

Symposium 57

Olympia Hall A 14:15 – 15:45

S 57
EARLY EXPOSURES AND DEVELOPMENTAL TRAJECTORIES: EPIGENETIC SIGNATURES AS A POTENTIAL BRIDGE

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Chair, Discussant, BC Children's Hospital Research Institute, Centre for Molecular Medicine and Therapeutics, Department of Medical Genetics, University of British Columbia, Canada

Early life exposures and significant experiences have lasting connections with child mental and physical health outcomes, suggesting the biological embedding of environmental contexts during these critical periods. In this symposium, we explore epigenetic signatures as biomarkers, or biological memories of early exposures, and the potential of these signatures for predicting child health outcomes. Each presentation focuses on DNA methylation, an epigenetic marker that undergoes drastic shifts across prenatal and early postnatal life. Many DNA methylation sites continue to accumulate changes in direct correspondence with aging, leading to the development of 'epigenetic clocks' that track biological aging. In the first three presentations, connections between early environmental contexts, including in utero substance exposure, socioeconomic status, and parental conflict, are linked to DNA methylation signatures and epigenetic aging. In the latter two presentations, DNA methylation signatures are further explored as predictors of developmental outcomes, including white matter integrity, and adolescent depression trajectories. Because epigenetic markers capture both genetic and environmental risk factors, signatures may be useful in identifying children at greatest risk for the developmental consequences of the early biological embedding of risk factors.

S 57 – 1

DNA METHYLATION IN MONOCYTES IS ASSOCIATED WITH SOCIOECONOMIC STATUS CHANGES THROUGHOUT LIFE

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*Equal senior contributions

Chronic early life stress is associated with adverse health outcomes later in life, characteristically with pro-inflammatory and accelerated aging phenotypes. Low socio-economic status (SES) is a significant source of chronic life stress, which has been previously associated to epigenetic changes, specifically DNA methylation (DNAm). Ascertaining these links holds great promise to understanding how early life SES may "get under the skin", potentially contributing to later life disease.

A cohort of 331 participants in the greater Vancouver area was used to investigate the associations between DNAm and SES trajectories. Early (aged 0-5yrs) and current SES were measured for all participants aged 15-55 years which were grouped into four categories (low-low, high-high, low-high and high-low) creating a balanced design to allow for rigorous analysis of SES in the context of specific life stages. Purified monocytes were assessed to investigate changes related to innate immune function. Over 450,000 sites of DNAm were interrogated throughout the genome using the Illumina Infinium microarray platform.

Using linear regression and adjusting for age, reported ethnicity, and sex, several DNAm associations were found (FDR <= 0.05, effect size >= 3%), with most differences observed when comparing the low-high category to all other individuals. It is tempting to speculate that these findings may be linked to a recent report describing a "skin deep resilience" phenotype seen in a cohort of individuals who went from low early life to high SES later in life.

Sites which uniquely displayed differential DNAm in the low-high group were located within genes previously associated with immune function (EBF4 and FBXO27) and neurological development (RCAN1, DDO, and STXBP5). These results suggest that DNAm may provide a unique molecular window into the mechanisms involved in the persistence of early life experiences and how these may predispose individuals to adverse, later life, health outcomes.

S 57 - 2

ASSOCIATION BETWEEN DNA METHYLATION AND PARENTAL CONFLICT IN A PEDIATRIC COHORT IN THE REPUBLIC OF CONGO

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Background and Aims: Child development is a dynamic process influenced by cultural factors, such as cultural values, adverse environments, and parenting style. Biological embedding describes the potential molecular mechanism where early-life experiences and environment can associate with later-life health and developmental outcomes. This can occur through epigenetic mechanisms, such as DNA methylation (DNAm), which can regulate gene expression and in turn alter an individual's sensitivity to biological stimuli. Here we aimed to examine global DNAm profiles from children in a small-scale community of Bondongo fisher-farmers in the Republic of Congo to determine if there is a relationship between DNAm and child psychosocial and child growth measures.

Methods: As part of a broader study focusing on family influences on Bondongo child well-being, genome-wide DNA methylation was profiled using the Illumina MethylationEPIC arrays with genomic DNA samples extracted from dried blood spots collected from children (n=54, age = 2-17). Epigenetic aging was assessed using the 353-CpG Horvath clock, and epigenome-wide association studies (EWAS) were carried out with study variables including parental conflict and developmental (weight-for-height) measures using linear regression models accounting for sex and age as covariates.

Results: We observed positive correlations between accelerated epigenetic aging with our study variables (parental conflict: r=0.2551, p=0.06; weight-for-height measure: r=0.400, p=0.002). We determined this age acceleration to be intrinsic, independent of blood cell composition changes. Further, EWAS identified a locus located in the 5'UTR of FCRL3 (cg17134153; Db = -0.32, FDR= 0.003) significantly associated with parental conflict. Differentially methylated regions in the genes MRGPRF and SLITRK5 were found to also associate with parental conflict (Db > 0.05, FDR<0.01).

Conclusions: Parental conflict and child development measures both demonstrated associations with DNAm signatures in Bondongo children, lending support to DNAm as a potential molecular mechanism that plays a role in child well-being in this cultural setting.

S 57 – 3

EPIGENETIC TRACES OF IN UTERO DRUG EXPOSURE IN CORD BLOOD AND INFANT WHITE MATTER INTEGRITY

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Background and Aims: In utero exposure to neurotransmitter-altering substances links to child neural and developmental deficits. Epigenetic alternations may occur in response to in utero exposures and have implications for gene expression and biological development. DNA methylation (DNAm) patterns undergo drastic resetting and developmental change across embryogenesis and early life. We explore DNAm as an early biomarker of the biological consequences of a variety of drug exposures.

Methods: Exposure to multiple toxins was assessed during pregnancy in a high-risk population of women from Drakenstein, South Africa. Multiple correspondence analysis summarized categorical variables of both objective and self-report indicators of in utero exposure to tobacco, alcohol, cannabis, amphetamines, MDMA, and methaqualone. DNAm was quantified in cord blood from two batches with two different arrays (n^1 = 126, 45% of sample exposed to at least one substance, 450K array; n^2 = 156, 31% exposed, EPIC array with 2x coverage). Associations between DNAm and toxin exposure were identified in the first batch and validated in the second.

Results: Controlling for sex, ethnicity, and cell type, individual sites as well as correlated substructures of DNAm were identified in relation to toxin exposure. Functional enrichment analysis indicated that the major hub genes composing DNAm substructures related to cellular functions (e.g., glycoprotein, transmembranes) and regulatory functions (e.g., DNA-binding, transcription). In turn, scores on DNAm substructures correlated with infant white matter integrity in the right superior longitudinal fasciculus, a region previously linked to alcohol exposure. Three individual DNAm sites were validated in the second sample, including a site within the JARID2 gene, which encodes a transcriptional repressor protein essential to regulating gene expression during embryonic development.

Conclusions: We conclude that DNAm may prospectively predict exposure-related perturbations of infant biology. DNAm signatures thus may be able to identify children at the greatest risk of exposure-related neurodevelopmental outcomes.

S 57 - 4

LONGITUDINAL EPIGENOME-WIDE ANALYSES USING DEPRESSION TRAJECTORIES IN ADOLESCENCE

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Background and Aims: Although much can be learned from current epigenome-wide studies (EWAS) of depression, DNA methylation and depression are assessed at a single time point, typically in adulthood. Using a longitudinal framework with depression measured over time in adolescence and DNA methylation measured at birth and adolescence, we applied a developmental lens to behavioral epigenetics. This developmental approach will be used to refine the depression phenotype (by identifying trajectory groups who are homogeneous in symptom onset, course, and severity) and to examine sensitive periods for the development of depression and for epigenetic alterations and questions about the stability of epigenetic modifications over time.

Methods: The Avon Longitudinal Study of Parents and Children (ALSPAC) is an on-going epidemiological study of children born from 14,541 pregnant women residing in Avon, UK. As a sub-project of ALSPAC, the Data Resource Profile: Accessible Resource for Integrated Epigenomic Studies (ARIES) profiled genome-wide DNA methylation on peripheral blood samples from 1018 ALSPAC children (50% female) extracted from cord blood at birth and peripheral blood drawn at either age 15 or 17. The Illumina Infinium 450k DNA array detects the proportion of molecules methylated at each CpG site on the array calculated as a beta value. Depression was assessed using The Short Moods and Feelings Questionnaire (SMFQ) collected at mean ages 12.5, 13.5, 16, and 17.5. We utilized a latent class growth curve model in MPLUS (controlling for sex) to extract depression trajectories.

Results and Conclusions: Results showed that the best-fit model indicated three latent depression trajectories: low (77%), increasing (14%), and decreasing (9%) [AIC=294956.106, BIC=295096.730, BLRT=p<.001, VLMR=p<.001, Entropy=0.80]. Six epigenome-wide association studies are being run comparing the three depression trajectories on (1) DNA methylation at birth and (2) DNA methylation in adolescence. Identified hits will be carried forward for gene network analyses.

Sunday, September 1st, 2019

Symposium 58

Olympia Hall B 14:15 – 15:45

S 58

EFFECTIVENESS OF APPLIED BEHAVIOR ANALYTIC INTERVENTIONS FOR PEOPLE WITH AUTISM SPECTRUM DISORDER

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Chair, Department of Philosophy, Pedagogy and Psychology, National and Kapodistrian University of Athens, Greece

Ralli A.

Discussant, Department of Psychology, National and Kapodistrian University of Athens, Greece

The complexity of difficulties presented by people in the spectrum of autism calls for comprehensive treatments that may address a great array of developmental issues. Applied Behavior Analysis draws from a sound theoretical perspective that potentiates individualized, evidence-based interventions and have been proven to produce optimal outcomes for people across the spectrum of autism. The purpose of the present symposium is to demonstrate the effectiveness of behavior-analytic interventions in three very important areas: (a) The first study addresses predominantly psychological aspects of the disorder, namely, the fear of going to an airport and air travel which is predominantly associated with elevated levels of anxiety and sensory defensiveness. (b) The second study addresses independent living issues and how both the child and parents can receive treatment and education to promote autonomy for a child with ASD. (c) The third study addresses amelioration of a highly persistent and primary executive skills' deficit, that of working memory In conclusion, this symposium aims to suggest effective and efficient means of addressing some of the most prevalent deficits of children with ASD which interfere with the quality of life of the child and the family.

S 58 – 1

BOARDING PASS TO AUTISM: AN INNOVATIVE INTERVENTION FOR DESENSITIZING CHILDREN WITH ASD TO AIR TRAVEL

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Air travel can be a stressful experience for children with Autism Spectrum Disorder (ASD) and their parents. The current psychoeducational programme is an innovative, collaborative initiative among the Onassis Foundation, Athens International Airport, the Aegean Airlines, and the University of Athens. The programme aims to familiarise youngsters with ASD with the multitude of procedures involved in air travel and to desensitize them to the anxiety they invariably experience in airports, because of the many sensory challenges found therein. The youngsters' families are involved in every step of the project. The programme incorporates a number of interventions, known to be effective in autism treatment. The interventions include innovative Social Stories, an individualized desensitization programme for each youngster coupled with graded exposure to target air travel-related anxiety, and a practice test run at the airport before culminating in an event held at the airport in which participants will board an airplane and observe a cockpit without actually flying.

The contribution of this intervention is threefold: 1) to desensitize youngsters with ASD to steps involved in air travel, 2) to educate stakeholders including airport staff and raise their awareness of ASD and 3) to create relevant resources, including information pamphlets and social stories.

S 58 – 2

USING ACTIVITY SCHEDULES TO PROMOTE INDEPENDENCE IN A CHILD WITH ASD IN CLINICAL AND NATURALISTIC SETTINGS

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[1] Department of Philosophy, Pedagogy and Psychology, National and Kapodistrian University of Athens, Greece
[2] Institute of Systemic Behavior Analysis, Greece

From a developmental perspective, autonomy is a crucial characteristic for the advancement and the adjustment of all children. For children with Autism Spectrum Disorder (ASD), in particular, who tend to be over-dependent on others, promoting independent functioning is crucial for their development and for the well-being of their families. Activity-schedules are an evidence-based practice that contributes to the autonomy of children with ASD. The present study aimed to investigate the effectiveness of a behavior-analytic multi-component approach - including procedures such as activity-schedules, prompting, and reinforcement - toward the improvement of the independent functioning of a boy with ASD in both a therapeutic and his home setting.

Two experiments will be presented. In the first experiment, a reversal (ABAB) single-case experimental design was used to assess the efficacy of using an activity schedule, in a clinical setting, to promote independent engagement with various tasks (e.g., puzzles, games, etc.) with a 6 year old boy with a diagnosis of ASD. In the second experiment, a multiple baseline across response categories experimental design was used to assess, in the home setting, the effectiveness of a parent-training intervention in training the father of the participant of the first experiment to enhance his son's independence in three areas: dressing, completing an activity schedule, and eating low-preference nutritious food. Treatment fidelity, social validity, generalization across people and maintenance assessments were assessed in both experiments.

The results of both experiments were very promising, demonstrating that the participant with ASD improved in all areas targeted and his father was able to use the intervention effectively and efficiently, leading to a greatly diminished level of adult support.

The present study provides additional support for the use of activity-schedules for the autonomy of children with ASD, not only in clinical but also in naturalistic contexts, with parents as therapists.

S 58 – 3

EFFECTIVENESS OF A BEHAVIOR-ANALYTIC INTERVENTION IN IMPROVING THE WORKING MEMORY OF CHILDREN WITH ASD

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People with ASD have various cognitive deficiencies some of which are attributed to Executive Function (EF) deficits which are both primary and persistent across the life span in people with ASD, regardless of their intellectual and functional abilities. EFs are meta-cognitive abilities and as such an umbrella term that includes various cognitive functions, such as cognitive flexibility, inhibition, working memory, and adoption to rules. The implications of the studies, the small number of participants, the heterogeneity of persons with ASD, the assessment procedures, the difficulty of maintenance and generalization of benefits of interventions, raise questions on how these impairments can be improved through a behavior-analytic intervention.

The purpose of this paper is to present the results of a pilot study that implemented a behavior-analytic intervention in two children with ASD. Those results suggest that EFs can be treated as operant behavior and thus may greatly improve following appropriate behavior-analytic treatment. In addition, it is likely that the prevailing difficulties of children with ASD pertaining to EFs may vary rather than presenting a homogeneous EF profile. Based on the findings of the pilot study, we have designed a study that aims to assess and teach auditory and visuo-spatial working memory in children with ASD using a multiple baseline experimental design. It is anticipated that visuo-spatial working memory is more impaired than auditory working memory in children with ASD, yet it remains to be verified. In addition, it is anticipated that both types of working memory will improve using reinforcement, prompting and modelling procedures as was the case in the pilot study.

Symposium 59

Ilissos Hall 14:15 - 15:45

S 59

INTERGENERATIONAL VALUE TRANSMISSION: THE ROLE OF MOTIVES, TRANSITIONS AND CONTEXT

Albert I.
Chair, University of Luxembourg, INSIDE, Porte de Sciences, Luxembourg

Lubiewska K.
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Cultural transmission refers to the transfer of knowledge, practices, values and norms through processes of socialization, enculturation and acculturation which can be intentional or implicit. Intergenerational transmission occurs to a large extent within the family as primary socialization agent. Apart from that, values and norms are learnt in contact with peers and friends, in school or through media. Although the last years have seen an increased research interest in these topics, mechanisms are still unclear and open questions remain with regard to moderators of transmission.

The present symposium brings together researchers from three different countries - Germany, Italy and Luxembourg - who will focus on factors that might have an impact on intergenerational value transmission at different points in the family life cycle and outside the family.

First, Daniela Barni and colleagues examine the impact of relationship quality toward mothers and fathers on adolescents' motives for internalization of moral values, thereby taking age of adolescents into account.

Christian Hoellger and colleagues then focus on later points in the family life cycle. Taking into account specific life course transitions, they find differences in value transmission, which are however moderated by adult children's gender.

Third, Isabelle Albert and colleagues concentrate on intergenerational transmission of values in the context of acculturation, taking into account parental motivation to transmit values in a sample of Portuguese immigrant compared to non-immigrant families with adult children.

Finally, Elke Murdock and Maria Stogianni analyze the roles of friendship patterns for the development of ethnic identity of adolescents who live in a culturally highly diverse setting, underlining the importance of experiences in individuals' biographies in specific contexts that shape their further development.

The discussion will focus on the importance of motives to transmit or take over values, context variables and transitions for intergenerational transmission of values within and outside the family.

S 59 – 1

ADOLESCENTS' INTERNALIZATION OF MORAL VALUES IN THE FAMILY CONTEXT: THE ROLE OF PATERNAL AND MATERNAL RELATIONSHIPS

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Moral values in adolescence are of great importance in the study of moral development and intergenerational relationships. However, motivational dynamics of adolescents' moral values internalization have been mostly neglected in the past research. Nevertheless, internalization of values, which is the process through which adolescents accept parental and societal values and integrate them into their sense of self, might be guided by different motivations: external and introjected motivations, where compliance with values is experienced as being externally controlled or related to a sense of internal obligation; identified and integrated motivations, where values are fully and authentically internalized into the self. Research is consistent in showing that true endorsement of values positively relates to adolescents' psychosocial adjustment and wellbeing.

This study focused on adolescents' motives behind moral values internalization and analyzed their associations with parent-adolescent relationship quality, by considering both paternal and maternal relationships. Despite the extant discussions on the importance of family context in the moral development, this is the first study considering both parents and several aspects of parent-child relationships (i.e., closeness and promotion of volitional functioning) in adolescents' motivations for moral values internalization. Participants were 789 Italian adolescents (54.5% females; 14-19 years), who completed a self-report questionnaire including the Moral Values Internalisation Questionnaire (Hardy, Padilla-Walker, & Carlo, 2008), the Inclusion of Other in the Self Scale (Aron, Aron, & Smollan, 1992) and the Autonomy-Support Scale (Grolnick, Ryan, & Deci, 1991).

Results showed that adolescents were mainly guided by identified and integrated motivations in value internalization. As shown by regression analyses, maternal relationship quality supported identified and integrated value internalization to a greater extent compared to the relationship with the father. Adolescents' age, but not sex, moderated the relations between maternal relationship dimensions and identified and integrated motivations. Implications for parenting and intergenerational transmission of values will be discussed.

S 59 - 2

LIFE COURSE TRANSITIONS AS AN INFLUENCING FACTOR ON INTERGENERATIONAL VALUE TRANSMISSION

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Several studies (e.g., Barni et al., 2011) examined intergenerational value transmission. Most studies focused on value transmission during childhood, adolescence or young adulthood. Little is known about intergenerational value transmission when the children are adult. Although some studies focused on the role of life course transitions in the parent-child relationship (e.g., Buhl, 2000; Kaufman & Uhlenberg, 1998), there is a lack of the knowledge about the linkage between life course transitions and value transmission. Therefore, our investigation concentrates on intergenerational value transmission between children in young and middle adulthood and their parents. It is asked for the effect of life course transitions, like marriage or adult children become to be parent, on value transmission.

The sample consisted of N = 1047 dyads. A number of 600 children (53.8% women) as well as 542 mothers and 505 fathers took part. The age of the children ranged between 25 and 49 years. The standardized questionnaires in German language were responded separately from adult children and their parents. To measure value orientation a short version of the Schwartz Value Survey, including 10 items (Held et al., 2009), was used. The life course transitions were measured by single item questions.

According with other studies (Albert & Ferring, 2012; Roest, Dubas & Gerris, 2009) value transmission was operationalized as value consensus, which was determined by dyadic correlations. First analysis show that life course transitions are linked to differences in value transmission. The extent of the influence of marriage on value transmission, was moderated by children's gender.

The results are discussed regarding to the specific background of adult child-parent-relationship.

S 59 – 3

INTERGENERATIONAL VALUE TRANSMISSION AND THE ROLE OF MOTIVATIONAL PROCESSES IN MIGRANT AND NON-MIGRANT FAMILIES

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[2] University of Porto, Portugal

The intergenerational transmission of values from one generation to the next is essential for the continuity of a society as it facilitates communication between members of different generations and within families, where shared values constitute a part of the family identity. In the context of acculturation, traditions can provide a secure base for migrants who have to adapt to a new living context. On the one hand, parents in migrant families might find it particularly important to transmit traditional values to the next generation, on the other hand offspring can be confronted with diverse value orientations in the receiving culture, and therefore special efforts might be needed to transmit traditional values.

The current study is part of the larger FNR-funded IRMA project and presents a cross-cultural comparison of n = 154 triads of parents and their (young) adult children from Luxembourgish native and Portuguese immigrant families in Luxembourg, as well as a subsample of Portuguese families living in Portugal. Participants from both generations filled out a standardized questionnaire assessing general value orientations, perceived value similarity as well as parental motivation to transmit respectively children's motivation to take over parental values.

Results showed that parental motivation to transmit values was particularly high in Portuguese families (in Portugal and Luxembourg), although no differences in perceived value similarity between the three subsamples occurred. Whereas parental motivation for transmission was related to the value of tradition in all three subsamples, perceived similarity between parents and their adult children was related to their self-oriented values. Concerning consensus in value profiles, the role of motivational processes will be further explored, and effects of culture and migration will be discussed in an integrative framework of intergenerational relations in light of migration and ageing.

S 59 - 4

MULTICULTURAL SOCIETIES - AND THE DISAPPEARANCE OF CULTURE?

Murdock E., Stogianni M.

University of Luxembourg, INSIDE, Porte de Sciences, Luxembourg

Vertovec (2007) describes countries with a heterogeneous population in terms of origin and migration status as super-diverse. Within these plurally composed societies the boundaries between minority and majority become blurred and norms, values and symbols may be negotiated dependent on context. For people growing up in such a multicultural context it is the norm to be with people of different cultural backgrounds and language skills. Reinders (2006) has introduced the term co-culturation, as distinct from enculturation and acculturation, to describe the process of engagement with cultural diversity by both, natives and those with migration background. In a sample of adolescents growing up in multicultural Luxembourg, we highlight the interplay between migration status, friendship patterns, family relations, well-being and identity.

Students (N = 85) attending a Luxembourgish secondary school participated in this questionnaire study (Mage = 16.45, SD = 1.09, 46 male, 39 female). The majority (n = 68) of the students were born in Luxembourg, 17 are natives (born to two Luxembourgish parents), 43 are second generation, 17 first generation and 6 are of mixed parentage. We assessed language competence and use, friendship patterns and family relationships. Measures also included the Brief Multidimensional Students' Life Satisfaction Scales (BMSLSS) which assesses satisfaction with life in different domains and the Multigroup Ethnic Identity Measure (MEIM) scale.

The results indicate that friendship patterns are formed on the basis of the characteristics of the individual rather than based on the country of origin. Few statistically significant differences could be found in terms of country of origin/ migration status and various outcome measures.

The results can be interpreted in the co-culturation framework. For this cohort of adolescents, culture contact is the norm and salience of cultural background appears to weaken as a result. However, the Luxembourgish language plays an important unifying role.

Sunday, September 1st, 2019

Symposium 60

Vergina Hall 14:15 – 15:45

S 60

OVERPROTECTIVE AND CONTROLLING PARENTING DURING ADOLESCENCE AND YOUNG ADULTHOOD: IMPLICATIONS FOR PSYCHOSOCIAL FUNCTIONING AND IDENTITY FORMATION

Van Petegem S.

Chair, University of Lausanne, Switzerland

In the developmental psychological literature, researchers generally agree that parents continue to play an important role for understanding optimal development throughout adolescence and young adulthood. In the present symposium, we will mainly focus on two parenting dimensions that would hamper adolescents' and young adults' personal adjustment, their relational functioning, and identity development. Whereas overprotective parenting refers to parents' provision of protection that is excessive, considering the child's developmental status (Thomasgard et al., 1995), controlling parenting refers to parents' use of forceful strategies to pressure the child to act, think or feel in parent-imposed ways (Soenens & Vansteenkiste, 2010). Although past studies generally indicate that these dimensions are predictive of maladjustment in adolescence and young adulthood, a number of questions remain, including questions regarding differences in perspectives on parenting behavior, explaining mechanisms, and implications for relational functioning and identity formation.

In the first contribution, Van Petegem et al. used a multi-informant approach in order to test whether congruence and incongruence in adolescents' vs. mothers' reports of parental overprotection is related to adolescents' internalizing and externalizing symptoms, and basic psychological need frustration. In the second contribution, Mendez et al. examined associations with adolescents' coping with peer exclusion. Specifically, using cluster analysis, they identified different profiles of adolescents' coping with social exclusion, and examined between-cluster differences in psychosocial adjustment and perceived parenting (in terms of overprotection, autonomy support, and responsiveness). Third, Skhirtladze et al. examined implications of overprotective parenting for young adults' identity formation, thereby also testing the intervening role of the developmentally regulatory strategies of goal engagement and disengagement. In the final contribution, Albert-Sznitman et al. created longitudinal trajectories of perceived controlling parenting, and examined associations with trajectories of adolescent adjustment and identity development.

S 60 – 1

THE RELATION BETWEEN MATERNAL OVERPROTECTION, INTERNALIZING AND EXTERNALIZING SYMPTOMS, AND PSYCHOLOGICAL NEED FRUSTRATION: A MULTI-INFORMANT STUDY

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[3] Independent researcher

Parental overprotection refers to parents' provision of protection that is excessive, considering the adolescent's developmental status (Thomasgard et al., 1995). Research consistently found that parental overprotection is related to lower psychosocial adjustment, including higher levels of anxiety, depressive symptoms, and more aggression (e.g., Roelofs et al., 2003). In addition, recent research found that such associations are largely explained by adolescents' frustration of their basic psychological needs, that is, their need for autonomy (i.e., experiencing a sense of volition and personal choice), relatedness (i.e., feeling connected to important others), and competence (i.e., feeling confident in one's capacities; Schiffrin et al., 2014). However, most of these studies are based solely upon adolescents' reports of overprotective parenting. Hence, the goal of this study was to use a multi-informant perspective to examine associations between maternal overprotection and adolescents' internalizing and externalizing symptoms and the frustration of their needs for autonomy, relatedness and competence.

Our sample consisted of 176 dyads of adolescents (Mage = 16.3) and their mothers (Mage = 45.7). Both adolescents and mothers filled out a questionnaire on overprotective parenting. Further, adolescents reported upon their internalizing and externalizing symptoms and the frustration of their needs for autonomy, relatedness and competence.

Data were analyzed using polynomial regression with response surface analysis (Barranti et al., 2017), as this approach allows modeling the effects of both the congruence as well as the incongruence (i.e., discrepancy) between adolescents' and mothers' reports of overprotective parenting. Results indicate that higher levels of overprotection related to more internalizing and externalizing symptoms. In addition, a discrepancy between adolescents' vs. mothers' reports additionally predicted more externalizing symptoms. Similar results were obtained for autonomy and competence need frustration. Associations with relatedness frustration were not significant. These results underscore the importance of using a multi-informant perspective when studying parental overprotection.

S 60 – 2

ADOLESCENT'S COPING WITH SOCIAL EXCLUSION: ASSOCIATIONS WITH PSYCHOSOCIAL ADJUSTMENT AND PERCEIVED PARENTING

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Every teenager has already experienced social exclusion and this can be a major stress factor in an individual's life. According to Zimmer-Gembeck (2016), teenagers differ considerably in their responses to these types of situations, with some coping constructively (or "challenge coping strategies", such as seeking support, thinking differently about situations), while others may react in maladaptive ways (or "threat coping strategies", such as isolation, opposition). The first objective of this study is to test whether we can distinguish coping profiles within the adolescent sample, whereas the second goal is to examine to what extent these profiles also differ in terms of well-being and perceived parenting.

In a sample of 338 adolescents (Mage=14.9), we first measured adolescents' coping with social exclusion. They were asked to read three scenarios describing situations in which peers behave in ways that could induce a feeling of rejection (Zimmer-Gembeck & Nesdale, 2013). They filled out a questionnaire assessing their anticipated reaction to each of the described situations, assessing challenge or threat coping. Further, we measured adjustment (e.g., loneliness, anxiety, self-esteem) and parenting (overprotection, autonomy support, responsiveness).

Cluster analysis revealed four groups with distinct coping profiles. The first cluster, was mostly characterized by high scores on threat coping, the second cluster was characterized by a mix of both threat and challenge strategies, the third cluster was characterized by high scores on all challenge coping strategies, and finally the fourth cluster was mostly characterized by low scores in threat coping and high scores on the passive challenge coping strategies. Statistically significant differences were found in terms of psychosocial adjustment, with the first group reporting the highest levels of maladjustment (e.g., anxiety, depressive symptoms, loneliness), and the third and fourth group reporting the lowest scores. There were only a limited number of significant differences in terms of perceived parenting.

S 60 – 3

OVERPROTECTIVE PARENTING AND IDENTITY CONFUSION IN GEORGIAN EMERGING ADULTS: THE INTERVENING ROLE OF GOAL DISENGAGEMENT

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Overprotective parenting refers to parents' overinvolvement and the provision of developmentally inappropriate protection. Overprotective parenting is hypothesized to be associated with dysfunctional developmental processes and outcomes. In the present study, we examined overprotective parenting as a potential predictor of identity synthesis and identity confusion, as the development of a coherent identity is conceived as one of the primary goals of adolescence and emerging adulthood. Thereby, we also tested whether goal engagement and disengagement functions as a mediator on the pathway between overprotective parenting and identity, as these developmentally regulatory strategies are assumed to be important processes that drive identity formation.

Participants were 318 Georgian emerging adults (Mage=23.41, 58% female). Perceived overprotective parenting was measured using the Georgian translation of four subscales of the Multidimensional Overprotective Parenting Scale (Kins & Soenens 2013). Identity synthesis and confusion were assessed using the Georgian translation of the Identity subscale from the Erikson Psychosocial Stage Inventory (EPSI; Rosenthal et al. 1981). Goal engagement and disengagement were assessed using the corresponding subscales from Optimization in Primary and Secondary Control Scale (OPS; Heckhausen, Schulz, & Wrosch, 1998).

Path analysis indicated that overprotective parenting directly predicted less identity synthesis and more identity confusion. Further, overprotection was unrelated to goal engagement, but predicted more goal disengagement. Goal engagement, in turn, positively predicted identity synthesis and negatively predicted identity confusion, whereas goal disengagement positively predicted identity confusion, indicating that goal disengagement partially mediated the relation between overprotective parenting and identity confusion.

These results suggest that overprotective parenting creates a context that is negatively associated with the successful resolution of the identity formation task. Goal disengagement, which is a relatively passive developmental strategy, seems to play an intervening role in this association.

S 60 – 4

TRAJECTORIES OF PERCEIVED AUTONOMY-SUPPORTIVE AND PSYCHOLOGICALLY CONTROLLING PARENTING: ASSOCIATIONS WITH IDENTITY DEVELOPMENT AND ADOLESCENT ADJUSTMENT

Albert Sznitman G., Van Petegem S., Antonietti J.-P., Zimmermann G.

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A large body of research supports the importance of parental autonomy support (AS) vs psychological control (PC) for optimal adolescent development. Whereas autonomy-supportive parenting encourages children to act in line with personally endorsed values and interests, psychologically controlling parenting intrudes on children's psychological space pressuring them to act or think in parent-imposed ways. In general, AS relates to higher well-being and adjustment, whereas PC relates to more internalizing and externalizing problems. Similarly, past research has evidenced the detriment of parental PC for optimal identity development. Few studies, however, have used a person-centered approach to examine longitudinal associations between these constructs. Thus, the goal of the present study was to examine whether unique trajectories of perceived parental AS and PC could be distinguished, and whether these trajectories would demonstrate differing associations with trajectories of identity development and adolescent adjustment (i.e., self-esteem and risk-behavior).

Adolescents (N=479; Mage=14.96) completed self-report questionnaires at four points over two years. Questionnaires included measures of perceived AS and PC, self-esteem, personal identity processes, and risk taking behaviors.

In a first step, individual trajectories of perceived parenting (AS and PC) were derived for each individual, followed by a hierarchical cluster analysis to identity individuals with similar trajectories. Three clusters of parenting trajectories were identified: 1) high stable levels of AS and low stable levels of PC (n=280); 2) low but increasing levels of AS and relatively high but decreasing levels of PC (n=99); 3) relatively low and decreasing levels of AS, and relatively high and increasing levels of PC (n=100). Using a similar procedure, four identity trajectory clusters and four adjustment trajectory clusters were derived. Lastly, parenting trajectory clusters were differently associated with both identity trajectory clusters and adjustment trajectory clusters, with increasing levels of PC being associated with less optimal identity development and decreasing levels of adjustment.

Sunday, September 1st, 2019

Symposium 61

Makedonia Hall A 14:15 - 15:45

S 61

CAREGIVERS' MIND-MINDEDNESS IN FAMILY AND OUT-OF-HOME CONTEXTS: METHODOLOGICAL PERSPECTIVES

Ornaghi V.

Chair, Department of Human Sciences for Education, University of Milano-Bicocca, Milan, Italy

Aram D.

Discussant, Department of School Counseling and Special Education
Constantiner School of Education, Tel Aviv University, Israel

Caregivers' mind-mindedness (MM) has been shown to be a key predictor of children's socio-cognitive, emotion and language development (Meins et al., 2003; Longobardi et al., 2017, Senhei et al., 2018). MM has been widely studied in the family context and less in out-of-home educational settings such as childcare centers (Degotardi & Sweller, 2012). It is usually measured through adults' mental-state comments when talking to or about the children. The recent new lines of research request these traditional methodological procedures to be revised and adapted to other contexts.

The aim of the symposium is to investigate MM both in the family and early childcare center through new methodological perspectives. Furthermore, the symposium contributes to advance our understanding of adults' MM by investigating its unexplored associations with other psychological variables, such as beliefs, socialization styles and interactive skills.

The symposium consists of three contributions, one of which has been carried out in the family context while the other two have been conducted in early childcare centers. The first study longitudinally investigates the association between maternal MM and the emergence of mental-state language in 18-to-30 months old children. The second paper focuses on how and to what extend early childhood teachers' MM relates to their beliefs about emotion and their emotion socialization, while also taking into account their age, level of education, teaching experience and training in emotion education. Finally, the third study investigates the relation between caregivers' MM and some structural quality factors (such as children's group size, group type and situation), as well as caregivers' education, work experience and interactive skills.

This symposium will offer an occasion to focus on the new lines of research on MM and to discuss about new methodological perspectives.

S 61 - 1

MATERNAL MIND-MINDEDNESS AND THE EMERGENCE OF MENTAL LEXICON IN EARLY CHILDHOOD

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Mind-mindedness (MM) is the maternal proclivity to refer to infant's inner mental states. A high maternal MM seems to foster child's acknowledgment of her own inner states paving the way for the development of a theory of mind (TOM). The emergence of mental lexicon is a precursor of these abilities. This study aims at investigating the associations between maternal MM and the emergence of mental state language in children vocabularies in early childhood, taking in further consideration some structural aspects of the maternal verbal input to the child.

26 mother-child dyads were assessed at 18, 24 and 30 months. At 18 dyads were observed during a play session and maternal utterances directed to the child were transcribed and classified as mind-related (MR), if these contained mental state language. MR comments were also coded in terms of appropriateness to child's current internal state. Moreover, maternal utterances were analyzed in terms of quantity, variety, and complexity. At 24 and 30 months, children's use of mental state language was assessed with the Italian version of the Mac Arthur-Bates Communicative Development Inventory.

Findings indicated that maternal use of MR and MR appropriate comments were positively associated to children use of mental state language at 2 years, controlling for children 'vocabulary sizes ($r = .47$, $p<.05$; $r = .41$, $p<.05$). Also maternal utterances' complexity correlated positively with children's use of mental state language ($r = .56$, $p < .01$). At 30 months, these associations were not further significant.

As hypothesized, maternal MM provides the basis for the acquisition of mental state language in children, stimulating their mentalization abilities. Even if independently from maternal mind-mindedness, also the complexity of maternal verbal input seems to play a role in this process, prompting the acquisition of mental lexicon in children.

S 61-2

HOW EARLY-CHILDHOOD TEACHERS' MIND-MINDEDNESS RELATES TO THEIR BELIEFS ON EMOTIONS AND THEIR EMOTION SOCIALIZATION STYLES

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The importance of caregivers' mind-mindedness (MM) has been studied in depth in the familty context, while it has been less explored in out-of-home educational settings (Degotardi & Sweller, 2012). The present study advances our understanding of early childhood teachers' emotion socialization practices by innovatively exploring how these relate to their beliefs about emotions and their levels of MM, while controlling for age, level of education, teaching experience and training in emotion education.

Participants were 89 teachers (M_{age} = 38.29 years; SD = 11.06 years) recruited in 45 nursery schools. They completed two self-report questionnaires assessing their beliefs about emotion and their use of emotion-coaching (EC) versus emotion-dismissing (ED) socialization styles, respectively. Their MM was evaluated via a mind-minded description task.

Results show that teachers' MM was significantly associated to both their beliefs and their emotion socializations styles. Specifically, teachers who believed that it was important to discuss emotion with children and to provide them with an emotion education obtained high scores on the EC-style measure (r=.33; p<.01) and showed higher levels of MM (r=.29; p<.01); teachers who believed that children should be protected from experiencing negative emotions got high scores on the ED-style scale (r=.29; p<.01) and low levels of (r=-.25; p<.05). Furthermore, training in emotion education appeared to be implicated in the relationships between teachers'emotion beliefs, MM, and emotion socialization practices. Based on these associations, multivariate analyses correctly identify different teachers' profiles.

These findings suggest the need for future research on MM of educational practitioners working with young children, so as to further understand its associations with other psychological skills, as well as to tease out its role in children's development of socio-emotional competences.

S 61-3
CAREGIVERS' MIND-MINDEDNESS IN EARLY CENTER-BASED CHILDCARE

Helmerhorst K.O.W.[1,2], Colonnesi C.[1], Fukkink R.G.[1,3]

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[2] *Erasmus School of Social and Behavioral Sciences, the Netherlands*
[3] *Amsterdam University of Applied Sciences, the Netherlands*

Recent studies suggest that mind-mindedness is an important element of caregiver-child interactions in both family and childcare context. This study investigated caregiver's mind-mindedness in a nationally representative Dutch sample and its relation with structural quality factors (i.e., group size, caregiver's education and work experience, group type, and situation) and caregivers' interactive skills.

Participants were 99 caregivers recruited in 50 childcare centers. Mind-mindedness was assessed with observations during free-play and lunch situations in infant, preschool and mixed-age groups (0-4 year-olds). Caregivers' appropriate and nonattuned mind-related comments were coded as individual (toward one child) or group related (toward more than one child). Caregivers' interactive skills were assessed using the Caregiver Interaction Profile scales (CIP; Helmerhorst et al., 2014).

Caregivers generally refer to children's desires, thoughts and emotions in about 10% of their verbal interactions, with a low incidence rate of nonattuned comments (< 1%). Regression analyses show that group size was the only structural quality factor predicting caregivers' mind-mindedness during the free-play situation. Group size was negatively associated with the use of individual appropriate mind-related comments, $\beta = -.31$, $p < .01$, and positively associated with the use of group appropriate mind-related comments, $\beta = .23$, $p < .01$. Group appropriate mind-mindedness was significantly correlated with caregivers' interactive skills in free- play situations, $r = .31$, $p < .01$. A series of moderation analyses were performed to further investigate the association between mind-mindedness and interactive skills. In free-play situations and in mixed-age groups, caregivers with higher levels of interaction skills used more group appropriate mind-related comments, $\beta = .17$, $p < .01$, and less individual appropriate mind-related comments, $\beta = -.05$, $p < .05$.

We will discuss the relevance of mind-minded comments at both individual and group level for the future study of mental state talk in early childhood education and care.

Sunday, September 1st, 2019

Symposium 62

Makedonia Hall B 14:15 – 15:45

S 62

DEVELOPMENT PREVENTION OF PROBLEM BEHAVIORS FOR HIGH RISK YOUTH IN ADOLESCENCE: EVIDENCE FROM THREE RANDOMIZED CONTROLLED TRIALS

Tolan P.
Chair, University of Virginia

Hops H.
Discussant, Oregon Research Institute

Adolescence is a time of increased risk for multiple types of problem behavior. Prominent among these are delinquency and violence, antisocial behavior, tobacco, drug and alcohol use, school failure and drop-out, and risk sexual practices. While this is a time of increased risk overall, studies have shown that risk is not distributed equally across the population. In the United States, as in many other developed western countries, risk is elevated for some population more than others. Specifically, in the US populations facing discrimination and racism and with greater exposure to poverty and crime are more likely to show higher rates of problem behavior among adolescents. This symposium brings together three randomized controlled prevention trials focused on reducing rates of adolescent problem behaviors. While quite different in timing of intervention, how the targeted population is identified, and the extent to which the outcomes are broader or more narrowly defined, each of these studies utilizes a developmental understanding of risk and prevention methods, focuses on family relationships and processes, and relies on longitudinal data to track long term effects. Tolan will report on the long term effects of a neighborhood-based family support group for inner-city residents, showing the link between early effects (first grade) and long term impact (at age 17). Waldron will present on the importance of intervention implementation quality and embedding in multicomponent programming for affecting risk of youth at high risk for substance use. Murry will track impact of a family support program for rural African-Americans to reductions in multiple problem behaviors. The purpose of the symposium is to juxtapose these three empirical examples for direct comparison and overall for broader implications of prevention for high risk populations, particularly family focused prevention. In particular, how these studies may extend to other countries and populations (or are not generalizable) will be emphasized in discussion led by Hyman Hops.

S 62-1

LONG TERM EFFECTS OF FAMILY SUPPORT INTERVENTIONS FOR INNER-CITY RESIDENTS WITH CHILDREN ENTERING FIRST GRADE

Tolan P.

Youth-Nex Center, University of Virginia, Charlottesville, VA

Background and aims: Families raising children in impoverished urban neighborhoods face multiple impediments and elevated risks to developmental success for their children. While a common view is that this risk is carried primarily or substantially because of limits in parental motivation or skills, empirical support for this is scant. This report is about an approach to preventing problems and enhancing development for children growing up in US inner-cities. The program, SAFEChildren, emphasizes connecting families to support parental involvement in school. By organizing neighborhood-based family groups as children enter first grade with academic skills training for the children, it was expected parental school engagement and student performance enhancement would provide developmental protection reducing adolescent problems.

Methods: 482 families residing in inner-city Chicago neighborhoods were engaged in a randomized controlled trial of SAFEChildren, a 15-session group-family support program offered half of families at the start of first grade in the 8 participating schools. The sample was approximately 60% African American and 40% Latino. This report is about whether positive initial impact on parental school involvement and student reading skills mediated long term (at ages 17-18) effects on major forms of problematic functioning of the child (e.g. violence, school completion, risky sex practices, substance use).

Results: Long term benefits of the intervention on risky sex practices, alcohol and marijuana use were mediated by early effects, with indirect effects related to misbehavior, but no effects for academic completion.

Conclusions: In the main, it appears helping families connect to others can help maintain parental involvement in school that can have long term benefits. Suggestion for improving effect size and breadth will be discussed.

S 62–2

PREVENTING ADOLESCENT MARIJUANA USE THROUGH FAMILY-CENTERED BEHAVIORAL HEALTH TREATMENT: A 12-MONTH FOLLOW-UP STUDY

Waldron H., Robbins M., Ozechowski T., Hops H., Turner C., Brody J.

Oregon Research Institute, USA

Background and aims: Drug abuse treatment has become specialized and, as a result, is rarely addressed directly in community mental health treatment settings. These settings may, however, provide an important avenue for preventing marijuana use among adolescents with behavioral health problems who are at elevated risk for substance-related problems. The current study was conducted with the primary aim of examining implementation processes associated with Functional Family Therapy (FFT) an evidence-based approach for youth disruptive behavior. We compared observation-based supervision (BOOST) to one FFT dissemination program's supervision as usual (SAU) to community treatment programs for diverse problem behaviors, but not specifically for drug abuse. Supervisors were, however, knowledgeable in drug abuse treatment techniques. Hence, the study allowed an examination of the extent to which FFT, implemented using BOOST versus SAU, would have preventive effects on marijuana use.

Method: BOOST (26 therapists, 105 families) and SAU (21 therapists, 59 families) supervision was implemented in 8 community mental health settings with FFT experienced therapists (*77% female*). Participating youth included 41% females; families reported Hispanic (62%), African American (19%), Non-Hispanic White (12%) or Other (7%) ethnic/racial origins. Therapy sessions were audio-recorded. Measures included clinical process (treatment fidelity, engagement, retention) variables and outcomes (adolescent behavior, family functioning, substance use) measured at baseline and 5 months and 12 months after baseline.

Results: The BOOST therapists did not differ significantly from SAU therapists in engagement, retention, or rated adherence. BOOST adolescents had significantly lower rates of marijuana use at both follow-up assessments.

Conclusions: Findings support enhanced supervision of therapists to prevent the normal escalation of marijuana use in high-risk adolescents. The preventative effects of enhanced supervision are particularly evident in cases receiving adequate doses of FFT from therapists exhibiting relatively high levels of fidelity to the engagement and behavior change components of FFT.

S 62–3

PREVENTING A WIDE SPECTRUM OF BEHAVIORAL AND DEVELOPMENTAL PROBLEMS AMONG AFRICAN AMERICAN YOUTH THROUGH THE STRONG AFRICAN AMERICAN FAMILIES (SAAF) PROGRAM

Murry V.

Vanderbilt University, United States

African American youth evince high rates of mental health needs and are less likely to be receive services for mental health disorders. Further, studies have shown strong associations between exposure to racial discrimination and elevated mental health problems. Consequences of unmet mental health needs include numerous academic problems and early exposure juvenile detention. Many African American families face challenges on how to buffer their children from succumbing to the consequences discrimination that have the potential to compromise overall development and adjustment. Studies of African American families have consistently shown that care giving practices have powerful protectiveness for their children's development. These parenting strengths were harnessed in a universal, family-based youth risk prevention program, the Strong African American Families program, to test its effectiveness in buffering youth from the negative effects of racial discrimination for their development. Findings from 671 parents and their children revealed that SAAF induced changes in regulated, communicated parenting indirectly buffered youth from internalizing negative of discriminatory messages and stereotypic messages about their race through the enhancement of youth racial pride, self-esteem, and future orientation, study shows the promise for the potential capacity of universal family-based prevention programs to induce positive changes in a wide spectrum of behavioral and developmental outcomes, including reducing the potential negative effects of discrimination on African American youths' mental health functioning.

Sunday, September 1st, 2019

Symposium 63

Mycenae Hall 14:15–15:45

S 63
HEARING & COGNITION

Iliadou V.

Chair, Clinical Psychoacoustics Lab, 3rd Department of Psychiatry, Neuroscience Sector, Medical School, Aristotle University of Thessaloniki, Thessaloniki, Greece

A recent European consensus acknowledges the need of different hearing evaluation than the usual clinical one based on the pure tone audiogram. Hearing is more than we are currently testing. Auditory Processing evaluation with a focus on more central parts of the auditory system than are currently tested is the way forward. The aim of the current symposium is to raise awareness on the methods that should be administered to have a clearer view of a person's hearing abilities in everyday life and the respective management techniques for Auditory Processing Disorder (APD).

APD management may benefit individuals with comorbid APD to provide them with individualized management even if complete recovery to normal auditory processing may not be a realistic expectation. Our findings demonstrate that APD children present deficits in the perception of regularly timed sequences in APD that is relevant to the perception of speech in noise, a ubiquitous complaint in this condition. These deficits are not related to attention, and further suggest the potential beneficial use of music/rhythm training for rehabilitation purposes in APD children would need to be explored.

A European platform for collecting information on diagnostic approaches and APD intervention outcomes will be of great value to individuals experiencing listening, communicational, academic, and working/ leisure difficulties. A European database would be used in this sense to check comparability of the prevalence of diagnosis, of symptomatology and of diagnostic test yield, usability of behavioral versus objective measures, and measure and compare management efficacy. The challenge in the European platform and database described would be to achieve verbal tests comparison across languages, instructions, and response mode uniformity with the addition of objective measures to compare across different languages and cultures.

S 63-1
AUDITORY PROCESSING DISORDER DIAGNOSIS

Iliadou V.

Clinical Psychoacoustics Lab, 3rd Department of Psychiatry, Neuroscience Sector, Medical School, Aristotle University of Thessaloniki, Thessaloniki, Greece

Background and aims: A recent European consensus acknowledges the need of different hearing evaluation than the usual clinical one based on the pure tone audiogram. Hearing is more than we are currently testing. Auditory Processing evaluation with a focus on more central parts of the auditory system than are currently tested is the way forward. The aim of the current symposium is to raise awareness on the methods that should be administered to have a clearer view of a person's hearing abilities in everyday life.

Methods: An evidence-based approach is used to provide insights on hearing sensitivity and auditory processing diagnosis in both children and adults with a focus on younger children and the elderly.

Results: A complex interplay between auditory processing and cognition is found to be present. Using standardised neuropsychology tools without prior knowledge of an individual's hearing sensitivity and auditory processing may result in inaccurate results. To avoid this possible over-diagnosis of cognitive deficits, there should be appropriate hearing evaluation.

Conclusions: Interdisciplinary approach and interaction between different specialties is of outmost importance to better understand what we interpret as attention or memory.

S 63–2

DEFICITS IN AUDITORY RHYTHM PERCEPTION IN CHILDREN WITH AUDITORY PROCESSING DISORDER ARE UNRELATED TO ATTENTION

Sidiras C.[1], Iliadou V.[1], Nimatoudis I.[1], Grube M.[2], Griffiths T.[2], Bamiou D.-E.[3,4]

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[2] Auditory Group, Institute of Neuroscience, Medical School, Framlington Place, Newcastle University, Newcastle upon Tyne England, UK

[3] Faculty of Brain Sciences, UCL Ear Institute, University College London, London, United Kingdom

[4] Hearing & Deafness Biomedical Research Centre, National Institute for Health Research, London United Kingdom

Background and aims: Auditory processing disorder (APD) is a specific deficit in the processing of auditory information along the central auditory nervous system, including bottom-up and top-down neural connectivity. Even though music comprises a big part of audition, testing music perception in APD population has not yet gained wide attention in research. This work tests the hypothesis that deficits in rhythm perception occur in a group of APD children. The primary focus of this study is to measure perception of a simple auditory rhythm, i.e. short isochronous sequences of beats, in APD children and to compare their performance to age-matched controls. The secondary question is to study the relationship between cognition and auditory processing of rhythm perception.

Methods: We tested 39 APD children and 25 control children aged between 6 and 12 years via a) clinical APD tests, b) Isochrony task, a test measuring the detection of small deviations from perfect isochrony in a isochronous beats sequence, and c) two cognitive tests (memory and attention).

Results: APD children scored worse in Isochrony task compared to the age-matched control group. In the APD group, neither measure of cognition (attention nor memory) correlated with Isochrony tasks. Left (but not right) speech in noise performance correlated with Isochrony task. In the control group a large correlation ($r=-.701$, $p=.001$) was observed between Isochrony task and attention, but not with memory.

Conclusions: The results demonstrate a deficit in the perception of regularly timed sequences in APD that is relevant to the perception of speech in noise, a ubiquitous complaint in this condition. Our results suggest a) the existence of a non-attention related rhythm perception deficit in APD children and b) differential effects of attention on task performance in normal vs. APD children. The potential beneficial use of music/rhythm training for rehabilitation purposes in APD children would need to be explored.

S 63-3

MANAGEMENT OF AUDITORY PROCESSING DISORDER

Bamiou D.E.[1,2]

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[2] Hearing & Deafness Biomedical Research Centre, National Institute for Health Research, London, United Kingdom

Background and aims: Management of APD needs to be multidisciplinary, and it is important that this is implemented in the educational environment for affected individuals who are still in education, in which case teacher-based adaptations and related strategies are of the utmost importance, alongside the previously mentioned interventions. The client's needs should be kept in mind before the multidisciplinary intervention planning.

Methods: Informal auditory training and compensatory, metacognitive, and metalinguistic strategies may also be of value. Working memory deficits may be specifically trained as they may be closely linked to auditory perception, but they are a precondition for auditory-language processing, for example examined by dichotic listening tests. The audiological results should be reflected in a multi-professional background to figure out the appropriate and individualized management for each child under consideration of the child's overall picture and problems in everyday life, the child's individual resources, and that management interventions match well with the individual main problems in everyday life.

Results: APD management may benefit individuals with comorbid APD to provide them with individualized management even if complete recovery to normal auditory processing may not be a realistic expectation. Data showing short-term memory and general IQ improvement following auditory training and FM use should be further investigated as they are indicative of brain plasticity on condition that it is not a short-term improvement and the stability of the improvements is ensured. It is, however, of clinical interest that such outcomes are being reported in the difficult to test and complex mental health patient as well as in the neurological patient and the child diagnosed with APD.

Conclusions: In order to implement cost-effective evidence-based APD management, there is a great need to identify specific psychoacoustic, clinical, or objective auditory markers (core measures) to guide appropriate specific management provision as opposed to using all three general approaches mentioned above. A European platform for collecting information on diagnostic approaches and APD intervention outcomes will be of great value to individuals experiencing listening, communicational, academic, and working/ leisure difficulties. A European database would be used in this sense to check comparability of the prevalence of diagnosis, of symptomatology and of diagnostic test yield, usability of behavioral versus objective measures, and measure and compare management efficacy. The challenge in the European platform and database described would be to achieve verbal tests comparison across languages, instructions, and response mode uniformity with the addition of objective measures to compare across different languages and cultures.

Sunday, September 1st, 2019

Papers 48 – Identity

Pella Hall 14:15–15:45

OP 279

INTEGRATING MODELS OF IDENTITY: COMBINED AND INDEPENDENT RELATIONSHIPS WITH MARKERS OF PSYCHOSOCIAL FUNCTIONING IN EMERGING ADULTS

McKay S.[1,2], **Lannangrand-Willaims L.**[2], **Skues J.**[1], **Wise L.**[1]

[1] *Swinburne University of Technology, Australia*
[2] *The University of Bordeaux, France*

Background and aims: Identity development is a key task of emerging adulthood that has many developmental and psychosocial consequences. However, the breadth of the identity literature means there are now many independent theories and models in the field. The present research aims to tackle the fragmentation of the identity development literature through testing an integrated individual identity model that includes Luyckx et al.'s (2008) Five-Dimensional Model, Cote's (1996) Resource Model, and McLean's (2006) Narrative Model of identity. These models have all previously been tested in relationship to each other, but no study has combined all three in a single model. The research explores how this fully integrated model and the associated underlying identity models, both together and independently, relate to important markers of psychosocial functioning.

Methods: The current research will test the integrated model with 112 emerging adults from Australia (Age M = 21.2, 71% female) and 110 from France (Age M = 20.1, 71% female). Participants completed three measures of identity and scales of psychosocial functioning including satisfaction with life, positive and negative affect, locus of control, self-esteem, meaning in life, and resilience.

Results: Preliminary data analysis generally supported expected relationships between the different models of identity and markers of psychosocial functioning. Processes of identity commitment were positively related to Cote's markers of identity development and better psychosocial functioning. While processes of identity exploration exhibited the opposite pattern of results. The relationship between the narrative identity meaning making scores and the other identity models was weaker but in the expected directions. For the full analysis, invariance testing will initially be undertaken to compare patterns of responses between French and Australia participants. Structural equation modelling will be used to test the structure of the individual identity models, how they interrelate, and the associated relationships with the positive functioning variables.

Conclusions: This research will provide a significant test of the relationships between three common identity models and their associations with several important psychosocial variables for emerging adults. The findings will provide a deeper understanding of the identity development processes for emerging adults and the ways these processes relate to healthy functioning adulthood.

OP 280

A LONGITUDINAL STUDY ON THE INTERPLAY OF SOCIAL CONTEXT AND IDENTITY FORMATION IN ADOLESCENCE

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Institute of Psychology, University of Pécs, Pécs, Hungary

Background and aims: Identity formation is the key developmental task in adolescence, which is influenced by contextual factors. Achieving an identity provides a sense of personal stability and continuity over time and allows individuals to consider different life choices. As identity formation is a dynamic process between individuals and their social context, poverty through social and material deprivation can be an important risk-factor for dysfunctional identity development. The aim of our study is to explore how child deprivation is related to normative and pathological identity formation, the role of social context and the psychosocial consequences.

Methods: In our study 338 (age=15,26; SD=1,11) first year secondary school students have participated. Data is collected in a short-term longitudinal study (three waves, 4 months apart), in which domain specific identity developmental processes (U-MICS) and pathology related identity processes (AIDA) are followed-up. In Wave 1 subjects filled out UNICEF's child-specific indicator system for measuring social and material deprivation, on which deprived and non-deprived groups were separated. Furthermore Multidimensional Scale of Perceived Social Support (MSPSS) and parental rearing style (S-EMBU-A) have been used. In addition domain specific self-esteem (Harter's Self-Perception Profile for Adolescents) and negative affectivity (PID-5) will be measured in Wave 3.

Results: Our initial results revealed the indirect effects of child deprivation on identity formation through social relationships. The interrelation between child deprivation, contextual factors, identity formation and psychosocial consequences will be investigated with various statistical analyses, among which structural equation model (SEM).

Conclusion: Our project aims to get a better understanding of the impact of child deprivation on adolescence development and the mediating role of interpersonal relationships.

OP 281

SADNESS, MUSIC AND IDENTITY IN ADOLESCENCE

Loureiro C., van der Meulen K., del Barrio C., Bivol M.

Universidad Autónoma de Madrid, Spain

Adolescence is characterized by the experience of new and intense emotions (e.g. Gross & Thompson, 2007), as well as by identity formation (Erikson, 1968). According to Meeus (2011), early adolescents do not start identity formation from zero. On the contrary, they have certain childhood commitments, which they might reconsider as they go through the various changes in a dynamic process. Although it seems logical to consider that both identity exploration and reconsideration of commitment depend on a certain openness towards important emotional experiences (Strayer, 2002), hardly any research exists on emotional regulation styles in combination with identity development. Salovey et al. (2008) argued that emotional regulation implies, among other aspects, openness to feelings and being able to control and reflect on emotions. Music has been found to be one of the preferred tools of emotional regulation by adolescents (e.g. Arnett, 2000); it is also used to express their identity (e.g. Gosling et al., 2002). However, we do not know what the relation is between various types of feelings and meaning making processes. Sadness could enable an individual to review her/his memories and reorganize resources (Ekman, 2003). The aim of the present study is to investigate the relations between adolescents' metaknowledge of emotional states and regulation, the different types of using music when feeling sad and processes in identity development. Participants are 300 adolescents, aged between 14 and 18 years. Used instruments are the Trait Meta-Mood Scale (Salovey et al., 1995); The Utrecht-Management of Identity Commitments Scale (Crocetti et al., 2008) and items on the emotional use of music when feeling sad. Results on the relations between sadness, music and identity development in adolescence will be presented. In the discussion we will highlight the relevance of music in the study of the development of both emotional regulation and identity.

OP 283

THE IDENTITY STATUSES OF ADOLESCENT AND EMERGING ADULT MOTHERS

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Identity achievement is one of the most important development tasks of adolescence. However, the pregnancy at an early stage of life affects not only physically, but also socially and psychologically. There is much evidence that young mothers are at risk for adverse psychological and maternal behavioral problems that can affect the mother's life course as well as the infant's health and development. One of the most important outcomes of being an early mother is that the lack of forming an achieved identity status. (Fergusson and Woodward,1999; Adamczyk and Luyckx 2015). This study aims to investigate the identity statuses of young people who became early mothers. In Turkey, although the marriages under 18 years old are restricted by laws, there is a huge population of young people who are married at a very early stage and most of them have children. In this study, early mothers' identity statutes were compared with their peers who don't have children. Research sample is consisted of 300 young people who live in Ankara including two groups aged between 16-19 and 20-24. Data was collected by "The Five-Dimensional Model of Identity Formation Scale" (Luyckx, Goossens, Soenens, Beyers, & Vansteenkiste, 2005). Cluster analysis was conducted and individuals are assigned to one of the dimensions of the identity. Pearson's chi square analysis reveal that identity statuses did not differ significantly ($X2=7,257$; $p>0,05$) between adolescents and emerging adults. However, early mothers have higher scores on foreclosure identity status and they seem willing to commit relevant roles before they explore. They do not have identity crisis and they commit the roles without exploring alternatives. This research seems to be the first study on early mothers' identity in Turkey and it is important that show the pregnancy and parenting of young people is linked to various problems.

Sunday, September 1st, 2019

Papers 49 - Parenting in Adolescence

Florina Hall 14:15 - 15:45

OP 284

DIFFERENCES IN PARENTS' AND ADOLESCENTS' REPORTS ON PARENTAL KNOWLEDGE AND LONGITUDINAL ASSOCIATIONS TO ADOLESCENTS' PSYCHOLOGICAL PROBLEMS

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Healthy parent–adolescent relationships are central for positive adolescent development. However, parents and their adolescent children often perceive the aspects of their relationship differently. This could stem from underlying problems in parent–adolescent relationship, which in turn is related to poor adolescent behavior or health. In this study, we investigate in what way disagreement between parents' and adolescent reports on adolescent disclosure, parental solicitation, control and knowledge are longitudinally related with psychological problems (internalizing and externalizing) and well-being in adolescence.

Data from matching parent and child dyads (n=477), from the research program LoRDIA were included. The adolescents' mean age was 13.0 years (SD = 0.56) at T1 and 14.30 years (SD = 0.61) at T2, evenly distributed between boys (51.6%) and girls (48.4%) at baseline. Discrepancy score was calculated by subtracting child's score from the parent's score, meaning that higher score indicated that a parent responded with a higher number than the child.

Structural analyses showed that higher levels of adolescent disclosure discrepancy were related to higher levels of adolescent internalizing problems and lower levels of adolescent well-being over time. Higher levels of parental solicitation discrepancy were related to higher levels of adolescent externalizing problems over time and lower levels of well-being. Parental control discrepancy was related to lower levels of externalizing and internalizing problems at T1. Parental knowledge discrepancy was related to higher levels of adolescent well-being over time and to higher levels of adolescent externalizing problems at T1.

Discrepancies in parents' and adolescents' reports of aspects in their relationship matter in terms of healthy adolescent development. Adolescent healthy development is harmed when parents overestimate the level of knowledge of adolescent whereabouts and parent–adolescent communication. However, when parents rate their behavioral control higher than their adolescents, the adolescents tend to show less psychological problems.

OP 285
ADOLESCENT SELF-CONTROL IN THE CONTEXT OF MATERNAL BEHAVIOUR AND INTERNALIZATION OF RULES

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Background and aim: One of the most important goals of parenting is to promote the adequate development of children's self-control. There are several ways in which parents can regulate the behaviour of their adolescents. The most frequent of these are autonomy support, behavioural control and psychological control. The aim of this work is to study how these three parenting practices of mothers are associated with adolescents' self-control and to what extent these associations are mediated through the level of internalization of maternal rules.

Method: The study was conducted on a representative sample of 1129 early adolescents (50.1% girls; mean age 12.98; SD 0.77). Mediation and moderated mediation (gender as the moderator) was performed using a PROCESS macro in SPSS. Based on the self-determination theory three levels of internalization in moral domain were examined: identification, introjection, external regulation as well as a measure of oppositional defiance.

Results. The study found that perceived maternal behavioural control and autonomy support were positively associated with adolescent self-control while psychological control was negatively associated. The relationship between behavioural control and self-control was fully mediated through identification with the rules and through a lack of oppositional defiance although not external regulation. Autonomy predicted self-control through identification; partially through a lack of external regulation and fully by a lack of oppositional defiance. External regulation did not mediate the relationship between psychological control and a lack of self-control while oppositional defiance did. This relationship was partially mediated by a lack of internalization. No interactions were found with gender in any of the analyses.

Conclusions. The way in which mothers regulate adolescents' behaviour is an important predictor of the level of adolescents' self-control. Overall, it is explained by the level of internalizing maternal rules.

OP 286
ADOLESCENTS' PROBLEM BEHAVIOUR: THE ROLE OF FATHERS' AND MOTHERS' KNOWLEDGE AND WARMTH

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Aims: The purpose of this study is to analyze the effect of adolescents' perception of fathers' and mothers' knowledge and warmth on their externalizing and internalizing problem behavior.

Methods: Participants (%49,2 of boys and %50.8 of girls) are included 191 adolescents who are age between 12 and 17, attend to middle and high school in Turkey. Parental monitoring scales, parental warmth scale and ASEBA (Youth Self Report) is applied as measuring instruments. Structural Equation Model is used to test two conceptual model. Models are tested to understand how mothers' and fathers' knowledge and warmth according to adolescents perception effect their problem behaviors.

Results: The conceptual model tested for mothers appears to be a good fit for the data in Figure 1 (path analysis for mother: $x2 = 21.5$, df=11, p=.28; x2/df = 1.95; CFI/TLI = .97/.96; RMSEA = .071). The Structural equation model shows that maternal knowledge has positive effect on maternal warmth and maternal warmth has related less frequent both internalizing and externalizing problem behavior. Other conceptual model tested for father has a good fit in Figure 2 (path analysis for father: $x2 = 8.3$, df=10, p=.59; x2/df = 0.83; CFI/TLI = 1.00/1.00; RMSEA = .00). Findings show that fathers' control directly and indirectly effect fathers' warmth via fathers' knowledge. Fathers' warmth has negative effect on both internalizing and externalizing problem behavior of adolescents.

Conclusion: The present study provide important insight in to the role of parental knowledge and warmth reducing adolescents' problem behavior. Moreover, what is the determinants of fathers' and mothers' warmth should be researched in different culture.

OP 287

EFFECT OF PARENTAL CAREER-RELATED BEHAVIORS ON CAREER INDECISION'S EVOLUTION. A THREE WAVES STUDY AMONG FRENCH ADOLESCENTS

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Family context is essential in understanding career development (Whiston & Keller, 2004). Parental career-related behaviors, particularly studied in terms of *support, interference and lack of engagement* (Dietrich & Kracke, 2009), have a direct effect on career development and specifically on *career indecision* (Young et al., 2001). This study pursues three objectives which aim to identify (1) type of parental career-related behaviors preferentially perceived by adolescents; (2) the trajectory of career indecision; (3) impact of parental career-related behaviors on career indecision's intensity during a school year. A three waves survey was contucted during the 2017-2018 school year. 1804 French adolescents schooled in 12th grade (crucial step of school path to commit in higher education) completed an online questionnaire. Participants' distribution is as follows: T1 (n = 973; G = 44.9%; F = 49.2%; M = 17.02; SD=0.59); T2 (n = 434; G = 40.4%; F = 40.0%; M = 16.9; SD = 0.49); T3 (n = 397; G = 44.4%; F = 41.9; M = 16.9; SD = 0.49). Data is currently being processed via Mplus. Expected results for our objectives are: (1) support is higher in T2 than in T1 and T3 while lack of engagement and interference are higher in T1 and T3 than in T2; (2) career indecision is stable in T1, increases in T2 and decreases in T3; (3) career indecision's intensity will be more or less strong depending on whether parents demonstrate more or less support, interference or lack of engagement in adolescents career decision-making process. Measuring career indecision's trajectory among adolescents schooled at a crucial step of their school path in view of parental career-related's role permits a comprehensive approach of this phenomenom. Theoretical and practical assumptions might be considered particularly in light of interactions' analysis between familty variables and subjective evaluation that adolescents make of their own experience of career decision-making process.

OP 288

PARENTS CAREER BEHAVIOR AS A FACTOR OF PROFESSIONAL SELF-DETERMINATION IN ADOLESCENCE

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Parents career behavior is widely studied as a predictor of career decision making self-efficacy and career maturity formation in adolescence. The influence of parental family on professional self-determination in adolescence is determined by the low level of adolescents' autonomy.

The aim of our research was to study personal professional perspective (PPP) development due to parents' career behavior in adolescence. 190 high school students (93 male, 97 female) from 14 to 17 years old (M = 15,93; SD = 0,87) participated in the research.

The "Parent career behavior checklist" (Keller, Whiston, 2008) and the "Personal Professional Perspective" (PPP) questionnaire (Pryazhnikov, 2016) were used in the research.

Five groups of teenagers with different perception of parents career behavior were distinguished: "Very involved parents", "Interested parents", "Involved mother and distanced father", "Involved father and distanced father", "Distanced parents".

The lowest maturity of the PPP components was figured out among adolescents whose parents are "Interested" in their professional self-determination. The highest maturity of the PPP components "Professional choice", "Value-semantic orientations", "Orientation in the socio-economic situation", "Perceptions of opportunities", "Overcoming obstacles" - are manifested among adolescents who perceive their parents as "Distanced" in their professional self-determination.

The group of adolescents with "Very involved parents" showed the highest maturity of the PPP components "Goal setting" and "Overcoming obstacles". Probably, adolescents from this group can count on the full support of their parents, including financial, and can build professional plans for the long term.

Adolescents whose parents are less involved in their professional self-determination show a higher level of orientation in the socio-economic situation and a more adequate level of aspirations. Probably, the situation of the forced necessity of self-orientation of adolescents in professional self-determination contributes to the active search for information about the current situation in the world and the formation of an adequate level of claims.

OP 289

DOES ONE SIZE FIT ALL? – LINKING PARENTING WITH ADOLESCENT SUBSTANCE USE AND ADOLESCENT TEMPERAMENT

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Parenting strategies, such as solicitation and behavioral control, as well as adolescent voluntary disclosure of their everyday activities can be protective of adolescent substance use involvement. But is that true for all adolescents? In this study, we explore whether adolescent temperament moderates the longitudinal associations between adolescent disclosure, parental knowledge, parental solicitation, parental control and adolescent substance use.

We used longitudinal data from (N = 1373) early-adolescent Swedish youth of 13.02 years of age at the baseline (51.6 % girls). We performed cluster analysis to identify temperament configurations (of novelty seeking, harm avoidance and reward dependence) and conducted cross-lagged panel design to test the reciprocal associations between the constructs. Multi-group analyses were used to test moderation by temperament.

Main results showed five distinct temperament clusters: detached and fearless, unstable, avoidant, sociable thrill-seekers, social and content. The bidirectional, negative associations between adolescent disclosure and substance use, and the positive longitudinal link between parental solicitation and adolescent substance use were moderated by temperament cluster. The link between T1 adolescent disclosure and T2 substance use was significant for adolescents in the detached and fearless and the unstable cluster, whereas the negative link between T1 adolescent substance use and T2 adolescent disclosure and the positive link between T1 parental solicitation and T2 substance use were significant for adolescents in the detached and fearless cluster.

Individuals and their contexts, in this case adolescents and their parents, are dynamically interactive in the process of an individual's development. We suggest that parental soliciting efforts may be disadvantageous, while open communication between parents and adolescent is beneficial for adolescent psychosocial development, especially for adolescents who rate high in thrill-seeking, fearlessness, and low in sociability, thus detached and fearless adolescents.

Sunday, September 1st, 2019

Papers 50 - Moral Development II

Kozani Hall 14:15-15:45

OP 290

APPRAISAL OF THE SPRITUAL INTELLIGENCE SELF-REPORT INVENTORY - REVISED (KAPN): ADAPTATION, VALIDATION AND PRELIMINARY FINDINGS IN THE GREEK CONTEXT

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Background and aims: New developments of policy-making in the fields of education and clinical psychology (i.e. OFSTED Handbook for the Inspection of Schools, 1994; DSM-5, by the APA, 2013; Position Statement on Religion and Spirituality in Psychiatry, published by the WPA Executive Committee in 2016) have necessitated the availability of assessment tools that cover a wide range of spiritual manifestations of personality, including skills and competencies related to spiritual intelligence. The Spiritual Intelligence Self-Report Inventory 24 (SISRI-24) is widely used to assess spiritual intelligence worldwide. The purpose of the current study was to examine the psychometric properties of the first known Greek version of the SISRI-24 (KAPN).

Methods: State of the art translation protocols were implemented to translate and adapt the original Canadian SISRI-24 in Greek. The psychometric properties of the translated instrument (KAPN) were then explored by means of exploratory and confirmatory factor analyses. A national sample of 1777 adults (M = 33.18, SD = 12.58, age range 18-76 years) provided data for factor structure. Three factors emerged, describing spiritual intelligence along the following dimensions: Conscious State Expansion (CSE), Personal Meaning Production (PMP), and Critical Existential Thinking (CET).

Results: A 3-factor solution, comprised of 17 valid and reliable items, yielded sound psychometric properties for the KAPN [fit indices: CFI=0.92, TLI=0.91, RMSEA=0.06, SRMR=0.06]. Internal consistency (KAPN total = .92; CSE, PMP, and CET subscales = .89/.80/.81) was sufficient for endorsing the reliability of the measure in Greek speaking populations.

Conclusions: The study provided evidence for the KAPN as a promising assessment tool, which expands our understanding of the concept of spiritual intelligence by turning this type of intelligence operative for Greek-speaking populations. Furthermore, the translated instrument lends itself to future empirical studies pertaining to cross-cultural, comparative analyses, critical reviews, and could better inform meta-analytic results.

OP 291

ADOLESCENT EMPATHY AND PROSOCIAL BEHAVIOUR LATENT CLASS GROWTH: DOES PARTICIPATING IN EXTRACURRICULAR ACTIVITIES MAKE A DIFFERENCE?

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The aim of this three-wave longitudinal study was to investigate heterogeneity in adolescents' patterns of prosocial behaviour and empathy development over time during adolescence, taking account of group membership (extracurricular activity participation and non-participation) and exploring whether the latent class trajectories for two dimensions of extracurricular activity participation (breadth of participation and intensity) were related to the class membership trajectory for prosocial behaviours and empathy.

Participants included 610 adolescents (53.2% female, Mage = 13.57; SD = 1.94) who completed measurements of prosocial behaviours, empathy and extracurricular activity participation annually. Growth mixture modelling (GMM) analyses demonstrated that the adolescent population was best typified by three latent growth trajectory classes for prosocial behaviours and two for empathy. Concerning the trajectories for prosocial behaviours across the extracurricular activity group compared to the non-extracurricular activity group, our results revealed that there was no downward linear trend trajectory. The same was observed for empathy development, with an upward linear trend over time during adolescence.

Contrary to our expectations, the latent class trajectories for breadth of participation and intensity were not related to the class membership trajectory for prosocial behaviours and empathy. These results highlight the importance of taking account of heterogeneity between class trajectories, with adolescents' prosocial behaviours and empathy being captured more effectively by diverse class trajectories. They emphasise the importance of moving away from analyss around mean-level change and examining other predictors besides gender and age to better understand which other factors might influence prosocial behaviours and empathy development over time during adolescence.

OP 292

VALUE PRIORITIES OF TURKISH MIDDLE-AGED CHILDREN AND COMPARISON WITH THEIR MOTHERS

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Children's value acquisition is one of the focuses of recent studies. Values can be defined as relatively stable beliefs determining the individual and social desirability of goals and behaviors. Schwartz's value categorization system is one of the most widely used categorization systems of human values. In recent years, evaluating the children's values is one of the attention-grabbing topics. Picture Based Value Survey for Children (PBVS-C) is used for examining value priorities of middle-aged children through self-report which is based on Schwartz's theory. The aim of this study was to evaluate the similarities between mother-child dyads in terms of the 10 value types of Schwartz.

A total of 172 mothers (M=37.31; SD=4.75) and their children aged between 6-11 years (M=8.5; SD=1.23) attending at 1st, 2nd, 3rd, and 4th grade of primary schools in Ankara participated in the study. Portrait Value Questionnaire was used for the assessment of mothers' personal values, PBVS-C was used for assessment of children's values.

Our findings showed that mothers give priority to values of achievement, security and self-direction, and high-order values of self-enhancement and conservation. In addition, it was found that children give priority to values of tradition, benevolence, and universality, and higher-order values of self-transcendence and conservation. Furthermore, it was seen that the values of the mother-child dyads have weak similarities and the order of priority of the value types differed from each other. In addition, our findings suggest that socioeconomic status has an effect on mother-child value similarity and its effect varies according to the age and gender of the child.

Our study revealed important findings in terms of evaluating the value similarity of mother-child dyads and factors affecting this similarity in middle childhood. Therefore, it is thought that these findings can be guided for the professionals studying on values education and acquisition of values.

OP 293

EXPLORING JUSTICE SENSITIVITY IN MIDDLE CHILDHOOD: MEASUREMENT AND RELATED CONSTRUCTS

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Justice sensitivity (JS), the tendency to perceive and negatively respond to injustice, was predominantly investigated in adults and adolescents. Recent research suggests a manifestation in middle childhood. This study explored if and how we may measure JS as well as links between JS perspectives (victim, observer, perpetrator), social competencies (empathy, theory of mind, inhibition) and temperament (surgency, negative affect) in this age range. Some of these links were never explored before. JS was shown to predict aggressive and prosocial behavior in adolescents and adults, but relations in middle childhood have not been examined yet. We asked 361 children between 6 and 10 years of age ($M = 7.66$, $SD = .96$) and/or their parents about children's justice sensitivity, social competencies, temperament, as well as prosocial and aggressive behavior. We replicated the intended factor structure with three distinct but correlated subscales displaying victim, observer and perpetrator JS in both child and parent ratings. Child and parent ratings of JS showed at least strong measurement invariance. Victim JS positively predicted aggressive and negatively predicted prosocial behavior, whereas observer and perpetrator JS positively predicted prosocial and negatively predicted aggressive behavior. All JS perspectives were positively related to prerequisites of prosocial behavior, such as theory of mind and empathy. Hence, victim-sensitive individuals are apparently not more aggressive due to deficits in social competencies. Positive relations between observer- and perpetrator JS and effortful control as well as positive relations between victim JS and negative affect indicate that relations between JS and pro- and antisocial behavior might be best explained by temperament. JS may apparently influence behavior early on and should therefore be considered as an important factor by future research.

OP 294

VALUE PRIORITIES, PSYCHOLOGICAL WELL-BEING AND ACADEMIC OUTCOMES: A QUALITATIVE EXAMINATION OF ADOLESCENTS OF MIGRANT BACKGROUND IN GERMAN SCHOOLS

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A number of studies have demonstrated that schooling entails more than just promoting academic competences and that the psychological well-being of an individual may yield positive academic and non-academic outcomes (Phan & Ngu, 2015; Fraillon, 2004). A study by Soutter (2011) about well-being in school details a theoretical framework that emphasises a range of sources for personal well-being (e.g., (1) freedom, choice and independence; (2) spirituality and/or religion; (3) friends, family and pets; (4) fun, happiness; and (6) music, sport, holidays; etc), most of which are also used in our self-affirmation study. Such values have been used in some studies for self-affirmation interventions and it has been found that writing short essays about one's core values, besides affirming one's self, reduces psychological threat and stress and promotes academic performance (Schnabel et al., 2013; Gayer et al., 2017). An interlink between personal value priorities, psychological well-being, and academic outcomes among adolescents of migrant background has been demonstrated by a number of studies (e.g., Tamm et al., 2016; Motti-Stefanidi et al., 2012; Mustafa & Vedat, 2014).In this study, we examine the relationship between personal value priorities, psychological well-being, and academic outcomes among adolescents of migrant background in schools.

This study seeks to understand (1) the kind of values, that adolescents of migrant background prioritize in their lives, (2) the beliefs these adolescents have about the values that matter most to them, and (3) how these prioritized values foster their psychological well-being and academic outcomes.

A sample of 50 adolescents (55% female, M_{age} =12.6) with Arabic, Turkish, eastern European and other migrant backgrounds are randomly selected from the main sample for the purpose of this analysis. The larger sample consists of 699 adolescents from 15 schools and 58 classrooms, in Berlin, Germany. These schools participated in a self-affirmation writing intervention where the participants wrote short essays about the values they identify most, with. The data is being inductively coded and analysed thematically.

While further analyses are in progress, to include the entire sample, the preliminary findings show that values of family and friends, and having fun were the most selected and written about by the adolescents. As to whether writing about values has any effect on the psychological well-being and academic well-being of adolescents of migration background, is yet to be established.

Sunday, September 1st, 2019

Papers 51 - Outcomes of Parent - Child Interaction

Edessa Hall 14:15-15:45

OP 295

OBJECTS AS DETERMINANT OF TRIADIC INTERACTION: THE COGNITIVE FUNCTION OF OBJECTS' PHYSICAL AND SYMBOLIC PROPERTIES WITHIN THE VIRGIN-CHILD PATTERNS OF INTERACTION IN PICTORIAL REPRESENTATIONS (15th-17th CENTURY)

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According to our previous work which studied interactions of the Virgin and Child in Bellini's paintings in the light of mother-child interaction patterns (*Leonardo*, 2002), our current research is about the use of objects in 200 European Virgin and Child paintings mainly Italian from the 15th to the 17th century. In these extra-dyadic situations, the dyad is interacting with a target object that can have two functionalities. On the one hand, the objet is depicted as a mediator of real physical interaction. These pictorial representations can be seen as a testimony of real mother-child triadic interactions with real objects, which can be used by the mother, for instance, as a scaffolding function for the child development, mainly requesting of attention via the object (or "proto-declarative intention") or as reflecting joint action. On the other hand, the object can be used as a mediator of allegorical interaction. The depicted object has a religious meaning for the dyad as well as for the perceiver, according to its symbolic meaning as used by the artist (for instance, a goldfinch figuring the Passion of Christ).

Taking into account object features, patterns of triadic interaction were elicited in the line of Fogel's works, and coded according to the physical and symbolic properties of the depicted object. Results are that the interaction patterns, - mainly the joint involvement and the appropriation of the object by the child -, are influenced by factors such as (1) the type of objects (its physical and allegorical properties), (2) the age of the child, and (3) the period in history of painting. Moreover, we find that for the same object, the allegorical meaning differs according to the level of the child-to-mother interaction.

OP 296

PARENT-CHILD ATTACHMENT, EMPATHY, AND PROSOCIAL BEHAVIORS AMONG PRESCHOOL CHILDREN

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This study aims to know the relation of parent-child attachment on empathy and prosocial behaviors. As attachment is relational in nature, this study endeavors to look as to which specific aspect of empathy is attachment significantly related to. Further, this also looks into their relationship with prosocial behaviors.

 A total of 87 children with ages ranging from 3.4 to 6.5 years old (M=4.70, SD=.46), together with their respective mothers (M=35.63, SD=6.14), participated. The mothers completed the Attachment Q-sort (ASQ) version 3.0 of Walters and Deane (1995), where they had to sort behavioral descriptions from least descriptive to most descriptive. Children, on the other hand, watched three videos of three respective emotions (i.e., happy, sad, and angry). Their facial expression were recorded, and affective empathy was measured by scoring the degree to which their facial expressions matched the facial expression of the characters in the video. Cognitive empathy was measured by scoring their understanding of the emotions of the characters. Prosocial behaviors were measured via the latency by which the child would help in picking up the crayons that fell on the floor and the degree to which the child would comfort the researcher who hurt herself with the clipboard.

Regression analysis showed that lower dependency attachment predicted affective empathy, but not cognitive empathy. Age differences were observed in cognitive empathy, but not in affective empathy. Also, both affective empathy and cognitive empathy significantly predicted prosocial behaviors. In addition, secure attachment also directly predicted prosocial behaviors. Cognitive empathy moderated the effects of secure attachment on prosocial behaviors, while affective empathy mediated the relation of dependency attachment and prosocial behaviors.

The importance of parent-child relationship, particularly of attachment, was emphasized and encouraged to further empathy and prososocial behaviors among children. Implications and suggested interventions were also discussed.

OP 297

PREDICTING PARENTAL INVOLVEMENT IN CHILDREN'S HOMEWORK: THE ROLE OF PARENT MOTIVATIONAL BELIEFS AND PARENT AFFECT

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Background and aims: The study aimed to investigate motivational and affective influences on parental involvement in children's homework. The main question of the study was why parents are involved in their children's homework adopting different types of involvement? Specifically, parent motivational beliefs (mastery and performance goals for their child, efficacy beliefs for their child, parents' self-efficacy) and homework-related affect (positive and negative) were examined as predictors of discrete types of parental involvement in homework such as parent autonomy support, control and interference.

Method: A matched sample of 807 5th grade children and one of their parents completed self-report questionnaires measuring the above variables. Confirmatory factor analyses demonstrated good fit of all scales under examination. Structural equation modelling was applied on the data in order to unravel the pattern of relationships among the variables.

Results: The main findings can be summarized as follows: (i) children's autonomy support, as the most beneficial type of parental involvement, was positively predicted by parent mastery goals and parent self-efficacy beliefs, and negatively by parent beliefs of their child's efficacy; (ii) both control and interference practices were positively predicted by parent performance goals and parent affect, whereas negatively by parent beliefs of their child's efficacy; (iii) interference, as the most detrimental type of parental involvement, was additionally negatively predicted by parent mastery goals; (iv) parent affect was predicted by parent beliefs about child's efficacy and their own self-efficacy beliefs, and (v) the mediating role of parents' affect during homework between parent efficacy beliefs for the child and themselves, on the one hand, and parent control and interference, on the other, was confirmed.

Conclusion: The above results indicate the significant interplay among motivational, affective and behavioral factors during parental involvement in children's homework and will be discussed in relation to current theory and evidence. Implications for parents and children will be pointed out.

OP 298

MOTHERS SPEECH BEHAVIOR STRATEGIES DEPENDING ON CHILD'S PSYCHOPHYSIOLOGICAL STATE: ASD, DOWN SYNDROME, NORM

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Background and aims: Mother speech is important factor for the child's speech mastering and cognitive development and socialization. The goal of the study is to reveal acoustic features of speech and elements of nonverbal behavior in "mother-child" dyads during the interaction situation. Participants in the study were 85 dyads with 4-7 years-old children: typically developing (TD n = 40 dyads), children with autism spectrum disorders (ASD n = 25), and children with Down syndrome (DS n=20).

Methods: Perceptual, phonetic, spectrographic analysis of speech and expert analysis of nonverbal behavior in "mother - child" dyads were conducted.

Results: It was shown that mothers of all children are characterized by the initiative when interacting with the child, their speech is loud, clear, grammatically simple, and aimed at stimulating children to the answer. Mothers of TD children more often demonstrated joy than mothers of children with ASD and DS, asked more questions, and clarified the meaning of the children's utterance. Mothers of children with ASD more frequently answered to children's replicas and encouraged them. Mothers of DS children were often angry, repeated the question or the same words, addressed to the child by his name. The strategies of mother's speech behavior correlating with high level of the speech development of TD children are defined. The correlations between features of mother's speech and clear articulation of children with DS are absent. Mothers of ASD children adapt their speech to the level of the child's speech and are guided by the severity of autistic disorders of the child, but this strategy does not always lead to progress in the child's speech development.

Conclusions: Different mother's speech behavior strategies during interaction with TD children, children with DS and ASD are revealed.

OP 299

THE ROLE OF EMPATHY AND SOCIAL SKILL IN THE RELATION BETWEEN PARENTAL ATTITUDES AND PRESCHOOL CHILDREN'S BEHAVIORAL PROBLEMS

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Although recent study provided some explanation about the relationship between parental attitudes and behavioral problems of preschool children, the role of intervening variables in this connection has been limited. The purpose of this research is to understand the effect of parental attitudes on preschool children's behavioral problems, and to focus on the mediator function of children's empathy and social skills.

Methods: Participants of this research were composed of 210 children attending to preschool class (104 females and 106 males), their parents and teachers.

In order to assess parenting behaviors, the Child Rearing Questionnaire which was developed by Sanson et al. (1994) was completed by mother and father.

The Social Competence and Behavioral Evaluation Scale was used. This scale has 30 items with 3 subscales namely; Social Competence, Anger-Aggression, Anxiety-Withdrawal (Çorapçı et al., 2010).

In order to measure children's empathy, empathy subscale of the Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1999) was used. The subscale is 8 items parent and teacher report questionnaire.

Ladd and Profilet Child Behavior Scale, is a teacher report instrument which was developed to evaluate preschool children's behavior problems. Scale included 44 items and 6 subscales (Ladd, & Profilet, 1996).

Results: Analysis of multi-informant data set was examined using structural equation model (LISREL 8.80 program). The full mediational model indicated better fit then the partial mediational model.
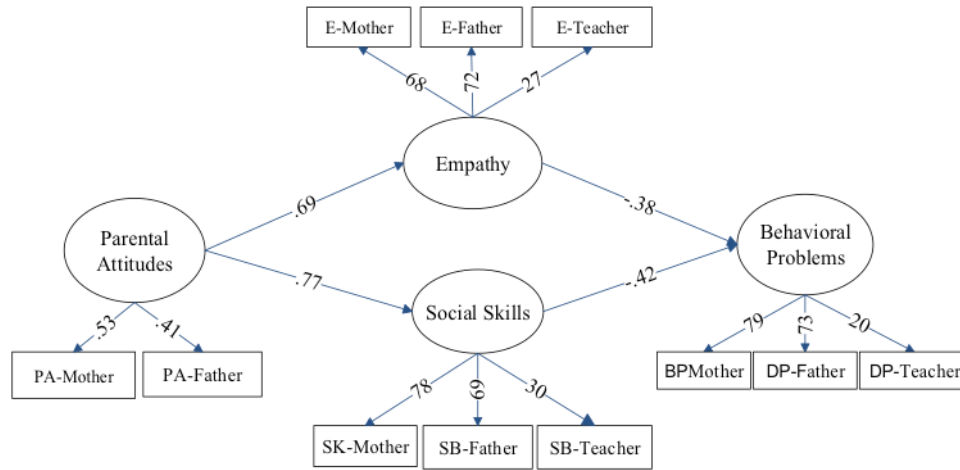
Figure 1. Standardized parameter estimates for the Final model.

Conclusions: Past researches has indicated that the importance of parent attitudes on children's behavioral problem, this present research contributes directly to knowledge about behavioral problems. Results show that preschool children's empathy and social skills fully mediated between the relationship parental attitudes and behavioral problems.

OP 300

THE ROLE OF MATERNAL MENTAL HEALTH AND EMOTION REGULATION STRATEGIES IN CAREGIVING HELPLESSNESS

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The caregiving system is conceptualized as a biologically based motivational system, which is considered as a guide for the protective responses to child of parents (Bowlby, 1982). George and Solomon (1999) extend the description of caregiving as the mother's skill to evaluation of the developmental aspect of the child. However, severe disruptions in the caregiving system can lead to maternal helplessness (Solomon & George, 1996). Caregiving helplessness is associated with maternal mental health (Huth-Bocks, Guyon-Harris, Calvert, Scott and Ahlfs-Dunn, 2016) and emotion regulation strategies (Solomon & George, 2011). The current study aimed to investigate the association between caregiving helplessness, maternal mental health and emotion regulation strategies of mothers ($N=521$) of toddlers (*Age Range* =18-36 months). Brief Symptom Inventory (Derogatis, 1992), Caregiving Helplessness Questionnaire (Solomon & George, 2011) and Emotion Regulation Questionnaire (Gross & John, 2003) were completed.

Results show that there is a positive association between caregiving helplessness and suppression as a strategy of emotion regulation ($r=.20$, $p<.05$). Moreover, caregiving helplessness is also positively associated with anxiety ($r=.36$, $p<.05$), depression ($r=.31$, $p<.05$), negative-self ($r=.32$, $p<.05$), somatization ($r=.29$, $p<.05$), and hostility subscale of brief symptom inventory ($r=.29$, $p<.05$). A Hierarchal regression analysis was conducted to predict caregiving helplessness from maternal mental health variables and emotion regulation strategies. The first step results show that mental health variables explained 13% of the variance ($F_{(5, 513)} = 16.52$, $p < .001$, $R^2 =.13$). In the second step, emotion regulation strategies, cognitive reappraisal and suppression, were entered. Findings reveal that suppression explains further and the model explained caregiving helplessness with an additional 16 % of the variance (($F_{(6, 512)} = 16.93$, $p < .001$, $R^2 =.15$).

It is great importance for having a better understanding about the factors that are important in caregiving and parent–child relationship in a sample of Turkish mothers.

Sunday, September 1st, 2019

Papers 52 – Emerging Adulthood

Naoussa Hall 14:15 – 15:45

OP 302
PROTECTIVE MECHANISMS AGAINST BURNOUT IN EMERGING ADULT UNIVERSITY STUDENTS WHO ARE JUGGLING WORK AND STUDY

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Successfully completing tertiary education is a critical developmental activity for many emerging adults. Increased competition for graduate jobs, increased living costs, and decreased government financial support for students (Richardson et al., 2014) has increased the proportion who work part-time while studying (Bexley et al., 2013; McNall & Michel, 2017). Working while studying has benefits (Curtis & Shani, 2002; Sanchez-Gelabert et al., 2017), but it increases drop-out rates (Hovdhaugen, 2015) and completion time (Tur-Sinai et al., 2017). It also increases work-study conflict, which increases negative affect (Creed et al., 2015) and burnout (Lingard, 2007). Student burnout is very common (Maroco & Campos, 2012) and associated with adverse academic outcomes (Kuittinen & Merilainen, 2011). Thus, it is important to understand how to protect working students against burnout.

We surveyed 227 Australian emerging adult university students (mean age 19.45 years; 64% female) who worked at least part-time (mean hrs = 16.30, range 0-48). Drawing on the Jobs Demands-Resources model (Bakker & Demorouti, 2007), we expected that work and study demands would predict higher work–study conflict whereas resources (role flexibility) would predict higher work-study facilitation. Conflict/facilitation were expected to mediate the demands/resource-burnout relationships. We also examined preference to control role boundaries and the ability to psychologically detach from work as moderators of these relationships.

We confirmed most hypotheses. Higher demands in each roles independently increased role conflict (56% variance explained), whereas higher role flexibility increased work-study facilitation (14% variance explained). Role conflict, but not role facilitation, in turn, increased burnout (67% variance explained). However, boundary control moderated work and study demands-role conflict relationships and study flexibility-role facilitation relationship. In addition, the capacity to psychologically detach moderated the conflict/facilitation-burnout relationships.

These findings have implications for policy and support services in both the tertiary institutions and the organizations that employ these emerging adult students.

OP 303
THE ASSOCIATIONS BETWEEN EMERGING ADULTS' MORAL FOUNDATIONS AND THEIR PROSOCIAL BEHAVIOR

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Prosocial behaviors are explained by personal factors age, gender, personality traits as well people's concerns about right or wrong on their actions are relevant constructs. With reference to these points the first aim of this study was to investigate the relation between moral foundations (i.e. the individualizing and the binding moral foundations) and prosocial tendencies (i.e. public, emotional, dire, anonymous and compliant). The second aim of the study was to test mediator role of personality traits between these variables among emerging adults. Participants included 309 college students (female= 190; male = 119; 18-27 years, M= 21.27, SD= 1.39). They completed Moral Foundations Questionnaire, Big Five Inventory and Prosocial Tendencies Measure. Regression analyses were used to explore the associations between moral foundations and prosocial tendencies, and then, Hayes Process were carried out to test mediator role of personality traits in this relation. Binding and individualizing foundation were found to predict prosocial tendencies. While higher concern about binding foundation was linked to greater public, altruistic and emergency prosocial tendencies, higher concern about individualizing foundation is positively related with prosocial tendencies except from public and altruistic behavior. Moreover, personality traits, i.e. agreeableness and openness to experience, have mediator role between moral foundations and prosocial behaviors of emerging adults. Agreeableness mediated the relation between individualizing foundation and prosocial tendencies in emotional and compliant situations. Also, openness to experience mediated the relation between individualizing foundation and prosocial tendencies in emotional, dire and anonymous situations. It means, the relation between moral concerns and prosocial behaviors exists in emerging adulthood years. Additionally, personal traits have crucial role in explaining the relation between morality and prosociality.

OP 304
LONELINESS AMONG EMERGING ADULTS: THE ROLE OF EMOTION REGULATION AND COPING

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Background and aims: Although past research has examined the association among loneliness, emotion regulation and coping strategies, little research exists on how emerging adults regulate loneliness and cope with it. Thus, the aim of the present study was to examine the role of emotion regulation abilities and coping strategies in predicting loneliness during emerging adulthood after accounting for depression.

Methods: Participants were 351 Greek emerging adults (ages 18-22; 63.8% females), who completed measures of loneliness, depression, emotion regulation difficulties and coping strategies.

Results: Hierarchical linear regression showed that, after controlling for depression, difficulty in accessing emotion regulation strategies was associated with higher levels of loneliness. Moreover, seeking less emotional and instrumental support, self-blaming, and behaviorally disengaging from the situation were associated with higher loneliness scores.

Conclusions: Lonely emerging adults may have limited access to emotion regulation strategies for downregulating loneliness and may also employ less appropriate coping strategies. Implications of these findings for loneliness interventions are discussed.

OP 305

ROMANTIC ATTACHMENT, SOCIOCULTURAL RISK AND PERSONAL AGENCY IN EMERGING ADULTS

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2 Center for Psychology at the University of Porto
3 University of Trás-os-Montes and Alto Douro - UTAD

Contemporary Western societies are characterized by high levels of uncertainty and unpredictability that create increased difficulties for emerging adults to be competent enough to exercise control over his or her life course (sense of agency). According to the literature, the establishment of quality relationships with a romantic partner can promote a more agentic performance. Although, the sense of personal agency should not be understood as dissociated from the psychosocial context, less attention has been attributed to the role of sociocultural risk in the aforementioned association. This analysis will allow us to understand if the mechanisms through which the quality of the romantic attachment predicts the personal agency differ in situations of low and high sociocultural risk. The sample is composed of 607 emerging adults aged between 18 to 30 years. Participants responded to self-report measures about personal agency, romantic attachment and sociocultural risk through an online survey (*LimeSurvey* 3.15®). Sociocultural risk was analyzed through a cumulative risk variable. The sample was divided into two levels of socio-cultural risk based on Composite Risk Index (1 cut-off point (50%) [Low risk, n = 381; High risk, n = 226]. Through structural equation modelling and multigroup analysis we verified that dependence and ambivalence in romantic relationships predict negatively the personal agency in both groups. We also found that gender is a predictor of personal agency, but only in the high risk group. Being male predicts a higher sense of agency. These results suggest that relationships characterized by separation anxiety, insecurity and fear of loss of romantic partner contribute to a limited personal agency in emerging adulthood regardless of socio-cultural risk. The discussion of the results is based on attachment and self-determination theories.

Sunday, September 1st, 2019

Papers 53 – Diversity, Equity and Social Justice

Makedonia Hall A 15:45 – 17:15

OP 307
COUNSELING PROUDLY: THE WORK OF SCHOOL COUNSELORS WITH LGBT YOUTH

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This study examines the experience of school counselors with issues related to the LGBT population (gay, lesbian, transgender, and bisexual). The study is based on a phenomenological qualitative method and semi-structured interviews with 18 high school counselors. The interviews were recorded and transcribed and underwent content analysis. The study findings show that school counselors perceive LGBT adolescents as a population with unique characteristics, including the need for concealment, feelings of loneliness and confusion, lack of acceptance in the peer group and family, and feelings of emotional distress. The counselors described a strong desire to help adolescents, along with a sense of great frustration and helplessness, resulting from lack of knowledge, sources of support and the feeling of being alone in the campaign. In addition, they mentioned the difficulty of working with parents who often find it hard to accept their children's sexual identity. Additional findings also point to a difficulty to deal with the issue from a systemic standpoint - schools are often afraid to deal openly with the issue and take a firm stand, as a result of fear of the parents' reactions and those of the educational system.

School counselors coping with LGBT youth play a two-fold, significant role - they provide solutions for the teenagers and their families, on a personal level, as well as find solutions on the school level. The counselors' sense of efficacy, relevance and ability in the encounter with LGBT youth can have a great influence on the formation of the teens' identity development and consolidation processes. Intervention programs at school that deal with sexual and gender identity may increase LGBT students' sense of support and security at school and contribute to their emotional well-being.

OP 308

DEVELOPMENT OF CIVIC COMPETENCIES DURING ADOLESCENCE: LONGITUDINAL ASSOCIATIONS WITH SYMPATHY AND PERSISTENCE IN LATE CHILDHOOD

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With increasing social inequalities, the role of active and engaged citizens becomes more important. Prior research has focused on the development of civic competencies in young adulthood; however, only few studies have investigated how civic competencies manifest themselves and develop at earlier stages. Those few studies suggest that civic competencies are an important developmental task of adolescence and are predicted by multiple processes in childhood. In order to shed light on these developmental antecedents of civic competencies, this four-wave study examined the role of social (i.e., sympathy) and self-regulatory competencies (i.e., persistence) from early childhood to early adolescence in the evolution of civic competencies during adolescence. Assuming that civic competencies reflects a multidimensional construct, we investigated associations of sympathy and persistence with different components of civic competencies (i.e., social justice values, perceived social and personal responsibility, informal helping, perceived efficacy to take responsibility, perceived political efficacy, and community engagement).

Based on a representative sample of 1118 Swiss children (M_{age} T1 = 9.26 years, SD_{age} T1 = 0.20 years) who were interviewed in their homes every 3 years (i.e., at the ages of 9, 12, 15, and 18), findings from autoregressive and latent difference score models revealed that: a) with the exception of community engagement, civic competencies remained highly stable during adolescence and slightly increased, although there were significant individual differences between participants; b) sympathy at the age of 12 was a central positive predictor of most civic competencies during adolescence; and c) persistence at the ages of 9 and 15 positively predicted certain aspects of civic competencies (i.e., social justice values and informal helping) while persistence at the age of 12 negatively predicted community engagement.

These findings shed new light on motivational and socio-emotional developmental antecedents of different components reflecting civic engagement in adolescence.

OP 309

PROMOTING POSITIVE ATTITUDES TOWARDS OUT-GROUPS AMONG ISRAELI KINDERGARTNERS VIA EXTENDED CONTACT

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During early childhood, children develop awareness of differences among people in race, ethnicity, and gender (Nesdale & Brown, 2004). When tensions exist among sub-groups of the society, as in Israel, children strengthen their positive bias towards their in-group and negative attitudes towards out-groups. Secular and religious Jews together consist the majority of the Israeli society; Ethiopian Jews and Arabs are two minority out-groups in Israel that usually suffer from negative attitudes.

This study evaluated the efficiency of an extended contact intervention, aimed at promoting positive attitudes towards out-groups among Israeli kindergarten children.

Secular and religious Jewish Israeli children (N=109) participated in 16 small-group sessions over four weeks. Experimenters introduced to the children persona dolls (Smith, 2013) that represented four Israeli social groups: secular Jew, religious Jew, Ethiopian Jew, and Arab. Children were exposed to the dolls' individual and group characteristics, and to positive encounters between them. Attitudes towards children from in- and out-groups were assessed before and after the intervention using four measures: liking, willingness for physical proximity, trait attribution, and empathy.

A series of ANOVAs, followed by Bonferroni tests, revealed that there was a positive change in children's liking of- and willingness to sit close to Arab and Ethiopian children. There were no significant changes in empathy towards Arabs and Ethiopians, nor in trait attribution. In sum, the intervention program was partially successful in changing children's attitudes. It was more effective for religious children whose initial attitudes were more negative than those of secular children. Empathy and trait attribution seem to be more resistant to change than liking and proximity.

The findings highlight the potential of intervention programs to promote young children's positive attitudes towards out-groups. They emphasize the importance of addressing this challenge early in children's development by implementing developmentally-appropriate methods.

OP 310

DEVELOPMENTAL TRENDS IN CHILDREN'S AND ADOLESCENTS' BYSTANDER PROSOCIAL BEHAVIOUR TOWARDS THE EXCLUSION OF IMMIGRANTS WITHIN A DIVERSE CONTEXT

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Intergroup exclusion (based on group membership) is harmful to children and can be challenged by prosocial bystander responses (Palmer & Abbott, 2017; Killen & Rutland, 2011). Developmental research has shown the decline between childhood and adolescence of prosocial bystander *intentions* concerning intergroup exclusion is dependent on the group membership of the excluder or victim (Palmer et al, 2015). A recent study examining bystander *behaviours* indicated that between 8-11 years children showed more prosocial behaviours to outgroups (Mulvey et al., 2018). This study, however, did not vary the group membership of the excluder or victim.

The present study examined for the first time children's and adolescents' bystander *behaviours* in both interpersonal (i.e., British-British and Immigrant-Immigrant) and intergroup (British-Immigrant and Immigrant-British) contexts using a simulated ball-tossing game, Cyberball. This study adopted a 2 (Age: 8-10 vs. 13-15) x 2 (Victim: British vs. immigrant) x 2 (Excluder: British vs. immigrant) between-participants design. British children (*M*age=8.96) and adolescent (*M*age=13.23) participants (*n*=292) from an ethnically diverse area completed the Cyberball game in which they witnessed either an ingroup or outgroup peer excluding either an ingroup or outgroup peer by not throwing them a ball. Tosses to the victim were coded as a measure of prosocial bystander behaviour.

Results revealed that younger participants were more likely to help when the victim was an immigrant and the excluder was also an immigrant (i.e., an interpersonal context) compared to when the context was intergroup. In contrast, the older participants were more likely to help the immigrant victim when the excluder was British (i.e., an intergroup context). These findings show a developmental trend towards more prosocial bystander *behaviours* in intergroup contexts relative to interpersonal contexts. The findings will be discussed from a developmental intergroup perspective on bystander responses and social exclusion (Palmer & Abbott, 2017; Killen & Rutland, 2011).

OP 311

LGBTQ+PHOBIC BULLYING: A PHENOMENON MORE COMPLEX THAN HOMOPHOBIC AGGRESSIONS

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Background and aims: The so-called homophobic bullying refers, in general, to bullying directed to students from sexual minorities such as gays, lesbians, bisexual and transsexual. However, there is no consensus regarding what makes this bullying homophobic. It is homophobic due the victims who is directed? it is the kind of aggression (e.g., homophobic names and epithet)? are both? The aim of this study was analyse traditional bullying and cyberbullying, as well as, homophobic aggressions in relation to sexual orientation of the students.

Method: The sample consisted of 2089 students (47% girls and 53% boys) with ages range between 11 and 18 years old (M= 13.68, SD= 1.31). To asses bullying and cyberbullying the European Bullying Intervention Project Questionnaire and European Cyberbullying Intervention Project Questionnaire were used. In addition, two items including homophobic aggression were added. The sexual orientation was assessed asking about their erotic-affective preferences towards boys and girls.

Results: The results showed higher prevalence of traditional bullying victimization in homo and bisexual students (27.5%) compared to the heterosexual (16.7%) and asexual ones (20.1%). In cyberbullying, the prevalence of victimization was also higher among homo/bisexual (10.6%) vs. heterosexual (7.1%) and asexual (2.9%). The prevalence of homophobic aggressions against homo/bisexual students was also quite greater both, face to face (16.2% vs. 5% hetero and 4.3% asexual) and online (6.3% vs. 1.4% hetero and 0.7% asexual). In addition, also homo/bisexual students suffer significantly more than three more times traditional bullying and homophobic aggressions simultaneously (17.6% homo/bisexual vs. 5.4% heterosexual and 4.3% asexual). To point out that also some heterosexual students also were victims, as has been shown, of repeated homophobic aggressions.

Conclusions: This study evidence a stigma-based bullying, LGBTQ+phobic bullying. A wider and comprehensive analysis of the homophobia and its different manifestations is needed to understand and tackle against this specific type of bullying that goes further of a specific sexual orientation.

OP 312

'THAT WILL PROBABLY LAST FOREVER': ON THE RELATIONSHIP BETWEEN NORMATIVE MASTER-NARRATIVES AND DIVERSITY IN SEXUAL IDENTITY CONFIGURATIONS IN GAY MEN

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Background and aim: During sexual identity development same-gender attracted (SGA) youth draw on different normative frameworks of sexuality and identity development to make sense of their own sexual desires and experiences. Hetero-normative master-narratives frame identity development as a discrete phase, resulting in identity integration; here sexual identity is understood exclusively in terms of sexual desire. In contrast, queer-normative master-narratives frame development as an ongoing process, and sexual identity as fluidly comprised of different dimensions. By narratively engaging with these cultural resources in the construction and telling of personal stories SGA youth selectively adapt and highlight their own romantic and sexual experiences. As a result both the specific configuration of sexual identity and their own understanding of their self-identity development were shaped by normative frameworks. The aim of the current study was to explore how identity configurations and understandings of their development were intertwined with normative frameworks.

Methods: Participants were eight young (18-24 years old) SGA-identified men from Germany who were interviewed about their experiences of sexual identity development using a modified question from the life-course interview. Interviews were transcribed and the first complete narrative was subjected to a structural Labovian narrative analysis.

Results: Participants framed their identity configurations either as mono-dimensional reflections of desire or as multi-dimensional constructs including other domains. Additionally, participants differed in their narration of development as either an ongoing process or a discrete phase. The complexity of identity configurations was related to the narrative framing of identity development, with mono-dimensional configurations being related to an understanding of identity development as a phase, and multi-dimensional configurations being associated with a process-view.

Conclusion: We suggest that in order to understand both identity configurations and narrations of identity development the normative frames that participants draw on in the process of identity formation need to be considered.

Sunday, September 1st, 2019

Papers 54 – The Role of Culture in Development and Socialization

Makedonia Hall B 15:45 – 17:15

OP 314

WHAT MAKES CHILDREN REJECT CONSENSUS INFORMATION? THE INFLUENCE OF CULTURAL BACKGROUND AND AGE OF INFORMANTS

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Much of the cultural knowledge that we acquire relies on other people's testimony; what we trust, however, depends on variables related both to the informant and to the nature of the information. In two studies conducted in China and Spain, we explored preschoolers' trust in the unanimous opinion of schoolteachers (study 1) and peers (study 2) in social decision making contexts. Participants were presented with two types of peer-interaction situations, which involved (a) ambiguous and (b) explicit scenarios. The ambiguous scenarios depicted a peer social situation open to interpretation (e.g., accidental fall or intentional push). The explicit scenarios depicted familiar events of a peer exclusion. In these latter scenarios, the schoolteachers (study 1) or peers (study 2) offered a non-normative judgment about the event (e.g., it's okay to exclude the child from playing with others), a judgment that greatly departed from children's own criteria. Children had to make decisions about the judgments of the informants, and whether they endorsed or not their view. In both studies, participants were overall more likely to accept the consensus information in the ambiguous than in the peer exclusion scenario. The two cultural groups, however, differed in their degree of agreement with the informants. Spaniards mainly focused on the content of testimony, regardless of the informants (adults, peers): they endorsed the consensus testimony when uncertain about what had happened, but not when the situation involved a peer exclusion event; in such cases, their own criteria against exclusion prevail over the consensus testimony. The Chinese participants focused more on the informants' identity, showing a greater deference towards adults as compared to peers, even when they held a non-normative opinion. These findings indicate culture-specific patterns related to children's attitude towards trusting peers vs. adults as sources of knowledge.

OP 315

HOW DO CULTURAL VALUES RELATE TO PREVALENCE AND NATURE OF BULLYING VICTIMIZATION?

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Large-scale surveys have pointed to considerable country variations in the prevalence and nature of bullying victimization. In seeking to explain these, one possible explanatory factor has been the cultural values of a country, such as expounded by Hofstede (1980; Hofstede et al., 2010). We examine predictions made about the prevalence and types of victimization, that may be made on the basis of his six dimensions of cultural values: PDI: power distance; IND: individualism-collectivism; MAS: masculinity-femininity; UAI: uncertainty avoidance; LTO: long-term orientation; and IVR: indulgence vs restraint. These predictions can be tested against survey data for many countries, available from HBSC, EU Kids Online, GSHS, TIMSS, and PISA. We summarise very recent findings on IDV (Smith & Robinson, 2019), finding a change over time in how IDV relates to prevalence of victimization; and we report further findings for the other five dimensions. The findings are discussed in relation to other factors from the EU Kids Online model of country predictors, and suggestions for a further research program to explain cross-country variations are made.

OP 317

STUDENTS' PSYCHOLOGICAL SEPARATION FROM PARENTS IN TWO CULTURES

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The psychological separation from parents (PSP) is a person's ability to maintain autonomy by itself in relations with parents (Holmbeck, 1996; Kagitcibasi, 2005; Dzukaeva, 2016).
As phenomenon the PSP is studied as the structure including four components: Conflictual, Emotional, Attitudinal and Functional separations (Hoffman, 1984; Dzukaeva, 2016).
Our study was aimed at investigation on how PSP changes within youth in connection with gender, age and culture.
Hoffman's Psychological Separation Inventory (1984) in adaptation by Dzukaeva & Sadovnikova (2014) and the J. Tausend's Test of Cultural and Valuable Orientations in adaptation by Pochebut (2012) were used.
The subjects: university students from 17 to 21 years old (M = 18,9; SD=1,11), N=534 (M/F=254/280), randomized at age, gender, and culture (Russian and Ossetian).
The non-simultaneity of PSP's components is found: Emotional separation development advance the Functional and Attitudinal separation. The typology of PSP at youthful age is offered: five patterns of students' PSP are described. The older respondents, the higher their PSP level is.
Fathers' support of students' PSP is more in compare with mothers'. Mothers more support separation of sons in comparison with their support of daughter's separation.
It is revealed *as the general*, and *the various* in PSP in the Russian and Ossetian ethno-cultural groups. The general is shown in similarity of the allocated separation patterns. The distinction is shown in significantly bigger PSP of the Russian students in comparison with the PSP of the Ossetian students.
Features of PSP are connected with students' belonging to different types of culture, according J. Tausend: traditional, modern, dynamically developing.
To sum up, the cultural differences are stronger in older students. PSP scores, its general profiles and dynamics differ depending on gender and culture.
This is because of the prevalent traditions varies among cultures widely. The results are discussed according to gender and cultural socialization.

OP 318

THE ADOLESCENT EXPERIENCE: YOUNG CZECHS AFTER AND DURING SOCIAL CHANGE

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Focus of this study is centered on relationships between social changes in the Czech republic during last 30 years and everyday live experiences of adolescents. The research followed on the idea of cohort comparison of samples gathered in different historical points (Silbereisen, 2005). We compare four specific cohorts of young Czechs: the first, „post-totalitarian" generation was born during communist regime and entered in adolescence at the time of the fall of the communist regime. The next three cohorts of Czech adolescents grew up in free and democratic society. However, these young people experienced rapid social, economic and political changes which influenced directly (e.g. school system) and indirectly (e.g. family relations, leisure) their everyday life. Cohort 2 experienced turbulent period of democratic changes during nineties, cohorts 3 a 4 represent young Czechs with social status of Europeans (Macek, Ježek, & Vazsonyi; 2013). Compared to previous ones, the current cohort 4 is much more "digital" and strongly influenced by social networks.

This presentation compares everyday life experiences of four mentioned cohorts of Czech adolescents (14 -17 years old). A set of relevant variables was taken from Euronet Pilot Study (Alsaker & Flammer, 1997). Measures included inventories and scales regarding daily activities, future plans and expectations, daily hassles, coping strategies, control beliefs in different domains of life, self definition, and well-being. Three former samples (S1: data collected in the year 1992; n = 257; S2: data collected 2001, n = 309; S3: data collected 2011, n = 370) will be compared with a new sample of current adolescents (S4: data will be collected in March - April 2019). Considering social change over the past three decades we propose several hypotheses about the present cohort of adolescents: more materialistic and individualistic orientation, less clear concept of future, and stable role of parents as the most important referential persons.

Sunday, September 1st, 2019

Papers 55 – Acculturation, Immigration and Biculturalism

Mycenae Hall 15:45 – 17:15

OP 319

REVIEW OF STUDIES ON THE INTEGRATION OF YOUNG REFUGEES. METHODOLOGICAL GAPS AND FACTORS INFLUENCING THE EMOTIONAL INTEGRATION

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This contribution comprises a methodological literature review (1) of the research on the integration of young refugees, published in peer-reviewed English-, German- and French-language journals in the last thirty years (N=3.044). The scoping review analyses demographic characteristics of the samples used, fieldwork characteristics, and the methodology and research designs of studies. The review identifies key methodological and data gaps and offers recommendations for future research priorities that address policy makers' concerns over a lack of reliable and accessible data and evidence for understanding how migration and forced displacement affect children and youth.

Furthermore the contribution presents preliminary results of a meta-analyses (2) on the emotional integration of refugees in the host country (N=201). The overall assumption was that involuntary displaced young refugees will develop a strong sense of belonging to the host country and will less likely identify themselves with their country of origin. Factors (e.g., gender, age, socio-cultural background) influencing the development of a sense of belonging to the host country and to the country of origin of young refugees was investigated.

OP 320

ACCULTURATION TRAJECTORIES OF MINORITY ADOLESCENTS: A CONTEXTUAL AND DYNAMIC APPROACH

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As society is becoming increasingly culturally diverse, adolescents from different cultural backgrounds come into sustained intergroup contact. Acculturation refers to subsequent changes in their cultural orientations. Following a well-established bi-dimensional model of acculturation, minority adolescents have orientations towards mainstream culture adoption and heritage cultural maintenance, which are seen as two independent dimensions. In line with a contextual and dynamic approach of entwined acculturation and developmental processes in adolescence, the acculturation orientations of minority adolescents change over time as a function of peer norms of acculturation in culturally diverse schools. The present study takes a more fine-grained person-centered approach of differential trajectories of acculturation (using multivariate latent growth mixture modelling). Furthermore, we predicted these trajectories from the intergroup school context and used them to predict school adjustment.

Drawing on large-scale school-based panel data (i.e., an accelerated longitudinal design with 3 waves and 3 cohorts, Mages 12, 13 and 14 at wave 1), we compared two minority subsamples in Belgian secondary schools: most devalued Moroccan and Turkish minorities (N=1189) and less devalued European minorities (N=530). We asked minority adolescents about their mainstream and heritage culture orientations and tested how these acculturation orientations changed over this three-year time period, distinguishing differential acculturation trajectories between and within minority groups.

Our findings showed differential trajectories for acculturation orientations across both samples. We differentiated three latent trajectories in the Turkish- and Moroccan-origin sample, and two latent trajectories in the European-origin sample. Follow-up analyses predicted different trajectories as a function of school diversity climate and cross-ethnic friendships in schools. Furthermore, these trajectories were also predictive of school adjustment (i.e., emotional and behavioral engagement). To conclude, our findings document the dynamic and contextual nature of acculturation in minority adolescents, and highlight the importance of a supportive school environment in the development of minority adolescents' acculturation orientations and beyond.

OP 321

PERCEIVED PARENTAL SOCIALIZATION PRACTICES IN BICULTURAL FAMILIES IN GREECE

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Family constitutes an important matrix concerning child socialization and emotional development. Cultural groups embody diverse social norms, beliefs and parental expectations, consequently, they behave in different ways regarding parenting. Cross-cultural study has emphasized differences in socialization practices of bicultural families. The present study examines the bicultural child in Greece and the diverse parental practices in mixed marriages from the aspect of the parent and the aspect of the child and seven different cultural roots.

Research questions were tested with the qualitative method of focus groups. One focus group of three bicultural adults was conducted in order to discuss about their parents' practices and one focus group of three women in a bicultural marriage exchanged opinions regarding similarities or differences in parenting between spouses.

The discussions were audiotaped and the transcriptions were analyzed in two categories; exact quote on transcript and additional/interaction data (non-verbal communication). Individual data were coded in categories in accord with the theoretical framework. Research findings place emphasis on the experience of the mixed-marriage child in the middle of two poles of cultural origin. Results also document the significance of both historical, economic and social conditions which form these practices. They also indicate that parent-child issues could be either universal or dependent on the developmental stage of the child and the personality traits. In addition, findings highlight the bicultural child's preference for one cultural identity.

As there is an immigrant increase in Greece during the last three decades and there are insufficient data on mixed marriages and parenting within them, this research attempts to make a first step toward this direction to a thorough understanding of the field mentioned above. Greek society has gradually been transformed in a multicultural society, therefore, psychoeducation respecting cross-cultural parenting seems to be a major target in order to create functional interpersonal relationships.

OP 322

PSYCHOSOCIAL DEVELOPMENT IN YOUNG CHILDREN OF CROSS-BORDER MARRIAGE FAMILIES IN TAIWAN: MIGRANT MOTHERS' PERCEIVED DISCRIMINATION MATTERS

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For the past two decades, Taiwan has received an increased number of marriage migrants, mainly women in childbearing ages moving from less developed countries in the region. The primary driving force pertains to Taiwanese men who are disadvantaged in the local marriage market due to old age, low social class and functional disability. As a country with lowest-low fertility, the well-being of children raised in these cross-border marital unions should call for greater attention, particularly for their potential exposures to multiple forms of discrimination. As much previous literature has discussed the impacts of discrimination on health and adjustment problems in immigrant youth, this study focuses on psychosocial development of younger children born to parents of cross-border marriages.

Data came from a subsample of the Taiwan Birth Cohort Study with 2,224 children whose mothers moved to Taiwan as marriage migrants and had complete follow-up survey data at 6 months, 3 and 5.5 years of age. Both institutional and personal dimensions of discrimination was measured based on mother's perception. Children's psychosocial developmental outcomes at 5.5 years included their self-efficacy and peer relationship. Two marriage groups were also defined by mother's original nationality: China (33.7%) and Southeast Asian (SEA) countries (66.3%) for exploring group differences. I applied multiple regression analysis to examine whether mother-perceived discrimination could predict children's later psychosocial development with child's basic demographic and family socioeconomic variables controlled.

Higher levels of institutional discrimination perceived by migrant mothers significantly predicted children's lower self-efficacy and poorer peer relationship, but not the personal dimension. The effect was significantly more pronounced on children's self-efficacy in mothers from China than from SEA countries. In conclusion, poor self-concept can be developed in children of cross-border marriages at very young ages in a wider context of immigrant discrimination even without the race issue.

OP 323

FAMILY, ECOLOGICAL AND SITUATIONAL PREDICTORS OF IMMIGRATION SUCCESS IN US CHILDREN IMMIGRANTS TO ISRAEL

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The study was designed to further the scant existing knowledge regarding the predictors of immigration success of children and families. Family adjustment to immigration is an understudied topic in general (Steinberg & Morris 2001) and is practically a non-existent subject of study in US families immigrating to Israel. The handful of studies on immigration to Israel primarily focus on immigrants from the Former Soviet Union an Ethiopia (Romi & Simcha, 2009; Walsh et al. 2010). The experience of US immigrants to Israel differs in considerable ways from other immigrants including being driven by what is known as "pull" reasons, as opposed to "push" reasons and the cultural similarities between the US and Israel driven by the Americanization of Israel (Waxman, 1995). Hence, the objectives of the current study were to assess child immigration success within the context of parental and family adjustment and to examine how immigration motivation and ecological variables post-immigration interconnect with family variables to predict child immigration success.

The sample included 140 parents who emigrated with children from the US to Israel between 3 to 10 years ago. The survey included indices of both pre-immigration and post-immigration variables including reasons for immigration, family support, child and parent relationships and well-being, and immigration adjustment and success. Marital and parent-child relationships were found to buffer the association between first-year transition difficulties and long-term child immigration success. Furthermore, parental psychological well-being was found to predict child immigration success. Pull factors were found to correlate with child and family immigration success and ecological similarities to family first-year post-immigration predicted long-term immigration success. Finally, first-year immigration satisfaction moderated the relationship between pre-immigration well-being and long-term immigration success. The study highlights the importance of assessing family and ecological variables and their interconnections when considering childhood adjustment to immigration transition.

Sunday, September 1st, 2019

Papers 56 – Social Media and the Internet

Pella Hall 15:45 – 17:15

OP 324
TRUST IN THE INTERNET AS A SOURCE OF KNOWLEDGE DURING SCHOOL YEARS

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The last 20 years have seen an increasing interest in the study of the acquisition of knowledge by testimony, the results of which contribute to the understanding of specific aspects of the process (Koenig, et al., 2004, Harris et al., 2018). However, little research has been conducted on the Internet despite its growing presence at home and schools as a tool to obtain information about a broad range of different issues. The objective of this paper is to analyze the credibility that scholars attribute to the information that comes from the Internet compared to the information given by their real teachers. Some studies have shown that young children give credit to the information coming from Internet (Schacter et al. 1998) without questioning the accuracy of the content or the quality of the source (Hirsh, 1999; Large & Beheshti, 2000; Watson, 1998). We address the objective in 4 studies (S) with different designs and materials adapted to participants' age. In S1 and S2 (N = 25, preschool; N = 114, primary), children faced with conflicting and new information provided by their teacher and the Internet and had to choose which source they trusted the most. In S3 and S4 (N = 25, preschool; N = 62, primary), we evaluated whether children's misconceptions about scientific contents are modified to a greater extent when the correct information is provided by their teacher or Internet, and the long-term effects. Preschoolers (S1, S3) did not show greater confidence in either of the two sources. However, older children were more selective: they trusted their teacher more than Internet when they did not know the answer (S2); when they had erroneous previous ideas, the information provided by their teacher was more influential in the long term than that provided by Internet (S4).

OP 326

SHARENTING, IS IT A GOOD OR A BAD THING? UNDERSTANDING HOW ADOLESCENTS THINK AND FEEL ABOUT SHARENTING ON SOCIAL NETWORK SITES

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As social network sites have become an integral part of parents' daily life, it often seems natural for them to give contacts an online peek of their children. This behavior is referred to as sharenting. Previous research indicated that parents might have several reasons for sharenting. However, less is known on how adolescents think and feel about sharenting. This raises questions as sharenting can cause harm to their identity formation by leaving digital footprints. Therefore, this study explores adolescents' perception of the reasons why parents participate in sharenting, and their attitudes toward sharenting. A survey was conducted among 817 adolescents. Factor analyses pointed toward four perceived sharenting motives: parenting motives, social motives, impression management motives, and informative-archiving motives. According to the adolescents, parents mainly shared information about their children due to informative-archiving motives. In addition, regression analysis indicated that adolescents largely disapproved of sharenting. They mainly considered it as embarrassing and useless. However, female adolescents or adolescents who were closer with their parents had more positive attitudes toward sharenting. When adolescents themselves disclosed more personal information or when they had more previous experiences with sharenting, they had more positive attitudes toward sharenting. Adolescents who were more concerned about their online privacy, were more likely to disapprove of sharenting. Moreover, the more adolescents thought that parents shared information about their children because of informative-archiving motives, the less they disapproved of sharenting. Conversely, the more adolescents perceived sharenting as an impression management issue, the more negative their attitudes toward sharenting. Based upon the results, it seems important to make parents more aware of their sharenting behavior and the potential risks, and how their adolescent children might think and feel about sharenting. Furthermore, parents need to go in dialogue with their children in order that they both can reveal their thoughts and concerns.

OP 327

INCREASING SOCIAL INTERACTION IN MOBILE GAMES: A FIELD EXPERIMENT

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Play is an avenue through which children develop social skills (Bergen & Fromberg, 2015). With rapid advances in gaming technologies, mobile games provide an increasingly common play context. However, there is growing concern that mobile games lack social stimulation and increasingly isolate children. We developed an infrastructure where different mobile devices interact and hence children can benefit from the mobile gaming environment as a social interaction context. Whether this new environment did indeed increase social interaction was tested in a field experiment. Sixty-four children (age range = 10-12) played the single player and multiplayer versions of the same mobile game in groups of four. The gaming sessions were counterbalanced and separated by a week. The game involved assuming various roles in a restaurant kitchen and the players' goal was to prepare orders as quickly and accurately as possible. In the single player version-mimicking the already available restaurant games in the market-children prepared the orders themselves. In the multiplayer version, children shared roles (e.g., getting ingredients from the pantry, chopping vegetables, cooking). The infrastructure allowed mobile devices to communicate so that all screens served as one particular segment of the gaming environment All gaming sessions were video recorded. Two independent blind coders coded all videos for social interaction duration (interrater reliability was .91 in the multiplayer condition and .84 in the single player condition). Children interacted with each other 88. 99 % (SD = 19.49%) of the time in the multiplayer condition but only 13.51 % (SD = 21.88%) of the time in the single player condition, $t(15)$=12.36, p < .001. After playing both games, 80% of children preferred the multiplayer version over the single player one, $t(54)$=5.51, p < .001. These initial findings indicate that emerging mobile gaming technologies provide important opportunities to facilitate social interaction.

OP 328

IM NO MODEL EITHER: EXPLORING THE POSITIVE LINKS BETWEEN ADOLESCENTS' BODY IMAGE, SOCIAL MEDIA USE AND AESTHETIC HYPER SENSITIVITY

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Background/aims: Adolescents use social media in which appearance messages are prevalent at a daily rate. Inconsistent findings have emerged on the relation between social media and adolescents' body image; the role of social media in body image remains thus unclear (Tiggemann & Slater, 2013). Three explanations may contextualize these results and refer to prior research's focus on 1) general social media measures and neglect of more content-specific measures, 2) negative effects, while some social media interactions may have positive effects, and 3) general audiences and lack of consideration of relevant differential susceptibility factors. A first attempt to address these gaps was done in the current study that focused on how adolescents' positive body image (PBI) related to social media exposure regarding (a) positive appearance feedback of peers, (b) general inspirational posts (e.g., #bepositive) and (c) specific body-positive posts. As the aesthetic component of adolescents' hyper sensitivity nature heightens the effect of rewarding stimuli (Smolewska, 2006), this factor was modelled as a moderator together with (the prior well-documented) factors of gender and age.

Methods/results: Survey data among 690 adolescents (M_{age}=16.41-SD=.98) were used to validate previously proposed factor structures and showed moderate to high scale reliability (αrange .60-.92). A set of hierarchical regression analyses (controlling for age, BMI, gender, general social media use) showed, first, that positive appearance feedback from peers significantly predicted PBI (β=.09, t= 2.24, p<.05), but not the two inspirational post variables (F(7,585)=15.18, p<.01). Second, no significant two-way interaction effects emerged between the social media variables and aesthetic sensitivity, gender or age. Similarly, no support emerged for three-way interactions between the moderators and examined social media variables.

Conclusion: The results highlight peers' potential to positively affect body image and suggest more research is needed to uncover subgroups of adolescents who may benefit more (or less) from such positive feedback.

OP 329

ADOLESCENT AND CHILD PERCEPTIONS OF THE RISK AND BENEFITS OF SOCIAL NETWORKING SITE USE

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Background and aims: 76% of adolescents and 26% of 5-11 year-olds reported using social networking sites (SNS; Ofcom, 2017). Children are spending increasingly more time on SNS; research has shown that the more time spent online the greater the possibility of exposure to risks (e.g., cyber bullying, low self-esteem) and potential benefits (e.g. social capital, digital literacy). In two studies, we aimed to gain an understanding of children's perceptions of the risks and benefits of SNS use and how this influences their online behaviour.

Method: The first study had 426 adolescents (13- to 16-year-olds), the second had 901 children (8- to 12-year-olds). Both studies had children complete a set of questionnaires. In the first study, adolescents completed an adapted online privacy scale (Buchanan et al, 2007) to assess risk perceptions of privacy, over-disclosure and addiction, and evaluated which items from a list of known risks and benefits of social media use they believed were negative, positive or both negative and positive consequences of social media use (e.g., items were linked to self-presentation, self-esteem, disclosure, social capital, and digital literacy). In the second study, children completed a set of validated scales related to over-disclosure, cyberbullying, self-esteem, self-presentation, digital literacy and social capital.

Results: Findings showed that adolescents were only slightly concerned about known risks, and when they were concerned it tended to be more around privacy and over-disclosure. In general males tended to perceive the items as more positive than females. The findings in study two showed that children, in particular the girls, who were more likely to see SNS risks to self-esteem, cyberbullying victimization and private disclosure predicted their likelihood to disclose online.

Conclusions: Findings will be discussed with regards to children and adolescent attitudes to the risks and benefits of SNS' and the implications for schools and policymakers.

Sunday, September 1st, 2019

Papers 57 – Technology, Media and Child Development

Florina Hall 15:45 – 17:15

OP 330

VIDEO IMAGING TECHNIQUE CLARIFIES THE LINK BETWEEN RAPPORT AND NONVERBAL SYNCHRONY OF FACIAL MOVEMENT DURING PSYCHO THERAPEUTIC INTERVIEW

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Background and aims: Video imaging technique (VIT) enabled to encode participants' body movements without evaluators' bias and labor. Application of VIT into psycho therapeutic interview clarified the link between clients' rapport and nonverbal synchrony (NVS) of body movement. Still, VIT was rarely applied to measure NVS of facial movements. Hence, the present study applied VIT to measure NVS of facial movements and aims to clarify the link between rapport and nonverbal synchrony (NVS) of facial movement during psycho therapeutic interview.

Methods: Sampling of video images: The 55 healthy participants received structured psychotherapeutic interview provided by a male Japanese clinical psychologist. During the interview, participants' and their therapist's facial movements were video recorded. All videos recorded during the conversation were converted into a series of pictures that represented one image for every 100 milliseconds of video. We selected participants' and therapist's facial movements during the first 15 minute interview and divided them into 15 one-minute portions. The final dataset consisted of participants' 495,000 face images and their therapist's 495,000 face images.

Analysis: We calculated absolute differences in facial landmarks between each picture and the previous picture. The absolute differences were used to estimate cross-correlation coefficients as the NVS of facial movements.

Results: We compared NVS of facial movements between real (genuine) and random (pseudo) pairs. Genuine NVS of facial movements was significantly lower than the pseudo NVS. Further, ANCOVAs shows that the negative NVS for face, ridge of nose, outer lip, and inner lip predicted high rapport during psychotherapy, even though participants' facial movement and sex were adjusted.

Conclusions: Negative NVS predicted high rapport during psychotherapy more accurately than positive NVS. These findings support the link between rapport and NVS of facial movements, and imply that polite turn taking during psychotherapy might be an index of high rapport.

OP 331

AN EVALUATION OF A DIGITAL READING AND SPELLING INTERVENTION FOR TYPICAL AND ATYPICAL READERS AND SPELLERS

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Previous studies provided inconclusive results on the effectiveness of digital literacy interventions. This study aims to identify whether use of an online literacy intervention tool will indeed result in improvement in the poorest readers' scores in reading and spelling and at the same time be as effective for children without literacy difficulties, but also increase motivation to read and write.

The project is a longitudinal one using a Randomised Controlled Trial (RCT) design to evaluate the impact of online-based reading and spelling activities in Key Stage 1 and 2 children (N=83) from two different schools in the UK. Children were assigned randomly to intervention and control groups in each school. Standardised reading and spelling tests were administered to the children at baseline, at two immediate follow-up assessment points and at one delayed follow-up assessment point (12 weeks later).

One-way and repeated measures ANOVAs conducted with the whole sample but also with the poorest spellers. All children showed improvement in reading and spelling over the course of the study, however, the improvement in reading and spelling was not significant for either the intervention or the control group, and the effect of group was not significant at any assessment point. Comparable results were obtained when we re-analysed the data including poor spellers only.

As the intervention children improved similarly to controls, findings suggest that online literacy intervention tools might not be always effective in boosting the students' literacy and cognitive outcomes. The effect of virtual learning by the use of digital literacy intervention tools will be further discussed.

OP 332

TOTS AND TABLETS: THE IMPACT OF SCREEN TIME AND PARENTAL MEDIATION ON TOUCHSCREEN USE AMONG INFANTS AND TODDLERS

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Touchscreens (e.g., tablets and smartphones) have become ubiquitous in the lives of young children. They offer unique features that were absent from traditional media forms (e.g., television) such as being portable, multi-touch, intuitive, and multimodal. With the ubiquity of touchscreens in the lives of children, parents have raised concerns regarding the negative impact of these devices in children's development. The parental mediation theory suggests that parents find ways to manage their children's media use. This exploratory study investigated the parental mediation strategies used by Filipino mothers in managing their children's touchscreen use. It also looked into the relationship between children's age, screen time, and parental mediation strategies. A total of 128 mothers, whose children ages 6 to 42 months use touchscreens, answered a survey questionnaire pertaining to the different parental mediation strategies they employ in regulating their children's touchreen use and estimates of amount of time children spent using such devices during weekdays and weekends. Results showed that active (parents explain media content to their children) and *diversionary* (parents divert their children's media use by encouraging them to engage in off-screen activities) strategies were significantly different from the other strategies, with diversionary strategy as the most frequently used strategy and *technical safety* (i.e., technology-supported safety measures such as apps designed to protect children's online safety) as the least frequently used strategy. Children's age was significantly correlated with screen time, with an increase in screen time as children get older. Screen time was negatively correlated with *restrictive* (i.e., parents set limit on children's touchscreen use) and diversionary strategies while children's age was negatively correlated with *co-use* strategy (parents use touchscreen together with their children). It can be concluded that parents indeed employ different mediation strategies to regulate their children's touchscreen use, with diversionary strategy seemingly more suitable for infants and toddlers.

OP 334

EFFECTS OF SCREEN USE ON THE DEVELOPMENT OF EMOTION UNDERSTANDING FROM AGE 4, THROUGH AGE 6, AND TOWARDS AGE 8. A NORWEGIAN COMMUNITY STUDY

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Background and aims: Recent increase in children's screen activities has raised concerns that screen time may replace face-to-face interaction, and hence impair children's development of emotion understanding. Here, we aimed to examine the effects of screen use (TV watching and gaming) and TV in child's bedroom on the development of emotion understanding from age 4 to age 8. We also investigated whether the effects were gender moderated.

Methods: 974 Norwegian 4-year olds from the longitudinal community study, the Trondheim Early Secure Study, were followed up at ages 6 and 8, employing the Norwegian version of the Test of Emotion Comprehension (TEC), parent-reported screen use and a range of covariates. Data were analyzed using autoregressive cross-lagged models in Mplus.

Results: Results revealed that more screen time (TV watching and gaming) at age 4 predicted lower levels of emotion understanding at age 6. In addition, television in children's bedroom at age 6 forecasted lower levels of emotion understanding at age 8. The effect of TV watching on emotion understanding was gender moderated, with stronger effects of TV use observed among girls, but no significant effects detected among boys. In contrast, gaming forecasted lower emotion understanding in boys, not girls.

Conclusions: The results suggest that extended screen time exposure might impair young children's socialization processes and result in lower ability to understand emotions. We discuss possible mechanisms explaining these findings, underscoring the importance of face-to-face communication to preserve the development of social-emotional competence.

OP 335

EFFECTIVENESS OF A ROBOT ASSISTED INTERVENTION FOR CHILDREN WITH AUTISM SPECTRUM DISORDER

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Background and aims: It is well documented that socially assistive robots may enhance social interaction skills in children with Autism Spectrum Disorder (ASD). This intervention study was carried out as part of the BabyRobot project and aimed to improve collaborative skills and emotional expression in children with ASD.

Methods: The intervention was applied in 3 school-aged children (2 boys, 1 girl) diagnosed with ASD. Participants attended a special school for children with ASD and were designated as low, moderate and high functioning according to the ADOS-2. It was based on two robot-guided interactive scenarios: (a) Sums of 4 game: The child, who was familiar with the task, was asked to teach the robot how to add up to number 4, (b) Emotional expression: Child was prompted to facially express happiness, sadness or fear. In both tasks robot's prompts were graded in three levels from more concrete to more abstract. Intervention sessions took place at school for 3 months twice a week and each session lasted approximately 20 minutes. Microanalysis was carried out on weekly videos.

Results: A gradual improvement in cooperative skills and facial expression of emotion was revealed corresponding to children's level of functioning. Over the last sessions, the low functioning child could respond to robot's abstract orders. Also, she sporadically directed expressions of happiness, but she showed difficulties in expressing sadness or fear. The moderately functioning child could also respond to robot's abstract orders and moreover acknowledge robot's actions. This child could spontaneously imitate happiness, sadness and fear after robot's prompt. The high functioning child spontaneously praised the Robot and made facial expressions of all three emotions.

Conclusion: The technological tools developed in the BabyRobot project may be effectively used in an educational context to improve social skills in children with ASD.

Sunday, September 1st, 2019

Papers 58 – Prevention and Interventions I

Kozani Hall 15:45 – 17:15

OP 337

ADOLESCENTS AS ACTIVE MANAGERS OF THEIR OWN BASIC PSYCHOLOGICAL NEEDS: A LONGITUDINAL STUDY AND AN INTERVENTION STUDY ABOUT THE ROLE OF NEED-CRAFTING DURING ADOLESCENCE

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Background and aims: There is an impressive evidence base for the beneficial effects of the psychological needs central to the Self-Determination Theory (autonomy, relatedness and competence) on adolescents' psychosocial adjustment. While satisfaction of the needs was found to be predictive of well-being and psychosocial development, need-frustration was found to forestall development and to increase risk for psychopathology. Although most research on the origins of adolescents' needs-experiences has focused on contextual influences (e.g., parents and teachers), adolescents are also likely to contribute actively to their own needs-experiences. According to this perspective, adolescents are motivated to manage their own psychological needs (i.e. need-crafting). Thereby, need-crafting would refer to adolescents' attempts to maximize their chances for need-satisfaction and minimize their chances for need frustration. The main aim of our present project is to investigate the value of need-crafting for adolescents' basic psychological needs-experiences and well-being.

Method: Two studies with adolescents, a 3-months longitudinal study ($N = 147$) and an intervention study (data-collection still running) aim to investigate the link between need-crafting, basic psychological needs and well-being. Latent change modelling was used to analyze the longitudinal data. Data of the intervention study will be analyzed using repeated measures ANOVA.

Results: The data of the longitudinal study showed that need-crafting predicts more need-satisfaction and less need-frustration across time. Also, well-being, but not ill-being, is predicted by need-crafting. With regard to Study 2, we hypothesize that after an intervention adolescents will report more need-satisfaction and less need-frustration in comparison to pre-measurement, and to a control-group.

Conclusion: This results are important from a theoretical and practical perspective, as our findings may have consequences for the knowledge of psychological needs and for the development of prevention programs on psychological well-being. The presented results are a first phase of a large scale prevention-project targeting self-management in adolescence.

OP 338

EXAMINING NON-TARGETED EFFECTS OF A FAMILY-BASED PREVENTIVE INTERVENTION ON AFRICAN AMERICAN YOUTHS' ACADEMIC ORIENTATION

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Background and aims: Previous literature has seldom considered the impact that family-based preventive interventions may have on the academic experiences of rural African American youth (Murry, Liu, & Bethune, 2016). To address this gap, the present study examines the non-targeted effects of exposure to a universal family-based preventive intervention-designed to reduce risky sexual behavior and substance use-on promoting academic success among rural African American youth during the transition from middle school to high school. Drawing on tenets of Garcia Coll et al.'s (1996) integrative model of developmental competencies in minority children, we sought to identify pathways through which the Strong African American Families (SAAF) program evinced change in parents' use of educationally promotive strategies and the extent to which intervention induced parenting strategies indirectly facilitated academically focused behaviors, through changes in youths' intrapersonal protective processes.

Methods: Four waves of data are drawn from a sample of 667 rural African American caregivers and their children (M_{ages} = 11.17, 11.83, 12.7, 15.5 years), who participated in SAAF. SEM was used to test the study hypotheses.

Results: Compared to parents in the control group, parents assigned to the SAAF program reported greater positive changes in the use of academically promotive parenting strategies. This indirectly fostered increases in their child's sense of academic self-efficacy, school motivation, elevated school bonding, and relationship quality with teachers, through the enhancement of youth self-esteem, self-control, racial pride and future orientation. These protective processes demonstrated sustaining positive effects on youths' grade performance over time. Additional analyses will examine potential gender differences in the specific mechanisms through which the preventive intervention was associated with youth's academic success.

Conclusions: This study shows the promise of universal family-based youth risk prevention programs to induce positive changes in a variety of behavioral and developmental outcomes beyond those targeted in the program.

OP 339

IMPROVING ADOLESCENT LIFESTYLES BY PROMOTING SOCIOEMOTIONAL COMPETENCES IN A COMMUNITY-BASED INTERVENTION PROGRAM

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The first aim of this study was to identify clusters of adolescent lifestyle changes after participating in a community group-based intervention program, and to characterise these clusters by sociodemographic and group related variables. Our second aim was to examine the contribution of the activities performed, and the adolescents' level of competences, to the types of lifestyle changes. Participants were 407 adolescents, distributed in 47 groups (52% girls), with an average age of 13.9, who took part in the 'Building My Future' program in the region of Castile and Leon, Spain. Participants completed self-report frequency measures on lifestyle behaviours before and after the program, as well as measures on self-concept, social realization, and participation and integration within the community. The facilitator of each group also gave information on group size and risk status, facilitator's years of experience, family implication level, number of modules, and types of activities performed. Cluster analysis revealed two groups of adolescents: a first group (72%) that presented healthy habit changes (less screen time, smoking, drinking and going out at night), characterized by being younger, from rural areas, and having a facilitator with less years of professional experience; and a second group (28%) with unhealthy changes in the mentioned behaviours, characterised by being older and from urban areas. Using binary logistic regression analysis, adolescents that performed sports and had higher task orientation were found to have fewer odds of having a positive lifestyle change; while adolescents that carried out excursions, personal development activities, games, shared meals and had higher empathy and sense of belonging to the community were found to have higher odds of belonging to the healthy lifestyle change group. These results are promising and indicate that institutionalized efforts that promote competences during group-based activities can be an effective strategy to embrace healthier lifestyles in our adolescents.

OP 340

A DELPHI STUDY OF INTERVENTIONS TO SUPPORT THE HEALTH, HAPPINESS AND WELLBEING OF ADOLESCENTS

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The "Ingredients of Success Toolkit" project is a vital step in defining and disseminating the hallmarks of success of interventions aiming to improve the health, happiness and wellbeing of young people aged 15-18 years in Scotland, supporting positive transitions through adolescence and into adulthood. The aim of this study was to gather consensus expert views on 1) the most important and successful components of interventions that lead to positive change; 2) key target outcomes; and 3) how the effectiveness of interventions might best be captured through evaluation.

A two-round Delphi method was adopted, due to the diversity of interventions and multitude of stakeholders. 29 practitioners completed the first round, comprised of open-ended questions. Key themes were identified using thematic analysis. 23 practitioners completed the second round, which aimed to seek expert consensus by posing statements derived from round 1. Respondents rated their agreement with each statement, and perceived importance, on a Likert scale.

There was clear consensus regarding key outcomes with 9 identified, 6 reaching consensus (over 75% agreement) for agreement, and 8 for importance. 'Mental health outcomes' ranked the highest, followed by 'resilience and coping skills', and 'self-perceptions'. 26 key components of interventions that lead to success were identified, 19 of these items reached consensus for agreement, and 17 for importance. 'Accessibility' was ranked the highest, followed by 'long term engagement and support,' and 'well-trained and knowledgeable staff'. Only a minority of organisations evaluated their interventions and the approaches used were diverse. There was a marked lack of consensus on evaluation approaches and techniques.

The information gathered from this study will help create a useful framework for future interventions for adolescent mental health. An evidence-based evaluation toolkit has been developed based on this study to assist practitioners wishing to evaluate interventions for adolescents during this important life transition.

OP 341

ACADEMIC ACHIEVEMENT OF CHILDREN UNDER GOVERNMENT PROTECTION: THE MODERATING ROLE OF TEMPERAMENT AND SOCIAL SUPPORT

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Psychosocially deprived conditions negatively affect children in terms of cognitive, emotional and social development. One of these conditions is to grow under the government protection. Being raised in institutions put children under the risk of developmental latencies and problems (Merz, McCall, Wright, & Luna, 2013). Environmental and individual factors might have a moderator role in the differentiation between children. Present study examined moderating role of social support as an environmental factor and temperament of children as an individual factor in the relationship between academic achievement and rearing condition.

Present study included 365 children (aged between 8-12); 142 of them were in care and 223 of them were selected among the classmates of children in care. Children's academic achievement was measured via teacher report and grades in school reports. Perceived social support from mother/caregiver and teacher was assessed via Child-Adolescent Social Support Scale (Malecki & Demaray, 2002). Children's temperament was evaluated by their caregivers/mothers by using The Temperament in Middle Childhood Questionnaire (Simon & Rothbart, 2004) and The Early Adolescent Temperament Scale-Revised Form (Ellis & Rothbart, 2001).

Results indicated that children under care showed less engagement in class and had lower grades than their peers living with their own biological families. Also, 3-way interaction between rearing condition, negative affect, and teacher social support was marginally significant ($\beta = .10$, $p = .07$). For children raised in institutional settings, children having lower negative affect showed more academic engagement when they perceived more teacher support, while the academic engagement of children with high negative affect did not change depending on perceived support.

Findings underlines the importance of parent or caregiver but teacher social support for academic engagement, especially for children under risk. The results will be discussed in the light of the current literature.

Sunday, September 1st, 2019

Papers 59 – Parenting, Parental Acceptance / Rejection and Psychological Distress

Edessa Hall 15:45 – 17:15

OP 342
A DYADIC ANALYSIS OF COPARENTING AMONG CHINESE PARENTS: ROLE OF PARENTAL FACTORS

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Background and aims: Coparenting plays an important role in family system, which may affect parenting and children's development. According to related theories and models of parenting and coparenting, parent characteristics are key factors of parenting, especially coparenting. The aims of this study were to examine (a) whether there were direct associations between parental personality, marital adjustment, depression state and perceived coparenting quality, and (b) whether there were mediation process among the associations.

Methods: 1,510 parents in two districts of China comprised the sample. Participants filled in Eysenck Personality Questionnaire (EPQ), Dyadic Adjustment Scale (DAS), SCL-90, and Coparenting Relationship Scale (CRS). Data was analyzed by using Actor-partner interdependence model (APIM) and extended model with a mediator (APIMeM).

Results: Parental personality, marital adjustment, depression state were important factors that affect coparenting. Parental depression were found to mediate the associations. Furthermore, both interpersonal (actor effects) and intrapersonal (partner effects) effects were found significant in the associations. In current study, there were only gender differences in the descriptive statistics and no differences in the associations.

Conclusions: Personality, marital adjustment and depression state were important parent characteristics that influenced coparenting quality among Chinese parents. What's more, parenting depression played a mediation role. Dyadic analysis results showed there were both interpersonal and intrapersonal effects. By examine parental factors of coparenting, the findings of this study have implications for the maintenance and promotion of coparenting among Chinese parents.

OP 343

THE RELATIONSHIP BETWEEN PARENTAL REJECTION AND ADOLESCENTS' REJECTION SENSITIVITY: THE MODERATING ROLE OF PARENTAL PSYCHOLOGICAL CONTROL AND ADOLESCENTS' CONTINGENCIES OF SELF-WORTH

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Background: There is consensus that adolescents' rejection sensitivity (RS), as a dispositional information processing bias, originates from parental rejection; however, no studies have explored whether father's or mother's rejection can exert different influence on this disposition. Also, little is known about whether this influence can be moderated by negative parenting practices, namely psychological control, and by adolescents' external contingencies of self-worth (CSW).

Aims: This study aimed to explore the impact of father's or mother's rejection on adolescents' RS, and whether such impact can be moderated by parental psychological control and adolescents' external CSW.

Procedure: Three hundred and ninety-nine (F=193, M=206) Chinese middle school students completed a demographic page, Parental Acceptance and Rejection Questionnaire-short version, Children's Rejection Sensitivity Questionnaire-short form, Self-Worth Contingency Questionnaire, and Parental Psychological Control Questionnaire.

Results: Regression analysis showed that rejection from father and external CSW were positively correlated with RS (ß=0.15 and 0.33 respectively). Subsequent analysis using PROCESS revealed that external CSW moderated the influence of father's rejection on RS (LLCI=0.00; ULCI=0.01, p<0.01). Parental psychological control had no relation with outcome.

Conclusion: Adolescents with a high level of rejection sensitivity tended to have experienced a great deal of rejection from their fathers and evaluate their self-worth based on external matters such as academic performance, social feedback, and physical appearance. Mother's rejection and parental psychological control as a parenting style, on the other hand, were not related to adolescents' sensitivity to rejection.

OP 344

PERCEIVED PARENTAL ACCEPTANCE/REJECTION AND PSYCHOLOGICAL DISTRESS AMONG UNIVERSITY STUDENTS: THE MEDIATOR ROLE OF SELF-COMPASSION

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According to theory of parental acceptance-rejection (PAR), parents' rejection refers to the absence/disappearance of parents' affection and support for their children or the disappearance of emotional closeness to their children. This plays a negative role on the psychological adjustment of both children and adults. Specifically, individuals who experienced rejection from their parents are prone to developing socio-emotional problems and distorted mental representations and having increased probability of developing mental health problems. In addition, PAR is also related wih the development of self-compassion as an essential mechanism in dealing with negative emotions and weakening psychological distress. Therefore, it is important to investigate how PAR explains the psychological distress experienced in emerging adulthood and the role of self-compassion plays. The present study aims at examining the mediating role of the self-compassion in the relationship between parental rejection and psychological distress.

Participants will include 320 undergraduate students, and the convenience sampling will be used to recruit the participants. Undergraduates will complete the Adult Parental Acceptance-Rejection Questionnaire, the Self-Compassion Scale and the Depression Anxiety and Stress Scale to report on their perceptions of parental rejection, self-compassion and psychological distress, respectively.

Three mediational models will be used that consist of three sub-dimensions of psychological distress (depression, anxiety and stress) as criterion variables, parental rejection as a predictor variable, and self-compassion as a mediator. With regard to parental rejection, the preliminary results obtained from 102 undergraduates (M_{age} = 21.66, SD = 1.58) partially supported the mediating role of self-compassion in its relationships to all dimensions of psychological distress.

The results of the present study may provide contributions to the intervention programs regarding the role of self-compassion in reducing psychopathological symptoms.

OP 345

THE EFFECT OF WORK-FAMILY CONFLICT IN PARENTING AND CHILD BEHAVIORS: THE BUFFERING ROLE OF SUPPORT

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The increase in the number of working women throughout the world, and changing traditional gender roles create anxiety and stress for the working women who experience work-family conflict and excessive workload, especially for the women with young children. This study aims to examine the role of work-family conflict in women's psychological health, parenting behaviors and their children's social-behavioral development, in working women with children aged 2-6. The main purposes of the study are; (1) to examine the underlying reasons that lead to work-family conflict in working women with young children; (2) to examine the association of work-family conflict with women's psychological health and parenting behaviors; (3) to understand the role of perceived support in this association.

The participants of the study were recruited by proportional random sampling from all around Turkey (N=500) in order to achieve representativeness of working women with children aged 2-6. The results indicated that higher number of working hours and the feeling of guilt due to working were the main predictors of work-family conflict. The mothers who experienced higher work-family conflict reported higher levels of depression and higher levels of using punishment as a parenting behavior, which were related with higher levels of child externalizing behaviors as an outcome. The social support received from the spouse and the family, however, buffered the negative effects of work-family conflict in this association. The findings are discussed with respect to the importance of micro and mesosystems in child development.

OP 346

EXPOSURE TO NEIGHBORHOOD DANGER AND ADOLESCENTS' EXTERNALIZING BEHAVIOR PROBLEMS: THE PROTECTIVE ROLE OF PARENTAL SELF-EFFICACY

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Adolescence represents a critical period for the development of externalizing behavior problems (EXT; Loeber & Hay, 1997; Moffitt, 1993). Several factors are responsible for the vulnerability of adolescents to EXT, including temperamental and environmental characteristics. Regarding the latter, several studies has shown that the exposure to neighbourhood violence is associated to adolescents' EXT (Gorman-Smith & Tolan, 1998; Scarpa, 2001). While most studies have documented this relation in samples from the United States, little research is available in the Italian context. One example, Bacchini et al. (2001) in a sample of 489 adolescents in Naples, found that high levels of community violence were associated to antisocial behaviors. In the present study, we examined whether mothers' perceptions of neighborhood danger are related to adolescents' EXT and whether maternal perceived self-efficacy in controlling high risk behaviors (MPSE-Risk) moderates this relation. Based on previous studies that have shown that MPSE-Risk significantly reduce adolescents' EXT (Ceravolo, 2014; Mahabee-Gittens et al., 2011) and on Bandura (1997)'s conceptualization of parental self-efficacy as beliefs in their own caregiving capabilities as well as in managing challenging familial demands, we hypothesized that MPSE-Risk operate as a protective factor especially in challenging circumstances, such as living in a dangerous neighbourhood. Altogether, 100 mothers from Rome and 95 mothers from Naples provided data (M_{age} of mother = 44.01 years; SD= 5.43; M_{age} of child =13.18 years, SD=0.66; 50,3% boys). Mother reported measures were used to asses MPSE-Risk, Exposure to neighborhood danger and adolescents' EXT. Hierarchical linear regressions were conducted to examine the effect of gender, socioeconomic status, MPSE-Risk and their interaction on EXT. Results showed that MPSE-Risk buffered the detrimental effect of the exposure to a neighborhood perceived as dangerous on EXT, representing a protective factor against the development of EXT especially in dangerous neighbourhood. Implications for further research are discussed.

OP 347

HOW TO AVOID THAT PARENTING BURNS YOU OUT: ON THE IMPORTANCE OF HAVING A CLEAR IDENTITY AS A PARENT

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Every parent would probably agree with the curious paradox that parenting is at the same time energy-consuming and energy-giving. For most parents there is a good balance between these two experiences, but for some parents the balance leans chronically to the wrong side. These parents are at risk for parental burnout. Symptoms are an overwhelming exhaustion related to one's parental role, emotional distancing from their children and loss of accomplishment. Given the costs associated with parental burnout (in terms of decreased parental mental health and quality of parenting), it is important to identify factors that protect parents against burnout. Herein, we argue that a more mature identity as a parent (i.e., having a clear view on one's role as a parent) may play such a protective role.

This study aimed to examine the role of parental identity in parental burnout in two ways. First, we investigated if having a more mature parental identity was related to less feelings of parental burnout. Secondly, we wanted to examine if parental identity could play a buffering role in the relation between known risk factors and parental burnout.

Participants were 453 parents (63% mothers). Almost 10% of the parents reported that they experience serious symptoms of parental burnout on a weekly base, 4% even on a daily base.

Preliminary results suggest that parents who have a committed parental identity experience less feelings of parental burnout. Parents who ruminate more about their role as a parent, more often experience feelings of parental burnout. Furthermore, when parents have a committed parental identity, it buffers against some of the detrimental effect of known risks on parental burnout.

The results underscore the important buffering role of parental identity on the experience of parental burnout. These findings can inform prevention and intervention practices to improve parents' well-being.

Sunday, September 1st, 2019

Papers 60 – Early Interventions

Naoussa Hall 15:45 – 17:15

OP 348

EVALUATION ON THREE LEVELS OF AN INTERVENTION TO IMPROVE EMOTION KNOWLEDGE IN KINDERGARTEN

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Background and aims: Support emotion knowledge of children is an important social matter. Children with extensive emotion knowledge are better in self-regulation and will enjoy better future school success (Voltmer & von Salisch, 2017). In addition, further education is an important task in professional life. Further educations could have positive effects (Lipowsky, 2012). In Germany, there is a lack of evaluated intervention for kindergarten teachers in the field of improving emotion knowledge of children on different evaluation levels. Lipowsky (2010) postulated four levels of intervention success. This pilot study examined three of four levels. The goal of this study was to create and evaluate an intervention for kindergarten teachers and took the following questions in account: 1) Contentment of kindergarten teachers with this intervention. 2) Increase in emotion knowledge of kindergarten teachers. 3) Modification of emotional-related interaction between kindergarten teachers and children.

Methods: Kindergarten teachers (N=41) were acquired in Northern Germany. 1) Self-reported satisfaction was raised immediately after training. 2) To test the knowledge growth of kindergarten teachers, a pre-experimental design with only one experimental group was applied. Participants had to solve an emotion knowledge crossword puzzle three times. 3) Self-reported frequency of interaction with children in different situations was raised backdated.

Results: 1) Summing up, there are „good" reviews (M=1.99, SD=.67) for the intervention. 2) Results indicate a significant meaning effect over time (F=12.483, p=.000, η^2=.373). 3) Analyses pointed out, that more than 70 percent of kindergarten teachers use emotional-related methods, more than one time per week with children in group and single situations as well as game playing.

Conclusions: Results show, that kindergarten teachers are satisfied with intervention. An improvement of emotion knowledge over three measurements was shown. If intervention improve emotion knowledge of children stays open, because fourth level was not examined in this study.

OP 349

EARLY PREDICTORS OF LITERACY SKILLS: AN INTERVENTION PROGRAM FOR ITALIAN PRESCHOOL CHILDREN

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In recent decades the number of studies focused on the assessment of early language skills in preschool children has increased considerably, displaying a variety of tasks and intervention programs for families and teachers aimed at facilitating the transition to primary school. However, the efficacy of the various intervention programs is often unclear. The aim of the present study is to assess language skills and to present an innovative intervention program for teachers and families which will support early literacy.

The study, part of a wider project, involves 114 participants (66 males, 48 females) in two groups: the experimental group (78 children) and the control group (36 children). At the beginning of the project the mean age of all the children was 5.6 years (SD = 0.4). The multi-method approach consisted of: a) testing all the children twice, at the beginning of pre-school (pre-test) and the end of pre-school (post-test); b) in the meantime the use, with the experimental group only, of an intervention program by teachers in the classroom and at home by parents. The language skills of each child were evaluated using a new multi-dimensional instrument (TALK) and the Italian version of the PPVT (Stella et al., 2000).

The results showed a significant increase in receptive vocabulary for the experimental group only [t(58) = -3.259; p=.002]. Moreover, the analysis of the sub-scales of the TALK assessment showed a significant increase for non-words repetition scores [t(42) = -4.795, p <.001], lexical production, [t(42)= -3.400, p = .001], lexical comprehension [t(42)= -3.577, p <.001] and morphosyntactic comprehension [t(42)= -3.532, p=.001].

These results lead to the development of a useful new instrument for teachers and parents that could evaluate the young child's language skills, enhance her capacities and prevent long-term learning difficulties.

OP 350

LONG-TERM EFFECTS OF EARLY INTERVENTION: CHILD OUTCOMES IN THE RANDOMIZED CONTROLLED TRIAL ZEPPELIN AT KINDERGARTEN

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Aiming for improving long-term educational outcomes for children raised in a potentially jeopardizing environment, interventions are proven to be most effective when applied in the first years of life. So far studies examining effects of early support outside of the U.S. are lacking. Especially those using randomized controlled trials. The present study examines the effects of the longitudinal intervention study ZEPPELIN on children's outcomes in the German speaking part of Switzerland 2 years after the intervention.

The study followed the development of 261 children in at-risk families from birth up to 5 years of age. The families were assigned randomly into an intervention group which was supported by the home visiting program "Parents as Teachers" ($n = 139$) and a control group which received no additional support than standard services of the communities ($n = 122$). Support at home was conducted by trained specialists and was executed in the first 3 years after birth. After baseline data collection, children's outcomes were assessed yearly around their birthday (four measurement points). At the age of 5 years intelligence (SON-R), German language skills (Sprachgewandt), mathematical skills (WILMA), self-regulation (HTKS, gift delay) and problem behaviour (SDQ, teacher questionnaire, CBCL 1½-5, parent questionnaire) were assessed.

Preliminary cross-sectional regression analyses on group differences show significant effects in German language skills, self-regulation and problem behaviour, while controlling for age, gender, German as a second language and socioeconomic status (ISEI). No effects were found in intelligence (SON-R) and mathematical skills (WILMA), applying the same analysis.

Further analyses of the longitudinal data using Generalized Estimating Equations will be conducted. However, these preliminary results confirm previous findings of the positive and enduring effect of early intervention. Moreover, the observed effects (e.g. language proficiency, self-regulation) are particularly promising with regard to the future educational trajectories of the participants.

OP 351

EFFECTIVENESS OF A TEACHER-BASED CHILD SEXUAL ABUSE PREVENTION PROGRAM FOR PRESCHOOL CHILDREN

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Child sexual abuse prevention programs are designed to raise children's knowledge and awareness regarding sexual abuse. Therefore, researchers in Turkey have developed a child sexual abuse prevention program called "I am learning to protect myself with Mika" for preschool children. The prevention program implemented by psychologists demonstrated that children gained more knowledge and skills to protect themselves. Because of teachers' role on children's development, it is important to implement a teacher-delivered child sexual abuse prevention program. The purpose of this study was to evaluate the effectiveness of a teacher-delivered child sexual abuse prevention program.

The sample consisted of 290 children and their parents. The participants were randomly assigned to education (n=137) or comparison group (n=153). The age of children ranged from 46 to 71 months (M= 58.99, SD= 6.64). In three public preschools, ten preschool teachers were trained to deliver the program and eleven teachers were used as a control group who did not receive training. The prevention program is a 5-week program which consists of five modules such as emotional awareness, good touch-bad touch, and body safety rules.

To investigate the effectiveness of teacher-delivered child sexual abuse, Latent Markov Analysis was conducted. A three-class solution was found as the best model: Status-1 (self-protecting group: *group who knows to be touched and to keeps it as a secret is wrong*), Status-2 (group who knows to be touched is wrong but keeps it as a secret), and Status-3 (risk group *who don't know anything about touching and secrets*). After the education members of Status-2 and Status-3 moved to Status-1 in the education group rather than in the comparison group. Skills were analyzed by using a 2 X 2 ANOVA with repeated measures. The interaction effects between group and time was significant. Follow-up analysis showed that gain on knowledge and skills of this program was maintained.

The results of this study were parallel to the previous literature. In sum, this program was also effective when delivered by teachers.

OP 352

EARLY INTERVENTION IN THE COMMUNITY FOR PRESCHOOL CHILDEN AND THEIR FAMILIES

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In this presentation, we will elaborate on the early intervention program that we conducted during the last 4 years in 12 childcare centers for children aged 2-5 in the municipality of our foundation. The objectives of this program are early detection and intervention of mental health issues in order to prevent developmental and behavior difficulties in young children and their families. To reach these objectives we used standardized questionnaires, screening tests, classroom observation and developmental diagnostic tools. We will present the results we gathered from 1000 questionnaires of preschool children that participated in the program. About 15% of all children presented some difficulties in emotional, cognitive and/or speech development and were seen by our multidisciplinary mental health team. After further diagnosis, they were referred to specialized treatment, early intervention programs and other programs like speech therapy, occupational therapy and family therapy performed in our Foundation. In conclusion, we will discuss the importance and the impact of this community-based program, which resulted in early detection and treatment for about 150 children and their families with mental health issues. We will also reflect on new ways of reaching "high risk" families, through coaching and education of the educational staff.

OP 353

EARLY CHILDHOOD ATTACHMENT BASED RESOURCEFUL PARENTING - CARE

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Background and aims: The early childhood period is critical in forming healthy attachment based relationships between parents and children. There is extensive evidence that parenting programs for children's behavioral problems can have positive effects on both parent outcomes and with changes in their children. Behavioral Parent Training (BPT) is an evidence based model of parent training which has been documented to improve the child's unwanted behavior and maladaptive parenting behavior. Researchers have noted the importance of videotaped modeling techniques in enhancing positive parenting skills. This study involves a major redesigning of parenting techniques with an attachment based positive parenting program.

Methods: 19 parents were taken for the purposes of this study. The ages of their children were between 5 through 6. The parents were all mothers with a mean age of 32,95.

A total of 5 sessions, each lasting 1,5 hours were conducted. There were three groups each of 6, 6 or 7 parents. The sessions were conducted in a child care center with parents who were volunteers. The pre-tests were given to the parents before the initial session and post-tests were given after the last session. The inventories used in this study were as follows; Children Behavior Check List, Short Temperament Scale for Children, Coping With Children's Negative Emotions Scale, Child Rearing Questionnaire, Parenting Scale, Brief Symptom Inventory, Parenting Stress Index and a Demographic Form.

Results and Conclusions: The CARE parenting program has shown that it changes parental stress and child behavioral problems. This is the first program in which behavioral contingency management techniques are used together with an attachment based theory. Another novelty of this program is that playing and reading sessions are video-taped at home and video-taped sessions are watched together during the sessions and supervision is provided to the parents. This program needs to be tested in clinical populations such as parents of children with ADHD and ODD and with a control group, further.

Friday, August 30th, 2019

Poster Presentations

Session 1

Olympia Foyer 11:00 – 11:30

PP 002

AUTOBIOGRAPHICAL MEMORY IN YOUNG AND MIDDLE-AGED ADULT JAPANESE MEN AND WOMEN

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One feature of autobiographical memory is the reminiscence bump, i.e., the phenomenon in which adults older than 40 years of age tend to recall more events experienced between 15 and 30 years of age than those experienced during other ages. This phenomenon is also observed when adults recall the most important or positive events in their lives, regardless of culture and gender (Berntsen & Rubin, 2004). However, because culture can affect autobiographical memory (Berntsen & Rubin, 2002; 2004), there may be cultural differences regarding the events and ages that adults tend to recall. Thus, the present study investigated which autobiographical events young and middle-aged Japanese adults tended to recall by asking 426 young adults (mean age [M]: 19.45 years; standard deviation [SD]: 1.78 years) and 223 middle-aged adults (M: 53.12 years; SD: 6.55 years) to recall the seven most important events in their lives. A total of 30, 30, 27, and 31 event categories were identified for male young adults, female young adults, male middle-aged adults, and female middle-aged adults, respectively. Of the 10 most commonly recalled events, three were shared among the four groups (University entrance exam, enrolling in university, and moving/changing schools) while other events related to Japanese schools were mentioned often, regardless of group (e.g., high school entrance exam and club activities). In middle-aged adults, a reminiscence bump was observed for events with positive valence as well as for those with mixed valence (positive and negative). Bumps were also found at 12, 15, and 18 years of age and, unlike previous findings, some age and gender differences were observed. Some of the present results differed from those of previous studies, which suggests that there may be cultural differences in the autobiographical events that adults focus on.

PP 004

TIMING THE FUTURE: HOW DO PRESCHOOL CHILDREN REMEMBER TO PERFORM TIME-BASED PROSPECTIVE MEMORY TASKS?

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Time-based prospective memory (PM) is the ability to remember to perform an intended activity at a certain point in time or within a certain time period. Despite intensive research into memory in childhood, little is known about early development of time-based PM. The current study aimed to extend existing knowledge by investigating how preschool children perform time-based PM tasks and exploring possible cognitive correlates of PM performance.

A total of 252 children aged 28-79 months were asked to perform a time-based PM task and a battery of cognitive tests (measuring executive functions, general intelligence, attention, retrospective memory, verbal abilities and time perception) in a familiar kindergarten setting. To our best knowledge, our sample included the youngest children that ever participated in research on time-based PM.

To examine time-based PM, children was asked to play a game called 'Memory' with a researcher (ongoing task) and to turn the hourglass whenever the sand runs to the bottom bulb, which served as a clock equivalent (PM task). Additionally, the time-checking behaviour was assessed in order to examine time monitoring.

The results indicated that even very young children were able to demonstrate time-based PM abilities at a basic level. Further analyses revealed that time-checking frequency was positively correlated with PM performance. In addition, the results showed that time-based PM performance was associated with some cognitive abilities (e.g., time perception, attention). Therefore, the present findings added further evidence to the initial claims that time-based PM and other cognitive abilities (particularly executive functions) are especially closely related to each other during very early stages of cognitive development.

PP 005

DISORDERS OF THE ATTENTIONAL SYSTEM IN VERY PREMATURELY BORN CHILDREN AT THE AGE OF 5: EVIDENCE FROM A POSNER'S PARADIGM

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Background and aims: Research indicates that children born very prematurely have significant attentional problems, including defective sustained and selective attention. However, in this population, studies characterizing fundamental aspects of attention, especially in light of a specific theoretical model, are missing. Thus, based on the Posner's model of attentional system that encompasses three attentional mechanisms (i.e., alerting, orienting and executive), the aim of the present study was to fill this gap.

Methods: The participants of this study were children born very prematurely (before 32nd week of gestation) and children born at term, all tested at the age of 5. In all participants the attentional system was assessed using the Attention Network Task - Child Version.

Results: The analysis revealed that, at the age of 5, in comparison to children born at term, children born very prematurely presented with defective orienting mechanism of attention, while there were no group differences in the alerting and executive attention. Moreover, the orienting mechanism of attention in children born very prematurely was one standard deviation below that of the control group.

Conclusions: At the age of 5, children born very prematurely have selective disorders of the attentional system. Specifically, the orienting mechanism of attention seems to be the only one that is defective in this population. Although the exact reason for this selective impairment of the attentional system in very prematurely born children remains unknown, it is possible that the period around the 32nd week of gestation is crucial for the correct development of the brain network supporting the orienting mechanism of attention. Future neuroimaging studies are needed, however, to better understand the neural underpinnings of this selective disorder of the attentional system in very prematurely born children.

PP 006

WHY CHILDREN ARE SO DISTRACTIBLE? DEVELOPMENT OF TOP-DOWN AND BOTTOM-UP ATTENTIONAL BALANCE FROM CHILDHOOD TO ADULTHOOD

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Distractibility, supported by a balance between top-down (TD) and bottom-up (BU) attention, spearheads behavioral adaptation. Previous studies about TD attention suggest an increased distractibility in children; though, only a few attempted to characterize BU attentional development. Contradictory results observed regarding TD and BU attention is a current limit in understanding attentional imbalance in childhood. We wanted to test if the increased distractibility in children would result from either (i) reduced TD attention, (ii) enhanced BU attention, or (iii) both these patterns simultaneously.

345 participants from 6 to 25 years-old detected auditory targets preceded by an informative or uninformative visual cues. In 50% of the trials, distracting sounds were played between the cue and the target according to different timings. To identify TD and BU developmental trajectories, we analyzed behavioral responses using generalized linear mixed models with cue type, distractor presence and target side as within subject factors, and age and gender as between subject factors.

TD attention

Regardless of age, participants were faster in informative cue condition (347.9 ± 2.7) compared to uninformative one (367.7 ± 3.5; p < .001), suggesting mature TD attention orienting at 6 year-old. Furthermore, the percentage of false alarms steadily decreased from 6 to 25 year-old (p < .001), suggesting slow maturation of TD inhibitory control.

BU attention

6 and 7 year-old children missed more targets in presence of distracting sounds, compared to older peers and adults (p < .001), suggesting increased BU attention in younger children.

Results indicate that TD attention orienting is functional at 6 year-old, while TD inhibitory control slowly develop during childhood and adolescence. Furthermore, before the age of 8, BU attention is highly increased. These results suggest that the exacerbated distractibility in children results from enhanced triggering of BU attention and reduced TD inhibitory control.

PP 007

DEVELOPMENT OF A COMPUTERIZED ASSESSMENT TOOL FOR MATHEMATICS DIFFICULTIES FOR PRIMARY SCHOOL STUDENTS

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Mathematical achievement during the first years of primary school is considered a reliable predictor of children's academic performance. Students with mathematics difficulties present low performance at number awareness, recall of numerical facts, execution of numerical calculations, as well as mathematical reasoning. The need for the development of a reliable and user-friendly tool, which aims at the early detection of mathematics difficulties for Greek students, raises urgent. Moreover, there is an increasing interest on using digital educational tools for assessing and supporting students with learning disabilities.

This study aims at the development of an online tool which will incorporate Information and Communication Technologies for the assessment of primary school students with mathematics difficulties. The design of the assessment tool will be based on the cognitive profile of students with mathematics difficulties. In the pilot study, ninety-one 2nd and 3rd graders (mean age 8.06 years) from 3 public schools of Attica, Greece were administered individualised assessment tests of, mental arithmetic ability, working memory, sustained attention, inductive reasoning. Math performance was measured with a curriculum based test including counting, arithmetic operations, arithmetic sequences, number line estimation and problem solving tasks.

The results showed that mental arithmetic ability, sustained attention and working memory predicted mathematical performance. In addition, there was a positive correlation between mathematical performance and inductive reasoning. Moreover, the results confirmed the structural validity and the reliability of the proposed assessment tool for mathematics difficulties.

The next stage of this study is the development and standardisation of the computerised Mathematical Assessment Standardised Test (MAST) which will incorporate curriculum based standardised tasks, as well as tasks related to working memory, sustained attention and inductive reasoning. It is anticipated that MAST will enable accurate and early detection of mathematics difficulties.

PP 008

ACTIVE STUDENT: THE ROLE OF ASKING QUESTIONS DURING LEARNING

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Children's learning experiences are largely shaped by their interactions with the social world - parents, teachers and peers (Vygotsky, 1978). Some learning experiences involve the child using their own experience, whereas others depend on the child's ability to actively seek information eg. ask questions (Callanan & Oakes, 1992; Hickling & Wellman, 2001). The ability to ask questions is a mechanism of children's cognitive development (Chouinard, Harris i Maratsos, 2007) and is a component of critical thinking (Lai, 2011; Ennis, 1985). The aim of the presented research was to explore the role of ability to ask question in effectiveness of learning during peer tutoring.

In research participated 100 six years old children - students in peer tutoring (age M=78,18 months; SD=3,06; range 72-84 months; 60 girls). Children has randomly divided into pairs and roles: tutor or student. Peer tutoring consisted of two sessions. First, experimenter taught tutors the game's rules. Next, experimenter asked tutor to teach another child how to play the game. Student's questions were coded by two competent judges. The effectiveness of tutoring was measured by the number of remembered rules after delay (about 10 days). Children also solved the task measured working memory.

Students were divided into two groups: passive and active, based on the number of questions asked during the tutoring. The number of questions asked correlates with number of remembered game's rules (r=0.293 p=.004). Asking questions was a significant predictor of effectiveness of learning, even controlling working memory (ß=0.27; p<.01).

Active students who asked numerous questions to the tutor, learned the rules of the new game more effectively. Active attitude towards the tutor and the task and readiness to explore, search for relevant information may contribute to effective learning in children at the beginning of school education.

PP 009

EARLY DEVELOPMENT OF ATTENTION AND LANGUAGE IN CONTEXT: ASSOCIATIONS WITH HOME ENVIRONMENT AND CHILD TEMPERAMENT

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An important development of attention and self-regulatory mechanisms is observed throughout the first years of life. Also, a vocabulary explosion is seen during these years, a domain often related with these mechanisms. We aim to characterize attention and language development from 2 to 4 years of age, and study they relationship with environmental factors. We expected environmental factors to impact cognitive development and explored whether this relationship was modulated by the temperament of the child.

Children were divided into four groups of age: 24 months (N = 12; mean age = 24.44 ± .52), 30 months (N = 9, mean age = 30.5 ± .54) 36 months (N = 10, mean age = 36.22 ± .44) and 42 months (N = 13, mean age = 42.11 ± .33) to date. Attention was evaluated in the lab employing touchscreen tasks, whereas language sessions were carried out at the school. Temperament, SES, parenting style, and CHAOS were parent-reported by questionnaires.

Preliminary analyses reveal age differences in executive attention (EA). Young children (24 months old) differ from 36 and 42 months old, indicating gains in EA with age. CHAOS and surgency are negatively related with EA, whereas effortful control (EC) and EA show a positive relation. Data also indicate the existence of a moderation of EC over the effects of CHAOS on EA, only in lower levels of EC. Language displays a strong positive correlation with SES across age, but we have not found an association between attention and language development in this study.

Results inform of the progressive development of EA through early stages, indicating an improvement in EA with age, which appears to be independent of language. In line with the literature, individual differences in the development of EA are greatly associated with environmental factors, as well as temperament.

PP 011

NIGHT AWAKENING AND ITS CONNECTION WITH EXECUTIVE FUNCTIONING IN INFANCY AND TODDLERHOOD

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Executive functioning (EF) begins to develop during infancy and continues to develop into early adulthood. In adulthood and adolescence, it has been extensively shown that sleep difficulties impair performance of executive function related tasks, but only a few studies have investigated the associations between sleep and EF in infancy. Due to the long course of maturation of EF and its associations with the frontal lobes, it is suggested that EF might be especially vulnerable to the effects of sleep problems. In the current study, EF was investigated longitudinally in infants with and without night awakenings.

Infants with (n=75, ≥3 awakenings in a night) and without night awakenings (n=63, ≤1 awakening in a night) at 8 months of age were studied within the CHILD-SLEEP birth cohort at 8 and 24 months of age. At both ages, a computerised task (Switch task) was performed in order to measure EF. At 24 months of age, in addition to the computerised task, behavioural tasks and a parent-rating of EF (BRIEF-P) were administered.

The Switch task data showed that infants with night awakenings were less able to learn new stimulus sequences and to inhibit their responses to a previously cued location compared to infants without night awakenings at 24 months of age. At 8 months of age, there were no differences between the two groups in EF. Contrary to our expectations, parent-ratings and behavioural tasks of EF did not reveal differences between the two groups at 24 months of age.

According to our results, it seems that the development of EF follows somewhat distinctive pathways in infants with and without night awakenings. Our partly conflicting results could be explained with the different methods used. Perhaps the computerised methods are more sensitive for detecting small differences between groups than traditional methods of EF.

PP 012
ATTENTION CAPTURE BY EMOTIONAL NOVEL SOUNDS IN CHILDREN - A PUPILLOMETRY - EEG STUDY

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The unexpected occurrence of task-irrelevant sounds can involuntarily capture attention. Little is known about the development of mechanisms on the single stages of auditory attention control in children. The present work aimed to examine change detection, attentional orienting and evaluation mechanisms in response to emotional distractor sounds. Using a new approach, we co-registered event-related potentials (ERPs) in the electroencephalography and sound-related changes in pupil diameter. Event-related changes in pupil size enable conclusions on the activity of the locus coeruleus-norepinephrine system that modulates attention.

We presented emotional and neutral environmental novel sounds within a sequence of repeated standard sounds (oddball paradigm) to 7 to10-year-old children (n=32) and to adults (n=32), while participants watched a silent video. Substantial age differences in ERP-markers for auditory processing indicated ongoing maturation processes. Emotional compared to neutral distractor sounds evoked larger amplitudes of ERP-components associated with attentional orienting and larger pupil dilation responses. This attention effect was observed in both age groups. Results indicated increased attentional orienting towards emotionally highly arousing distractor sounds. Importantly, results support the idea of a correspondence between the pupil dilation response and attention-related ERPs in the framework of attentional orienting in children. This work suggests that pupillometry is an efficient and suitable method to investigate the development of involuntary attention mechanisms that might be applied to sensitive groups.

PP 013

FROM GENERAL TO SPECIFIC: THE DEVELOPMENT OF EFFICIENT PROSPECTIVE MEMORY STRATEGIES

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Prospective memory is the ability to remember previously set intentions at the right moment and is essential for goal achievement. This core ability develops markedly during childhood and adolescence. But little is known about the development of strategic processes involved in monitoring for the right moment to execute the intention. Strategic monitoring is thought to come at cost for the ongoing task compared to spontaneous retrieval of the prospective memory task. We hypothesized that a developmental progression occurs in strategic monitoring. To test this hypothesis, we conducted a task switching experiment in a sample of 156 participants; 8-, 10-, and 12- year old children as well as young adults. Participants were instructed to perform three alternating tasks (parity, color, and case decisions) as an ongoing task. In a baseline block, participants performed the ongoing task without prospective memory instructions. Next, participants were instructed for the prospective memory task (i.e., to press a special key if a deviant letter occurred for a case decision). In the first block, the prospective memory task was activated but no target event occurred, while in the second block targets appeared. To control for practice effects we included a third block again without targets. Although no targets appeared in the first block, participants performed the ongoing task slower compared to the baseline block. Adults slowed down predominantly on case decisions while children slowed down on all the tasks. Compared to blocks 1 and 3, there was an immediate slowing after responding to prospective memory targets in the second block. This slowing decreased with age, which speaks for attenuating after-effects with development. Taken together, these findings highlight developmental differences of efficient strategies for prospective memory monitoring in order to maintain performance in an ongoing task.

PP 014

THE EFFECTS OF CODING ACTIVITIES IN CHILDREN WITH BEHAVIOURAL DISORDERS ATTENDING THE COPING POWER PROGRAM

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Deficits in executive functions (EF) have been found in school-age children and adolescents with externalizing behavior disorders (Schoemaker, Mulder, & Dekovi, 2013). EF include mental processes such as planning, working memory, inhibition of inappropriate responses, flexibility in adaptation to environmental changes, and decision making (Nigg, 2006). Children with behavioral disorders could find benefits participating to training programs on EF (Halperin et. al., 2012) given the key role the executive processes play in developmental pathways towards dysfunctional outcomes (Nigg & Casey, 2005) and in externalizing child psychopathology (Castellanos et al., 2006). This preliminary study aims to investigate the effect of a "coding training" (code.org) in 3 children (age range 8-10 years) with behavioural disorders. The Coding Training activities were integrated in the Coping Power intervention program that the three children were attending, a clinical intervention program for youngsters and their parents to reduce the aggressive and risk behaviours. The Coding training consisted of 8 computer lessons, lasting half an hour each, twice a week.

Before and after the training, the children were administered two tests investigating planning abilities (Elithorn Perceptual Maze Test and Tower of London) and one test investigating the ability to inhibit learned automatic answers (NEPSY-II). Moreover, the answers and the decision and execution times to perform each coding activity were recorded. Each child individually completed the lessons. The parents filled two questionnaires about the inattention and hyperactivity difficulties (SDAG) and the assessment of executive functions (BRIEF-2), pre and post-training.

The first preliminary results show that the coding activities can encourage the development of EF, such as planning and inhibition abilities helping the children, as parents reported, to better control their dysfunctional behaviours.

PP 015

WORKING MEMORY LOAD EFFECTS IN VISUAL SEARCH IN PRIMARY SCHOOL CHILDREN

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Both from empirical data and cognitive theories, it seems that working memory may play a key role in selective attentional tasks. However, these studies have usually been carried out in adulthood, and as far as we know there are no works with children examining this modulation. From a developmental perspective, it seems relevant to determine how WM and selective attention may interact during childhood, as both processes are in full development. In the present study, two groups of children of 7-8 years old (n=30) and 9-10 years old (n=30) were compared with a group of adults (n=32) in a Visual Search (VS) task while maintaining information in WM within a dual task paradigm.

In the VS task, participants looked for a target "pirate treasure" image among similar distractors. At the same time, they were asked to remember a different image (low WM load condition) or 4 different images (high WM load condition) that were tested in a recognition task at the end of each VS trial.

The results show that concurrent WM loads increase reaction time in VS for younger children (7-8), while for older ones (9-10) response time only increases when the target was present in the search for high WM load conditions. For adults, and replicating previous findings, WM load does not modulate VS performance.

It seems that as children still have both WM and selective attention under development, there is an increase in RT performance for the VS task that does not appear for adults. As seen for the older children group though, this effect only appears under high WM load conditions. Studies like the present can help us to understand how these processes are developed through childhood, and more importantly, how they might interact during development.

PP 016

ROLES OF EMBODIMENT AND EXECUTIVE FUNCTIONS IN SPATIAL PERSPECTIVE TAKING AMONG CHILDREN, STUDENTS AND ELDERLY PEOPLE

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Spatial perspective taking (SPT) requires both mental self-rotation and other forms of cognitive information processing. Mental self-rotation—the process of rotating an embodied representational self—is hypothesized to be influenced by physical development (a phenomenon called embodiment), while executive functions are hypothesized to influence the cognitive information processing and determine the accuracy or speed of SPT task responses. The purpose of this study was to test these hypotheses and substantiate the roles of embodiment and executive functions in SPT performance.

Experiment 1 sought to clarify how the characteristics of embodiment, particularly the vividness and controllability of body schema, contributed to SPT. Vividness was measured as the discrepancy in reaction times between an imagination task and an action, while controllability was measured as the time for transforming a body image. Ninety-three participants (college students and elderly people) participated. In Experiment 2, we assessed correlations of scores on four executive function tasks (2 inhibitory function tasks and 2 working memory tasks) and the reaction times during an SPT task among 144 participants (children and college students).

In Experiment 1, the controllability of the body schema was significantly related to the reaction times in the SPT task among elderly people. In Experiment 2, the accuracy of the SPT task was positively associated with visuo-spatial sketchpad spans in children. Additionally, inhibitory function partially correlated with reaction times for mental self-rotation processing in the SPT task. Conversely, college students did not show these associations. These experiments indicate that SPT shows lifelong development due to age-related changes in body schema and executive functions. In the future, we should consider the interaction of embodiment and executive functions throughout the life span.

PP 018
JAPANESE CHILDREN'S AND ADULTS' BELIEFS ABOUT THE CONTROL OF PAIN CAUSED BY ILLNESS

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The understanding of illness, including pain, has been extensively studied as a field of naive biology since the 1980s. It has been shown that young children's understanding is not as immature as Piaget pointed out and that adults are not very scientific. However, there have been few studies so far that have focused on beliefs about pain itself. In order to clarify children's beliefs about pain, we need to pay more attention to its uniqueness as a symptom and investigate children's understanding of the differences between pain and other physical symptoms. Therefore, this study focused on a unique characteristic of pain (that its control is more strongly influenced by psychological factors compared to other physical symptoms) and examined the development of beliefs about this unique aspect of pain. We presented 69 fourth-graders (MA=10:1), 75 sixth-graders (MA=12:2), and 82 adults with two scenarios one by one, in which the protagonists felt pain or showed other symptoms to certain parts of the body. They were then asked to evaluate the effects of seven control methods using four-point scales. It was found that the participants in all age groups tended to believe that the three types of psychological methods and coating medicine, but not the other kinds of methods (internal medicine, a Japanese magical method, and a nonsense method) were more effective for controlling pain than other symptoms. Furthermore, only adults believed that the magical method was effective for alleviating both pain and other symptoms. In conclusion, by at least the middle of childhood, people can distinguish between pain and other symptoms in terms of the effectiveness of psychological control. In addition, only adults believed in the effectiveness of the magical method, which is in agreement with previous findings that the non-scientific understanding of illness is more often observed in adults.

PP 019
RISK-TAKING AND DEVIANT BEHAVIOR IN ADOLESCENTS

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This study investigated whether the signs of deviant behavior among adolescents were related to their predisposition to risk-taking. In a large group of adolescents (N=177, mean age 14.37+1.12), riskiness was assessed by the Balloon Analog Risk Task (BART) and the presence of deviant behavior was scored with the questionnaires adapted for Russian speakers. Based on the reports of parents and school teachers, as a preliminary step, the entire group of adolescents was divided into those who showed signs of deviant behavior (D) and those who did not (N). The D group showed significantly higher delinquency and aggression scores as well as addiction and norm violation scores. For the further analysis, two contrasting subgroups, "control+" (N+) and "deviant+" (D+), from N and D groups were arranged. The N+ and D+ adolescents were those with the highest statistical distance along the scales of the questionnaires. Two groups showed different bet history in the course of successive trials in the BART test. In particular, two major strategies were found among the D+ subjects. High stakes at the beginning of the BART session followed by a lower stakes in the middle of it and return to high stakes by the end of the session showed those adolescents who were most inclined to norms violation. On the contrary, those who did not show such inclination made low bets all alone.

Scoring cognitive processes with Raven's Progressive Matrices suggest that those participants of D+ group who adopted the first more risky strategy might suffer from the lack of insufficient inhibitory control, i.e. excessive impulsivity.

Betting low stakes along the entire block of BART trials in D+ adolescents with low norms violation scores might well be related to avoiding failure along with a reduced ability to estimate the results of their own activity.

PP 020

CHANGES IN THE COGNITIVE PROCESS OF FATHERS IN RESPONSE TO INFANT CRYING

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The purpose of the present study was to investigate how cognitive processing in fathers changes in response to infant crying from the age of 2 to 4 months. The study participants were 10 pairs of parents with a 2-month-old infant at the start of the study. Joint interviews were conducted with each couple at their home when their infant was 2 and 4 months of age. The interviews consisted of questions on infant crying under two different situations: when both parents were in the same room (situation1), and when the mother was absent (ituation2)

At 2 months of age, the most common reason for infant crying in situation 1, as inferred by the father, was a "physiological need". In response to infant crying, the father talked about the perception of crying he gained through a mutual understanding with the mother, and inferred the cause of crying based on information such as spacing and the timing of nursing. In situation 2, it was characteristic of the father, who perceived the crying through a mutual agreement with the mother in situation 1, to have a lot of information that could be used to make an inference regarding the cause of the crying.

By 4 months of age, the infant's physiological needs had decreased and the father more frequently inferred the cause of crying to be a psychosocial need. Similar to when the infant was 2 months old, the father talked about the perception of crying he had gained through a mutual agreement with the mother and inferred the cause of crying based on changes in the state. In the situation 2, it was characteristic of the father to talk about the aspects of real crying and to identify the cause of crying quickly based on changes in the situation.

PP 021

ASSOCIATION OF INFANT DEVELOPMENTAL CHARACTERISTICS AND ABILITY OF THEIR MOTHER TO PERCEIVE EMOTIONAL STATE – INVESTIGATION WITH NEWLY DEVELOPED VTR STIMULI METHOD

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Studies have shown that a mother's accurate recognition of their infant's emotional state is related to social and emotional development of the child. In those, the subjects were primarily mothers of newborns, while investigations of mothers with infants at an age when developmental characteristics become more obvious are few.

For determining awareness by a mother regarding the emotional state of their infant, observation of mother-infant interactions and utilization of controlled stimulation such as photographs of their child have been utilized. However, the infant's personal personality might be included with the former method, while with the latter, the information is extremely limited and different from daily life. In this study, we examined the association of the ability of mothers to perceive emotions of their infant's developmental characteristics using VTR stimuli that included temporal development and contextual information of the child as stimuli obtained in a controlled environment and daily life context.

In Study 1, 36 infants were allowed to play freely by themselves for a 30-minute period while being video recorded. Scenes showing apparent positive, negative, or neutral emotions were extracted and prepared as 30-second video clips. For examining the validity of the prepared VTR stimuli, the clips were shown to 100 different mothers, who evaluated them using a questionnaire. The results indicated the validity of the stimuli based on the correlation of the evaluations with emotional empathy and affection towards the infants shown in the clips.

In Study 2, using the VTR stimuli, the relationship between a mother's ability to perceive their infant's emotional state and developmental characteristics of the infant was examined. Those results suggested that the ability to perceive emotional state by the mother was related to sharing of emotion with others by the infant and development of symbolic function.

PP 022

VISUAL DEFICITS IN CHILDREN WITH DEVELOPMENTAL DYSLEXIA

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Developmental dyslexia is a reading disorder characterised by problems with accurate or fluent word recognition. Most theories characterise dyslexia as a deficiency in verbal processing. The novel perspective taken here is that a visual impairment (e.g., visual attention or visual processing deficit) may also account for developmental dyslexia. The aim of this research was to assess phonological and visual processing in dyslexic and typically developing readers. The overarching hypothesis is that, not only phonological but visual impairments could also be a critical feature in developmental dyslexia, as shown by patients with acquired dyslexia. Children with dyslexia were compared to typical readers, matched for age and gender in both verbal and visual aspects. Results confirmed verbal impairments in children with dyslexia but, interestingly, difficulties also in visual tasks. These results confirm that developmental dyslexia is a complex disorder that might be characterized by deficits in a variety of cognitive processes.

PP 023

THE DEVELOPMENT OF COGNITIVE FUNCTIONING INDICES IN PRESCHOOL CHILDREN OF THE GROWING UP IN NEW ZEALAND STUDY

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Background and aims. A key difficulty of longitudinally observing the development of cognitive functioning in early childhood lies in different measures used at different time points. Valid indices are needed in order to explore trajectories of cognitive functioning in the preschool years. We report on the development of three cognitive composite indices (CCIs) at 9 months, 2 years and 4.5 years in children enrolled in the longitudinal Growing Up in New Zealand study.

Methods. Data was collected from 5993 children including child observations and mother-reports. Analysis comprised 21 age-adjusted cognitive outcomes in total. Principal axis factoring with promax rotation was performed with outcomes measured at 9 months, 2 years and 4.5 years respectively. Beforehand, multiple imputations were carried out accounting for missing data. Parent-rating of literacy at 4.5 years and school readiness at 6 years were used as validity measures.

Results. At 9 months, cognitive outcomes were loading together on one factor. At two years, only the attention components grouped together on one factor. At 4.5 years, a one-factor solution emerged including several cognitive areas. CCIs at 9 months (r=0.13, p<.001) and 4.5 years (r=0.30, p<.001) as well as verbal communication at 2 years (r=.35, p<.001) were related to literacy at 4.5 years. Verbal communication at 2 years (r=0.11, p<.001) and CCI at 4.5 years (r=.13, p<.001) were related to school readiness.

Conclusions. We identified valid CCIs at 9 months and 4.5 years. At age 2 years, only the language component was found to be related to later literacy and school readiness, which may partially reflect the measures used. Both continuous and categorical index scores were calculated to allow for further analyses. The development of CCIs provides the opportunity to potentially examine early cognitive trajectories along with factors that may promote or hinder cognitive functioning in early childhood.

PP 024

MENTAL REPRESENTATION OF BODY IN CHILDREN

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Body experience is a base for psyche formation. Awareness of separation of Me and the Other occurs only on the mirror stage of developing.

Mental representation of the body as possessed properties of volume, density, continuality develops in ontogenesis. However the concepts "inside" and "inner volume" are different in a case of representation of alive and non-alive objects. For living things "inside" implied an inherent causal mechanism connected with intentions and vital energy.

A new method for investigation of inner volume was developed. The stimuli were two models of a doll (66 cm). The mouths of every doll were linked with bellies. The size of the belly of the first doll remained unchanged, and the size of the belly of the second first doll depended on quantities of "food", i.e. the fist doll was not changed in external volume and the second one was changed.

The experiments were carried out with children (3-9 years old). The children were asking to feed the dolls and to estimate the moment when the dolls were satiated. The models of food were made from different materials (soft, hard).

The results revealed a main effect of age in representation of "inside" and in criteria of satisfaction of the doll. Children aged 3-6 supposed that the doll was satiated when they saw its mouth filling with the food. They didn't pay attention on its external volume (pot-bally) when made resolution about its satiety. Children in age of 8-9 filled the doll up to its throat and paid attention on its external volume.

The representation 'inside' the living body leaves behind the representation of the 'inner volume' within a non-living capacity of the jar, as soon as for feeding the doll the children aged 5 preferred hard material, whereas they chose exclusively soft material to fill in the jars.

The inner space of the alive body acquires the character of a three-dimensional reality which accords with the rule of cumulativeness.

PP 025
IS LOWER COGNITIVE RESERVE RELATED TO LOWER COGNITIVE PERFORMANCE IN ADULTS?

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Background and aims. The study was designed to investigate whether low cognitive reserve (CR) is associated with low cognitive competences in adults. Evidence from numerous earlier studies suggests that high cognitive reserve, defined as previously acquired knowledge and experience, plays a protective role with respect to cognitive capacities in adults and senior citizens. The study involved 120 Polish adults (75 women and 45 men) ranging in age from 40 to 85 years (M = 57.42; SD = 10.48).

Methods. The CR index applied took into account formal education level, involvement in social, occupational and physical activity, and level of social support. The recorded data also included depression level (BDI II) and cardiovascular status (hypertension). The subjects' current cognitive competences were assessed using MoCA test, WAIS subtests, verbal fluency tests and DEX-S. Based on the subjects' scores in cognitive function tests, cluster analysis was performed and the participants were divided into two groups presenting lower cognitive level (LCL) and higher cognitive level (HCL).

Results. The LCL subjects were older than HCL and were characterised by higher level of depression and lower CR. In order to determine whether lower CR is related to lower cognitive abilities in the adults, logistic regression analysis was computed, also taking into account age, cardiovascular status and depression level. It was shown that lower level of cognitive abilities is related to lower CR. Older age also corresponds to weaker cognitive function. The findings showed no interaction of CR and age. Depression and health status did not predict lower cognitive abilities.

Conclusions. The current findings are consistent with results of earlier studies: low level of CR may be associated with poorer cognitive capacities in adults. These findings is discussed with reference to models and CR indexes.

PP 026

DEPRESSIVE MOOD AS A MAIN DETERMINANT OF A SUBJECTIVE COGNITIVE COMPLAINTS IN POLISH HEALTHY ADULTS

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Background and aims. Frequency of subjective cognitive complaints (SCC) i.e. feeling of weakness of own different cognitive competences affects from 50% to 95% of people aged 50+. SCC status is not clear in healthy adults. Emotional factors and personality, gender and level of education are the determinants of complaints. The aim of the study was to define the determinants of SCC in group of Polish healthy adults. The data analyzes included 60 people (30 women, 30 men) aged 45-75 years old (M=60,5, SD=9,34).

Methods. ProCog questionnaire was used to assess the intensity of SCC, GDS 30 was used to assess the intensity of depressive mood and MMSE to assess the overall level of cognitive function. Determinants of SCC included: the intensity of depressive mood, age, gender, level of education, and the overall level of cognitive function. A series of analyzes of regression (Catreg optimal scaling) were done, taking into account the quantitative and qualitative variables.

Results. Intensity of SCC is significantly associated with level of depression. Its higher level increases the general feeling of cognitive deficits and anxiety that they may be a sign of dementia. In conjunction with lower level of education, higher depressive mood increases the subjective feelings of episodic memory deficits, loss of various types of previously acquired competences and negative changes in social relations related to perceived deficits. Gender, age, and overall level of cognitive capabilities were not significant factors for the SCC.

Conclusion. A higher depressive mood and lower level of education increase the feeling of cognitive deficits in healthy adults. There was no relationship between the intensity of the complaints and the level of cognitive functions. Despite the lack of these relationships, people with high SCC' intensity should be monitored for cognitive functioning changes and depression, because the increase in depressive mood may indicate the development of cognitive impairment. This means that it is necessary to enrich the traditional psychological interview with quantitative methods of assessing SCC.

PP 027

INFLUENCE OF EXECUTIVE FUNCTION ON AGILITY AND COMPREHENSIVE PHYSICAL ABILITY IN KINDERGARTENERS

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Introduction: Executive Function (EF) might be important for successful performance in sports (Verburgh et al., 2014). EF predicts success in ball sports for adults and adolescents (Vestberg et al., 2012; Verburgh et al., 2014). However, few studies have examined the influence of EF on physical performance in kindergarteners. Diamond (2015) suggests that complex exercise requires thought and EF. Complex exercise skills consist of motor coordination (Gibney, 1993). It is known that the development of EF and motor coordination in kindergarteners is remarkable. Therefore, the present study investigated the relationship among EF, motor coordination, and comprehensive physical ability in kindergarteners.

Methods: Participants were 43 Japanese children between the ages of 4 and 5 years old. They performed the Fruit/Vegetable Stroop task (Archibald & Kerns, 1999 ; Roebers et al., 2012) to assess inhibition, the Hand Movements task (K–ABC-II) to assess spatial working memory (WM), and the Backward Digit Recall task to assess auditory WM. They also performed side hop repetitions to assess agility and stood with their eyes closed to measure balance. Then, they completed an activity involving jumping over and passing under a rubber tape that was set 35 cm above the ground 5 times to measure dexterity (Idemura et al., 2011). The teacher evaluated the comprehensive physical ability of them.

Results: Agility was significantly related to inhibition, spatial WM, auditory WM, dexterity, and comprehensive physical ability after controlling for age. Furthermore, we investigated whether EF influenced comprehensive physical ability via motor coordination using structural equation modeling. Results showed a significant correlation between spatial and auditory WM. Inhibition, spatial WM, and auditory WM predicted comprehensive physical ability via agility in motor coordination in the kindergarteners. The present study suggests the importance of EF for physical performance. Further study should examine how EF affects physical performance at various ages.

PP 028

RELATIONSHIPS BETWEEN EXECUTIVE FUNCTIONING, PRIVATE SPEECH AND EMOTION REGULATION IN PRESCHOOLERS

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Background and aims: Language acquisition is closely related to the regulation of cognitive (Azmitia, 1992; Kopp, 1982; McCarthy, 1946) and emotional aspects (Campos, Frankel, & Camras, 2004). Throughout the language development, children's speech in outer or observable forms that address the self is called as private speech. Previous findings revealed that private speech is related to self-regulation (i.e., Barkley, 1997; Berk, 1986; Piaget, 1959, Vygotsky, 1934/1986). The present study investigated the associations among executive functioning (EF), private speech (PS), and emotion regulation (ER) in a sample 62 preschoolers from the age of 4- to 5-years, their mothers and teachers through a cross-sectional design. Method: Inhibition (IC) and working memory (WM) difficulties of children were measured through mother reports on Childhood Executive Functioning Inventory (Thorell & Nyberg, 2008). Children's ER strategies were observed during the "Attractive Toy in a Transparent Box" task (Goldsmith, Reilly, Lemery, Longly, & Prescott, 1999) and coded as constructive or avoidance. Effortful control and negative emotionality were assessed through mother and teacher reports on the Child Behavior Questionnaire Short Form (Putnam & Rothbart, 2006). Children's PS was observed during a categorization task and coded according to Berk's (1986) coding scheme. Results: The PS positively predicted the IC difficulties beyond the child and family characteristics, implying that children who had difficulty in inhibition were more likely to rely on the PS. Bivariate correlations revealed that both the IC and WM difficulties were negatively related to effortful control and positively related to negative emotionality. Conclusions: The results seem to indicate that executive functions and temperamental emotion regulation are interrelated and the PS may have a supportive function for disinhibited children.

PP 029

SEGMENTATION OF ACTION SEQUENCES IN INFANCY: AN ERP STUDY

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Speech and action sequence processing both involve the segmentation of a continuous stream of information into meaningful sub-units. In order to segment these information streams, boundaries between sub-units must be detected. While we have now begun to understand how detection of prosodic boundaries in speech develops throughout infancy and early childhood (e.g. Holzgrefe-Lang et al., 2018), little is known about the development of processes supporting the segmentation of action sequences. We therefore aimed to examine whether the processes involved in speech segmentation also play a role in the segmentation of action sequences during infancy. To do so, we examined the possibility that a specific electrophysiological correlate of speech segmentation, an ERP component consisting of a positivity in response to a prosodic boundary (Steinhauer et al., 1999), is also found at the boundary between individual actions of an action sequence. 12-month-old infants were presented with videos in which an animated character performed a sequence of three different actions (e.g. hopping, expanding and twirling). Some action sequences contained a boundary between the second and third action. This boundary was realized by inserting a pause, and extending the duration of the pre-boundary action, two modifications that signal a boundary in non-speech stimuli (e.g. Friend & Pace, 2016; Frost et al., 2017). Initial analyses revealed a positivity in response to the onset of the boundary, which shares some temporal and spatial characteristics with the positivity found in response to boundaries in speech (e.g. Holzgrefe-Lang et al., 2018). This finding suggests that already during infancy, the processes operating during the segmentation of speech also underlie the segmentation of action sequences. The current study provides further evidence that action and speech perception are tightly linked during early development.

PP 030

EFFECTS OF EXECUTIVE ATTENTION TRAINING IN CHILDREN AND TRANSFER TO OTHER COGNITIVE FUNCTIONS - RELATIONSHIP TO THE INITIAL LEVEL OF COGNITIVE PERFORMANCE

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Studies on the possibility of improving cognitive functioning of people of all ages through short-term cognitive trainings have been of growing interest in psychology in recent years. The meta-analysis of the published studies shows that the improvement in the performance is observed not only in the trained tasks, but also in tasks that engage other basic (near transfer) and more complex (far transfer) cognitive processes. However, the results of the studies are inconclusive (e.g. Au et al., 2014; Melby-Lervåg, Hulme, 2013; Soveri et al., 2016). Moreover, researchers are looking for moderators of training's efficiency and the scope of the transfer. One of them may be the initial level of key variables (Lövdén et al., 2012).

The aim of research was to analyze the effects of the executive attention (EA) training in preschool children and their transfer to untrained tasks performance, measuring working memory (WM) and fluid intelligence (Gf). We took into account the baseline performance of trained and untrained cognitive task as the factor influencing the training effects.

 The sample consisted of 180 typically developing children from two age groups: 4-year-olds (N=90) and 6-year-olds (N=90). Children were divided respectively into three research groups: Training (executive attention's training), Active Control (naming objects) and Passive Control (lack of activity) groups. In the Training group the computer version of adaptive EA training was used. 14 appointments were arranged. An assessment of working memory (WM) and fluid intelligence (Gf) were performed on each group in pre-test and post-test.

The analysis of the data showed that (a) the EA training in children leads to an improvement in the correctness of performance of tasks which engaging EA, WM and Gf; (b) there is a correlation between the initial level of the measured functions and the scope of progress in the results of EA training.

PP 031

COUNTERFACTUAL THINKING AND ITS RELATION TO EXECUTIVE FUNCTIONS AND EMOTIONAL UNDERSTANDING IN EARLY CHILDHOOD

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Counterfactual thinking (CFT) is an ability to think about alternative versions of past situations. It enables one to change behavior, intention and motivation. How children can base a conclusion on what they have learnt from the world they've perceived can be understood by studying CFT. Among many other important cognitive and emotional skills such as executive functions (EF), theory of mind (ToM), and emotion understanding (EU), the ability of CFT also rapidly develops in early childhood. This study investigated the relations of CFT to cognitive and emotional skills by testing 82 children whose ages ranged from 3- to 5-year old were (M= 4.07 SD= .81, range: 38-70 month). All participants were going to one of three preschools that were located in İzmir, Turkey. CFT was measured through three tasks: Syllogism, Location Change, and Causal Chain Tasks. EF performance was measured by inhibitory control tasks of   Hand Game and Day- and-Night Game. ToM was assessed by a well-known task of Unexpected Content. Emotion Comprehension Test was used for emotional understanding performance. Children's language ability was also controlled by using Turkish Early Language Development Test (TEDIL). The results showed clear correlations among CFT, EF, ToM, and EU. However, in the hierarchical regression analyses CFT was only significantly predicted by the executive functions. Despite their correlation, CFT was not predicted by EU and ToM. The inhibitory demand of EF plays a more critical role in the development of CFT than the other factors. This is one of the few researches that examines the role of emotion in CFT, thus further investigation should take place.

PP 032

CHILREN'S SCIENTIFIC REASONING – THE ROLE OF THE SPECIFITY OF THE CONTENT

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Scientific thinking can be defined as the process of knowledge seeking (Kuhn, 2011) or a set of abilities like testing hypotheses, making inquiry or evaluating evidence (Jorout & Zimmerman, 2015). Zimmerman and Klahr (2018) presented a categorization of experimental studies on scientific thinking according to the principal features of this phenomenon that were utilised by authors. Importantly, Kuhn and Pearsall (2000) indicated metacognitive processes involved in coordination of theory (explanations) and evidence (data) as crucial characteristic of scientific thinking. Based on this assumption we designed the experiment aimed to investigate if children's ability to think in a scientific way depends on the specific content of reasoning. We compared children's reasoning in the domain of social vs natural sciences.

100 preschool children (aged 5-7) participated in the study. Children were presented with a set 8 stories (4 refers to social situations and 4 to the biological or physical world). Each story was illustrated with 3 pictures describing sequences of events and after each story children were asked two questions: "Why did it happen?" and "How do you know it?". We examined if children are sensitive to the distinction between the certain cues suggesting the explanation of the final result of the story and the evidence for their claims. Reasoning about events in the stories did not required advanced scientific knowledge, but children had to understand basic principles of natural and social world derived from their everyday observations (e.g. "when the sun is shining, the snow melts").

This is an ongoing study and the results are analysed to see if the successful scientific reasoning depends on the type of the content presented to children (i.e. story based on natural vs social principles). We discuss the results in the light of the question if early scientific thinking abilities are general or domain-specific.

PP 035

THE DANCERS' VISUO-SPATIAL BODY ENHANCES MOTOR-FORM DIVERGENCE IN CHILDREN

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Background and aim: Dance generally improves motor skills, cognition and well-being. In particular, it seems to yields positive effects in motor creativity. The extent to which it also enhance positive effects in other domain of creativity is still unclear. In addition, the key role of visuo-spatial body map in mediating such effects has also to be explored. Therefore, in the present study, the issue if dance improves divergent thinking, which is a measure of the creative potential based on the ability to find many different solutions to an open-ended problem, was investigated in both motor and visual domains. If the topological map of the body mediates the performance at the motor task was faced.

Methods: 49 children aged 6-10 years were recruited. They were divided in two groups: 24 children practicing ballet dance (23 girls; mean age = 8.2 S.D. ± 1.35; dance expertise in years = 3.36 S.D. ± 1.68) were compared with 25 children that never practiced dance (11 girls, mean age = 7.92 S.D. ± 1.50).

All children were asked to make drawings starting from given shapes (visual divergent thinking task), to producing motor forms (motor divergent thinking task), and to construct the map of the body starting from single parts (frontal body-evocation test).

Results: Results revealed that dancer children were better than the control group only in motor divergent thinking task. This effect was found to be also mediated by the ability to construct the topological map of the body.

Conclusions: These results show that dance improves specifically motor divergent thinking by means of a better topological map of the body since the early developmental age. In general, this study highlights the key role of dance in promoting bodily self-consciousness and motor creativity and opens to the idea that dance program should be pursued since the elementary school age.

PP 036
DIVERGENT THINKING AND DECISION-MAKING PROCESSES: AN ITALIAN SCHOOL-AGE STUDY

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Background and aims: Creating new ideas is a fundamental skill for humans in multiple domains especially in everyday life.

The creative process is the result of two type of thought: convergent and divergent thinking. Whereas convergent thinking is a mental process that allows us to find a single solution to a given problem, divergent thinking can be defined as the ability to generate and apply new ideas in order to solve an open-ended problem. The development of divergent thinking could depend on specific decision-making styles that evolve during childhood and studies on this issue are rare. The aim of our work is to analyze the relationships between divergent thinking and decision-making style focusing on the jumping to conclusion bias (JTC), namely the tendency to take rapid decisions without having all information.

Methods: 127 Italian children (mean age = 8.79, S.D. = 1.37; 66F) were recruited. The TTCT (Torrance, 1989) was used to assess verbal and visual divergent thinking and the beads task (Huq et al., 1988) was used to measure the tendency of JTC. This task requires to reach a decision about which of two hidden containers the beads were extracted from.

Results: Four parameters of visual divergent thinking were scored: fluence, flexibility, originality and elaboration. To evaluate the JTC, the error scores were calculated in both versions. The regression analysis showed that error scores of hypothesis beads task predicted the flexibility of verbal divergent thinking (β = -.231; p = .011) and flexibility (β = -.329; p = .0002) and originality (β = -.276; p = .002) of visual divergent thinking.

Conclusions: In general, it seems that visual divergent thinking requires time and reflection. The generation of flexible and original ideas, indeed, is based on a careful analysis of possible alternatives, rather than on a spontaneous decision style.

PP 037
RELATIONSHIP BETWEEN FINGER GNOSIS AND MENTAL NUMBER LINE AT CHILDREN

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Finger gnosis and number is closely related. Finger gnosis is the ability to identify the form of the hand and position of fingers without visual feedback. Previous studies have shown that finger gnosis correlated with and selectively predicted arithmetical abilities in children (Fayol, Barrouillet, & Marinthe, 1998; Noël, 2005; Gracia-Bafalluy & Noël, 2008; Reeve & Humberstone, 2011; (Wasner, Nuerk, Martignon, Roesch, & Moeller, 2016). However, the previous studies did not clarify the relationship between finger gnosis and mental number line.

In this study, an experiment was conducted on 33 first grade and 35 second grade at elementary school to clarify relationship between their finger gnosis and mental number line. Mental number line was measured by using number line estimation task. In this task, printed number lines (20 cm long) with anchor point 1 (to the left) and 10 (to the right) were presented to the children. Each child was asked to mark the position of a given number (2-9). To examine the accuracy of the estimates, the Error rate (ER) was calculated by the following formula: ER=|estimate - real value| / interval of real value.

To investigate relationship between their finger gnosis and mental number line, multiple regression analysis was performed at each grade using ER as dependent variables, with finger gnosis, age, visual-spatial memory task scores as independent variables. The result indicated that at first grade, ER was related with finger gnosis (β=-.696, p<.01), but not related with all variable at second grade.

Okamoto (2010) argued that mental "objects" line would be constructed prior to mental number line. Mental objects represent real word objects on a single dimension. From the above result, it seems that, at first grade children, mental objects line was constructed and these mental objects was based on fingers.

PP 038
FINANCIAL CRISIS IN GREEK CHILDREN'S DRAWINGS

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Background and aims: Despite the growing body of research on the consequences of Greek financial crisis on children's development, few researchers have investigated how children perceive this socio-political phenomenon. The present study attempted to explore children's drawing representations of financial crisis and whether these vary as a function of age. Methods. Data were collected during 2015 and two hundred children aged 5-, 7-, 9- and 11-years were first asked to define the term and then to draw a person experiencing the financial crisis, as well as to produce a control drawing (a person). Participants' drawings of financial crisis were content analyzed in order to identify the graphic cues employed. Then, two independent raters were asked to examine each drawing of financial crisis for the presence of those graphic cues by comparing it to its control drawing. Results. Data analysis showed that from the age of seven years onwards children were able to represent financial crisis in their drawings, while the older age groups included significantly more graphic cues in their drawings than the younger ones, showing a more mature understanding of the term under investigation. Regarding the type of graphic cues used, it was found that children in all age groups represented a negative emotional state, by adding to their human figure drawing facial graphic cues denoting either sadness or fear. However, while the 7- and the 9-year olds included in their drawings cues representing the materialistic dimensions of the financial crisis (e.g., lack of money or deprivation of clothing), the 11- year olds incorporated cues (such as beggars or immigrants) which also reflected the social dimensions of the financial crisis. Conclusions. The findings shed light on the way children perceive financial crisis and their contribution for providing psycho-social support to children affected by the financial crisis is discussed.

PP 040
JAPANESE MATERNAL INPUT OF BABY-FORM WORDS AND ADULT-FORM WORDS ON CHILDREN'S ACQUISITION OF NOUNS AND VERBS

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Backgrounds and aims: Infant directed speech is used across many cultures and the researchers have postulated that IDS plays a critical role in the process of language development. The present study investigated the role of IDS for the acquisition of nouns and verbs and the change of the effect across development.

Methods: Mother-infant pairs including 9-, 12-, 14-, 18-, 21-, and 24-month-old infants (n = 28, 29, 26, 32, 22, and 21, respectively) were observed. Maternal input of the baby-form (write as B) and the adult-form (write as A) of nouns and verbs were analyzed using the JMOR program in Clan and the ratio of B/ (B+A) for the types and the tokens were calculated. The children's vocabulary outcomes were assessed by the Japanese version of the CDIs (JCDIs) at 24 months and 33 months.

Results: The B/ (B+A) ratios for the tokens was highest at 14 months. The B/ (B+A) for the verb types and tokens were higher than those of nouns.

From the partial correlations controlling for children's linguistic measures at the observation time, the types and tokens of B/ (B+A) ratios for nouns at 14 months positively predicted the productive nouns at 24 months, and the tokens of B/ (B+A) ratio for verbs at 14 months positively predicted the productive verbs at 33 months.

On the other hand, the types and the tokens of the B/ (B+A) ratios for verbs at 24 months negatively predicted the productive verbs at 33 months.

Discussion: Higher production of baby-form words will contribute to the scaffolding effect to children's subsequent vocabulary development at 14 months when infants making mappings from words to referents. On the other hand, IDS of baby-form had a negative effect on subsequent vocabulary development at 24 months when children's productive words with adult form were acquired.

PP 041
MATERNAL SPEECH TOWARDS INFANTS AND PETS: A CASE STUDY

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Modern empirical work confirms Darwin's suggestion that some human expressions have precursors in non-human primates (Schirmer, et al. 2013). Non-human animals' ability to recognize human emotions and intentions through their expressions, gestures and signals, has been confirmed by recent research data (Hare, et al. 2002; Kaminski, et al. 2004; Kaminski, et al., 2012). The influence of animals as companion or/and as therapy assistants in infancy is a relatively new area of research. Hirsch-Pasek and Treiman (1982) studied motherese and doggerel and found similarities in structure and differences in functional and social issues in the way mothers speak to their dogs and their infants. Moreover, similarities has been found in heightened pitch and affect among motherese and doggerel while differences in the use of hyperarticulated vowels were also present (Burnham, et al., 2002). The aim of the present study is to qualitatively analyze and compare motherese and doggerel early in life in order to detect their basic aspects and the functions they serve.

An infant girl with her mother from a Cretan famil, and their small-sized 2 year old dog participated in the present study. Video-recordings of 7-minute free play interactions were made at 30-day intervals from the 2nd to the 6thmonth (non-participant observation). The maternal speech towards the infant and the dog was analyzed (sound and phrases) and described within well-defined units of analysis.

Preliminary results show similarities in the pitch and affect among motherese and doggerel. However, the mother was more directive towards the dog, used imperative cues and tended to use it in order to gain infant's attention.

The systematic analysis of motherese and doggerel sheds light in the triangular exchanges in early infancy and multifaced interactions, highlights the emotional dialogues among humans and human-animals and gives a step to the emotional and social benefits of human-animal co-existence.

PP 042

THE DEVELOPMENT OF LANGUAGE FLEXIBILITY IN PRESCHOOL CHILDREN: THE ROLE OF THE TYPE OF TOY AND PLAY PARTNER

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Recent studies have shown that parent-child interactions during play with traditional versus electronic toys differ in terms of the quantity and quality of communication, the latter being negatively affected in play instances involving electronic toys. Moreover, the type of toys used during play has an influence over certain cognitive aspects, such as sustained attention.

Drawing from these studies, the purpose of this research is the investigation of the role of the play partner and that of the type of toy used during play on the development of language flexibility in preschool children (3-4 year-olds).

Using an experimental design, a number of 80 children will be randomly distributed in each of the four groups (20 chidren per group). Every child will participate in three 15-20 minute play sessions, wherein they will interact with 'simple toys' in the presence of the experimenter (StE group)/parent (StP group) or with 'complex toys' in the presence of the experimenter (CtE group)/parent (CtP group). Subsequently, the children will be evaluated with the language flexibility task that consists in the presentation of several short stories, where children have to use flexibly the same word label for different objects.

We expect to observe the highest performance in the language flexibility task for those children that will interact with simple toys in the presence of a parent. Also, we believe that the children in the CtE group will have the worst performance in the same task.

As play is a central activity at this age, this study seeks to investigate if the toys used in these play instances can have an influence on how children use language in a flexible manner. If this relationship is confirmed, then we can shed further light on some of the factors that impact language development.

PP 043

DEVELOPMENT OF STORY RETELLING SKILLS IN PRESCHOOL CHILDREN

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Narrative skills are said to be an important aspect of language development in early childhood that have been linked to later learning and literacy. Despite this, the developmental aspects and evaluation indexes of narrative skills in preschoolers are still not clear enough. The purpose of this study was to examine the development of the story retelling skills in typically developing Japanese preschoolers, and the correlation between story retelling skills and other linguistic skills.

Participants consisted of 148 children ages 4 to 6. Children were asked to listen to a 4 minute CD story, watching 14 portions of a story picture book, and to retell the story without visual aids after listening. And children's other linguistic skills were examined: verbal knowledge, expressive vocabulary and riddles by KABC-, receptive vocabulary by PVT-R, and sentence repetition skill.

The number of occurrences out of 21 basic propositional units (P-unit-score) that are necessary to give an outline of the story were used to assess story retelling skills. Results indicated significant correlations between age and story retelling skills. The median of P-unit-score showed a remarkable rise, especially from the age of 5 to 6. And over 70% of the children in the latter half of the age of 5 told some basic propositional units from all three structural parts of the story (the beginning, middle, and ending part). Although there was no partial correlation controlled for age between P-unit-score and scores of KABC-II/Gc or PVT-R, there was a significant partial correlation between P-unit-score and sentence repetition score.

In this study, it was indicated that the story retelling skills rapidly develop, especially from the age of 5 to 6. Moreover, it was shown that the skills are related to the sentence repetition skill, rather than the verbal knowledge, expressive vocabulary, riddles, and receptive vocabulary skills.

PP 044

RECURSIVE SYNTAX AND THEORY OF MIND IN PRESCHOOL CHILDREN: SYNTACTIC EMBEDDING PREDICTS SECOND ORDER FALSE BELIEF REASONING

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Research exploring the links between language and explicit theory of mind (ToM) show that the acquisition of recursive syntax is crucially involved in developing cognitive representations required for false beliefs (FB; de Villiers, 2017). Previous studies confirmed the role of comprehension of recursive syntax in the development of first order ToM. Our study aimed at finding whether the use (i.e. production) of such syntax assists children with the representation of complex and conflicting perspectives of second order ToM ability.

We tested 142 five and a half year olds (M = 68 months, 70 girls) with two new tasks designed specifically to measure production of embedded clauses, and two second order FB tasks (Sullivan et al., 1994).

Controlling for sex, working memory (digits span), vocabulary and grammar (picture naming and complex sentence understanding), we found that recursive syntax production was a significant predictor of second order FB reasoning ($\beta = 0.27$, $p < .01$).

The findings suggest that children's recursive syntactic productions support embedded representations involved in explicit, recursive reasoning about mental states. The results are discussed in the light of theories and recent findings concerning the phenomena of recursion in language and ToM, manifesting itself in the mastery of syntactic embedding and the ability to reflect upon one's own thinking processes, respectively.

PP 045

RELATIONSHIP BETWEEN GAZE AND INFANT'S VOCAL PRODUCTIONS FROM 18 TO 21 MONTHS OF AGE IN NATURAL INTERACTION SITUATIONS

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The aim of this study is to analyze the development of gaze and vocal productions and its coordination in natural interaction situations at the end of the second year of life. Four Basque-speaking children were observed in their natural contexts in interaction with their primary caregivers at 18, 19 and 21 months of age.

All the vocal utterances as well as eye-gaze produced by children were coded using ELAN software. Vocal productions were coded as communicative and non-communicative according to adult's contingent response to children's productions. We also continuously coded the gaze towards the object, the adult, or the experimenter.

Results show that communicative vocalizations are more frequently produced with gaze towards the adult than expected by chance, whereas non-communicative vocalizations are produced with gaze towards the object.

When analyzing the probability of every type of gaze preceding every type of vocalization we found that this probability is higher for gaze to the object when preceding non-communicative vocalizations than when preceding communicative vocalizations. For the gaze towards the adult, we found the inverse pattern with a higher probability of precede communicative vocalizations than non-communicative ones.

The duration of gazes produced without vocalizations tend to shorten with age, specially the gaze towards the object. This pattern is not found for the gazes produced with vocalizations.

These preliminary results can provide clues to focus the dynamic analysis of gaze and vocalization coordination along the process of language development.

PP 046

ON-LINE SCREENING AND PROFILES OF LANGUAGE DELAYS IN VERY PRETERM AND MODERATE PRETERM CHILDREN COMPARED TO FULL-TERM CHILDREN AT 30 MONTHS

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Background and aims: Preterm birth (gestational age-GA < 37 weeks) has been reported among risk factors for language delays (Sansavini et al., 2011; Vohr, 2014). Among very preterm children (VP, GA<32 weeks), one out of four 2-3-year-olds shows a delay in expressive vocabulary (≤ 10th percentile, LT- late talker) not associated to neurological/sensory deficits. Moderate preterm (MP) children (GA 32-36 weeks) can also be at risk for language delays. However, findings are less concordant. The present study aims to identify LTs among VP and MP children at 30 months through an on-line screening by referring to normative data and a comparison group of full term (FT) children and trace their linguistic profiles in function of language level (LT vs no LT) and neonatal (VP vs MP vs FT) status.

Methods: One hundred sixty-six children (26 VPs, 60 MPs and 80 FTs), without major cerebral damage, visual or hearing impairments, comparable for gender, socio-economic status and exposure to Italian language, participated at 30 months (corrected age for preterm children). Parents filled in on-line the Italian version of the MB-CDI short form questionnaires (Caselli et al., 2015) for language and of the PARCA questionnaire (Cuttini et al., 2011) for cognitive development.

Results: Similar rates of LTs among VP and MP children with no significant differences with FT children. Children's linguistic profiles differed in function of language level but not neonatal status: LTs, compared to no LTs, obtained lower scores in word comprehension, word production, complete sentence production, and cognitive development.

Conclusions: Interindividual variability and a similar rate of LTs were found through an on-line screening both in VP and MP as well as in FT children at 30 months. Interestingly, multiple linguistic and cognitive weaknesses characterized LT's profiles. Longitudinal investigation is needed to further understand LTs' rate and profiles in these populations.

PP 047

DEVELOPMENT OF NARRATIVE SKILLS IN PRESCHOOL CHILDREN

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The assessment of narrative skills in preschoolers is an important responsibility facing educationalists today. Early identification of problems in narrative skills and, more specifically, narrative abilities is especially important for identifying children at risk for later learning and literacy-related difficulties. Telling fictional stories is a highlevel language skill, which likely contributes to the academic and social difficulties of children with communication disorder. The purpose of this study was to examine the narrative formulation skills of preschool children with typical development. Participants were recruited from the kindergarten in Tokyo, Japan.

Participants consisted of 83children with typical development ages 4:0 to 6:10 (39boys, 44girls.). Children were instructed to create a story using laminated picture cards. Each of four pictures presented the character taking some action to resolve the problem in a problem/conflict situation. Each child was presented with each picture, at a time, and then asked to tell the story while looking at the picture.

The number of occurrences of causal relationship (CR-unit) between events that necessary to score an meaning of the pictures was used to assess a fictional story telling skill. The basic units of analysis were CR-units, and four measures were selected for analysis: number of different words, mean length of CR-unit , total number of CR-units, and a subjective narrative quality score (Lebel1~ Level3).Results showed significant correlations between age and fictional story telling skills. The CR-unit-score and Level3 showed a remarkable rise especially from the age of 5 to 6.

We have proposed a method of eliciting and scoring of telling fictional stories from preschoolers and presented some normative data that would enable early detection of problems at the narrative level of language. As for the articles on background of telling fictional stories, central coherence, executive function, event knowledge, working memory, receptive language, expressive vocabulary, and others were discussed.

PP 048

EMOTIONAL AND REFERENTIAL COMMUNICATION: DEVELOPMENTAL TRAJECTORIES OF POINTING GESTURE IN THE FIRST YEAR OF LIFE

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Already at four months, infants display first manifestations of social attitude and affiliation to familiar and unfamiliar social partners, by coordinating their visual attention, facial expressions of emotions, and vocalizations during dyadic interactions with others (i.e., emotional communication) [1]. As infants mature, between the eighth and the twelfth month, their interest in third objects (or events) outside of the dyadic interaction gradually increases, and infants' learn to use referential communication, such as the pointing gesture: the extension of the hand and the index finger toward a specific object, in order to intentionally direct the attention of a social partner [2]. Although infants' emotional and referential communication are recognized as the two most significant manifestations of social engagement in early infancy, fundamental to a healthy socio-emotional maturation, little is known about the developmental interplay of these abilities. The current study aims to investigate the developmental relation of emotional and referential communication in the first year of life.

Sixty families participated in the present longitudinal study with their not-first-born infant. Emotional communication was measured in naturalistic settings at 4 and 8-months; infants' production and comprehension of pointing gesture was measured in naturalistic settings at 8-months and in experimental settings at 12-months (data collection is being currently conducted). Observations are systematically coded at the micro-level (frame-by-frame) with the software program the Observer-XT-13.0 [3], both for emotional communication [2] and for the pointing gesture task [4].

Path models (i.e., hierarchical regression analyses) will be performed to examine the hypothesized predictive effects of infants' emotional communication on later pointing gesture abilities. Results will be illustrated and discussed during the conference presentation.

Results will not only extend our knowledge on socio-cognitive development, but also contribute to uncovering those developmental mechanisms central in psychopathologies.

PP 049

NOVICE WALKERS PERFORM A CHALLENGING TASK: DOES TEMPERAMENT PLAY A ROLE?

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The new affordances and challenges that accompany emerging skills and the ways infants coordinate new abilities to cope with expanding range of experiences and behaviors are central to the developmental process. To study, in concert, developmental change along with individual child factors calls for merging different paradigms. The present study is conceptualized within a Dynamic System approach and investigates the involvement of individual differences as defined by temperament characteristics, in the way the child copes with a challenging task. For novice walkers, crawling through a toy tunnel presents a unique challenge requiring flexible motor problem solving.

The participants were 45 toddlers (28 boys and 17 girls), aged 10 - 18 months (M=13.8, SD=1.9), within two weeks of independently walking 10 steps without falling. During a home visit, the tunnel test was administered. The filmed observations were coded (interrater agreement >.90) producing scores for duration, latency, trials, and mismatches in fitting the body into the tunnel opening. The mothers completed Rothbart's temperament questionnaire.

The mean age of walking onset criterion was 13.64 months, similar for boys and girls. Performing the tunnel task required, on average, 3.8 trials and 1.5 minutes. The main finding was that only in girls, temperament was significantly correlated with performance: surgency was positively correlated with duration (r =0.48, p=0.05); negative affectivity was associated with shorter latency (r=-.52, p=0.03) and duration (r=-.60, p=0.01).

These findings point to the role of temperament in performing a motor task requiring postural change, underlying the reactive temperament dimensions - surgency and negative affectivity. That only in girls this link was apparent partially aligns with previous gender-related findings. Clarifying the role of temperament in shaping children's performance has both theoretical and applied significance. Thus, more research on the mediating role of gender in different populations and contexts, as well as at different developmental transitions, is called for.

PP 050

HIDDEN OBJECTS AND THE SEARCH FOR SPATIAL TRANSFORMATION IN CHILDREN

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Many research studies have been conducted on searching in a space, but basic research on finding hidden objects displayed in a game has not been performed. Analysing the process of preschool infant search activities will give insight on how to form a covered image. This study aimed to examine the possibility that children can perform processing similar to spatially transformative tasks. Three-year-old (N = 19) and four-year-old (N = 15) children participated in this study. Sample stimuli were presented to the subjects on the computer screen, but the target stimulus can be visible only through the displayed hole. The children could move the hole using a mouse to determine which stimulus was being hidden. The target stimulus was placed randomly, and the children's reaction time and time-series data were measured using the coordinate position of the hole. Individual differences were recognized in the time and range required for tracking. Although the orientation of the target stimulus affected the reaction time, it did not become an inverted V shape like mental rotation. However, the effects of the reaction time and search distance per trial were confirmed. Peculiarly, reaction times and moving distances did not linearly decrease according to the repeated trials but decreased after increasing once (making a peak) in the latter half of the trials. This study could discern new ways to explore children. The time-series change of the variables required for tracking divulged important knowledge. If the search time and distance reflect the image of a hidden object, it is presumed that the two-step change consisting of feature search phase and judging based on the formed image phase.

PP 051

THE EFFECTS OF SOMATOSENSORY PROCESSING ON EARLY LEARNING DIFFICULTIES AND SELF REGULATION

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Previous studies have showed that sensory processing patterns are related to adaptive and challening behaviors in the general population of children. The aim of this research is to investigate the association among somatosensory processing, early learning difficulties and self regulation. Our recent study involved children with learning difficulties between the age of 4 and 6 years along with typically developing children who were matched by IQ, age, gender and caregiver's education. We examined the sensory processing (Sensory and Motor Experiences Questionnaire), behavioral and self regulation (Child Self-Regulation and Behavior Quastionnaire) and behavioral difficulties (Strength and Difficulties Questionnaire) assessed by parents. The results indicate that children with learning difficulties exhibited mild impairments in sensory processing and showed more difficulties in externalizing behavior and emotional regulation as well as self regulation. Taken together, these findings suggest that the impaired sensory process may contribute to the develoment of higher order social and cognitive deficits, like learning abilities and regulatory functions which can fundamentally affect school readiness.

PP 052

OUT OF SIGHT, OUT OF MIND? GAMMA OSCILLATIONS DURING OCCLUSION EVENTS IN BABIES

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Using high-density EEG and frequency analysis, we analysed the induced brain responses in infants before, during, and after temporary occlusion of a car driving around a rectangular path with three different speeds. The mean age of the infants was 10.6 months (SD = 1). All infants had between 2 and 25 weeks of self-produced locomotor experience.

A time-frequency analysis was carried out for the nine different conditions, 3 (fast, medium, slow speed) x 3 (before, during, after occlusion) for all participants, separately. No significant differences with respect to the speeds were found when the TSEs of the conditions were compared with each other. Thus, fast, medium, and slow speeds were combined into one motion condition and analysed separately for before, during, and after occlusion.

The individual TSEs of the infants showed a pattern of synchronized gamma-band (> 30 Hz) activity before the occlusion of the car in the visual and central brain sources of interest, while a pattern of induced desynchronised oscillatory activity (ERD) within the gamma frequency band was found during the occlusion of the car in the visual sources of interest. TSEs of the motion after the occlusion of the car showed similar oscillatory activity as the motion before occlusion.

The synchronized event-related brain activity observed may indicate that fewer but more specialized neuronal networks were activated in synchrony when the car was visible than when it was hidden. The desynchronized event-related brain activity observed during the temporary occlusion suggest that larger neuronal networks were communicating with each other, to keep the object in mind during the occlusion of the car. Strengthening of synaptic connections and increasing maturity of visual pathways during the first year of life may help account for the use of the high-frequency oscillations.

PP 053

VERY PRETERM CHILDREN SHOW IMPAIRED ABILITY TO DETECT BIOLOGICAL MOTION AT 12 YEARS OF AGE

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Very preterm children (VPT, <32 gestational weeks) are at risk of difficulties in social perception. In typically developing children, studies of biological motion (BM) indicate that social functioning is closely related to ability to detect the motion of others. A premature phenotype has been suggested including shyness and difficulties in social functioning.

To investigate if level of prematurity and neonatal complications are associated to ability to detect BM.

Thirty-six VPT born and a control group of 17 children born full term (FT) were investigated at 12 years of age. Gaze was recorded with Tobii-TX300 eye tracker whilst looking for 8 walking point-light men (BM). BM was masked by random dot motion in 2 conditions: 6 dots/sq in and 12 dots/sq in. Detection time for the two BM conditions were measured. An independent t-test calculated the difference between groups. One further analysis excluded children with PVL. For the VPT group gestational Week (GA), gestational weight (GW) and neonatal complications: Bronchopulmonary dysplasia (BPD), Retinopathy of prematurity (ROP), Intraventricular hemorrhage (IVH) and Periventricular leukomalacia (PVL) were correlated to mean detection time for BM.

No significant correlations were found between mean time for detection of BM, birthweight, GA or neonatal complications except PVL which showed a correlation of .42, p=.01. When excluding children with PVL the mean group difference compared to full term peers remained: VPT children (M=11.0 SD=5.3), t=-2.27, p = .01, the one child with autism also had PVL.

Only PVL was associated to detection of BM, indicating greater problems. However, VPT children without PVL or ASD show slower detection times than FT. These results suggest that VPT children in general show difficulties in social perception in terms of biological motion detection, which may explain part of their challenges in social functioning.

PP 055

THE RELATIONSHIP BETWEEN MEDIA MULTITASKING AND EXECUTIVE FUNCTIONING IN ADOLESCENTS

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In the context of mixed data in the domain of digital media behaviour and cognitive functioning, but also considering the increase in media multitasking behaviour among adolescents, the present study aims to replicate the methodology used by Baumgartner, Weeda, van der Heijden and Huizinga (2014) to study the relationship between adolescent media multitasking and executive functioning.

Early adolescents (11-15 years old) from two middle schools in Cluj-Napoca are participating. Three major executive functioning processes (inhibition, shifting and working memory) are assessed by using two kinds of measurements: a self-report inventory regarding day to day challenges that result from difficulties in executive functioning (Behavior Rating Inventory of Executive Function - BRIEF) and three computerised tasks (Eriksen Flanker Task, the Dots-Triangles Task and Digit Span). Along with these, children also complete a measure of daily media use and media multitasking behaviour (Media Use Questionnaire).

Questionnaire data were collected so far from 219 participants aged 10.11 - 14.9 years old. Data from computerised tasks will follow. We expect that media multitasking behaviour will be positively related to self-reported executive function difficulties in the three aspects that are evaluated in the present sample. Media multitasking is not expected to be related to working memory and shifting as assessed by the computerised tasks, but it is expected to be positively associated with the ability to inhibit irrelevant information in the environment.

Methodological implications for the study of adolescent media use will be discussed, as well as practical implications for academic achievement.

PP 056

GENDER AND RELIGIOUS DIFFERENCES IN SEEKING AND PROVIDING HELP ONLINE AMONG ARAB ADOLESCENTS IN ISRAEL

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Many modern youths rely on online environments for seeking support in coping with their life challenges. Furthermore, the growing tendency of adolescents to provide help online accords various psychosocial benefits for both the recipient and the provider. However, previous research has not paid sufficient attention to the phenomenon of help-providing by adolescents. The goal of the present research is to investigate online help-seeking and help-providing behaviors among Arab adolescents in Israel. In particular, gender and religious (Christian vs. Muslim) differences were examined among 662 Arab adolescents (61% female, 58% Muslim). The results showed that, overall, 54% of the participants sought help online and 70% reported providing help online to others, with 60% of the latter comprising familiar others. A high frequency of providing help to others was found among those having sought help online. Girls were more likely to seek help online than were boys; however, no gender differences were found in the prevalence of providing help online. Regarding the sources of help sought online, girls turn to family members more than do boys, whereas boys turn to unfamiliar peers more than do girls. As for providing help, girls seek and provide more emotional and informational help than do boys. Muslim Arabs turn to family members and familiar professionals more than do Christian Arabs. Muslims also seek and provide more instrumental and informational help than do Christians, and they are also more satisfied with the help they receive. Among those who do not seek help online, the primary reasons noted were the importance of self-reliance and a preference for face-to-face help. The results of the present study have practical implications for mental health providers. These findings may be used to develop interventions that better meet the needs of ethnic minority adolescents in their giving and receiving online help.

PP 057

HYPERACTIVITY, CONDUCT PROBLEMS SYMPTOMS, FAMILY ENVIRONMENT AND HEALTHY RECREATION IN CHILDREN UNDER 11: THE MEDIATING ROLE OF DIGITAL MEDIA

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Aim: Attention deficit hyperactivity disorder (ADHD) is associated with more digital media exposure, less healthy lifestyle and more challenging family circumstances, though the exact nature of these relations is unclear. Using structural equation modelling, we test the hypothesis that ADHD drives increased digital media use, which in turn reduces healthy recreation - an effect exacerbated by difficult family circumstances. We also test whether these effects are driven by ADHD or by a highly comorbid conduct problems (CP).

Method: Parents of 532 children aged 2-11 years reported on: children's ADHD and CP symptoms, child-parent conflict and own mood disorders symptoms. Parents also reported on children's media use and healthy recreation: sports, social clubs (e.g., music groups, scouts), reading and games at home.

Results: The parameters of the structural equation model suggested a good fit of the model ($x2=38.47$, df=15; CFI = .965; RMSE = .054). There were direct effects of CP on media use ($\beta=.14$, p=.005), media use on healthy recreation ($\beta=.-.17$, p=.029) and parental mood symptoms on healthy recreation ($\beta=.-.23$, p=.001). Moreover, there was a significant indirect effect from conduct problems to reduced healthy recreation through an increase in media use (p=.016). An indirect path from ADHD symptoms to reduced healthy recreation through increased media use approached significance (p=.050).

Conclusions: CP but not ADHD symptoms were associated with increased use of digital media. However, neither CP nor ADHD symptoms were directly associated with reduced healthy recreation. Rather, children with CP participated less in positive recreation due to an increased use of digital media. In contrast, family environment was not associated with media use. However, parental mood disorders symptoms led to a reduction in healthy recreation. These findings emphasise the need for a more fine-grained approach to investigating the complex associations between digital media use and children's mental and physical health.

PP 058

ONLINE HATE POSTINGS AGAINST MINORITY GROUPS: PEER NORMS IMPACT MORAL JUDGEMENTS AND EMOTIONS

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Online hate postings against minority groups are a cause of concern all over the world. Understanding how adolescents morally judge and emotionally respond to hate postings is important for designing effective prevention. To better understand the impact of peer norms when responding to hate postings, main ideas of the social-ecological framework on bullying (Espelage and Swearer 2010) and the Affect-Cognition Model (Malti & Keller, 2010) were combined. It is well researched that cognitive and emotional skills are progressively integrated throughout development. Moral emotions involve a great degree of cognitive processing, as they require both an understanding of why it is wrong to break a moral rule, and how the rule-breaking negatively affects the well-being of others (Malti, 2016). However, it is not known how actual and perceived peer norms impact moral judgments and emotions of online hate postings.

Grade 7 and 8 adolescents (N= 454, 53% girls) aged 13 to 15 years responded to four hypothetical vignettes depicting hate messages against refugees, people who are disabled, people who are gay or women. Participants were asked to judge the hate messages and to rate their own emotions in their roles as observers. Furthermore, they were asked to rate the judgements and emotions of their peers in class.

Moral judgements and emotions differed between the four hate postings and gender moderated the answers. Perceived and actual peer norms were positively associated. HLM models revealed that actual peer norms had an impact on the moral judgment and emotion of the hate postings. The results are discussed regarding their theoretical and practical importance.

PP 059

IS CHILD'S USE OF MEDIA DEVICES ASSOCIATED WITH VOCABULARY ABILITY? : THE ROLE OF MOTHER'S PARENTING STRESS

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As children's overuse of media devices has received much scholarly attention, its impact on child literacy is of growing interest to many developmental psychologists. Previous research has focused primarily on how parents should monitor and supervise children's media use. However, children have been reported to use media devices more when parents are under stress. Thus, it appears equally important to understand the role of parental stress in children's media use. While media use shows a negative correlation with child literacy, the role of parental stress in this remains unclear. Therefore, the present study aimed to investigate the moderating effect of mothers' parenting stress on the relationship between child's use of media devices and vocabulary ability.

We used the Wave 8 data from the Panel Study on Korean Children. The sample for this study included 1,405 mothers and their seven year-old children. Child's vocabulary ability was assessed using Receptive Expressive Vocabulary Test. Parents reported on the number of hours that their child used media devices per week. Mother's parenting stress was asssessd using Parenting Stress Scale.

Multiple regression analyses showed that the higher the child's use of media devices, the lower the child's vocabulary ability (B = -.360, SE = .104, p < .01). The moderating effect of mother's parenting stress was significant (B = -.335, SE = .150, p < .05). Specifically, the magnitude of the negative association between media device use and vocabulary ability was significantly greater for children whose mothers' parenting stress was high as opposed to low.

Results suggest that it is necessary to pay attention to mother's psychological status, which appears closely tied to child's use of media devices. Interventions designed to alleviate mother's parenting stress seem promising in mitigating the negative impact of media use on children's literacy.

PP 060

BASH ME BABY ONE MORE TIME. AN EXPERIMENTAL STUDY ON THE EFFECTS OF EXPOSURE TO CELEBRITY BASHING ON ADOLESCENTS' OWN BASHING BEHAVIOR

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Celebrities increasingly become the victim of online aggression, a phenomenon referred to as celebrity bashing. Whereas celebrity bashing originally developed as a journalistic practice (media bashing), the audience itself has now largely taken over this behavior (audience bashing). Several antecedents, both on the individual and social level have been investigated in order to explain this practice. Research on contextual factors is limited. This study aims to investigate the influence of regular exposure to online celebrity bashing. Based on social learning theory, it can be expected that regular exposure to celebrity bashing might create the impression that it is normal to treat celebrities like that online, which will lower the threshold for experimenting with it.

An experimental study with a 2 (neutral or bashing) x2 (journalistic comment or journalistic and audience comment) between-subjects design was conducted among a sample of 133 (N= 133) adolescents (M= 13.46; SD= .74). Bashing behavior was measured using a hot/not rating mechanism of celebrity pictures. After voting, the adolescents had the possibility to write a comment to specify their choice, which gave them the opportunity to directly bash celebrities. A qualitative coding was conducted on the comments. The results indicated that the condition with the combination of bashing by journalists and the audience, contained significantly lesser negative ratings and lesser bashing comments toward the celebrity targets. The condition with the combination of neutral journalistic and audience comments on the other hand contained the most bashing.

The results of this study suggest that adolescents' exposure to celebrity bashing can function as a buffer for their own participation in it. A second experiment will be conducted in order to further analyze the underlying processes that can explain this finding, based on the three routes (cognition, attitudes, arousal) of the GAM. The results of both studies will be presented.

PP 061

TRANSFER OF LEARNING BETWEEN DIGITAL AND PHYSICAL VERSIONS OF THE TOWER OF HANOÏ AND THE ROLE OF INHIBITION

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Research on transfer often uses isomorphic tasks, whose structures are the same but which differ on some surface elements. Such different surface features make it necessary to adapt the knowledge, so that it can be transferred (Schwartz, Chase, & Bransford, 2012). As to digital transfer, which refers to a kind of transfer between a main task performed on a digital device and a transfer task performed either on a digital device or on a tangible apparatus. Transfer task is characterized by the novelty of its surface features, some authors suggesting that executive functions, and especially inhibition, may be implied in transfer success (Clerc, Miller, & Cosnefroy, 2014). The aim of this study was to test for a facilitative role of tasks' and contexts' similarity, as well as inhibition skills, on digital transfer among children.

One hundred and three children (M = 6.7 years, SD = .45, 52 girls) learned to solve two isomorphic versions of the Tower of Hanoï task: one in the main task and the other in the transfer task. The two tasks included a tangible – three dimensions (3D) – one and a digital – two dimensions (2D) – one. Four experimental conditions were used: integrated 2D (2D/2D), integrated 3D (3D/3D), cross towards 3D (2D/3D), and cross towards 2D (3D/2D). Children also performed the « day and night » inhibition test (Gerstadt, Hong, & Diamond, 1994).

Transfer score (number of moves) was significantly higher in the integrated 2D (2D/2D) than cross towards 2D (3D/2D) condition, p = .003, n^2p = .125. Inhibition predicts overall transfer (R^2 = .242, p< .001, ß = .-499). Cognitive overload, and interferences caused by adaptation to transfer's task, are discussed as possible reasons for digital transfer failure among children.

PP 063

WHAT MATTERS FOR CYBER-VICTIMIZATION OCCURRENCE? THE ROLE OF OFFLINE BULLYING AND PARENTAL CONTROL IN ADOLESCENCE

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Background and aims: Research pointed out that frequent traditional bullying involvement, low levels of parental control and being female constitute risk factors for cyber-victimization. Firstly, we aimed to investigate whether traditional bullying roles predicted cyber-victimization. We hypothesized that experiencing bullying both as victims and perpetrators may predict cyber-victimization, controlling for gender and parental control. Secondly, we aimed to explore whether gender and frequency of involvement into bullying impacted on the relation between parental control and cyber-victimization. We expected that low levels of parental control were associated with frequent cyber-victimization, with increased risk for female adolescents and adolescents frequently involved into traditional bullying.

Methods: Data were drawn from Health Behaviour in School aged Children-HBSC (2014) self-report survey in Lombardy-Northern Italy (N=906, 49% males, Mage = 16.02, SD = 2.4). Firstly, analysis of covariance (ANCOVA) on paired data was run to examine bullying roles in determining cyber-victimization, controlling for gender and parental control. Secondly, moderation analysis was conducted to investigate whether gender and involvement into bullying significantly moderate the relation between parental control and cyber-victimization.

Results: Experiencing off-line bullying both as perpetrator and victim resulted the strongest factor associated with cyber-victimization occurrence, controlling for gender and parental control. Moderation analyses of the relationship between parental control and cyber-victimization indicated that gender and involvement into bullying constitute significant moderators within the relation.

Conclusions: Our findings have implications for cyber-victimization occurrence prevention among adolescents. These data suggest to a wide range of professionals several factors (biological, behavioral, and family-related) that should be considered in implementing preventative programs against online victimization.

PP 064

THE NEW BARBIE CREW: UNRAVELING THE INTERPLAY OF BARBIE AND MOTHERS ON GIRLS' APPEARANCE SCHEMA, BODY DISCREPANCY AND APPEARANCE SATISFACTION

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Background/aims: Inconsistent findings have emerged about the effect of dolls' body sizes on girls' body image. One experiment revealed that playing with a thin Barbie doll evoked a dysfunctional body image, while another experiment found no effect (Anschutz & Engels, 2010; Dittmar et al., 2006). In response to these mixed findings and the recent introduction of average-sized Barbies by Mattel, our study investigated if exposure to an advertisement of a slim Barbie evoked higher levels of (1)appearance schema activations, (2)discrepancy between the actual and ideal body, and (3)appearance dissatisfaction than exposure to an advertisement of an average-sized Barbie or animal toy. Moreover, we examined the moderating roles of the number of Barbie dolls owned by girls and maternal food monitoring.

Methods/results: Survey data of 62 mothers (M=39.14) and experimental data of 62 girls (aged 6-11, M=8.34) who were randomly exposed to an advertisement showing an animal toy (n= 17) vs a slim Barbie (n= 27) vs an average-sized Barbie (n= 18) were analyzed. Prior to the study, a manipulation check among college students (n =85) revealed significant differences between the two Barbie conditions (thin vs average-sized Barbie) in perceptions of body weight p<.01, and compliance with the thin ideal, p<.05. Next, multivariate analysis of covariance revealed that girls' body image (see 1, 2, 3 above) did not change after being exposed to one of the three conditions, p = .62, while controlling for age/BMI. No moderation effect of Barbie collection p=.11, and maternal food monitoring p=.69, was found. Interestingly, girls had similar favorable attitudes towards the promoted toys across the different conditions, p=.50.

Conclusion: As long as research cannot fully exclude negative effects of slim Barbies, toy companies may in particular focus on average-sized Barbies given that girls seem to embrace these dolls with an equal enthusiasm as slim Barbies.

PP 065

PERCEPTION OF CYBERBULLIES AND CYBER VICTIMS: A PUBLIC ATTITUDE STUDY ABOUT CYBERBULLYING IN HUNGARY

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Background and aims: The prevalence of cyberbullying is intensely growing thus it is important to explore what adolescents' and young adults' (since they are the most affected by it) view and knowledge are about the phenomenon. Our aim was to get a profound view on cyberbullying by the Hungarian population, to see what stereotypes and prejudice people have in mind about cyberbullies and cyber victims.

Methods: 5041 participants (4832 females, mean age=14.44, SD=3.68) filled out the questionnaires. The study targeted three main concepts about cyberbullying: knowledge (e.g. what is cyberbullying), experience (e.g. have you experienced cyberbullying?) and attitude (e.g. what do you think about cyberbullies/cyber victims).

Results: According to our results 7.8% (392 person) of the participants is perpetrating cyberbullying and 12.9% (651 person) is cybervictimized. Independent samples t-tests were conducted to see the differences about attitudes towards victims between bullies and not bullies. Bullies deemed the victims to be more hostile. Bullies think that cyberbullying is part of the everyday life, it is not a serious problem and they think that cyberbullies can be loveable people. On the other hand, according to the results of independent samples t-tests between victims and non-victims victims think that cyberbullies are popular, impulsive and have few friends.

Conclusions: Our results show that adolescents and young adults have a biased view on cyberbullying. Cyberbullies disengage themselves morally and they also blame victims for their cybervictimization. In the future we should focus on educating young people about the consequences of cyberbullying therefore their prejudice towards cybervictims could decrease.

PP 066

THE ROLE OF NEGATIVE EMOTIONALITY IN RELATIONSHIP BETWEEN SLEEP PROBLEMS AND USE OF SCREEN MEDIA AMONG PRESCHOOLERS

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Relationships between children's sleep problems and screen media use is widely studied, although factors moderating this link remain under researched. Recently researchers assert that negative emotionality may operate as possible risk factor in developing sleep problems, but its role among sleep problems and screen media use relationship remains unanalyzed.

The aim of this study was to examine relationship between children's sleep problems and screen media use and the role of children's negative emotionality in this relationship. This research is a part of larger national study "Electronic Media Use and Young Children's Health" conducted in year 2017-2018. Participants are 996 children aged 2 to 5 years old, and their parents. Children's sleep problems and negative emotionality were assessed using Child Behavior Checklist (CBCL/1½-5). Information about screen media use and sleeping arrangements was received using parent-report questionnaire.

Results show that longer screen media time is associated with higher levels of negative emotionality, but not sleep problems. However, children with higher negative emotionality have longer sleep onset time and are prone to use screen media at bedtime. Finally, results of regression analysis revealed that irregular sleep/wake regime, higher negative emotionality and longer screen media use at bedtime significantly predicted higher sleep problems.

Our research results show that negative emotionality explains longer screen media use as well as higher sleep problems. These results are important in addressing recommendations for pediatricians and parents recognizing the most vulnerable children to develop sleep problems when using screen media.

PP 067

ADOLESCENTS' SOCIAL MEDIA USE, LONELINESS AND DEPRESSIVE SYMPTOMS. A RANDOM-INTERCEPT CROSS-LAGGED PANEL MODEL APPROACH

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The psychosocial outcomes of adolescents' social media use have been under current scientific debate for a while now. Previous research has uncovered contradictory relationships between social media use, time spent online and a range of psychosocial outcomes. However, a reliance on cross-sectional research designs and focus on the between-persons effects, that is, examining the differences between individuals, has limited the broader understanding of these relationships. This study explores the directions of the longitudinal effects between social media use, loneliness and depressive symptoms, focusing on the direction of the effects, especially on within- person level.

The three-wave longitudinal dataset consisted of 1726 (43.7% female) participants from upper elementary school collected via annual self-report questionnaires (T1 = 7th grade, T2 = 8th grade and T3 = 9th grade). To evaluate the direction of relations between social media use, loneliness and depressive symptoms we used a random intercept cross-lagged panel model (RI-CLPM). All of the analyses were made separately for boys and girls.

Results for the boys' models indicated a positive reciprocal effect between depressive symptoms and social media use and a directional positive effect from loneliness to social media use. The results for the girls' models indicated a directional negative effect from social media use to loneliness. There was no longitudinal effect between girls' social media use and depressive symptoms

To conclude, it appears that there are clear gender differences in the psychosocial outcomes of social media use. These findings highlight the complexity of making any predictions on the psychosocial outcomes of social media use from cross-sectional research designs and highlight the importance to study the direction of the effects on within-person level. We suggest that sociodemographic factors and individual characteristics contributing to the relation between social media use to psychosocial well-being should be further examined.

PP 069

IS YOUR SOCIAL LIFE AT YOUR FINGERTIPS?" PREDICTION OF SMARTPHONE ADDICTION IN UNIVERSITY STUDENTS

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Background and aims: Nowadays smartphone usage have become addiction instead of need. Smartphone addiction is a kind of behavior which is grounded on avoidance of disturbing emotions, limiting behaviors to prevent harmful consequences and also enjoy life. This type of addiction causes many negative results for individuals' life in terms of financial, psyhological, physiological and social aspects. Hence, examination of smartphone addiction as regard to factors that affect or predict of it is substantial. In terms of literature, it is known that there is a relationship between self-regulation, loneliness, fear of missing out (FoMOs) and excessive smartphone usage. This research study aims to investigate the relationship between loneliness, self-regulation, social interaction anxiety and smartphone addiction and also detect the predictors of smartphone addiction. In addition, whether or not smartphone addiction differs according to gender is examined.

Methods: The sample consists of 200 college students between the ages of 18-24. Survery method was preferred to assess variables and questionnaires consist of demographics, Fear of Missing Out Scale (FoMOs) (Przybylski, Murayama, DeHann, & Gladwell, 2013), UCLA Loneliness Scale (ULS) (Russel et al., 1978) / Hays ve DiMatteo (1987), Self-regulation Questionnaire (Brown, Miller and Lawendowski, 1999), Social Interaction Anxiety Scale (Mattick ve Clark, 1998). We will examine both age and gender differences. Questionnaires started to be applied to participants and the application continues.

Findings: The data is stil collecting and data will be analyzed with Multiple Regression Analysis. When analysis will be completed, results will be discussed in detail comparing to current literature.

Friday, August 30th, 2019

Poster Presentations

Session 2

Olympia Foyer 17:00 – 17:30

PP 071
DOES CHILDREN'S EPISTEMIC COGNITION MAKE A DIFFERENCE IN THEIR JUSTIFICATIONS FOR INCLUDING OTHERS: A LONGITUDINAL STUDY

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Background and aims: Young children develop friendships based on a range of factors including age, gender, culture, and behaviours (Nipedal, Nesdale & Killen, 2010). In this paper we draw on research which shows that epistemic cognition may influence reasoning about inclusion. The aim of the study was to explore changes in the relationship between epistemic beliefs and children's reasoning about including or excluding an aggressive peer in their play.

Methods: The children in the study were from 10 primary schools in South-east Queensland, Australia. Children were 6-7 years old in year 1 (83 boys, 86 girls) and 8-9 years in year 3 (65 boys, 64 girls). The data collection involved 30-minute interviews in which children were asked to engage in two tasks related to epistemic cognition and reasoning about social inclusion respectively.

Results: A chi-square test of independence was performed to examine the relation between epistemic beliefs and children's decision to include or exclude. Results indicated that there was no relationship between children's epistemic beliefs in year 1 and whether they chose to include or exclude, x^2 (1, N =167) = 0.305, p = 0.77. In year 3 there was a significant relationship between children's epistemic beliefs and whether they chose to include, x^2 (1, N =128) = 8.45, p = .004. Children were more likely to choose to include if they expressed subjectivist beliefs.

Conclusions: The findings showed that children became more likely to say that an aggressive child should be included in play as they progressed through primary school. Children in year 3 were also more likely to indicate that an aggressive child should be included if they expressed subjectivist beliefs than if they expressed objectivist beliefs. Our findings suggest that as children become able to consider multiple perspectives (subjectivist), they become more likely to behave inclusively. This has important implications for classroom practice if we wish to reduce prejudice and promote inclusion.

PP 072

DEPRESSIVE SYMPTOMS AS MEDIATOR BETWEEN PARENTAL CONFLICT AND SOCIAL WITHDRAWN AMONG CHINESE ADOLESCENTS: A BETWEEN- AND WITHIN-PERSON EFFECTS ANALYSIS

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Social withdrawn is a critical indicator of adolescent development. Although certain studies have explored the association between social withdraw and peer relationship, this study has several unique strengths. First, it examines the effect of a family factor on adolescent social withdraw. Second, it examines adolescent depressive symptoms as a possible mediator variable between parental conflict and social withdraw (shyness and unsociable). Third, it separates between-person effects (i.e., people with depressive symptoms tend to be unsociable and not interested in sociability than those who are less depressed) and within-person effects (i.e., a depressed person performed higher unsociability over time). Participants were 1188 Chinese adolescents in grades 7—9 (53.9% boys). Multilevel statistical models were used to disaggregate between- and within-person effects. Results showed that parental conflict and depressive symptoms were positively associated with adolescent unsociability. These associations were significant both at one point in time (between-person effect) and over time (within-person effect). However, the association between parental conflict and shyness was significant in time but not over time, and the association between depressive symptoms and shyness was not significant on both levels. Moreover, at both the between- and within-person levels adolescent depressive symptom was found to be a significant mediator of the association between parental conflict and unsociability. That is, within a given individual, a more negative perceived parental conflict at a given time point was a significant negative predictor of depressive symptoms for that individual, and in turn, depressive symptom was associated with significantly more unsociable at that particular time point. But the mediation effect was not found between parental conflict and adolescent shyness at both levels. Those findings suggested that the mechanism of two subtypes of social withdraw are different.

PP 073

GENDERED PATHWAYS TO BULLYING VIA SOCIAL ACHIEVEMENT GOALS: CONFORMITY CLIMATE AND SENSE OF BELONGING AS POTENTIAL MEDIATORS

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This study investigated the gender-specific effects of social achievement goals - i.e., social development goals (SD), social demonstration approach goals (SAp), and social demonstration avoid goals (SAv) - on bullying involvement in a sample of 788 adolescents (53.3% female), considering the mediating role of sense of belonging and conformity climate. Two-group structural equation modeling results indicated that SAp positively predicted bullying involvement for both genders. For girls, higher SD and for boys, higher SAv decreased bullying involvement. Gender-specific effects of belonging and conformity climate on bullying involvement occurred. For boys, but not for girls, conformity climate mediated the relation between all social achievement goals and bullying. Implications for future research and (gender-sensitive) bullying interventions are discussed.

PP 074

ATTITUDES TOWARDS SEXUALITY OF ELDERLY: A COMPARISON OF UNIVERSITY STUDENTS AND OLDER PEOPLE

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Background and aim: Due to the socio-cultural structure of Turkey, sexuality is not spoken at almost any age and is seen as a taboo. Especially for the sexuality of older people, it is thought that sexuality should end because of sexual myths which are widely accepted in our country. There were a limited number of studies on elderly sexuality, and these studies frequently examined the knowledge and attitudes of university students, health workers, and caregivers to the elderly. Therefore, the aim of this study was to examine the attitudes of university students and older people towards elderly sexuality in Turkey.

Method: The sample of this study consisted of 202 university students and 196 older people. While the age of university students ranged from 18 and 27, the age of older people ranged from 65 to 81. The sample was asked to complete a number of questionnaires including a demographic information form and the Aging Sexual Knowledge and Attitudes Scale (ASKAS). Ethical approval was obtained from Ufuk University Ethical Commission.

Results: It is expected that older people have more permissive attitudes towards elderly sexuality than university students. In addition, we expect that there can be an interaction between age and sex on attitudes. Younger males can be more conservative than older males while younger females can be more permissive than older females.

Conclusions: After the analyses are completed, the findings of the study will be discussed in light of the current literature. It is thought that the results will make a significant contribution to both the scientific and applied field.

PP 075

AN EXPLORATION OF THE TIMELINE AND DEVELOPMENT OF ADULT ROMANTIC RELATIONSHIPS FROM INFATUATION TO ATTACHMENT

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Over time, romantic relationships evolve from the excitement and uncertainty of infatuation to the stability and comfort of attachment. Past research has taken a conservation of systems approach to compare the attachment development in adulthood with attachment development in childhood. Though significant work has been done, the timing and qualities of the adult transition from romantic infatuation to attachment is still not well understood. This study endeavores to elucidate the likelihood and timing of this process and individual differences that may affect it.

1,259 participants took a survey asking the number of infatuations and attachments in their lifetime, as well as the length of the transition period between them. Participants also listed their current relationship length and status, attachment style, and demographics. Statistical comparisons were made among groups and a predictive decision tree model was used to statistically significantly describe the infatuation to attachment relationship progression.

On average, people experience approximately 6 infatuations, 3 of which become committed relationships, and 2 attachments in their lifetime, regardless of age. Taking these self-reported averages and assuming a progressive relationship trajectory, about 33% of infatuations and 67% of measured romantic relationships became attachments. Avoidantly attached men and anxiously attached women are less likely than average to move from infatuation to attachment. Additionally, these data support the theory that the transition from infatuation to attachment occurs around 2 years ± 6 months, and, unlike other times in the relationship, this transition is characterized by concurrently feeling both attachment and infatuation. Additionally, high attachment avoidance, but not anxiety, significantly biases this transitionary period towards infatuation.

This suggests the process of moving from infatuation to attachment is gradual, affected by attachment style, and is a common process. These data serve to better understand the process, timing, and likelihood of the transition from infatuation to adult attachment.

PP 076
RELATIONS BETWEEN UNIVERSITY STUDENTS' RECOGNITION OF AGE HIERARCHY AND GENERATIVITY

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Erikson's concept of generativity mainly has been studied how does person after the adulthood make communications with young people, then they can get the generativity, which means the generativity direction from older generations to younger generations has been a focus of the research already. However, not only the generativity in parent-child relationship, but also in order to consider the generativity between teachers and students, bosses and staffs, and inheritance of cultures throughout the region, it is considered that importing the mutually viewpoint whether the younger generations accept the older generations and the direction of acceptance from younger generations to older generations is also important. So, in this research, it was examined how do students make their recognition of age hierarchy. In addition, an exploratory investigation was examined, because of the various recognition, if the younger generations would get different view towards generativity.

Participants were 156 university students, 96 were males, 60 were females. Participants were asked to answer their recognition about the beginning age and the ending age of older generations, twice older generations and third older generations. Besides, they were also asked an open-ended question about the contents of generativity that are given by others, but except their parents.

The Cluster analysis proposed that four groups reflected the range of same generations and age hierarchy. With the result of analysis of the open-ended question, it was showed that four groups were different from the recognition of generativity that was directed from older generations except their parents.

PP 077
WHAT IS DATING VIOLENCE? FINDINGS FROM A QUALITATIVE STUDY IN TURKEY

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Dating is defined as the romantic relationship life of individuals without marital bonding. The dating violence is characterized by sexual, physical, emotional, and economical violence. It is known that dating violence is common in Turkey and victims suffer from a lot of psychological problems such as depression, suicide, and eating disorder. Therefore, it is important to determine the risk factors of dating violence and understand how college students define violence behaviors. To investigate in depth, it is important to carry out a qualitative study. Focus group interviews aim to collect data on subjects that are experienced by individuals in everyday life or frequently encountered in individuals' close environment. Therefore, it was decided to conduct focus group interviews to collect data from college students.

The participants consisted of 78 college students. The age of participants ranged from 18 to 22. Open-ended questions were developed by the researchers to investigate experiences and definitions about dating violence. Eight focus group interviews were conducted in separate groups for male and female. Groups consisted of 8-13 participants. The interviews were conducted by 2 researchers who were trained as 1 interviewer and 1 observer in each group. Focus group interviews were conducted with the participants for 40-60 minutes. The interviews were recorded.

In this research, it is planned to use content analysis to analyze the data. In this research, the categories were determined according to the questions used. After each interview, it is planned to decode the common opinions and codify them by two researchers. During the coding process, the researchers took into consideration how behaviors the participants emphasized and defined as violence in order to understand their perspectives. After analysis is completed, results will be discussed according to current literature.

PP 078

PERSISTENCE OF BULLYING PERPETRATION FROM MIDDLE TO HIGH SCHOOL: MORAL COGNITIVE DISTORTIONS AND VIOLENCE EXPOSURE AS RISK FACTORS

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Background and aims: Recent research on trajectories of bullying perpetration during elementary and middle school years have found some children engaging in very little bullying and others exhibiting high or chronic levels of bullying across time (Reijntjes et al., 2013). Still little is known about the persistence of bullying perpetration as youth transition to high school. This study examined the association of trajectories of bullying perpetration across middle school years (grade 6 to grade 8) with bullying perpetration in high school (grade 9). Furthermore, we analyzed moral cognitive distortions (CDs) and exposure to community violence (ECV) as predictors of trajectories of bullying perpetration.

Methods: The sample consisted of 338 Italian children (186 males). Peer ratings of bullying perpetration were collected, whereas measure of CDs and community violence exposure were self-reported in grade 6 by completing the How I think Questionnaire (Barriga et al., 2001) and an adapted scale of violence exposure from Schwartz and Proctor's (2000), respectively.

Results: Three trajectory groups were identified: High and increasing (5%), medium and stable (12%), and low and declining (83%). Trajectory membership was differentially predictive of bullying perpetration in grade 9, with subjects in the high and increasing group and in the medium and stable group scoring higher than subjects in the low and declining group (Wald test: $ps < .001$).

Using the low and declining trajectory as the baseline condition, we found that children high in CDs and ECV were more likely to be classified in the high and increasing trajectory; only ECV was associated with being in the medium and stable trajectory.

Conclusions: Prevention and intervention efforts should target children who display early and chronic patterns of CDs and ECV, in order to address the risk of engaging in bullying perpetration and its persistence over time.

PP 079

RELATIONS BETWEEN ADOLESCENTS' ANXIOUS BEHAVIORS FOLLOWING A STRESSFUL TASK AND FRIENDS' OWN FEELINGS OF ANXIETY

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The influence of friends on adolescents' emotional experiences is important to consider because of the salience of peer relationships during this developmental period (Phillipsen, 1999). Despite the abundance of literature on friendships in adolescence, research focusing on the interactions between friends and how these experiences may influence reactions to stress is lacking. The present study examines adolescents' behaviours following a stressful social situation, while in the presence of a close friend, in order to provide insight into the role of friendship in mitigating or exacerbating stress.

The preliminary sample includes 68 15-16 year-old adolescents from areas surrounding a major university in the US. Target adolescents were asked to invite a close friend to join them at the lab to complete four tasks. The present study focuses on the second task: a post-speech debrief. Following a speech task, where targets are asked to give a speech in front of three unfamiliar peers, targets were reunited with their friend and instructed to tell them about their experience. The task was video-recorded and coded by two independent coders for a variety of behaviors. Cronbach's alpha for the coded behaviors showed very good reliability ($\alpha s = .85-.91$).

Preliminary results revealed targets' anxious behaviors across the debrief task were significantly and positively related to the friends' own shyness ($r = .54$, $p < .001$), nervousness ($r = .65$, $p < .001$), dismissiveness ($r = .54$, $p < .001$), and awkward behaviors ($r = .83$, $p < .001$). Analyses will be conducted using Actor-Partner Interdependence Models to examine relations between target and friend behaviors more thoroughly once data from the full sample has been collected. Our preliminary findings highlight the role adolescents' own feelings of anxiety can play in maintaining the anxiety experienced by a friend after engaging in a stressful social interaction or situation.

PP 080

RADICALIZATION: A QUALITATIVE STUDY OF RISK AND PROTECTIVE FACTORS IN ADOLESCENCE

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Adolescence is a critical period for identity development characterized by new personal and social opportunities, but also by risks, such as feelings of loneliness and personal dissatisfaction, which can expose youths to potentially harmful influences and behaviors such as radical ideas and acts. Despite this general pattern, young immigrants may face even more complex, multiform and, therefore, riskier paths. Based on a qualitative approach, the present study explored the potential risk and protective factors of radical thinking and behavior in both autochthonous and immigrant adolescents living in southern Italy.

Four focus groups were conducted using a semi-structured question route that comprised topics such as identity, sense of belonging to the sociocultural community, religion and family relationships. Each focus group consisted of six to eight adolescents aged 14-18 years and was balanced for gender and ethnicity. The discussions were audiotaped and then transcribed verbatim. The analysis followed the process of data reduction and generation of themes, which allowed an accurate reading of the possible risk and protective factors of radical thinking and behavior.

The main emerged themes were "the role of national (Italian) identity", "the sense of belonging to the ethnic or civic community", "discrimination", "the influence of the family" and "the religious issue". Generally, (a) lower levels of national identity and lower sense of belonging to the ethnic or civic community, (b) a "feeling of difference" from peers, and, for immigrant adolescents, (c) the perception of being "in the middle" and "missing a clear integration strategy" were reported as risk factors promoting potential radicalization pathways. In contrast, positive family relationships, especially involving mother and adolescent child, were stated as protective factors. Religion was considered only as *a posteriori* justification of radical behaviors.

These findings open new and more appropriate research questions on radicalization and its development process.

PP 081

THE IMPORTANCE OF LINGUISTIC AND EMOTIONAL COMPETENCE IN CHILDREN'S SOCIAL ACCEPTANCE

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Social acceptance among one's peers is an important developmental achievement during infancy. Children who are well accepted by their classmates experienced a greater psychosocial well-being both concurrently and in later stages (Prinstein, Rancourt, Guerry, & Browne, 2009). Successful peer interactions require a number of fundamental skills, including children's ability to engage in effective communication and the capacity to regulate their own emotions in an adaptive way (Hay, Payne, & Chadwick, 2004). The aim of the present study is both to explore the relation between children's productive lexicon and emotion regulation and to examine the way these constructs contribute to peer acceptance in a sample of Italian preschoolers.

Participants were 135 children (63 males; 72 females), ranged in years from 3 to 6 (M in months: 58,14; SD: 10,10) attending four kindergarten schools in northern Italy. Peer acceptance has been assessed through the Peer Nomination Technique whereas the "Test Fono - Lessicale" (Vicari, Marotta & Luci, 2007) and the "Emotion Regulation Checklist" (Molina & Zappulla, 2014) were used to evaluate, respectively, children's productive lexicon and emotion regulation ability.

Results showed that, controlling for age, productive lexicon is positively associated with emotion regulation (r=.252; p=.003) which, in turn, is positively associated with peer acceptance (r=.267; p=.002). Instead no association, neither direct nor indirect, has been found between productive lexicon and peer acceptance.

Taken together, these findings suggest that children's linguistic ability, measured exclusively in terms of productive lexicon, does not seem to be relevant for social acceptance in this specific developmental stage. Conversely this competence may help children to develop a better emotion regulation which is an important component of positive peer interactions.

PP 082

EXAMINING THE PREVALENCE OF THE BULLYVICTIM IN SPAIN, SINCE 2002 TO 2018: AN ANALYSIS FROM THE PERSPECTIVE OF GENDER AND AGE

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Bullying is a situation of inequality of power, from which a student is attacked by one or more partners. Around this concept, we find a minority group called bully-victim, which is characterized by intimidating behaviour towards colleagues in response to received attacks. The aim of this study was to analyze the prevalence of the group of bullyvictim in Spain from 2002 to 2018, both from the perspective of gender and age.

The participation was 109424 adolescents aged 11 to 18 years, as part of the study Health Behaviour in School-Aged Children in Spain from 2002 to 2018. The instruments used were two questions, which were used to identify boys and girls as participants and/or victims of episodes of school abuse. Then, generated four groups: those who have not participated or have been victims of abuse, those considered as victims, perpetrators and bullyvictim group.

It was observed a decrease in the prevalence of the bullyvictim group in 2018, as well as an increase in the group of boys and girls who have not been victims or have had abuse on this last year. In terms of sex, the girls were most represented in not having mistreated

and they obtained lower percentages when they occur within the group of bullyvictim. As regards the differences by age, the bullyvictim group was decreasing in the last stage of the age in all editions.

The results show the presence of a group of teenagers with peculiar features. This group represents a small percentage which tend to decrease in 2018. Appears obvious significance when compared between boys and girls, being them who tend to be less exposed to the group. As well as, aged 17 to 18 years stage supposed to be key in all editions due to a decrease in this problem.

PP 083

MIRROR IN THE CHATROOM: MUNCHAUSEN BY INTERNET, SOCIAL MEDIA ADDICTION, AND FEAR OF MISSING OUT IN AN INTERNATIONAL SAMPLE

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Background: Munchausen by Internet (MBI) refers to feigning psychological illness online by claiming to have a psychological disorder or symptoms of a disorder. First described by Feldman (2000), anecdotal evidence suggests that MBI is not uncommon among current emerging adults. We investigated the rates of MBI and its relation to other aspects of online activity and personality traits.

Methods: We created a 10-item measure of MBI and also measured social media addiction (SMA, Andreassen et al., 2016), fear of missing out on social experiences (FOMO, Przybylski et al., 2013), 'Big Five' personality traits (John & Srivastava, 1999), and Machiavellianism, narcissism, and psychopathy (Jones & Paulhus, 2014). Data were collected online from University students, and from US and Non-US participants through MTurk, resulting in 327 US and 292 Non-US participants.

Results: Full sample reliability coefficients of all previously published scales were either acceptable or good, ranging from .76 to .88. Exploratory factor analysis of the MBI items extracted a single factor that included all 10 items and accounted for 75% of the variance, and a CFA supported the scale properties (CFI = .98, TLI = .98, RMSEA = .07; Hu & Bentler, 1999, Browne & Kudeck, 1993). The average MBI scale score was low across the full sample, as expected, (M = 1.40, range = 1.00 - 4.40), although 35% of Ps reported some MBI activity. Separate forward regression analyses indicated MBI was significantly related to psychopathy (ß = .38), FOMO (ß = .23), and SMA (ß = .11) among US participants and among non-US participants (corresponding ßs = .43, .23, and .20).

Conclusions: Results suggest that the attention-seeking MBI is related to callousness and impulsivity, anxiety regarding one's social connection with others, and obsessive/dependent use of social media. Further analyses will explore the above relations by age and world region.

PP 084

RISK PROFILES FOR PHYSICAL, PSYCHOLOGICAL AND SEXUAL DATING AGGRESSION: A LATENT CLASS ANALYSIS

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Research has shown that those adolescents with poor emotion regulation abilities, those involved in dating relationships characterized by conflicts and jealousy, and those who are aggressive with their peers show high levels of Dating Aggression.

The aim of this study was to identify different risk profiles of adolescents and to investigate whether these groups explain Dating Aggression over time.

866 adolescents with romantic experience (50.5% male; average age= 15.04) were interviewed at two time points six months apart about their romantic relationships, couple quality, peer and Dating Aggression (Psychological-PDA, Physical-PHDA, and Sexual-SDA), and individual characteristics. Latent Class Analysis at wave 1 was computed in order to identify risk profiles. Variables included were: jealousy, intimacy, conflict, bullying, anger regulation, and acceptance of violence norms.

A three-classes model (Entropy = .97) was selected to best represent the data. The three groups defined a "normative" class (N=768; 88%), a "high aggressive" class, HAC (N=13, 1.5%) and a "jealousy" class, JC (N=85, 10%).

Regression analyses were computed to test whether PHDA, PDA and SDA (in wave 2) were predicted by the "HAC" or the "JC" controlling for age, gender and the longitudinal stability of the outcome. PHDA at T2 was predicted by PHDA at T1 (B=1.098; SE= .173; p=.000) and by the probability of being part of the "HAC" (B= .941; SE=.398; p=.018). PDA was predicted by PDA at T1 (B=1.104; SE= .124; p=.000), by the group "JC" (B= .669; SE=.235; p=.004), age (B= .086; SE=.043; p=.047) and gender (B= .359; SE=.119; p=.003). SDA was predicted by SDA at T1 (B= 1.618; SE=.208; p=.000), by the "JC" (B= .835; SE=.273; p=.002), gender (B= -.498; SE=.202; p=.014) and by the "HAC" as a trend.

Findings are discussed in terms of their relevance for the design of universal and indicated dating violence prevention programs.

PP 085
"H, I, J, K, L, M, N, O, PEE! GET IT? PEE!": SIBLINGS' SHARED HUMOUR IN CHILDHOOD

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Background and aims: Children's social interactions with other children have a central role in their developing understanding of themselves and of others (Carpendale & Lewis, 2015). Shared humor is a form of playful, intimate, and warm interaction that is an integral part of children's close relationships (Hoicka & Akhtar, 2012), which may reveal a great deal about children's developing understanding of one another's minds (Dunn, 1994). However, there is a dearth of research investigating the nature of children's humor production beyond the preschool years and how humor is shared within children's close relationships with other children (e.g., siblings).

Methods: In a sample of 86 7-year-old children (M age = 7.82 years, SD = 0.80), we investigated patterns and individual differences in spontaneous humour observed during free play with their older (M age = 9.55 years, SD = 0.88) or their younger sibling (M age = 5.87 years, SD = 0.96). We coded children's instances, categories, and responses to humour. We investigated the nature of children's humour on the dyadic and individual level.

Results: Humour was common, and siblings' production of humour was highly interdependent between play partners. Dyadic humour differed according to structural features of the sibling relationship (age, gender composition), and 7-year-old focal children's humour varied according to gender.

Conclusions: Our study addresses the need for observational studies investigating humor as an intimate form of dyadic communication shared between children and provides insight into how young children understand others' minds. Moreover, our study provides a platform for future research investigating humor as an important marker of children's social and cognitive development.

PP 088
STRESS AND COPING MECHANISMS AMONG HIGH SCHOOL ADOLESCENTS IN ZAMBIA

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School comes with a number of stressors especially among adolescents. In addition to school related stressors, adolescents experience a myriad of daily life stressors which are often exacerbated by high poverty levels and public health issues. Consequently, coping with such daily life stressors is important especially among school going adolescent in order to excel in school work. The aim of this study was to assess stress and copying mechanisms adolescents used. The study hypothesized that negative coping strategies were related with increased daily life stressor while positive daily life stressors with reduced daily life stressors.

The study used a sample of 629 adolescents aged between 12 and 18 years from selected high schools in Lusaka city. The COPE brief and Daily Life Stressor scale were completed. Data was analysed using hierarchical regression analysis. While controlling for demographic characteristics, negative coping mechanism were found to be associated with increased reported daily life stressors (family size, β-.114, p <.01; age, β = .196, p = <.001; being female, β.087; >.05; self-distraction, β = p > .05; denial, β = .182, < .01; substance abuse, β = .153, p < .01; behaviour disengagement, β = .154, <.01; venting, β = .153, p < .01 and self-blame, β = .120, p < .05). On the other hand, most positive coping mechanisms were not significantly associated with reported daily life stressors except for two (humour, β =.186, p < 0.01 and positive reframing, β = .168, p < 0.05).

In this study negative stress coping mechanisms were positively related with increased daily life stressor while positive stress coping mechanism were mostly not significantly related with daily life stressors. School guidance teachers could hep students developed positive coping strategies that can help them copy effectively with daily life stressors that most adolescents experience in Zambian schools.

PP 090

STRESS-MODERATING EFFECTS OF PLAY EXPERIENCES IN COLLEGE STUDENTS

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Background and aims: The definition and function of play is remained an unsolved issue. The notion of play as a facilitator of child development has been most presumed and accepted as an answer for this argument. However, such a developmental effect has never evidenced. Further, play works through life-time. Recent studies suggested playfulness in adults may moderate stress and promote resilience. Then this study explores to show the stress-moderating effects of play experiences in college students through a questionnaire research.

Methods:

1. Development of Japanese Adult Playfulness Scale (JPS):
2. Data Assessment:
a. Participants: 122 university students (M=20.0 years of age).
b. Questionnaire's: JPS, The State-Trait Anxiety Inventory(STAI), and Resilience Scale (RS)

Results:
1. Factor Analysis of JPS.
Factor analysis of JPS yielded 4-factors. There were Fun-Orientated (FO), Play Experience (PE), Optimism (OP), and Curiosity (CU).
2. Relationships between 4 factors of JPS and STAI and RS.
FP, OP and PE showed a significant relationship to RS. Both FO and PE also had a significant negative relationship to STAI.
3. Path Analysis of effects of playfulness on resilience and stress mitigation
We set a causal model that PE promotes FO and RS, as a result, mitigate stressful state. Path analysis to confirm this model, yielded 4 paths between FO, PE, RS and STAI. The first path indicated correlation between FO and PE. The second suggests PE facilitates RS. The third and fourth imply that FO predisposition developed by PE facilitates stress tolerance.

Discussion and Conclusions: Results of this study indicated that play experiences with funny activities develop resilience and stress tolerance in adults. It is because that enjoyment of play promotes a skill to arouse positive emotion under a stressful situation. Positive relations between PE, FO and RS, found in this study, support the notion.

PP 092

HAPPINESS AS POSITIVE FEELINGS: ITS ROLE IN ADOLESCENTS' WELL-BEING AT SCHOOL AND ACADEMIC ACHIEVEMENT

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Recent works have pointed out to the importance of school contexts to help children and adolescents develop and maintain their emotional wellbeing. For instance, adolescents who experienced higher levels of happiness at school also reported higher academic achievement (Gilman & Huebner, 2006) and lower scores on internalizing problems (Proctor, Linley, & Maltby, 2009). Following this line of research, the aim of the present work was to explore if adolescents' conceptualizations of happiness at school were linked to both positive (i.e., higher academic achievement, higher experience of autonomy, competence, and relatedness, higher prosocial behaviour) and negative outcomes (i.e., lower internalising and externalising symptoms).

In total, 314 adolescents from 7 secondary schools in Liverpool (Mage=13.3; 49.7% girls) freely reported their conceptualizations of happiness at school and filled out a series of validated scales to measure autonomy, relatedness, competence, prosocial behaviour, internalized and externalized symptoms. Two researchers coded the qualitative responses and identified 13 conceptualizations (positive feelings, good grades, emotional support, learning, harmony, leisure, friends, nonviolence, moral actions, purpose and teachers; Kappas over .82). A series of MANOVAs with all 13 conceptualizations and sex as independent variables and positive and negative outcomes as dependent variables were conducted.

The results showed only a significant effect for the conceptualization of positive feelings. Pairwise comparisons indicated that participants who mentioned more positive feelings reported higher autonomy (d=.23, $p = .04$), relatedness (d= .25, p= .009) and competence (d= .24, p= .02) and lower externalising symptoms ($d = -.17$, p= .005) than those who did not mentioned it. There were no differences for prosocial behaviour (d= .06, p= .38) and internalising symptoms (d= .04, p= .48).

The results highlight the importance of studying further conceptualizations of happiness at school as it may help us understand how adolescents strive for their happiness in school settings.

PP 094

DEVELOPMENT OF EMOTIONAL EXPRESSION IN ELEMENTARY SCHOOL CHILDREN

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Recently, the number of children who have difficulty adapting to groups in schools has increased in Japan. Some of them often get into trouble with their peers, while others cannot control their emotion and behavior well. To understand them and make the individual educational program for them, it is necessary to grasp the emotional development of them. The purpose of the present study was to investigate the development of emotional expression in elementary school children. Subjects were 2142 children; 392 first graders, 402 second graders, 376 third graders, 338 fourth graders, 340 fifth graders, and 294 sixth graders. The number of children with special needs was equal to the number of typically developing children. Their teachers were asked to complete "Emotional Development Questionnaire". There were 20 items in the questionnaire; three of them were about facial expression (i.e., "When he/she is happy, he/she expresses it facially") and three of them were verbal expression (i.e., "When he/she is angry, he/she expresses it verbally). These items were scored using a 5-point rating scale from 1 (never) to 5 (frequently). The score of emotional expression was examined by a two-way ANOVA including age group (2) and type of children (2) as factors. The main results were as follows: (1) Younger children (1st to 3rd graders) got higher scores than older children (4th to 6th graders) in both facial expression and verbal expression. (2) Children with special needs were higher than typically developmental children in both facial expression scores and verbal expression scores. It was suggested that children developed the competence to control their emotional expressions through elementary school period. The results also showed that children with special needs expressed too much their emotions facially and verbally.

PP 095

CAN'T STOP THE FEELING: AGE DIFFERENCES IN THE EXPERIMENTAL INDUCTION OF EMOTIONS THROUGH MUSIC CLIPS

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Music contains cues such as tempo, pitch and key, which may induce basic emotions (Johnson-Laird & Oatley, 2016). In fact, music used in the laboratory has proved to induce emotional states, similar to real experienced emotions, in adults (Scherer, 2004). Although we know that this fact can have relevant clinical applications (i.e., music has positive effects in hospitalized children, Barrera, Rykov & Doyle, 2002), no experimental studies have evaluated (1) whether different basic emotional experiences can be induced in children and (2) whether emotional and cognitive evaluations might differ across age groups.

To address this gap, ninety 7-9-year-olds (M = 8.77; 53% girls), ninety-six 10-12-year-olds (M = 10.95; 49% girls), and eighty adults (M = 20.54; 80% women) listened in randomized order to two happiness-, anger-, fear-inducing and two neutral songs, previously used with adults to induce such emotional states (Ford & Tamir, 2012). Participants indicated how they felt (emotional judgment) after listening to each song and to what extent they thought the song matched with different emotion terms (cognitive judgment).

The happiness-, fear-inducing and the neutral music clips provoked the expected emotions across all age groups. The anger-inducing music clips only induced anger in adults but not in children, who reported happiness instead. Interestingly, for the happiness-, anger, and fear-inducing music clips adults did differ in their cognitive and emotional evaluations. Namely, they did attribute the right emotion to each song but reported lower emotion induction as compared to children. For the neutral music clips, this pattern was true for all the age groups.

These results highlight interesting differences in the cognitive and affective evaluations of music clips across age groups. However, further research is needed to investigate whether anger-induction might depend on different musical features (i.e., pitch, tempo, key).

PP 096

APPYING "TEACHERS' RESILIENCE SCALE" TO TEST THE RELATIONSHIP OF RESILIENCE WITH AGE AND TEACHING EXPERIENCE

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Previous research findings regarding the development of teachers' resilience with proceeding age and teaching experience are not conclusive. Some indicated that older and more experienced teachers exhibit higher levels of resilience (e.g., Botou, Mylonakou-Keke, Kalouri, & Tsergas, 2017· Estaji & Rahimi, 2014), while others revealed no significant relationship of resilience with age and teaching experience (e.g., Morris, 2002· Siourla, 2018). Regarding measurement, there is a lack of instruments addressing resilience excursively in the teaching profession; Teachers' Resilience Scale (TRS, Daniilidou & Platsidou, 2018) is recently constructed to address the above shortage. Using the TRS, the present study aimed at examining whether teachers' resilience changes across age and work experience.

The sample consisted of 212 Greek secondary education teachers (111 females, aged 21-63 years, with a mean of 46,3). Factor analysis confirmed the 4-factor solution of the TRS: Personal Competences and Persistence (PCP, α = .87), Social Skills and Peers Support (SSPS, α = .88), Spiritual Influences (SI, α = .61) and Family Cohesion (FC, α = .91).

It was found that PCP and SSPS correlate positively, whereas SI correlate negatively with proceeding age and teaching experience. Interestingly, Family Cohesion does not change significantly with age or teaching experience. Results indicate that especially the internal dimensions of resilience develop across their working life. Conclusively, it is assumed that older and more experienced teachers can act as mentors for young and/or pre-service peers to support their resilience in stressful situations.

PP 097

INTERPERSONAL EMOTION REGULATION IN PRIMARY-SCHOOL CHILDREN: THE ROLE OF EMPATHY AND EFFORTFUL CONTROL

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Background: Emotion regulation (ER) is the ability to change one's own (intrapersonal ER) or others' emotional experience (interpersonal ER), mostly from feeling negative to feeling positive emotions. This study investigated (1) whether children can change others' (negative) emotions in interpersonal conflict situations; (2) whether there are age differences in interpersonal ER strategies; and (3) whether children's empathy and effortful control skills were related to interpersonal ER.

Methods: 40 7-year-old and 39 11-year-old children were presented with a bullying and a social-exclusion scenario and were asked about the emotions of the violator and victim and whether and how the violators' and victims' emotions could be changed. Participants' open-ended responses were coded according to different interpersonal ER strategies. Empathy and Effortful Control were assessed with questionnaires.

Results: In both age groups and scenarios, participants attributed negative emotions to the victim. The majority of participants suggested appropriate strategies for changing the victim's emotions, but older participants suggested more sophisticated and cognitively-demanding ER strategies than younger children. Empathy, but not effortful control, was positively correlated with the use of cognitively demanding ER strategies.

Conclusions: Interpersonal ER skills have been shown to be a vital component for developing high-quality relationships. This research indicates that primary school children want to and can use strategies to change a victim's negative emotions in the context of interpersonal conflict situations. Studying determinants of children's interpersonal ER strategies may help in gaining a better understanding of how children establish and maintain high-quality relationships.

PP 098

NON-RELIGIOUS NON-SPIRITUAL SCALE (NRNSS): PSYCHOMETRIC PROPERTIES AND FACTOR STRUCTURE IN A NATIONWIDE GREEK SAMPLE

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Background and aims: This study provides empirical support for the translation, cultural adaptation and initial validation of the Greek version of the Nonreligious-Nonspiritual Scale (NRNSS; Cragun et al., 2015), a measure designed to assess individuals who identify as nonreligious and nonspiritual.

Method: Cultural adaptation and analyses of construct validity and internal consistency of the NRNSS were based on data collected from a nation-wide sample of 1754 individuals. State of the art "translate-retranslate" protocols (stepwise independent forward and backward translations) were implemented to translate the original NRNSS in Greek, and exploratory and confirmatory analyses (EFA and CFA) were performed to assess the psychometric properties of the instrument. Convergent and discriminant validity was evaluated by examining the NRNSS's associations with the Meaning in Life Questionnaire (MLQ; Steger et al., 2006) and the Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003).

Results: The results showed that NRNSS established concrete psychometric factors, retained its bifactor model, produced sound fit indices [x^2=556.21, CFI=0.95, TLI=0.93, RMSEA= 0.06], and demonstrated a robust internal structure, comparable to that of the original (NRNSS total = .91; NR and NR subscales = .91/ .89).

Conclusions: The cross-cultural adaptation of Greek version of the NRNSS followed the established process recommended in the scientific literature, which yielded a scale successfully adapted to the Greek reality. Taking all this in consideration, and examining the results from the CFA and the reliability analysis, we can affirm that the Greek version of the NRNSS both fits the original model and retains its reliability as a questionnaire that is fit for use with Greek-speaking populations.

PP 099

NARCISSISTIC PERSONALITY AND PERSONALITY TRAITS AMONG JAPANESE ADOLESCENTS

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Aim: This study aims to explore the relationship between narcissistic tendencies, personality traits, and friendships among contemporary Japanese adolescents.

According to the "alternative DSM-5 model for personality disorders", the narcissistic personality disorder correlates to the antagonism-agreeableness personality trait. Gabbard (1994) suggested that there are two types of narcissistic personality disorders: oblivious and hypervigilant. The features of narcissistic personality disorder described in the DSM model are a close match to the oblivious category. Thus, the hypervigilant personality disorder may affect personality traits differently.

It has been argued that present-day Japanese adolescents worry about being rejected by their friends and hurting each other. Okada (2011) found that adolescents who eager to maintain their friendship harmonious and who were careful not to hurt their friends scored high on the "need for attention and praise."

Method: We examined online questionnaires answered by 740 Japanese college students to measure narcissistic tendencies, Big Five personality traits, and present-day adolescent friendships.

Results: Cluster analysis based on the narcissistic tendency scale yielded two major clusters of adolescents: (1) adolescents who showed a high covert sense of entitlement and low hypersensitivity to approval/admiration; and (2) adolescents who showed a low covert sense of entitlement and high hypersensitivity to approval/admiration.

Regarding personality traits, cluster 1 had significantly higher scores on extraversion traits than cluster 2 and lower scores on conscientiousness and neuroticism traits; however, no significant difference on the agreeableness trait between clusters was revealed. On the friendship scale, adolescents in cluster 2 had higher scores on the "tendency of being careful not to hurt their friends" and "hyperthymia-like tendency among their friends" than the adolescents in cluster 1.

Conclusions: These results suggest that hypervigilant adolescents display features of internalizing pathology (Wright et al., 2012); however, the antagonism-agreeableness trait does not distinguish between hypervigilant and oblivious narcissists.

PP 100
EMPATHY AND RESILIENCE AS PREDICTORS OF GRATITUDE: DOES GENDER MAKE A DIFFERENCE?

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Gratitude has a broad classification often defined as a transient emotional state, a sentiment which prompts as to reward, a personality trait, a moral virtue, and a habit or a coping strategy, as well as an attitude (Lubomirsky, 2016). Positive psychology defines gratitude as a character strength, a sense of thankfulness and joy for what one possesses (Mullet et al., 2003, Emmons, 2004). The literature indicates that gender often plays a significant role in people's empathy and gratitude experiences (Huetter et al., 2016). Generally, women report a greater willingness to experience and express empathy and gratitude (Roa-Meggo, 2017). However, there are some studies that failed to find significant sex differences in gratitude levels (Sood & Gupta, 2012). Interestingly, although some previous work demonstrates significant sex differences in resilience (Sun & Steward, 2007; Mwangi & Ireri, 2017), some find that there are limited or no gender differences in the resilience level (Morano, 2010).

This study aimed to explore sex differences among predictors of gratitude (empathy and resilience) among 214 Polish emerging to middle-aged adults. To investigate empathy, resilience and gratitude, we administered the *GRAT - R, SPP-25, and QCAE* were used.

Findings indicated that compared to males, females scored higher on empathy and gratitude (especially in Social Appreciation). Results showed that overall, compared to females, males scored higher on resilience along with one dimension - Optimistic attitude to life, and the ability to mobilize. Regression analyses confirmed significant sex differences. Although higher resilience predicted higher gratitude among females and males. Results indicated less of an influence on gratitude among males. For females, also professional activity influenced the level of gratitude. Among males cognitive empathy was the strongest predictor (β = .36), followed by resilience (β = .22). Openness for a new experience emerged as the strongest predictor, regardless of gender. However, among women Openness, Tolerance, Perspective Taking and Peripheral Responsivity, allowed to predict gratitude with the higher prediction level (43% of the variances). Among men no significant influences were observed for these variables. SEM indicated that among women, empathy significantly impacted on gratitude only indirectly through resilience. Among males, there were direct and indirect effects of empathy on gratitude. Findings of this study are discussed in terms of future research and implications.

PP 101

EXPLORING SCHOOL MENTAL HEALTH, STUDENT-TEACHER RELATIONSHIP, AND SCHOOL CLIMATE AMONG ADOLESCENTS: RESULTS OF A SURVEY STUDY IN ITALY

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Background and aims: Mental health is defined as a state of well-being in which every individual realizes his or her own potential, cope with the normal stresses of life, work productively and fruitfully, and is able to make a contribution to her or his community (WHO, 2014). Mental health problems are a serious public health concern, especially among adolescents. To date in Italy, a limited number of studies have examined adolescents mental health at school, exploring gender and age-group differences.

The main aims of the present study were to examine: 1) the association between mental health, teacher-student relationships perceptions and school climate 2) gender and age-group differences.

Methods: Participants. The sample included 2466 (43.6 % girls, 56.4 % boys) high school students (14 to 18 years).

Measures: The Mental Health Continuum-Short Form (MHC-SF, Keyes, 2002) was administered to assess students' mental health. The quality of the teacher-student relationship was assessed using the Student-Teacher Relationship Questionnaire (STRQ; Murray & Greenberg, 2001), and students' school climate perception was measused using the Sense of Community in the School questionnaire (Samdal, Wold, & Torsheim, 1998).

Results: All bivariate correlations were statistically significant ($p < 0.01$). Gender differences were observed with males showing significantly greater levels of mental health, teacher-student relationships perceptions and school climate ($p = 0.10$ to $p > 0.0001$). Mean levels of students' mental health, teacher-student relationships perceptions and school climate decreased over time; in particular, students attending the 1st year, aged 14, showed significantly higher levels in all variables in comparison with students of the 5th year, aged 18 ($p. < .001$).

Conclusions: The findings provide important implications emphasizing that students' mental health is significantly associated with student-teachers relationship and school climate.

Furthermore, based on observed gender and age-groups differences, specific intervention needed to be developed in order to increase the mental health of females and older students attending the high schools. Addittionally, results will be discussed in the light of adolescence developmental tasks.

PP 103
DEVELOPMENT OF SELF-CONSCIOUS EMOTION IN ELEMENTARY SCHOOL CHILDREN

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Children with special needs often have difficulty in interacting with peer. This difficulty is related to the development of self-conscious emotions such as pride and shame. To understand them and make the individual educational program for them, it is necessary to grasp the development of self-conscious emotion. The purpose of the present study was clarify the development of self-conscious emotion and the difference between children with special needs and typically developing children. Subjects were 2142 children; 392 first graders, 402 second graders, 376 third graders, 338 fourth graders, 340 fifth graders, and 294 sixth graders. The number of children with special needs was equal to the number of typically developing children. Their teachers were asked to complete "Emotional Development Questionnaire". There were 20 items in the questionnaire; two of them were about self-conscious emotion. ("He/she feels pride for what he/she was able to do." and "He/she feels shame for what he/she was not able to do.) These items were scored using a 5-point rating scale from 1 (never) to 5 (frequently). The score of self-conscious emotion was examined by a two-way ANOVA including age group (2) and type of children (2) as factors. The main results were as follows: (1) Younger children (1st to 3rd graders) got higher scores than older children (4th to 6th graders) in self-conscious emotion ($F(1,2138)=8.05$, $p<.005$). (2) Children with special needs got lower scores than typically developmental children in self-conscious emotion ($F(1,2138)=42.3$, $p<.001$). It was suggested that the maladjustment in an elementary school caused the lowness of self-conscious emotion scores.

PP 104
DEVELOPMENT OF CONTROL OF EMOTION IN ELEMENTARY SCHOOL CHILDREN

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Recently, in elementary schools, the number of children who are unable to control their own emotion has increased. They often get in trouble with their friends, because of the uncontrollable emotion. It is important for us to understand the characteristics of their emotional development in order to support their daily life and education at school. The present study focused on the development and characteristics of emotion, especially control of emotion in elementary school children.

Subjects were 1071 children with special needs and 1071 typically developing children. School teachers were asked to complete the "Emotional Development Checklist" (this study focused on only the "control of emotion" section: the control of "Happiness", "Anger", and "Sadness") for each child in their classes using 5-point scale (from 1[never] to 5[frequently]). The subjects were also divided into two groups by the grades: (1) from first-grade children to third-grade children (Lower-Grade Children), (2) from fourth-grade children to sixth-grade children (Upper-Grade Children).

Two-way ANOVA with type of children (2 types) and grade (2 grades) as factors revealed the effect of type and grade. The main results were as follows: (1) Upper-Grade Children were higher in the scores of emotion control than Lower-Grade Children. (2) Children with special needs were lower in the scores of emotion control than typically developing children.

It was suggested that elementary school children developed the control of not only negative emotion (angry, sad) but also positive emotion (happy), as they grew older. However, children with special needs had a delay of the control of both emotions.

PP 105

FACTOR STRUCTURE OF COGNITIVE BIASES IN JAPANESE YOUNG ADULTS: CONSTRUCTION OF THE COMPREHENSIVE COGNITIVE BIASES QUESTIONNAIRE

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In recent years, cognitive biases have attracted attention as a factor related to the occurrence and maintenance of mental disorders in young adulthood. Various cognitive biases have been reported up to today. But some of them are somewhat similar or at least have common factors. In the present study, the Comprehensive Cognitive Biases Questionnaire (CCBQ) was constructed and factor structure and construct validity was examined.

66 items of CCBQ were constructed to measure the wide range of cognitive biases (e.g. arbitrary inference, rumination, inflated responsibility, intolerance of uncertainty, catastrophic cognition), and were administered to 557 young adults (50.6% girls) by online survey. At the same time, they answered the Multidimensional Depressive and Anxiety Symptom Scale (MDAS; Sato et al., 2001) as a validity scale, which consist of three subscales: Negative Affect (NA), Physiological Arousal (AR), and Positive Affect (PA).

In order to examine latent factors, exploratory factor analysis (ML, promax rotation) was performed on CCBQ. The result reveal four factors: Anxious and Delusional Thinking (AD), Depressive Thinking (DT), Distrust of the World (DW), and Compulsive and Perfectionist Thinking (CP). Reliability of each subscale was enough. In order to examine construct validity, correlation coefficients between CCBQ and MDAS were calculated. In the results, NA and AR of MDAS were positively correlated with all the subscales of CCBQ, but PA positively correlated only two subscales (AD, CP) of CCBQ.

In the present study, CCBQ was successfully constructed and the latent factor structure was revealed. Convergent validity was confirmed, but discriminant validity was supported only partially. Further in the future is necessary.

PP 106

WHAT MAKES COLLEGE ADAPTATION SO HARD? THE ROLE OF INDIVIDUATION-SEPARATION PROCESS

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Adaptation is the process by which an individual adapts himself/herself to changing environmental conditions. College life adaptation includes meeting students' academic demands and integrating the college into the social environment. Previous literature indicates that some college students experience a great deal of stress and challenge, especially during the first year of college. Due to the transition to a new environment and social groups, they may experience emotional difficulties and depression. Findings also show that specific dimensions of separation-individuation process predict college adjustment among emerging adults.

This study was conducted in order to examine the effects of individuation-separation process on adaptation to college among Turkish emerging adults.

The sample consisted of 486 students (67% females) between the ages of 18 and 26 (M=21.4, SD: 1.8). Emerging Adults completed a questionnaire packet consisted of demographics Individuation Test for Emerging Adults - Short Form (ITEA-S), "The Student Adaptation to College Questionnaire (SACQ), Life Satisfaction Scale, CES-Depression Scale, and Self Esteem Scale.

The findings showed that the adaptation to college and individuation levels of emerging adults differ according to the demographic variables (e.g. gender, parents' gender, grade, and SES). Moreover, individuation sub-dimensions predicted academic adjustment, personal/emotional adjustment, social adjustment, and institutional attachment 8%, 9%, 11% and 11%, respectively.

Therefore, it can be concluded that relations between individuation for emerging adults and adaptation college should be considered through developmental perspective. Results show that social adjustment and institutional attachment are highly influenced by individuation sub-dimensions such as connectedness and self-reliance. It is suggested that future studies should focus on educational programs to examine individuation and adaptation to college during emerging adulthood which would provide enriched findings.

PP 107

DISASTER-RELATED COPING STRATEGIES: A META-ANALYSIS ON CHILDREN

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Background and aims: Following disasters, children can use a large variety of coping strategies to feel better. There is a growing body of studies on the relation between such strategies and children's adjustment, considering negative symptomatology or positive indicators of development. Yet, these constructs are studied separately, leaving the field with a fragmented understanding of their relation. We synthesized the body of research on disaster-related coping strategies with children through a meta-analytic approach. We aimed at assessing the mean correlation between several coping strategies (Zimmer-Gembeck & Skinner, 2011) and positive and negative outcomes following disasters.

Methods: We used PsycINFO, PsycARTICLES, Scopus, ERIC, and PubMed databases to identify articles on natural and technological disasters published to date, applying the following filters: participants younger than 18 years at the disaster, peer-review, English as publication language. Inclusion criteria regarded investigating the relation between at least one coping strategy and at least one indicator of negative symptomatology (e.g., post-traumatic stress disorder, depression; 14 studies; 9,028 participants) or positive development (e.g., self-efficacy, emotion understanding; 8 studies; 3,540 participants). For each one, we studied separately the effect of strategy type (problem solving, escape, self-reliance, support, accommodation) using a random effect model.

Results: For negative indicators, even if there was a global positive significant correlation ($r = .09$, $p = .008$), the relation was significant only for escape ($r = .26$, $p < .001$). For positive indicators, the global correlation was not significant, but there were significant positive correlations for problem-solving ($r = .24$, $p < .001$) and support ($r = .23$, $p = .070$). High heterogeneity between studies was found, except than for support.

Conclusions: Our findings are a first step to deepen theoretical knowledge on the efficacy of disaster-related coping strategies, in order to inform intervention programs for helping children before and after disasters.

PP 108

BULLYING VICTIMIZATION AT SCHOOL: LONG-TERM ASSOCIATIONS WITH POST-TRAUMATIC STRESS SYMPTOMS AND POST-TRAUMATIC GROWTH AMONG UNIVERSITY STUDENTS

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Whilst a great amount of research has focused on the negative outcomes of bullying and its association with PTSD symptomatology, very little attention has been paid to the potential post-traumatic growth of victims of school bullying. This retrospective study investigated the association between bullying victimization experiences at school, current post-traumatic stress disorder (PTSD) symptoms and post-traumatic growth (PTG) among Greek university students.

Initially, a sample of 400 university students aged 17 to 40 years (M $age = 20.33$, $SD= 3.18$, 68% females) attending six departments at the University of Thessaly in Greece completed a survey consisting of three self-reported scales measuring school bullying victimization experiences, post-traumatic stress symptoms and post-traumatic growth. Two-thirds of the participants were excluded from the final analysis, as they did not report any victimization experience during their school years.

Results showed that victims of school bullying reported mild levels of PTSD and moderate feelings of growth. Females presented higher scores of post-traumatic growth. Duration and frequency of victimization of school bullying were found to present a significant main effect on PTSD and PTG, respectively. Finally, it was found that post-traumatic growth as a result of school-bullying victimization was related to PTSD severity and that this relationship was curvilinear.

Post-traumatic stress and post-traumatic growth are features that co-occur in the adult lives of individuals who experienced chronic and frequent bullying victimization at school. It is concluded that although being bullied in school is distressing and often results in adverse consequences, positive outcomes are also possible.

PP 109

GENDER STEREOTYPES AND MIDDLE-SCHOOL CHILDREN'S SELF-PERCEPTION: A COMPARISON OF MOTHERS' AND THEIR CHILDREN'S REPORTS

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The present study investigated the roles of children's and mothers' gender stereotypes and mothers' perception of their children in predicting children's self-perception in five competence areas, namely scholastic competence, social competence, athletic competence, physical appearance, behavioral conduct and self-worth beliefs. Also, the interaction between gender and other predictor variables was examined.

The data were collected from 270 middle school students aged between nine and 14 and their mothers reached through schools and home visits in Istanbul. The children's and mothers' gender stereotypes were measured with self-developed Gender Stereotype Questionnaire. The children's self-perception was measured with Harter's Self-Perception Profile for Children; and mothers' perception of their children were measured with the mother version of the same scale.

The mothers' perception of their children predicted children's self-perception in all areas. The mothers' gender stereotypes was a significant predictor only in scholastic competence while the children's gender stereotypes only predicted children's physical appearance beliefs. The interaction between gender and mothers' perception of their children's scholastic competence predicted children's scholastic competence and the interaction between gender and children's gender stereotypes predicted children's global self-worth beliefs.

These findings indicate the important role of mothers' perception in children's self-perception, indicating that mothers still play such an important role in children's self-perception in preadolescence period. In addition, the gender stereotypes could have important implications on individuals' lives starting from early ages. The gender stereotypes in both society and in the home context might influence the children's self-perception in some areas. Through mothers, these gender-differentiated beliefs that might negatively intervene the children's social-emotional functioning and sense of self-worth.

PP 110

THE RELATIONSHIP OF PHYSICAL ACTIVITY WITH AGGRESSIVENESS, SELF-ESTEEM AND LIFESTYLE IN ADOLESCENTS

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Puberty is important for shaping one's lifestyle because this is when health behaviours developed in the socialisation process are consolidated. Among the factors that significantly influence health in adulthood are behaviours leading to harm occurring in early and late adolescence: violence and aggressive behaviours, tobacco use, alcohol consumption and substance use, risky sexual behaviours, unhealthy diet, and low levels of physical activity (PA) (Kann et al., 2016). Despite efforts to promote PA in adolescence, teenagers exhibit low levels of PA and the percentage of individuals who are exempt from taking part in physical education (PE) classes is high. For this reason, the goal of this work is to analyse levels of aggressiveness, self-esteem, and selected ways of adolescents' spending free time characterised by varying levels of physical activity.

A total of 968 sixteen year-old adolescents took part in the study. Participants were divided into four subgroups: 1) a non-active group $n = 141$; 2) a PE group $n = 514$;

3) a high PA group $n = 178$; and 4) an athletes group $n = 135$. Participants were asked to complete a socio-demographic survey, a set of questionnaires (IPAO, KAM-RE, and SES).

The non-active group scored higher than the PE and high PA groups on the general aggressiveness scale. The athlete group scored higher on the indirect aggression scale than the PE group. The high PA group scored higher than the non-active group in self-esteem. Different relations between the way of spending free time and personality variables were found depending on gender and levels of physical activity.

Obligatory physical education classes in school support emotion regulation processes and help lower teenagers' levels of aggression.

PP 111

CORRELATIONS BETWEEN PHYSICAL EXERCISE AND PROBLEM-SOLVING STRATEGIES IN INTERPERSONAL CONFLICT SETTINGS: A JAPANESE LONGTITUDINAL STUDY 2

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A childhood habit of doing exercise is known to be effective for developing   sociability. A longitudinal investigation was conducted on correlations between sports lessons and problem-solving strategies in interpersonal conflict settings.

Families (N = 201, 97 boys) that consented to participate in the study and responded to questionnaires conducted at age 3, 4, and 5 were investigated. Parents assessed (1) problem-solving strategies in interpersonal conflict settings and the frequency of using five strategies including crying when a friend or the child takes an object was assessed using a three-point scale, (2) the warmness of mothers' child-rearing attitudes including five items, such as "talking to the child in a warm voice," was assessed using a four-point scale, and (3) Sports lessons, either having or not having sports lessons at the age four.

Results indicated that 70 children (36 boys) had experienced sports lessons at the age four. Changes in the frequency of using the five strategies and correlations among variables were examined using the latent growth curve model. A model with a good fit ($x^2(8)=4.70$, p=.79, CFI=1.00, RMSEA=0.00) having the mean intercept, 3.35 ($p<.001$) and the mean slope (-.98, $p<.05$) ß was obtained for the crying strategy. Significant or marginally significant paths were shown from the warmness of child-rearing attitudes to the intercept (-.22, $p<.01$) and slope (.27, $p<.10$), as well as from sports lessons to the slope (.22, $p<.10$). A significant correlation was not indicated between the child's gender and the intercept or the slope. When the frequency of using a crying strategy was lower at the age of three, the slope after four years of age was steeper ($r=-.47$). It was suggested that warmness of child-rearing attitudes and the experience of sports lessons might decrease the frequency of using the crying strategy.

PP 112

HOW MATERNAL PRACTICES AFFECT PRESCHOOL CHILDREN'S EMOTION SOCIALIZATION AND PROSOCIAL BEHAVIOR?

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Background: Emotion regulation (ER) refers to the ability to maintain, inhibit or elicit appropriate positive or negative responses in different situations. Due to rapid increments in the complexity of emotions and the demands of the social world, preschool years have great importance (Denham, 1998). Therefore, examining the development of ER in young children and contributing factors are very crucial to increase our knowledge about ER.

Literature has highlighted the importance of mothers' way of modeling, reacting, and coaching emotions on children's developing ability to regulate their emotions (Fabes & Murphy, 1996). While mothers' use of supportive coaching strategies enhances children's abilities to deal with emotions, unsupportive strategies such as minimizing, ignoring, denying, punishing or preventing the expression of emotions affect emotion regulation adversely (Yağmurlu & Altan, 2009). Authoritarian parenting style, which is characterized by high levels of power assertion was found to predict emotionally incompetent behaviors (Chang et al., 2003). The literature indicates that besides parental factors, temperamental characteristics of children also influence ER abilities (Denham, 1998; Eisenberg & Fabes, 1992). Temperament and ER jointly predict various aspects of social functioning such as prosocial behaviors, adjustment, and peer relations (Eisenberg et al., 2002).

Aim: The aim of the present study was to investigate the effects of maternal parenting practices and emotion socialization behaviors on preschool children's ER and prosocial behavior moderated by children's temperament.

Method: The sample consisted of 250 mothers and 24 teachers of preschool children (3-6 ages) from 6 different preschools in İzmir, representing low, middle, and upper SES families. Coping with Negative Emotions Scale, Child Rearing Questionnaire and Short Temperament Scale for Children, Emotion Regulation Checklist and Prosocial Behavior Scale were used to evaluate children from two different sources: mothers and teachers.

Results: Data analysis are currently ongoing.

PP 113

DOES EI REALLY CHANGE WITH AGE? APPLYING A BRIEF VERSION OF THE SCHUTTE EMOTIONAL INTELLIGENCE SCALE ON A SAMPLE AGED 15 TO 67 YEARS

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The argument that Emotional Intelligence (EI) develops with proceeding age holds a strong position in the majority of EI theories. However, empirical data do not unanimously confirm that EI develops with age, mainly due to the fact that most studies focus on a specific age group (e.g., adolescents) rather than including participants of a wide age range. Longitudinal studies or even EI studies with participants of various age groups could shed light on how EI changes with age, but such studies are scant. Moreover, measuring EI with extended scales, often consisted of items that lack emotional content, may further blur the EI-age relationship.

In the light of the above, in the present study, we performed a content validity analysis of the Schutte's Emotional Intelligence Scale (SEIS; Schutte et al., 1998), extracted a Brief Version of the scale (SEIS-BF; authors, in preparation) and used it to test for EI changes across a wide age range.

A total of 616 participants (aged 15 to 67 years) filled in, on a voluntary base, the SEIS-BF and two demographic questions concerning their age and gender.

Results revealed that the 10 items of the SEIS-BF can be organized to three meaningful factors with satisfactory reliability indexes. Concerning the EI-age relationship in the whole sample, significant positive correlations emerged, as expected. However, when participants were divided to gender-balanced age groups [*adolescents*; n=148, M_{age}=16.12, *emerging adults*; n=112, M_{age}=20.55, *young adults*; n=113, M_{age}=35.37, *mid-aged adults*; n=107, M_{age}=45.38, and *older adults*; n=137, M_{age}=54.98] and the EI-age relationship within each age group was tested, the picture changed. The EI-age correlations were not significant within all age groups except for the emerging adults.

The EI-age puzzling relationship, developmental aspects of EI as well as issues on the extraction and the use of short forms of EI scales will be pointed out.

PP 114
CONCEPT «CHILDHOOD EMOTIONAL COMPETENCE»

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The construct "emotional competence" was proposed in 1990 by S. Saarni. Her empirical model includes 8 abilities. In modern studies, the model of emotional competence usually includes 3 main components: expression, understanding and regulation of emotion. H.Rindermann in his model emphasizes the importance of recognizing not only other people's emotions, but also his own.

Based on the model of emotional competence of adults by G. Yusupova (2006), a model of emotional competence of preschoolers was developed by N.Smirnova, S. Savenysheva (2017), containing 2 dimensions: cognitive and behavioral, interpersonal and intrapersonal. Thus, it contains 4 main components at the intersection of the two dimensions described above:

1 Emotional identification - recognition and understanding of the emotions of others (cognitive, interpersonal dimension);
2. reflection of emotion (cognitive, intrapersonal);
3. emotional self-regulation (behavioral, intrapersonal);
4. empathy and emotional expression (behavioral, interpersonal).

As markers of emotional competence, we consider the parameters of psycho-emotional well-being: adequate self-esteem, moderate anxiety and the absence of pronounced fears. As factors affecting the formation of emotional competence, we consider age and sex factors and family factors (family structure, parent-to child relationship, etc.).

For the experimental analysis of the proposed model of emotional competence, we conducted a study.

Sample: 93 children (47 boys and 46 girls) aged 5-7 years and 93 mothers lived in Saint-Petersburg, Russia.

Methods: «Emotional identification» by Izotova, Projective technique «Emotional regulation strategies» by Smirnova, Savenysheva, Projective technique «Study of empathy» by Avdulova.

An analysis of the relationship between the components of emotional competence in preschoolers revealed the greatest number of links in empathy, emotional identification and emotional expression. Reflection and self-regulation were less associated with other components. Thus, the interpersonal characteristics are the backbone components of emotional competence.

PP 115

TAKE YOUR WINGS, BUT DON'T FORGET YOUR ROOTS: BASIC PSYCHOLOGICAL NEEDS OF TURKISH EMERGING ADULTS

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Background and aims: Self-determination theory is defined as the ability of making one's own decisions to determine oneself rather than making decisions on dependent external factors. According to self-determination theory, basic psychological needs are more important than biological needs. Basic psychological needs are explained by three dimensions: 1) autonomy, 2) competence, and 3) relatedness. Previous literature show that many factors influence the satisfaction of these basic psychological needs.

This study was conducted in order to examine the effects of individuation-separation process, within the framework of self-determination theory, on psychological functioning of Turkish emerging adulthoods.

Methods: The sample of the study consisted of 527 emerging adulthoods (366 females) between the ages of 18 and 26 (M=21, SD=1.6). Turkish emerging adults completed the Needs Satisfaction Scale, Individuation Test for Emerging Adults-Short Form (ITEA-S), Life Satisfaction Scale, CES-Depression Scale, and Self Esteem Scale.

Results: The findings showed that the basic psychological needs satisfaction and individuation levels of emerging adults differ according to the demographic variables (e.g. participant gender, parents gender, grade, and SES). In addition, individuation sub-dimensions predicted need for autonomy, need for competence, need for relatedness, and total need satisfaction, 20%, 17%, 12% and 22% respectively.

Conclusions: This is the first study investigating relationship between separation-individuation and basic psychological need satisfaction among Turkish emerging adulthood. These results, opening the way for further investigation of the relationship among individuation-separation and basic psychological needs. According to our findings, in order to provide solutions developmental problems for emerging adults, future studies should aim for preventive strategies.

PP 116
AGE, GENDER AND FAMILY FACTORS OF OLDER PRESCHOOLERS' INTERPERSONAL EMOTIONAL COMPETENCE

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Present research aims to found age, gender and family factors of older preschoolers' interpersonal emotional competence (identification of emotions, empathy and expression).

The study involved 80 mother-child dyads from Saint-Petersburg: 5-year-olds (n=44) and 6-year-olds (n=36); 42 boys and 38 girls; complete families (n=67) and one-parent families (n=13); without siblings (n=27) and with siblings (n=53).

Methods: Test «Emotional identification» and questionnaire for parents by E.Izotova, Empathy test by T.Gavrilova, «Analysis of family relationships» questionnaire by E.Eidemiller and V.Yustitskis, «Parent-child emotional interaction questionnaire» by E.Zakharova, FACES III by D.X.Olson, J.Portner, I.Lavi, Test of marriage satisfaction by Y.E.Aleshina, L.Y.Gozman, E.M.Dubovskaya.

ANOVA revealed that girls have a higher interpersonal emotional competence in overall and didn't reveal differences due to factors of age and family structure. Regression analysis revealed one predictor of competence in overall - lower index of deficiency of demands, obligations. Emotional identification by schematic pictures is better formed at higher indexes of mother's positive feelings in the interaction and lower indexes of preference to childish traits; by photo - at lower indexes of understanding the causes of child's state, excessive demands, prohibitions and in the case of minimal sanctions. Knowledge of emotional markers is better in the case of necessary demands, obligations and at the same time at underdevelopment of parental feelings. Empathy is positively associated with mother's ability to influence to the child's state. Emotional expression is better at higher indexes of family cohesion, mother's positive feelings in the interaction, positive emotional background of interaction and at the same time at lower indexes of mother's acceptance of himself as a parent.

Thus, the maturity of parenting styles and well- being in emotional interaction can be regarded as resources for preschoolers' interpersonal emotional competence. At the same time the compensatory mechanisms in its formation were revealed.

PP 117
MATERIALISM AND WELL-BEING AMONG GREEK ADULTS

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Although there is growing evidence on the negative effects of materialism on psychosocial development, to the best of our knowledge no previous studies have examined materialism among Greek adults. This study aims to examine materialism in adults and its relationship with well-being measures such as life-satisfaction and self-esteem. This search is of particular interest in the Greek society that is for several years under severe financial austerity. Therefore, the role of felt-economic security was also considered. The study also tested the novel hypothesis that a meaningful life will eliminate investment in materialistic values, thus increasing individuals' well-being. Two hundred adults (mean age 37 years) were asked to completed a questionnaire. The questionnaire consisted of: a) the material values scale (Richins, 2004) that assesses three dimensions of materialism: i) happiness - possessions lead to happiness, ii) success -possessions as a sign of success, and iii) the centrality of possessions in one's life. b) The life satisfaction scale (Diener, et al., 1985), c) the self-esteem scale by Rosenberg (1965), and d) the meaning in life questionnaire (Steger, 2010) that assesses the presence and the search for meaning in life. The results revealed that materialism had a negative correlation with life-satisfaction and self-esteem. The higher the materialistic values were the lower self-esteem and life-satisfaction was. Financial insecurity was associated with heightened levels of materialism However, those who had a meaningful life exhibited lower levels of materialism. The findings of the study support previous research on the negative association of materialism and life-satisfaction. In a society facing chronic financial crisis elevated levels of materialism and focus on external aspirations can further diminish people's sense of well-being.

PP 118

AGE, GENDER AND FAMILY FACTORS OF OLDER PRESCHOOLERS' INTRAPERSONAL EMOTIONAL COMPETENCE

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Emotional competence is actively formed in the preschool years and plays a crucial role in the social adaptation of the child. Parents have the strongest influence on the emotional development of the child.

The aim of the study was to investigate the intrapersonal components of emotional competence (emotional regulation, reflection of emotion) of older preschool children and influence parent-to-child relationships on it.

Methods: Projective technique «Emotional regulation strategies» by Smirnova, Savenysheva, test «Emotional identification» by Izotova, Projective technique «Drawing the family», Parent-child emotional relationship questionnaire by Zakharova.

Sample: 93 children (47 boys and 46 girls) aged 5-7 years and 165 parents (93 mothers and 72 fathers) lived in Saint-Petersburg, Russia.

Findings: The study of age differences in the level of reflection of emotions among older preschoolers did not reveal significant differences. The study of strategies of emotional self-regulation revealed a significant increase in constructive strategies with age. It was also found that with age, the number of behavioral strategies of self-regulation increases, while reducing affective ways. The study of sex differences in the level of self-regulation and reflection of emotions showed that there are less unconstructive strategies in girls compared to boys. The level of reflection is also significantly higher in girls.

The study of the relationship of reflection of emotions, emotional self-regulation and parent-child relationships showed that more constructive strategies of self-regulation are observed in children of mothers and fathers, who are characterized by the acceptance of their children. Link of reflection and child-parent relationship wasn't found.

Conclusion: The study showed that the level of emotional regulation and reflection is higher in girls. The level of emotional regulation, but not reflection, increases with age. Emotional regulation of preschool children is closely related to the parental acceptance.

PP 119

THE ROLE OF RUMINATION ON THE RELATION BETWEEN MATERNAL REJECTION AND SELF-ESTEEM IN TURKISH ADOLESCENTS

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In adolescence, self-development and emotion regulation strategies have been learned and internalized from maternal practices. The purpose of the present study was to examine the role of mothers' rejection on 10th graders perceived self-esteem through emotion regulation strategy use, specifically rumination.

The sample consisted of 310 Turkish mothers ($M_{age} = 43.35$, $SD_{age} = 5.59$) and their children (121 boy, 189 girl; $M_{age} = 15.61$, $SD^{age} = .49$). Mothers of adolescents completed a family demographics form and the parenting behaviors scale (EMBU; Castro, Toro, Van Der Ende, and Arrindell, 1993). Adolescents completed the child version of parenting behaviors scale (EMBU), Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965), and Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski, Kraaij, & Spinhoven, 2001).

Adolescent- and mother-rated rejection were positively correlated with each other ($r = .41$). Thus, two scores were aggregated to obtain total rejection score. Rumination score was obtained as a subscale of Cognitive Emotion Regulation Questionnaire. Rejection score was positively related to rumination ($r = .13$) and negatively related to self-esteem ($r = -.21$). Also, adolescents who reported higher rumination had lower self-esteem ($r = -.20$). The mediating role of rumination on the relationship between rejection and self-esteem was examined when gender was controlled. The results indicated that rejection increased rumination, $b = .16$, $p < .05$; which then predicted lower self-esteem, $b = -.10$, $p < .05$. The direct effect of rejection on self-esteem was negatively significant, $b = -.14$, $t = -3.59$, $p < .001$. More importantly, the indirect effect of rejection on self-esteem through rumination was negatively significant, $b = -.02$, 95% CI [-.04, -.00].

In conclusion, the results were interpreted regarding the Turkish context for adolescent development. A longitudinal research is needed to test the directionality of the mediation model as it was a cross-sectional sample.

PP 120

MORE PROSOCIAL BEHAVIORS = MORE COGNITIVE SKILLS: AN EVALUATION OF THE EFFECTIVENESS OF SOCIAL SKILLS TRAINING PROGRAM ON PRESCHOOL CHILDREN

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Background: Prosocial behaviors are known as other-oriented behaviors as they are being a fundamental component of interaction with others. Other-oriented behaviors have a critical role regarding social interaction. Helping, comforting, and sharing are among the major prosocial skills of children. Prosocial behaviors are related to different cognitive processes. Changes in cognitive processes follows a developmental pathway, both by itself and in relation to other skills. Therefore, in the present study, prosocial behaviors are examined by using sociocognitive perspective.

Aim: Social skills training program aims to increase prosocial behaviors and investigate the effects of this program on preschool children's helping, sharing, and comforting behaviors as well as their social information processing and emotion comprehension skills.

Method: A quasi-experimental design with a pretest-posttest control group was used in this study. The sample consisted of 96 children, aged between 42 and 64 months (M = 53.40, SD = 4.96), enrolled in a preschool, and they are from a middle and upper middle SES families. Fifty-seven (29 girls, 28 boys) of the children were in the intervention group and 39 (17 girls, 22 boys) of them were in the control group. The training program included 6 modules and delivered by the researcher for 3 weeks (two days per week). Children were assessed individually with tasks and children's prosocial and cognitive skills were evaluated by the child's mother and teacher.

Results: Evaluating the effectiveness of the program, it was found that helping, sharing, comforting, emotion compensation, and calm response scores of the children in the intervention groups were significantly higher than the scores of the control group. Evaluating whether social skills training program had an effect on mothers' and teachers' reports, similar results were obtained.

Conclusion: Although present research has some limitations, results suggest that the program is shown to be effective on prosocial behaviors and cognitive skills of children.

PP 121

DEVELOPING REPRESENTATIONS OF NOSTALGIA IN CHILDREN'S HUMAN FIGURE DRAWINGS

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Background and aims: Nostalgia is a self-relevant emotion which serves key psychological functions. This study was designed to investigate developing representations of nostalgia. Specifically, we examined the way that participants (N = 162) convey nostalgia in their human figure drawings.

Methods: To this end, 122 children aged 8-, 10- and 12- years, as well as a group of adults, were asked to draw a person experiencing nostalgia and a baseline figure "feeling nothing". We examined the developing drawing representations of nostalgia through a 4 (age: 8 vs 10 vs 12 vs adults) x 2 (gender: male vs female) x 2 (order of drawing task: first vs second), between subjects design. Content analysis permitted to identify eight discrete graphic indicators used by participants to depict nostalgia in their drawings. Drawings of nostalgia were rated in terms of (i) variety and number of graphic indicators used to convey nostalgia and (ii) valence of facial expression.

Results: In general, the results showed significant age, but not gender differences. Older children produced drawings containing a larger range of graphic indicators than younger ones, whereas no significant differences between older children's and adults' drawing representations were noted. Finally, whereas the 8- year old children depicted nostalgia as a negative emotion, the 12- year olds denoted a positive emotion.

Conclusions: The findings are discussed in terms of children's emotional development, as well as contemporary research about nostalgia's prototypical features.

PP 122

A LATENT PROFILE ANALYSIS OF SOCIAL WITHRAWAL SUBTYPES IN EARLY CHILDHOOD

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Background and aims: In recent years, researchers have proposed complex models to describe social withdrawal, shifting from a unidimensional approach to a multidimensional construct, using a variable-centred approach (Coplan, Ooi, Xiao, & Rose-Krasnor, 2018). However, a person-centred approach would allow for a greater understanding of the different types of social withdrawal and improving our knowledge of the socio-emotional correlates related to these different groups of children. The main aim of our study was to examine the socio-emotional functioning of young children who formed distinct groups of social withdrawal.

Methods: Participants were 212 preschoolers (102 girls), ranging in age from 30.59 to 76.48 months (M=58.32, SD=10.72), recruited from three preschools in Italy. Parents and teachers completed questionnaires on children's social withdrawal (shyness, unsociability, social avoidance) and socio-emotional functioning.

Results: A latent profile analysis of social withdrawal scores revealed that the four-profile model fit the data better than others models. Cluster 1 (9.5% of children), cluster 2 (12.5%), and cluster 3 (8.5%) were all characterized by high scores on different combinations of social withdrawal subtypes, whereas cluster 4 (69.5%) was low on all forms of social withdrawal. Clusters 1, 2, and 3 showed higher level of shyness and unsociability (and not differ from each other) but differed in terms of social avoidance scores (cluster 3 showing the highest level of social avoidance). In terms of outcomes, cluster 1 demonstrated higher level of attention focusing than clusters 2 and 3; cluster 2 displayed higher levels of school liking and social competence than cluster 3; and cluster 3 showed lower levels of popularity than the other three clusters.

Conclusions: Children who had high levels avoidance displayed more difficulties in terms of social functioning compared to the other groups of children. Results may help in identifying those children in order to conduct early intervention programs during preschool years.

PP 124

PROSOCIAL AND AGGRESSIVE BEHAVIOUR IN ELEMENTARY SCHOOL: THE CONTRIBUTION OF EMOTION REGULATION AND EMPATHY

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Emotional regulation is an important precondition for the development of children's empathy (Eisenberg, Spinrad, & Knafo-Noam, 2015). Furthermore, research evidenced that emotion regulation predicts student prosocial behaviour, both directly and through the mediation of empathy towards classmates (e.g. Benita, Levkovitz, & Roth, 2017). However, it may be of interest to analyse if the relationship between emotion regulation and prosocial behaviour is comparable with the association between emotion regulation and aggressive behaviour, and if the empathy both for the prosocial and aggressive behaviour play a mediational role. Consequently, the aim of the study is to investigate the mediational role of empathy in the relationship between emotion regulation and prosocial/aggressive behaviour.

Thirteen Italian teachers rated two hundred-and-thirty-seven elementary school children (45,1 % females; mean age = 8.75 years, SD= 0,69) for empathy and emotion regulation, whereas both teachers and children rated children's prosocial and aggressive behaviour using the *Emotion Regulation Checklist* (Shields & Cicchetti, 1997), the *Empathy Scale* (Zhou, Valiente, & Eisenberg, 2003) and the *Prosocial and Aggressive Behaviour* (Caprara & Pastorelli, 1993).

In order to examine the above-mentioned relationships among the constructs, structural-equation modelling was used. The fit indices indicated good model fit: $x2 = 652.40$, $p<.001$, RMSEA=0.11 (.07 - .15), CFI=.96, SRMR=.07. The results of structural equation modelling showed that there is a weak direct effect of emotion regulation on students' prosocial behaviour, whereas there is a strong indirect effect through the mediation of empathy towards classmates. Instead, regarding emotion lability there is a strong direct effect on students' aggressive behaviour, whereas there is a weak indirect effect through the mediation of empathy towards classmates.

Results suggest that the promotion of empathy affects more the increase of prosocial behaviour than the decrease of aggressive behaviour. Our findings highlight the importance of promoting school-based programs of social and emotional learning (Durlak, 2015).

PP 125

THE PREGNANCY ANXIETY QUESTIONNAIRE REVISED – 2: A CONTRIBUTION TO ITS VALIDATION IN AN ITALIAN SAMPLE

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Background and aims: Pregnancy-related anxiety (PrA), is a construct partially distinct from general anxiety experienced during pregnancy. It refers to worries specifically related to and arising during pregnancy. In many studies (Dunkel Schetter, Niles, Guardino, Khaled &Kramer, 2016) PrA is associated to preterm birth and seems to be a predictor of adverse child outcome (e.g.: poor attentional regulation, impulsivity). The aim of the present study is to validate the Pregnancy Anxiety Questionnaire Revised-2 - PRAQ-R2 (Huizink et al., 2016) in a sample of Italian women, by testing its psychometric properties, and checking for Italian-Finnish measurement invariance. Additionally, the association with general anxiety and depression was examined.

Methods: Participants included 348 Italian pregnant women (mean age = 32.62 years; SD = 5.15 years; range = 19-45 years) and 348 Finnish (mean age = 30.36 years; SD = 4.36 years; range = 17-42 years).

Results: Results showed that the Italian version of PRAQ-R2 presents satisfying psychometric proprieties (CFI = .996; NNFI = .994; RMSEA= .070). Data supported a three-factor solution: *fear of giving birth, worries about bearing a handicapped child and concern about own appearance*. Invariance across countries was confirmed. The primiparous condition was associated with a higher level of pregnancy anxiety only for fear of giving birth (β = -0.35, SE = .09). A moderate correlation was found between pregnancy-anxiety dimensions and general anxiety (from .53 to .57) and depression (from .37 to .40), providing evidence for concurrent validity, as well as for the existence of a specific pregnancy-anxiety dimension.

Conclusion: PRAQ-R2 is a reliable measure for the assessment of PrA also in the Italian context, as it was for Finnish women, and can be used, together with other measures of depression, for assessment during pregnancy facilitating intervention in order to prevent later problematic outcome both in mother and children.

PP 126

A VERSION OF THE SOCIAL ANXIETY SCALE TO ASSESS SOCIAL ANXIETY AMONG BOTH CHILDREN AND ADOLESCENTS

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Social anxiety refers to a condition of fear, worry, withdrawal, and avoidance in the context of peer relationship. It is associated with social maladjustment, academic difficulties, and health problems (Pabian & Vandebosch, 2016). We aimed at adapting, in an Italian sample, the Social Anxiety Scales for children (SASC-R, La Greca & Stone, 1993) and for adolescents (SAS-A, La Greca & Lopez, 1998) in a single version, testing construct and concurrent validity.

Participants were 632 primary and secondary school pupils (51.9% girls; age: 8-17 years, M=11.50, SD=2.60), who answered the SASC-R and SAS-A. Subsamples answered also to measures assessing psychological adjustment (Kovacs, 1998), participation in bullying (Salmivalli & Voeten, 2004), and peer status (Cillessen & Mayeux, 2004). A test-retest of the scale (after 3 and 6 months) involved 403 participants.

Based on an exam of the content of SASC-R and SAS-A items and preliminary analyses (EFA, CFAs) four items were removed: three items because of differences in the content across the scales; one item because of its low loading. The final scale consisted of 14 items with a 2- factor dimensionality: Fear of Negative Evaluation and Social Avoidance and Distress. The structure of the scale was confirmed: $Chi^2(75)=288.83^*$, CFI=0.91, RMSEA=0.067. The measure was invariant across age-groups (partial scalar invariance, after freeing 4 intercepts): $Chi^2(170)=431.84^*$, CFI = 0.90, RMSEA=0.069. The test-retest after 3 and 6 months was good (rs =.58*, .56*). Social anxiety (alpha=.84) was associated negatively with social acceptance and pro-bully roles, positively with depression, victimization, and outsider behavior in bullying.

The use of a single SAS instrument for children and adolescents can facilitate assessment in studies with participants of different ages or longitudinal designs. Findings also highlight the importance of social anxiety as a risk condition for social and emotional functioning.

PP 127

ASSESSMENT OF EMOTIONAL AND BEHAVIORAL PROBLEMS IN CHILDREN OF CHRONICALLY ILL PARENTS, ACCORDING TO THE CHILD BEHAVIOR CHECKLIST (CBCL)

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Aim: As part of a doctoral dissertation in parental chronic illness effect on children's psychosocial development, this study aims to identify specific emotional and behavioral problems, using the Child Behavior Checklist (CBCL).

Background: Parents suffering from one or multiple chronic medical conditions constitute a large population size nowadays. Children with parents affected by chronic illness are subject to an increased risk for internalizing problems, adverse caregiving characteristics, daily hassles and a low school performance (Sieh, et al. 2013). Children of a parent with multiple sclerosis reported greater family responsibilities, less reliance on problem solving, higher somatization, lower life satisfaction and positive affect (Pakenham & Bursnall, 2006). Risk of problems presenting in children of chronically ill parents, were, according to Watson et al. (2006), linked with low levels of family cohesion and low affective responsiveness. In the same research, adolescents reported family communication issues, which were associated with externalizing behavior problems. Maternal depression was related to child internalizing problems, particularly in girls.

Method: Participants are parents who have been diagnosed with a chronic medical condition (CMC) and have children of age 4 – 12 years old, all living in Greece. For the statistical analysis of the CBCL, raw Internalizing, Externalizing and Total Problems scores will be transformed to standardized T scores using the CBCL data conversion programme (Arnold et al, 2000).

Results: Different aspects of children's behavior are expected to be examined. The analysis of the scores will include amounts of social withdrawal, somatic complaints, anxiety/depression, social problems, thought problems, attention problems, delinquent behavior and aggressive behavior, as well as differences between sexes.

Conclusions: Children of chronically ill parents are rather left without sufficient explanations about the illness and ways of coping. Results of the survey are meant to contribute to the conduction of appropriate psychological interventions for young children's mental health promotion and prevention of psychological disorders.

PP 128

"I AM A HIGHLY-SENSITIVE PERSON": QUALITATIVE RESEARCH ON THE MEANING OF THE HIGH SENSITIVITY CONSTRUCT

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Background and aims: In the past years, High Sensitivity has become a very popular concept with which a growing number of individuals (of all ages) identify themselves as Highly Sensitive Persons (HSP). The popularity of the construct, however, stands in sharp contrast with the limited work on its conceptual underpinnings. The construct historically evolved from Sensory-Processing-Sensitivity (Aron & Aron, 1997), yet, many consider it a buzzword without a clear uniform or developmental meaning.

This research aimed to explore the perceptions of the concept's value in adults identifying themselves with the HSP-label. In addition, this study aimed to probe needs of "HSP"-individuals in their search for clinical guidance or support.

Methods: Qualitative in-depth interviews were conducted with 14 "HSP"-adults (M_{age} = 31.8; SDage = 13.02) and analyzed by using a rhizomatic, plugged-in method (Jackson & Mazzei, 2012).

Results: In addition to idiosyncratic interpretations of the construct, most participants reported to have felt differently from an early age on. They described to be more empathetic, and to experience more social over-stimulation, relative to others in their environment. Most persons also noted that finding the HSP-label meant a relief ("like a piece of a puzzle fallen into place"), strengthening them in developing a more positive self-esteem and attaining a more balanced identity. They described difficulties with emotional self-regulation but also reported frequent misunderstandings by their direct context and a deep-rooted incomprehension by society. Many emphasized their abilities of depth-of-processing and analytical skills, stressing that being HSP means much more than 'just being sensitive'. In probing what they needed in their contacts with clinical care or support, all participants asserted that recognition, acceptance and understanding of HSP must be at the heart of all interactions.

Conclusions: These results demonstrate the high face-validity and emotional value of 'recognition and relief' for adult users of the HSP-label, who identify high sensitivity as an important and relatively stable personality characteristic throughout their development. Suggestions are formulated to further study this concept from a developmental psychological perspective.

PP 129

PRELIMINARY INVESTIGATION: PROSOCIAL BEHAVIOR PRACTICED IN SEQUENCE

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Prosocial behavior is defined as voluntary behavior intended to benefit another (Eisenberg, Spinrad, & Knafo-Noam, 2006). Prosocial behavior contains various behaviors such as helping, cooperating, donating, and sharing. However, in previous research, there is no "correct" way to respond defined as one when helping others (Tunçgenç, 2016). Therefore, regarding ecological validity, it is needed to observe prosocial behaviors practiced in sequence. By examining this, it is possible to clarify a new aspect of prosocial behavior; how a toddler, who is still in the process of learning how to practice prosocial behavior, learns to change his/her behavior corresponding to the other's response.

Naturalistic observation was conducted at two private nursery schools in Tokyo, Japan. Two classes of 4-years-olds (Class A: n = 20; mean age = 61.9 months, SD =3.1; Class B: n = 17; mean age = 60.5 months, SD =3.6) participated in this study. Children were videotaped for three hours per day for 3 months. Event sampling procedure was used to identify children's distress.

As a result, there were several episodes of sequential prosocial behaviors. For example, a toddler (female, 64 months old), after simply approaching the peer, returned to wipe the peer's tears with tissue paper, when she saw a crying peer. Between the first behavior and the second, it was observed that she changed the first behavior to the second considering the reaction of the one in distress. However, some of the other children continued to provide the same help, regardless of the peer's reaction.

In conclusion, the present research indicated the possibility that toddlers between the age of 55 months and 66 months could, but not always, change his/her behavior depending on the situation. Further research is necessary to investigate individual differences in sequential prosocial behaviors by longer term longitudinal study.

PP 131

WAYS TO OVERCOME THE DIFFICULTIES IN YOUNG PEOPLE WITH PERSONAL HELPLESSNESS

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Personal helplessness defined as a systemic characteristic of the subject is considered as internal conditions that determine the influence of external conditions including uncontrolled life events.

This paper analyzes the results of a study of ways to overcome the difficulties in young people with personal helplessness. The choice of this age category is due to the need for young people to overcome the difficulties on the way to independence (mastering a professional role, separation from parents, establishing close relations).

For research of ways to overcome the difficulties the technique "Coping-behavior in stressful situations" (N. Endler, D. Parker).

The comparative analysis of ways to overcome the difficulties allows us to draw the following conclusions. Young people with personal helplessness have more developed emotionally-oriented and avoiding styles of coping compared to independent students. Emotionally-oriented coping is aimed at reducing emotional stress. Students with personal helplessness are characterized by inability to cope with the situation, immersion in experiences and emotional discomfort associated with the difficulties. Focusing on their shortcomings expressed feelings of guilt or irritation, emotional attitude to the problem characterize those who prefer an emotionally-oriented style of coping. Distraction from the problem can reduce emotional discomfort in a difficult situation.

The revealed features can be prerequisites in the solution of a problem of development of the behavior coping with difficulties at subjects with personal helplessness.

PP 132
PECULIARITIES OF THE ASSESSMENT OF COMMUNICATIONAL SKILLS IN EARLY CHILDHOOD

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The child development is a complex and interesting subject from many perspectives. This is an active and dynamic process influenced by many factors, both external and internal. The child development at different stages has certain specificity which can ensure a series of benefits for child: easy adjustment, efficient acquiring, comprehension, developed communicational skills etc.

The child develops a peculiar connection with the parent, especially with mother, before he/she learns first words - this is happening because the child feels protected and loved. The affection, attention and care that are offered to the child represent the proof of the fact that he/she can count on the parent.

The assessment and development of skills that can assure a better adjustment of the child in society have the leading place in the contemporary psychology.

Applying ESCQ (Early Social Communication Questionnaire) allows the assessment of the level of child development, as well as the determination of a strategy that can be used by parents or adopters in order to improve the skill of social communication.

The tool ESCQ presupposes observing the behavior of child aged 2-30 months, in different situations of interaction between adult and child by means of the game. The questionnaire assesses three socio-communicative functions - social interaction, focusing attention and maintaining the contact.

The study has as the main goal to determine the peculiarity of manifestation and development of the skills of social communication in children of early age, as well as the involvement of parents or adopters in developing these skills in children.

PP 134
GENDER DIFFERENCES IN ADOLESCENT EMOTIONAL DEVELOPMENT AND ITS IMPACT ON RUMINATIVE THINKING

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Background and aims: Heightened self-awareness and intense emotions are experienced during adolescence, increasing vulnerability for emotional problems. Rumination, a cognitive process that directs attention towards negative self-referential information, is associated with the onset of depression. Cognitive maturation does not happen linearly and may be impacted by gender. Understanding cognitive factors involved in rumination would facilitate the prevention of mood disorders in adolescents. Therefore, we aimed to study the impact that gender may have on two adaptive strategies on ruminative thinking.

Methods: We recruited 162 adolescents (13-17 y.o., 90 females) in schools of the San Juan Metropolitan Area, Puerto Rico and administered two self-report instruments previously translated and validated by our team: the Experiences Questionnaire (EQ) and the Alternatives Subscale of the Cognitive Flexibility Inventory (CFI-Alt). The two EQ subscales, Decentering and Rumination, assess the ability to disengage from negative thoughts and the tendency to negatively ruminate about them. The CFI-Alt assesses the ability to consider alternate solutions to problems. After administering the scales, we performed multiple regression analysis to explore the predictive effect of decentering and the ability to think about alternatives on rumination.

Results: Analysis showed that for females, the predictors explained 23% of the variance in rumination ($R2=.23$, $F(3,85)=8.69$, $p<.001$). More specifically, we found that the ability to think about alternatives predicted rumination (Beta=.29, $p<.01$), as also did decentering (Beta=.23, $p<.05$). In contrast, for the male group, although predictors explained 24% of the variance in rumination scores ($R2=.24$, $F(3,67)=7.13$, $p<.001$), only the ability to think about alternatives predicted rumination scores (Beta=.33, $p=.01$).

Conclusions: Although the ability to think about alternatives impacts rumination in both male and female adolescents, only in females we observed the ability to disengage from negative thoughts through decentering as an additional strategy. These results could have implications on the way emotional development is understood.

PP 135

THE RELATIONSHIP BETWEEN CHILDREN'S COMPETENCE AND MOTHER'S GLOBAL SELF-WORTH: A JAPANESE LONGTITUDINAL STUDY3

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The role of mother's global self-worth likely varies across parents, children, and cultural-contextual factors, its influence cannot be overlooked as a possible predictor of child functioning, or perhaps an indicator of risk (e.g. Jones&Prinz, 2005). Mother's global self-worth may also be an appropriate target for prevention and intervention efforts. Therefore, in this study, we tried a longitudinal study using the latent growth curve model for the relationship between children's competence and mother's global self-worth. A total of 331 families who have preschool children (boys N= 169, girls N= 162) and their mother (mean age 35.0 years when their children at age 3) were participants in the Project of Environmental Effects on Relationships and Self (PEERS), an ongoing longitudinal study.

Mother reported (1) Children's competence/The Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Harter & Pike, 1983; consisted of 12 items,α=.80) across three time points, (2) Mother's Global self-worth/Self-perception profile for adults (Messer & Harter, 1986; consisted of 6 items, α=.70), and (3) CES-D/ The Center for Epidemiologic Studies Depression Scale (Locke&Putnam,1971; consisted of 20items, α=.85) at Time 1.

Using the latent growth curve model, a model with a good fit (x^2(8)=15.269, p=.054,CFI=.983, RMSEA=0.052) having the mean intercept 23.846 (p<.001) and the mean slope (3.626, p<.05) . Significant paths were shown from mother's global self-worth to the intercept (.178, p<.05) and child's gender to the intercept (.294, p<.001). It was suggested that higher scores of mother's global self-worth related with higher levels of baselines of children's competence. In addition, it indicated that baselines of girl's competence higher than boys. Although there was no direct relation between mother's depressive tendency and children's competence, indirect relation was implied, as it correlated with mother's global self-worth.

PP 136

DEVELOPMENTAL CHANGES AND CORRELATES OF PROSOCIAL BEHAVIOR AMONG PRESCHOOL YEARS: A JAPANESE LONGTITUDINAL STUDY 1

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The present study was designed to investigate the longitudinal changes in prosocial behavior among preschool years and the parent and peer correlates of prosocial behavior. A total of 331 families who have preschool children (boys = 169, girls = 162) participated in an ongoing longitudinal study project of Environmental Effects on Relationships and Self (PEERS) in Japan. Mothers (mean age 35.0 years when their children are at age 3) completed the prosocial subscale of the Strength and Difficulties Questionnaire for their children at three time points (37.3 [Time 1], 53.3 [Time 2], and 66.2 [Time 3] months in average), and they also completed the scale of parental warmth and punitive attitude to their children and children's frequency (time per week) of play with peers at Time 1.

A latent growth curve analysis showed that the model fit the data well [x^2 (8)=9.05, p=.34, CFI=.996, RMSEA=0.20] and the intercept and slope coefficients were significantly different from zero. The positive coefficient for the linear slope indicated that the average level of prosocial behavior gradually increased from Time 1 to Time 3. In addition, the variance components for the intercept and slope were significant, indicating that the variability in prosocial behavior at Time 1 and the rate of change may be mediated by individual differences. Female gender, higher level of parental warmth, and higher frequency of children's peer play were positive predictors of the intercept of children's prosocial behavior. On the other hand, parental punitive attitude per se was a negative predictor of the slope of children's prosocial behavior. These results suggest that positive relationships with the mother and peers in early preschool years facilitate the development of the children's prosocial behavior, but on the contrary parental punitive attitude at age 3 gradually diminishes their sociability.

PP 137

ARE HELPFUL PEOPLE HAPPIER, OR HAPPY PEOPLE MORE HELPFUL? A CROSS-LAGGED STUDY BETWEEN PROSOCIAL BEHAVIORS AND SUBJECTIVE WELL-BEING IN CHINESE ADOLESCENTS

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Both prosociality and subjective well-being (SWB) are not only the important indicators of positive youth development, but also significant to the society's harmonious future. An enormous amount of research has been devoted to investigating the one-way relationship of adolescents' prosociality and SWB. For one, happy people are more likely to engage in prosocial behaviors. What's more, the idea of prosociality as an important condition of well-being has been explored deeply, even the reason of that link (i.e., the autonomy support, the role of belief in reciprocity). Thus, an increasing number of studies described the associations between SWB and prosociality as a virtuous circle; happy people engage more in prosocial behaviors, and doing good deeds enhances their well-being, which has been supported by some experimental researches among college students or adults in lab. However, the stability of this association is under-researched, including that whether it exists when surveying across a long time in a natural context, and whether it exists in Chinese adolescents of different demographic backgrounds, such as gender, rural-to-urban migrant children and especially, the children's different academic levels, a special label for Chinese students.

To address this issue, this study aimed to examine how the bilateral association between prosociality and SWB presenting among Chinese adolescents of different demographic backgrounds.

Three-wave longitudinal panel data were collected from 1724 students (M_{age} T1= 12.35, SD=0.52; 49.8% girls; 17.7% migrant; 418 students in the high academic status group according to the 27% standard) from 13 junior high schools and their parents in Beijing. The Prosocial Behaviors Scale and the Subjective Well-being Scale were finished by themselves, and the academic status was evaluated by their parents in T3.

Results from cross-lagged analysis indicated that: (1)SEM analyses generally favored the bilateral link between prosociality and subjective well-being. (2)The differences on the multiple group analyses lied on the path from prosociality to SWB later. For boys, prosociality at Grade 8 did not predict the SWB at Grade 9. Similarly, for the low academic status students, the inconsistent path was as same as the previous one. Finally, for migrant children, prosocialilty did not predict SWB in the subsequent year.

These results suggested that the bilateral link between prosociality and SWB is generally stable in Chinese adolescents on a span of one year, except for the prediction of prosociality to SWB in the subsequent years, which reminds us we should pay more attention to inhibit the negative factors to reduce adolescents' well-being in order to facilitate the virtuous circle between prosocial behaviors and the subjective well-being.

PP 138

UNDERSTANDING THE PERSONALITY PROFILE OF ENVIRONMENTAL SENSITIVITY USING THE FFM OF PERSONALITY: A CLOSER LOOK AT PERSONALITY FACETS ACROSS DOMAINS

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The current paper presents a detailed examination of which FFM personality facets are specifically relevant for the assessment of the environmental sensitivity phenotype. Associations between sensory processing sensitivity aspects (as measured by the High Sensitive Personality scale and High Sensitive Child scale) and the FFM personality domains and facets were examined in a community sample of children (Study 1), as well as late adolescents and young adults (Study 2).We hypothesized that environmental sensitivity would be related to a number of FFM facets across domains and that especially facets of the Neuroticism, Introversion and Openness domains would emerge as relevant. It was also hypothesized that different aspects of environmental sensitivity (Ease of Excitation, EOE, Low Sensory Threshold, LST, Aesthetic Sensitivity, AES) would be differently related to the FFM facets.

Study 1 included a community sample of 461 individuals aged 9-15 (57 % female). Study 2 included a community sample of 426 individuals aged 16-26 years (63% female). Sensory processing sensitivity was assessed using the 12-item version of the Highly Sensitive Person scale and the 12 item Highly Sensitive Child scale; FFM personality traits were assessed using the 240 item NEO-PI-3 and 144 item HiPIC.

Across the two studies and instruments of high sensitivity and FFM of personality, preliminary results suggest that several facets within the domains of Neuroticism, Extraversion and Openness are relevant to environmental sensitivity. Agreeableness and Conscientiousness show a weaker relevance to environmental sensitivity. Furthermore, it has been shown that the pattern of associations is different for the three aspects of environmental sensitivity.

The two studies strongly indicate the possibility of assessing the environmental sensitivity phenotype with the FFM.

PP 139

TEMPERAMENT AND SLEEP/WAKE PATTERNS IN INFANTS

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Background and aims: The phenomenon of a lack of increase in nocturnal sleep in the first 6 months of life was shown in our previous study (Nakagawa & Sukigara, 2016) not to be a sign of problematic infant development. Rather, nocturnal awaking may give infants opportunities for self-soothing. Data also indicate that the nocturnal sleep of breast-fed infants shows significantly higher sleep efficiency compared to that of supplement-fed infants. The present study is part of a longitudinal study whose purpose is to confirm these preliminary results.

Method: During the first 5 days of their 3rd and 4th months, the sleep characteristics of 30 full-term infants (18 boys, 12 girls) were recorded with a Motionlogger Sleep Watch (AMI) applied to the infant's ankle. Temperament was assessed by having mothers complete the Infant Behavior Questionnaire Revised (IBQ-R) at 4 and 12 months. Mothers also reported infant feeding type.

Results: Sleep/wake data were divided into two 12-hour blocks: daytime (08:00-20:00), and nighttime (20:00-08:00). Nocturnal and diurnal sleep duration (%) did not change with age or feeding type. The longest sleep duration (min.) of breast-fed infants (N=17) was significantly shorter than that of supplement-fed infants (N=13) (F(1,27)=4.37, p<.05, η_p^2 =.13). Regarding the relationship between sleep patterns and temperament, the higher the falling reactivity score, the higher the percentage of diurnal sleep at 4 months (r=.48, p<.01). Moreover, the longest diurnal sleep duration was significantly positively correlated with scores for perceptual sensitivity at 4 months (r=.44, p<.05).

Conclusion: Overall, our data on early infancy did not support the view that increased sleep correlates with rhythmic maturational and regulatory aspects of behavior. As the first alerting system emerges at birth and is involved in the state of wakefulness and arousal in infants, further studies should contribute to our understanding of attention and temperament.

PP 140

TRAJECTORY OF GLOBAL SELF-WORTH DURING EARLY ADOLESCENCE: A GROUP-BACED TRAJECTORY MODELING

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Are there any changes in global self-worth during early adolescence? Are there some patterns of change in global self-worth? The purpose of this study was to examine the trajectories of global self-worth during early adolescence, by using group-based trajectory modeling.

Global self-worth was the degree to which the adolescent likes oneself as a person and is happy with oneself. Responses ranged from 1 to 6, with higher scores indicating more positive self-evaluations.

The questionnaire was administered at five different times, repeatedly. Time1 was in September 2002, when the participants were in the second term of the seventh grade. Time2 was conducted in May 2003, during the first term of eighth grade. Time3 was in September 2003, during the second term of eighth grade. Time4 was in May 2004, when the participants were completing the first term in ninth grade. Time5 was administered in October 2004, during the second term in ninth grade. The analyses reported here are based on 321 junior high school students. They answered the questionnaire at all five times.

A five-group solution was identified as optimally fitting the data, representing patterns of change in global self-worth. The first group (13.3%) had low global self-worth at Time1, and further declined in. In the second group (21.8%), global self-worth was the middle level at Time1, and declined. The third group (19.3%) had high global self-worth at Time1, and further declined. The forth group (37.2%) had low global self-worth at Time1, and slightly declined. In the fifth group (8.4%), global self-worth was high at Time1, and there was no change.

It was suggested that many junior high school students declined in global self-worth, and there were few junior high school students who kept high global self-worth during early adolescence.

PP 141

GREEK ADOLESCENTS' SEX ROLE IDENTITY

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Many different theoretical frameworks have been proposed for the study of sex role identity during adolescence. At first, theorists have proposed that boys should develop a "male" sex role identity and girls should develop a "female" sex role identity, in order to be psychosocially adapted. Later on a "two-dimensional" theoretical model was proposed. According to this, masculinity and femininity are viewed as independent variables and it is suggested that a combination of both, "androgyny", could describe major behavioral changes in different cultures. It was also suggested that sex role identity is linked with different patterns of behavior during different developmental stages in a person's life and especially during adolescence. Moreover, a great deal of cross-cultural research has been conducted.

In this study 462 participants, Greek adolescents aged 13-19 years, filled in the Hellenic version of BSRI (Bem Sex Role Inventory). The BSRI treats masculinity and femininity as independent variables and, in this way, a person can either have high score on both variables (androgynous sex role identity), or low score on both variables (undifferentiated), or high score on femininity and or low score on masculinity (feminine) or high score on masculinity and or low score on femininity (masculine). It was found that a great percentage of boys (44.4%) was classified into the masculine sex role identity group, while a great percentage of girls (41.3%) was classified into the feminine sex role identity group. On the other hand, 21.3% of the boys and 23.9% of the girls were classified into the androgynous sex role identity group and 18.5% of the boys and 21.1% of the girls were classified into the undifferentiated sex role identity group. There is a statistically significant difference between the percentages of the two genders. Statistically significant differences between the means of boys and girls on masculinity and femininity were found, but neither statistically significant differences nor statistically significant interactions occurred concerning other variables, such as: birth order, socio-economic status, and number of children in the family.

There is a general skepticism concerning measures of sex roles and related concepts, because of the lack of a theoretical framework.

Saturday, August 31st, 2019

Poster Presentations

Session 3

Olympia Foyer 11:00 – 11:30

PP 142

HOMOPHOBIC BULLYING AND MENTAL HEALTH IN ADOLESCENCE: HOW DIFFERENT METHODOLOGICAL DECISIONS LEAD TO DIFFERENT RESULTS

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Adolescence is characterized by heightened peer regulation regarding gender and sexuality and by the possible emergence of mental health problems. Therefore, studying the interplay of mental health and homophobic bullying in non-heterosexual youth is crucial. This study investigates how two methodological decisions can affect the results in such studies. The first decision concerns whether youth are assigned to different sexualities based on their desire or on their behavior. The second concerns who is compared with whom. For instance, a researcher may decide to compare heterosexual with non-heterosexual youth or homosexual with non-homosexual youth, following the heteronormativity or the homophobia hypotheses, respectively. L;

Participants were 757 Greek students (54,3% female; mean age=16,0, SD=0,8) who filled the Homophobic Content Agent Target scale, the University of Illinois Aggression Scale, the Psychological Sense of School Membership, the Beck Hopelessness Scale, the Rosenberg Self-Esteem Scale, the Revised UCLA Loneliness Scale and the WHO-Five Well-Being Index. One-sided comparisons were conducted with the non-parametric criterion Mann-Whitney U.

Some comparisons yielded the same results irrespective of the methodological decisions made. For instance, irrespective of the sexuality criterion, in depression, heterosexual youth scored lower than non-heterosexual youth, and homosexual youth scored higher than non-homosexual youth. In some comparisons, the results depended on the first decision. For instance, homosexual youth scored higher than heterosexual youth in bullying when judging sexuality based on sexual behavior but not on sexual desire. Finally, in some comparisons, the results depended on the second decision. For instance, differences in self-esteem emerged when heterosexual youth were compared with non-heterosexual youth, but not when homosexual youth were compared with non-homosexual youth.

In conclusion, the decisions on when one is named hetero- or homosexual and on how to group youth with reference to their sexuality have important implications for the research on homophobic bullying and mental health.

PP 143
TEACHERS CONSIDER ETHNICITY AND GENDER WHEN EVALUATING PEER EXCLUSION AND DECIDING WHETHER OR NOT TO INTERVENE

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Much research has been shown to indicate that intergroup exclusion (exclusion based on gender, ethnicity, nationality) occurs among adolescents with negative outcomes. Very little is known, how about whether teachers view it as their role to intervene when they witness intergroup exclusion in the classroom. This study filled this gap by surveying a sample of teachers regarding intergroup exclusion (gender, Czech or Arab target). We hypothesized that teachers would evaluate same-ethnicity or same gender exclusion differently from intergroup exclusion. We predicted that teachers: (1) would judge the exclusion as more harmful and more disruptive to the group than same-group exclusion, and (2) would be more willing to intervene.

Participants were 740 teachers (77% female; M_{age}: 45 years) from elementary and secondary schools in the Czech Republic. Using a between-subject design, teachers evaluated a hypothetical incident of peer exclusion with varying gender of the excluders, gender of the target, and ethnicity of the target (Czech vs. Arab).

ANOVAs confirmed our hypotheses about exclusion and showed unexpected results for intervention. Teachers viewed peer intergroup exclusion as more harmful in terms of disrupting fair treatment of others than same-group exclusion ($p = 0.001$). Teachers also judged exclusion of a girl as more harmful than exclusion of a boy in terms of disrupting academic motivation ($p = 0.04$). When asked how probable it was that they would intervene they did not differentiate between intergroup and same-group exclusion ($p > .05$). Teachers showed higher willingness to intervene in intergroup exclusion based on ethnicity in a single specific context, namely, when boys excluded a boy ($p = 0.04$).

The novel results are that while teachers viewed intergroup peer exclusion as more wrong than same-group / same-gender exclusion, they are not fully ready to intervene more in intergroup than same-group situations. The implications for teacher education are discussed.

PP 144
CHARACTERISTICS OF TEACHERS RELATED TO THE PERCEPTION OF THE FOREIGN PUPIL INTEGRATION PROCESS[1]

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The authors aimed to investigate the relationship between ethic prejudice and perceptions about inclusion of immigrant students among primary and middle school teachers, focusing on the role of resilience. Participants were 261 teachers, 233 women and 28 men, ages 34 to 66 ($M = 51.67$; $SD = 8.27$). Participants completed the Classical and Modern Racial Prejudice Scale, the Resilience Process Questionnaire, and an ad hoc questionnaire for evaluating teachers' perceptions about inclusion of immigrant students. The results showed a total effect of ethnic prejudice on perceptions about inclusion of immigrant students and an effect of resilient reintegration on perceptions about inclusion of immigrant students. Age of participants was related to ethnic prejudice. The mediation model showed that resilient reintegration mediated the relationship between ethnic prejudice and perceptions about inclusion of immigrant students. Educational and practical implications are provided.

PP 145

AN ANALYSIS OF SOCIOECONOMIC INEQUALITIES IN ADOLESCENTS TOBACCO USE BY SEX, AGE, AND TIME

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Research about inequalities in adolescent tobacco use often shows contradictory results. Evidence demonstrates that findings differ depending on the socioeconomic indicator employed. Moreover, different patterns of inequalities are also found according to sex, developmental stage and over time. The aim of this study was to examine the relationship of socioeconomic indicators and adolescent tobacco use, attending to their differential impact through sex, age, and time.

Data comes from a sample of 40,089 adolescents (11-16 years old) who participated in the HBSC study in Spain in 2006, 2010, and 2014. Multiple logistic regression models were used to explore the impact of parental unemployment, family affluence, and the perception of family wealth on adolescent tobacco use, analyzing their interaction effects and their impact on different levels of stratification by sex, age, and survey year.

Interaction analysis revealed different patterns of inequalities according to age: having a mother out of the labor market showed a protective effect on smoking only for 15-16 years old adolescents, whereas perceiving their families as normal or rich had a protective effect only for the 11-12 and 13-14 years old adolescents. In addition, inequalities showed to vary over time: having a father's out of the labor market did not influence adolescent smoking in 2006 but was a risk factor in 2010 and 2014. Moreover, whereas in 2006 adolescents with high family affluence showed a lower probability of smoking, family affluence did not show significant effects in 2010 and 2014.

No sex differences were found in the effect of different socioeconomic factors on adolescents smoking, but different patterns were found according to age and time. Interventions aimed at reducing inequalities in adolescents' tobacco use should contain specific components depending on the adolescents age and take into account the dynamic interaction between socioeconomic factors and tobacco use over time.

PP 146

LGB MICROAGGRESSIONS AND OVERALL COMFORT WITH UNIVERSITY CLIMATE: PRELIMINARY DATA FROM AN ITALIAN HIGHER EDUCATION CONTEXT

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Background and aims. Higher education contexts (HEIs) are generally hostile environments for homosexual students due to homophobia and heterosexism. Discriminations against lesbian, gay and bisexual (LGB) people within US universities have received considerable attention in the literature of the last two decades (Rankin, 2010). Still scarce is research at European level. The aim of this study was to investigate the association between environmental microaggressions (i.e., subtle forms of discriminations) targeting LGB students and the overall perception of comfort with university climate in a sample of Italian heterosexual and homosexual students.

Methods. Participants were 471 students from a large university of Southern Italy (65% Females, Mage = 22.95, SD = 4.57), enrolled at both humanistic (56%) and scientific (44%) academic programs. Students completed a web-based survey in 2018. Students who identified as LGB were 42 (9%). The frequency of homonegative microaggressions within the university was collected through the LGB Environmental Microaggression Scale (Woodford et al., 2015). Also, participants were asked to indicate their overall comfort with university climate on a scale ranging from 1 to 5, with higher values indicating high comfort.

Results. T-test for independent samples revealed no significant differences between heterosexual and LGB students in levels of comfort with campus climate and reports of homonegative microaggression in the university context (ps > .001). The regression analysis showed that microaggressions negatively predicted students' perceptions of comfort in both samples, with a stronger impact in LGB students (unstandardized interaction coefficient = -.39, p < .05; simple slope analysis: bs = -.53 and -.14, p < .05 for LGB and heterosexual group, respectively).

Conclusions. Students' perceptions of comfort within the university are all impacted by a climate of homonegativity. HEIs should prioritise inclusive policies and practices, based on respect and valorisation of differences and promoting social cohesion, educational inclusion and active citizenship.

PP 147

BEYOND THE DIFFERENCES: ANALYSIS OF THE PHYSICAL AND PSYCHOLOGICAL HEALTH OF SPANISH ADOLESCENTS ACCORDING TO THEIR GENDER IDENTITY

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Gender identity refers to the individual's identification with sociocultural expectations associated with gender. In most instances, this identity is congruent with the sex assigned at birth (cisgender). However, there are people who have a gender identity that is not fully aligned with their sex (transgender and gender nonconforming people, TGNC). Overall, researches suggest that TGNC people report worse psychological health than cisgender people, such as higher levels of depressive symptoms or suicide attempts. So, TGNC people seem to be at risk, particularly the adolescents, who must cope specifically tasks of their lifespan and the possible victimization due to their gender identity. Thus, studying the characteristics of these groups is necessary to satisfy appropriately their needs. The aim of this study was to analyze possible differences in global health according to the gender identity of Spanish adolescents.

17641 adolescents between the ages of 15 and 18 ($M = 16.23$; $SD = 1.09$) participated in the 2018 edition of the survey 'Health Behaviour in School-aged Children' in Spain. Instruments employed were two questions about biological sex and gender roles to obtain gender identity and four measures of health: life satisfaction, self-rated health, health-related quality of life and psychosomatic complaints. After controlling age effects, Kruskal-Wallis tests and Eta-Squared were used to compare medians and to estimate the effect size of the possible differences.

The prevalence of TGNC adolescents was 2.2% ($n = 389$). Although comparisons between cisgender and TGNC groups showed significant differences in the measures of health ($p < .001$), the effect size was negligible in all cases ($\eta^2 < .02$).

These results, contrary to what was expected in the literature, invite us to rethink methods to understand gender identities diversity and their health disparities and similarities related, as well as to comprehend the factors that promote positive youth development.

PP 148

ADAPTIVE BEHAVIOR: SOCIOCULTURAL CONDITIONS OF A FAMILY AND IT'S RELEVANCE TO PARENTAL ASSESSMENT OF CHILD'S ADAPTIVE BEHAVIOR

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Adaptive behavior is defined as social, conceptual and practical abilities that enable to handle demands of daily life. Internationally there are several instruments available to assess child's adaptive behavior, however, no psychometrically sound norm-referenced instruments in Czech Republic. In our project we develop adaptive behavior rating scale that would 1) reflect life in Czech Republic, 2) apply to assessment of ID and 3) provide data for qualitative analysis of child's special needs. Rating scale will evaluate adaptive behavior of children from 5 to 15 years in both family (parental form) and educational (teacher form) context.

The rating scale is aimed to be culturally fair towards largest minority group in Czech Republic, the Roma. Pilot studies are conducted on both majority sample and Roma control group to assess the DIF. Along with cultural fairness we evaluate impact of sociocultural conditions on adaptive behavior assessment. Construct is measured by self-reported parental scale (20 items), based on the Project of Early Care of Children from Culturally Disadvantaging Surroundings in the Field of Education (Ministry of Education Youth and Sports, 2005). We observed 3 main factors of sociocultural conditions - 1) socioeconomical status, 2) social and cultural capital and 3) consequences of family differences.

Based on analysis of 395 responses we described 4 groups zero to high sociocultural disadvantage. Controlled for nationality, age, parent education, special educational needs and sex we found negative relation between reported adaptive behavior and reported sociocultural disadvantage ($\omega^2 = 0,027$), membership in the lowest group predicted lower adaptive behavior ($\beta = -0.21$). Relation was stronger in self-regulation and social adaptation items ($\omega^2 = 0.035$, $\omega^2 = 0.034$, respectively) compared to practical and academical items ($\omega^2 = 0.07$, $\omega^2 = 0.05$, respectively). We found significant interaction with age, lower social disadvantage in younger children predicted lower parentally reported adaptive behavior.

PP 150
THE LIMITS OF FATHERING: UNDER THE SWAY OF MATERNAL GATEKEEPING

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The fact that mothers started to take a more active role in business life, started to change the traditional understanding of parenting, and the father-child relationship and its effects became more important. In this context, the concept of maternal gatekeeping, which has become more important, refers to the mother's supervision of the father's attempts to be included in the domestic life and the child's life. There are eight subtypes of maternal gatekeeping and it is examined in three dimensions: encouragement, discouragement, control. The current study aims to investigate the relationship between maternal gatekeping perceived by fathers and father involvement.

For this purpose, Turkish adaptation of the Maternal Gatekeeping Scale-Father Form and the validity and reliability analysis of the scale was completed. The sample of the study consisted of 300 fathers of 3-7 years old children. The participants completed the Demographic Information Form, Father Involvement Scale and Maternal Gatekeeping Scale-Father Form.

According to the descriptive statistics, the most commonly perceived gatekeeping type by fathers is the traditional gateblocker in which the level of the encouragement is low; the least perceived gatekeeping is apathetic gatemanager in which, encouragement and discouragement are low and the control is high. Partners of mothers with low levels of education often perceive discouragement and control; the negative perceptions of gatekeeping perceived by fathers are reduced as the duration of marriage and the age of the child increase. Fathers often find encouragement in the care of children in families with more than one child. ANOVA analysis showed that, the father who perceived facilitative gatekeeping showed the highest level of father involvement.

Research results are important to show the effect of maternal behaviors on the fatherhood role and they are discussed within the framework of father vulnerability hypothesis.

PP 151
ASSESSING CAREGIVERS'(DIS)AGREEMENT IN THE EVALUATION OF CHILDREN'S CONDUCT PROBLEMS AND EMOTIONAL SYMPTOMS

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Background and aim. Previous research showed that informants observing their children in the same context (e.g. mothers and fathers) reported higher level of agreement in evaluating their children compared to those reporting from different contexts (parents versus teachers; De Los Reyes, 2015). Following this line of research, we first evaluated the level of (dis)agreement between mothers and fathers when rating two important indicators of their children's psychological health such as conduct problem (CP) and emotional symptoms (ES). Second, as previous studies indicated that high negative parents' emotionality was associated with the evaluation of their children's psychological functioning (Clark et al., 2017), we also explored whether the informant (dis)agreement was linked to the level of distress and neuroticism experienced by both parents.

Method. Ninety-seven heterosexual couples (mothers M_{age}=36.64 SD=6.28; fathers M_{age}=39.08 SD=7.54) reported on their child's (Girls= 50,5%, M_{age}=7.85, SD=3.70) CP (Cronbach's α, =.744, 730 respectively for mothers and fathers) and ES (α=.799,.839) using the Strengths and Difficulties Questionnaire (Goodman, 1997). Fathers and mothers reported their personal distress (α=.83,.79, respectively) using the Interpersonal Reactivity Index (Davis, 1980) and neuroticism (α=.633,.642, respectively) with the Mini-IPIP scale (Donnellan et al., 2006).

Results. After establishing cross-informant scalar measurement invariance, Latent Difference Score analysis indicated no latent mean-level difference (*mother - father*) between mothers and fathers' ratings on their children's CP and ES (Δs= -.139 and -.062, ps>.09, respectively). The effects of parents' neuroticism and personal distress on CP and ES were all not significant (ps >.108).

Conclusion. Fathers and mothers showed a high agreement in rating their children's CP and ES, thereby suggesting the possible interchangeability of these two informants in developmental research. Although parents' neuroticism and personal distress were not significant predictors, future research should investigate whether other informants' characteristics could affect the level of agreement when rating children's CP and ES.

PP 152
DO PARENTS DIFFER IN THE EVALUATION OF THEIR CHILDREN'S SYMPATHY AND PROSOCIAL BEHAVIOR?

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Background and aims: Previous work found significant differences between mothers and teachers in the evaluation of children's social-emotional development (Zuffianò et al., 2018). In this study, we evaluated whether mothers and fathers, two informants who share the same context of observation, converged in rating their children's sympathy (Zhou et al., 2003) and prosocial behavior (PB; Goodman, 2006). We also explored whether possible discrepancies could be related to parents' perception of the quality of communication at home (Olson & Barnes, 2004) and their levels of positivity (Caprara et al., 2012).

Method: Ninety-seven heterosexual couples (mothers M_{age} =36.64, SD= 6.28; fathers M_{age}=39.08, SD= 7.54) reported on their children's sympathy and prosocial behaviour (50.5% girls, M_{age} = 7.85, SD=3.70).

Results: After establishing scalar measurement invariance between the two informants, Latent Different Score (LDS) analysis indicated no latent-mean level difference (mother - father) between parents' evaluations of sympathy (Δ=.108, *p*=.252) and PB (Δ=.100, *p*=.070). Yet, the variance of Δf was statistically different (s^2=.641, and .165, *p* <.01 for sympathy and PB), highlighting that some children were perceived as more different than others. A conditional LDS showed a significant interaction effect of parents' perceived quality of communication at home (b=-.616, *p*= .048): when both mothers and fathers perceived a high quality of communication at home they showed a higher level of agreement when rating their children's sympathy. Finally, higher levels of mother's positivity were associated with higher parental discrepancies in the evaluation of children's PB.

Conclusions: Although, on average, fathers and mothers agreed in rating their children's sympathy and PB, mothers' positivity predicted higher evaluation of children's' PB compared to their fathers, thereby indicating a potential positive bias. Interestingly, a family environment characterized by high quality of communication seemed to help the two parents converge in the evaluation of their children's emotional development.

PP 153
HOW WE REMEMBER OUR PARENTS AFFECTS HOW WE RELATE TO OUR PARTNERS: SIMILARITY BETWEEN PARTNERS BUT DIFFERENCES AMONG COUPLES?

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Assortative mating describes how individuals with similar characteristics mate each other and how the degree of similarity affects the course of mating. Attachment styles refer to the internal working models that guide how individuals relate to each other and are based on how individuals recollect their parents' behaviours during their childhood. The literature suggests that attachment styles matter in assortative mating. This study investigates a) whether romantic partners recollect similar parental behaviours and b) whether the degrees of similarity in recollected parental behaviours differ between couples with different levels of relational commitment.

Participants were the partners of 142 heterosexual couples (mean age=33,7, SD=4,4 for men, and mean age=31,9, SD=4,5 for women). Partners in 50,7% of the couples were in long-term relationships; the rest were married. Partners in 35,2% of the couples had at least one child. The participants filled a demographic form and the Parental Bonding Inventory, a 40-item questionnaire that measures recollected overprotection and recollected control per parent.

Whether romantic partners recollect similar parental behaviours was tested with the Pearson r. Statistically significant correlations were found in maternal care and overprotection and in paternal overprotection, but not in paternal care. The degree of similarity was operationalized per scale as the absolute difference between the scores of the two partners. The t-test for independent samples was used to test whether the degree of similarity in recollected parental behaviours differ between couples with different levels of relational commitment. No statistically significant differences were found.

This study replicated findings from the assortative mating literature on the existence of similarities in recollected parental behaviours but failed to provide support to the idea that the degree of similarity differs per level of relational commitment.

PP 154
PREDICTORS OF CHANGE IN MATERNAL AND PATERNAL PARTNER RELATIONSHIP SATISFACTION DURING THE TRANSITION TO PARENTHOOD IN THREE COUNTRIES

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It is important to study the trajectory of partner relationship satisfaction in parent couples, because of its role in parental well-being and the parent-child relationship (e.g. Beach, Katz, Kim & Brody, 2003; Erel & Burman, 1995). Previous studies found a decrease in partner relationship satisfaction during the transition to parenthood (Mitnick, Heyman, & Smith Slep, 2009). The goal of this study is to examine parent (mental health problems), contextual (socioeconomic status), and child (sleep) characteristics as predictors of the trajectory of partner relationship satisfaction in first time parents from the third trimester of pregnancy (36W) until four months postpartum (4M).

This study is part of the larger international longitudinal study '*New Fathers and Mothers Study*' examining relations between risk factors (e.g., parental stress) and child (cognitive) development from pregnancy to 24 months post-birth. The sample consisted of 355 families (UK $n = 172$, NL $n = 97$, US $n = 86$). Partner relationship satisfaction (36W and 4M), parental mental health problems (36W and 4M), family socioeconomic status (36W), and infant sleep (4M) were measured with questionnaires.

Overall, mothers were more satisfied with their relationship than fathers, $F(1, 346) = 5.75$, $p = .017$, $\eta_p^2 = .02$. There was a decrease in relationship satisfaction from 36W to 4M for both fathers and mothers, $F(1, 346) = 147.60$, $p < .001$, $\eta_p^2 = .30$. The decrease in partner relationship satisfaction was stronger for parents who scored high on 4M mental health problems. There were no significant interaction effects between time and 36W maternal or paternal mental health problems, family SES, infant sleep, parent gender, or country.

These results show the robustness of the decrease in partner relationship satisfaction during the transition to parenthood and the role parental mental health problems play in this decrease.

PP 155
CAREER GOAL SETTING AND PURSUIT IN YOUNG ADULTS: WHAT IS THE INFLUENCE OF SES?

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Background and Aims: Socio-economic status (SES) is one of the most influential contextual variables for young people; yet we know little about how SES affects the career development and identity of young people. Informed by goal-setting/self-regulatory theories, we tested the mediating role of career-related effort (i.e., goal striving) in the relationships between career-related indecision (i.e., lack of goal clarity) and career-related stress (i.e., affect) and perceived employability (i.e., career-related attitude), and examined the effect of subjective SES as a moderator in these direct and indirect relationships.

Method: The study was survey-based, cross-sectional, and used latent variable analyses. The sample contained 202 young adults (mean age 19.8 years, 81.7% female).

Results: We found indecision to be related to effort, stress, and perceived employability, and effort mediated between indecision and stress, and indecision and perceived employability. Explained variance (R2) was .31 (career-related effort), .72 (career-related stress), and .39 (perceived employability). The standardised indirect effects of indecision on stress was .09, and on perceived employability, was -.24. Additionally, SES influenced these relationships. Lower SES young adults exerted less effort and had lower perceived employability, compared to those with higher SES; whereas higher SES young people experienced more stress with career indecision.

Conclusions: The study contributed by testing a mechanism for how career indecision relates to other career variables, and by showing how subjective SES affects this underlying mechanism.

PP 156
CAREGIVING PATTERNS IN ADULT INTIMATE RELATIONSHIPS AS PREDICTORS OF COHESION AND COMMUNICATION IN COUPLES WITH CHILDREN DIAGNOSED WITH AN AUTISM SPECTRUM DISORDER

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Background and aims: Parental couples are greatly impacted when a child is diagnosed with an autism spectrum disorder (ASD). Parents of children with ASD experience lower functioning of the family as a whole, lower family adaptability and cohesion, and a lack of warmth and connection. However, a partner's ability and willingness to respond sensitively and responsively to a relationship partner are major determinants of relationship quality, stability, and satisfaction. The aim of this study is to examine perceptions of caregiving patterns (proximity and sensitivity) in adult intimate relationships and family functioning (cohesion and communication) of fathers with children diagnosed with an ASD.

Methods: Two hundred (200) fathers of children with ASD between 4 and 7 years of age completed the Caregiving Questionnaire to assess proximity and sensitivity as caregiving patterns and the FACES IV to assess cohesion and communication in the family system.

Results: The project is currently in the stage of data entry. It is expected that higher levels of proximity and sensitivity caregiving (and lower levels of controlling and compulsive caregiving) provided by the father to his partner will be associated with high levels of cohesion and communication in the marital couple.

Conclusions: Findings will be discussed with reference to Family Systems Theory and Attachment Theory.

PP 157
AN INVESTIGATION OF PSYCHOMETRIC PROPERTIES OF THE REVISED FAMILY COMMUNICATION PATTERN (RFCP) SCALE

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Although in the research of pro-environmental behavior there is some evidence that children and adolescent can be important source of positive influence on their parents' engagement in environment friendly behavior (Ballantyne, Fien, & Packer, 2000), little is known in this field. Thus, it is important to analyze psychological mechanisms of child to parent influence in pro-environmental behavior. Considering aspects of family communication as significant, theoretical construct of Family Communication Pattern (FCP) (McLeod et al., 1972) was analyzed. Research shows that FCP can be related to many individual outcomes including consumption and shopping behaviors (Schrodt, Witt & Messersmith, 2008) which is relevant to environment friendly behavior research. To find out if FCP could be employed to explain child to parent influence in pro - environmental behavior informative and reliable measures are crucial. As not much is known about effectiveness of Revised Family Communication Pattern (RFCP) scale (Ritchie & Fitzpatrick, 1990) in research of pro-environmental behavior, aim of this study is to explore psychometric properties and use possibilities of the scale in sample of adolescents.

Data for this study is taken from the ongoing longitudinal intervention study GOGREEN. Adolescents sample was drawn from intervention piloting stage: N = 450 (52% girls), age of adolescents from 14 to 17 (M=15.24, SD=0.64).

Results confirmed two factor structure of RFCP (model fit: χ^2 (274) = 470.01, χ^2/df = 1.72, CFI = .931, RMSEA = .043 [.037-.05]), so constructs of conversation and conformity orientation were confirmed. Cluster analysis revealed that based on different levels of mentioned communication orientation four types of families can be distinguished. Further analysis showed that these families are different in all investigated environment friendly behaviors.

Findings highlight that RFCP scale could be used in research of pro-environmental behavior and child to parent influence in particular, so further research is needed.

PP 158

THE REPLICABILITY OF NURSE HOME VISITATION PROGRAM ACROSS COUNTRIES: A REVIEW OF EFFECTIVENESS

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The effectiveness of home visiting interventions has been demonstrated in relation to reducing the risk of child maltreatment, improving the quality of parenting and of mother-child relationship, and improving the socio-economic status of single mothers (Olds et al 1997; Sweet & Appelbaum, 2004). Moderators of effectiveness are the frequency of the visits, the level of experience and training of the professionals, and the level of risk of the targeted families (Olds & Kitzman, 1993). The American model "*Nurse Home Visitation Program*" (Olds et al 1998) showed strong evidence of effectiveness in the US country. Although the program is one the most used in the world, very few studies evaluated the effetiveness of the model in other countries. The current review is aimed to compare the results of US studies reporting data on Olds'effectivenss with other countries' studies.

A systematic review has been conducted using three main databases: PsycInfo, PubMed and Web of Science. The keywords used were "*Family Home Visiting*" AND "*Program*". We included articles, meta-analyses and systematic reviews.

24 studies were carried out on the Olds effectiveness in US and 3 studies replicated this model in England, Australia and Germany. Studies conducted in US showed that the intervention was effective in reducing child maltreatment, improving the quality of life of mothers, improving the quality of parenting, improving intellectual functioning and reducing behavioral problems of children (Olds et al., 1998; Olds et al., 2004). The studies conducted in England and Australia reported small effects (Robling et al., 2015; Segal et al., 2018). The German study showed small, but significant, positive treatment effects on parental self-efficacy, and marginally significant effects on social support, and knowledges on child rearing (Sierau et al., 2015).

The discussion will be centered on the issue of transportability of and evidence-based model across cultures.

PP 159

GRANDPARENTING CHILDREN WITH AND WITHOUT SPECIAL EDUCATIONAL NEEDS

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There is a growing body of research on the role of grandparents (GPs) on their grandchildren's upbringing. However, less research evidence is available on their involvement with their special needs grandchildren.

The aim of this study is to explore and compare GPs' involvement in families with a typical developing (TDC), and with a special educational needs grandchild (SNC). More specifically, the study assessed: i) the extent and the kind of GPs' involvement, ii) the quality of their relationship and their emotional closeness, and iii) the factors that may affect their involvement (eg geographical distance, health condition).

The participants were: a) 104 GPs of TDC and, b) 53 GPs of SNC. GPs were administered a structured questionnaire. The results revealed that GPs are an important source of support both for their TDC and SNC. Care was their prime responsibility, followed by indoor and outdoors activities. Being an important link with the past, they follow the family traditions alike for their TDC and SNC, but they narrate events from the past more frequently with their TDC. Similarly, GPs offer their advice alike to their TDC and SNC, but it was mainly the TDC that trusted their problems to them. Almost all GPs described the relationship with their grandchild in a positive light, but GPs of TDC enjoyed a higher quality of relation and felt emotionally closer to them compared to SNC. The age of the GPs was in inverse relation with their involvement. Geographic distance had a role to play only for TDC, while GPs health affected their involvement with their SNC.

The findings suggest that GPs are an important source of support for their families. Attention should be paid to their needs in order to maximize the support they can provide to their families.

PP 160

RELATIONS BETWEEN FAMILY CONTEXT, EXPERIENCED TRAUMAS AND SUBSTANCE ABUSE IN ADULT PSYCHIATRIC PATIENTS

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Background and aims: Family context and childhood trauma are regarded as important factors leading to substance abuse (i.a. Khoury, Tang, Bradley, Cubells, & Ressler, 2010; Mandavia, Robinson, Bradley, Ressler, &Powers, 2016; McLaughlin, Campbell, & McColgan, 2016). Nonetheless, most of the studies apply to the population of adolescents in risk and only few of them concern adults abusing alcohol and drugs. The aim of the present study is to establish whether family factors and experienced traumas play significant role in the substance abuse of adult patients of the psychiatric department.

Methods: Quantitative research was conducted in the group of 82 patients. The scale 'Me and My Parents' from the Attachment Patterns Questionnaire (Adamczyk-Banach) was used to determine family context and relations with the main attachment figures. The scale is composed with three sub-scales 'Me and My Mother', 'Me and My Father' and 'Me and my Parents', all with good reliability (Cronbach's alpha from 0,74 to 0,93) and validity (correlations with 'Parental Bonding Inventory' Parker, Popiel, Pragłowska, 2006). Childhood and adolescent traumatic events were estimated with Crises and Traumas Inventory (Adamczyk-Banach).

Results: A multiple regression analysis was conducted to examine the predictors of substance abuse. Only one predictor showed statistical significance - the overall level of experienced traumas (ß = .24), which accounted for 14% of variance in substance abuse. Furthermore, correlation analysis revealed positive, weak interdependence between substance abuse and poor parental relationship (r = .23, p < .035), as well as family dysfunction (r = .26, p < .016).

Conclusions: According to the results of the present study, experienced traumas might play an important role in developing substance abuse. Family context is also not without significance, especially the factors connected with parents, e.g.: low relationship satisfaction, conflicts, violence and substance abuse. Such a family background might result in child's over-responsibility and lack of parental support. The obtained results suggest further research in this direction.

PP 161

RISK AND PROTECTIVE FACTORS FOR INFANTS BEDTIME RESISTANCE IN THE FIRST YEAR OF LIFE

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Infant's difficult temperament and parental mental health could interfere with children's sleep quality and regular bedtime routines (Sorondo et al., 2015; Teti & Crosby, 2012; Tikotzky, 2017). While mothers' role in sleep difficulties have been widely described in literature fathers' contribution is not so often taken into account. The current study aimed to explore in a group of infants from 8 to 12 months old, the relationships among child negative emotionality, parental bedtime caregiving (methods of falling asleep and constant bedtime routines), parental post-partum affective disorders and children's bedtime difficulties and to combine aforementioned variables into a predictive model of infants' bedtime difficulties perceived by both parents.

56 Italian intact two-parent families participated (33 boys) in this study. Parents completed Brief Infant Sleep Questionnaire (Sadeh, 2009), Italian Temperament Questionnaires (Axia, 2002), Perinatal Assessment of Paternal and Maternal Affectivity (Baldoni et al., 2016), an ad-hoc scale for parental bedtime involvement.

The main results evidenced that bedtime caregiving, parents' post-partum affective disorders and paternal involvement dimensions were significantly correlated with infants' bedtime difficulties. The main results from the two hierarchical regression models performed to evaluate the predictive roles of studied variables on children's bedtime difficulties showed respectively that method of falling asleep ($\beta = -.22$, $p < .05$) , constant bedtime routines ($\beta = -.47$, $p < .001$) and father's bedtime involvement ($\beta = -.25$, $p < .05$) were relevant predictors of children's bedtime difficulties perceived by mothers and method of falling asleep ($\beta = -.27$, $p < .05$) , paternal post-partum affective disorders ($\beta = .35$, $p < .05$) and fathers' bedtime involvement ($\beta = -.40$, $p < .05$) were crucial predictors of children's bedtime difficulties perceived by fathers.

Findings support that bedtime caregiving, parental post-partum affective disorders, and paternal role can play a meaningful role at bedtime.

PP 162

ASSESSMENT OF POST-DIVORCE CO-PARENTING: VALIDATION OF THE QUESTIONNAIRE SUPPORT RECEIVED FROM THE EX-PARTNER (CARE) IN CHILEAN PROGENITORS

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The number of divorces in Chile has been growing exponentially after the enactment of the divorce law in 2004. In 2012, the total number of divorces was 48.594, in 2013 it was 48.272, while in 2014 it was 47.253 (Civil registry and identification of Chile, 2015), not counting couples who do not legally divorce, but the cohabitation ends. When there are children, the divorce dissolves the marriage, but not the family, making the components of the former couple redefine their parental roles in a context full of intense and conflicting emotions characteristic of a divorce (Yárnoz-Yaben, 2008).

In Chile, there are few instruments aimed at measuring co-parenting. In order to provide a useful and brief tool to assess the perception of divorced progenitors about the help they receive from their former couple in the upbringing of children, the present study arises. The objective was to examine the factor structure, internal consistency and construct validity of the Questionnaire Support Received from the ex-partner (CARE, Yárnoz-Yaben, 2010), in a sample of Chilean progenitors.

The total sample was of 205 divorced progenitors with minor children, 36% men and 64% women, from different cities in Chile, whose average age was 37.82 years ($SD = 10.40$). The results of the confirmatory factor analysis (CFA) support the one-dimensional structure of the questionnaire. The internal consistency index was very adequate (Cronbach's α = .94). Regarding the construct validity, a statistically significant association was obtained ($r = .79$, $p < .01$). between the support received from the ex-partner (CARE) and the adjustment to divorce-separation (CAD-S). Finally, the validity of CARE scores for use in divorced Chilean progenitors is concluded.

PP 163

PREDICTORS OF RESPONSIVENESS TO INFANTS

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Responsiveness is the most important component of being a parent (Aisworth, 1978). It requires specific skills regarding intuition, promptness, adaptation and modification of own behaviour (Shoppe-Sullivan et al., 2006). Responsive reactions are characterized by empathy and sensitivity (Mascaro, et. al, 2014) and are based on taking the baby`s perspective and receiving his/her cues. Furthermore, patterns of attachment could be predictors of this cooperative behaviors.

The aim of the study was to find predictors of parental responsiveness. The analysis of factors affecting responsiveness will allow to understand the interactions in the family. Responsiveness experienced in the early stages is extremely important for strengthening ties and would stimulate the development of trust and self-efficacy (Davidov & Grusec, 2006).

One hundred eight seven parents (incl. 46 men and 101 women) having child from 6 to 18 months participated in the study. Parental responsiveness was measured by one-dimensional experimental tool Parental Responsiveness Scale (reliability .92). Empathic dimensions (Empathic Sensitiveness Scale [SWE], Kazmierczak et al., 2007), global personality dimensions (Ten Item Personality Inventory [TIPI-PL]; Sorokowska et al. 2014) and attachment (Experience in close relationships; Lubiewska, 2015) were defined as predictors of parental responsiveness.

The preliminary analyses were carried out. The regression analysis indicated that other-oriented empathy (higher empathic concern), attachment (lower avoidance) and higher consciousness were predictors of parental responsiveness ($F(3,143)=16.37$, $p < .001$, $R^2 = .26$). Moreover having more children predicted lower parental responsiveness.

The obtained results indicate that parents' response to infant varies depending on their empathy, attachment and global personality traits. Therefore, individual differences should be considered in analyses of responsiveness to infant cues of mothers and fathers.

PP 164

PERSONAL INTEGRATION, TENDENCY TO DEPRESSION AND ATTITUDE TOWARDS MARRIAGE AMONG YOUNG ADULTS OF DIVORCE PARENTS

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Starting from the 1960s, in the Western cultural circle there is a constant increase in the number of divorces in relation to marriages. People whose parents are divorced are exposed to a number of consequences related to the breakdown of the family. The effects of this event may vary depending on the intensity of the conflict at home (Mustonen et others, 2011; Vousoura, Wickramaratne, 2012; Alonzo, Thomson, Stohl, Hasin, 2014).

Based on Conway's (2010) conception of consequences related to the divorce of parents, it was assumed that the departure of one of them reflects on particular aspects of the child's mental life, regardless of the age at which they experienced this traumatic event. The aim of the research concerned the consequences of divorce of parents among young adults. The studies included, as explained variables, personal integration, depressiveness and attitude to marriage. The perception of ACoD parents' divorce, their feelings towards parents, and the way in which they dealt with stress were also analyzed.

The study group consisted of 120 young adults (75% of women) aged 18-25. Personal integration questionnaire by Zagórska, Migut and Jelińska (2014), Questionnaire for measuring depression by Łojek, Stańczak and Wójcik (2015), Questionnaire: Views of academic youth on marriage by Plopa (2005) and Questionnaire for adults, whose parents divorced by Conway (2010) were used.

It has been shown that ACoD are less integrated and more depressive than their peers. They more often believe that there is no justice in the marriage, and they are more skeptical about the prospect of marriage and having children. The age of ACoD during the parental divorce turned out to be associated with feelings that were then addressed to parents. Contact with relatives or peers turned out to be the main way of dealing with a difficult situation at home in ACoD.

PP 165

DIMENSIONS OF THE FAMILY SYSTEM AND PARTNERS' SENSE OF COHERENCE – PREDICTORS OF RELATIONSHIP SATISFACTION

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Despite numerous social and cultural changes in recent years, marriages are still the most common form of life for two people. Therefore, psychologists often conduct researches on relationship quality and its correlates. One of the dimensions of relationship quality, particularly often analyzed, is the partners' relationship satisfaction. Researchers are looking for variables that are related to this satisfaction. In the present study, the focus was on the following variables: partners' sense of coherence and the dimensions of their family systems.

This research was based on The Olson Circumplex Model, which focus on three dimensions of family system: flexibility, cohesion and communication. Also, the construct of sense of coherence, derived from Antonovsky salutogenic model, was used.

This study explored the correlation between partners' sense of coherence and relationship satisfaction. It was also considered, to what extent the dimensions of the family system are related to relationship satisfaction. Data was presented on 50 couples aged 30-50. Participants were asked to complete three questionnaires: SOR, Margasiński, DAS, Spanier, and SOC, Antonovsky.

Results of the analyses pointed to positive correlations between partners' sense of coherence and their relationship satisfaction. Also, results revealed that the strongest correlation is between sense of manageability (one of three components of sense of coherence) and relationship satisfaction. The regression analysis shows that the dimensions of the family system: Disengaged and Rigid, and sense of coherence, explain 48% of the variance of the relationship satisfaction variable.

The results provide initial support for the following hypotheses. The sense of manageability (understood in this study as interpersonal skills) might be a protective factor in the relationship. Also, there could be a circular relationship between the sense of partners' coherence, the dimensions of their family systems, and relationship satisfaction.

The findings provide a number of theoretical and practical implications.

PP 166

SIGNIFICANCE OF SENSORY INTEGRATION METHOD IN MATERNAL EXPERIENCE - INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS

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Background and aims. Sensory integration disorders (SID) affect 5-16% of children without other disorders (Walbam, 2014) and 40-80% children who have SI coexistence with other clinical diagnoses (Fox et al., 2014). The popularity of the SI method and the range of its applications (Alers, 2005) coincides with the skeptical attitude of researchers testing its effectiveness (Leong et al., 2014). International scientific committees include SI therapy to the category of *Unestablished Therapies* (NAC, 2015).

In view of the controversy around the SI method, we paid attention to the growing popularity of this method in Poland and the considerable expenditure that is associated with it. By perceiving this as a socially important problem, we made an attempt to identify factors explaining this phenomenon.

The aim of the study was to explore the meaning of the SI diagnosis and therapy experience.

Method. In the qualitative study based on the principles of Interpretative Phenomenological Analysis (Smith, 2012) we interviewed 15 mothers of children with SID.

Results. Among various reflections considering SI therapy experience, we paid attention to those indicating possible functions of the SI method:

1. Protective function: the SI method was a safe way to seek help for the child and for yourself. We also observed a specific pattern of this process: SI diagnosis was the initial stage of a long-term process, which resulted in clinical diagnosis (mainly ASD and ADHD).

2. Function of fighting with helplessness: interest in the SI method resulted from the feeling of helplessness of mothers and exhaustion of own resources, whose causes were: loneliness, lack of coherence in parental interaction with the partner or his withdrawal.

Conclusions. In the study group, the SI method paved the way for clinical diagnosis, and revealed the dynamics of a difficult partner relationship leading to its suspension or reconstruction.

PP 167

OBSERVATIONAL INSTRUMENTS AND STRATEGIES TO ASSESS COPARENTING: A SYSTEMATIC REVIEW OF THE LITERATURE

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Based on the Theory of Family Systems, the concept of Coparenting is studied as the relationship between parents to deal with the demands involving in raising a child. The relevance of the topic rely on the empirical founds to this relation to child and family outcomes, assessed by self-report and observational methods. Therefore, the aim was to systematically review empirical studies to answer the following question: what are the instruments of observational evaluation of coparenting?

The study design was based on the research question formulation by PICO method and the PRISMA guidelines. In this way, searches were carried out in the electronic databases BVS, PsycNET, MEDLINE, in March and April of 2018. The keyword "coparenting" was combined with "observational data," "observation," and "observational method".

Only 19 articles complied with all inclusion criteria. The results shown the following instruments: the Coparenting and Family Rating System, The Interactional Dimensions Coding System, the Revised-PicNic Assessment Scales, The Coparenting Behavior Coding Scale and the Family Alliance Assessment Scale. The tasks used were: the Lausanne Trilogue Play and the prenatal version (more commonly), the Inconsolable Doll Task, the Baby Care Simulator, The Diaper Change Play, the The Pic Nic Game, the Meal Time Play and the Free Play Recorded Task. The Lausanne Trilogue Play paradigm especially captured the family triads from different points of view.

Overall, the studies highlighting the relationship between the family functioning and the children's socioemotional adjustment: particularly that (a) the competitive coparenting remained the sole predictor of externalizing symptoms and (b) even when controlling for family factors and infant negative affectivity, supportive coparenting continued to predict toddler social-emotional adjustment. Besides the limitations - the majority of sample was well-educated- implications for future research was indicated: more longitudinal studies, with multiple time points and across multiple settings would be helpful.

PP 168
DEVELOPMENT OF THE RELATIONSHIP BETWEEN PARENTS AND THEIR CHILDREN WHO ARE SEXUAL MINORITIES: NEGATIVE EMOTIONS AND PERCEPTIONS AFTER THE CHILDREN COME OUT

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Many parents of LGBT individuals learn their children are members of a sexual minority when their children come out. The aim of this research is describing the developmental changes in their relationships to elucidate the process of accepting their LGBT children while focusing on the parents' negative emotions against their children and how the parents perceive the situation.

I conducted semi structured interviews for 2-10 hours between one and 3 times with three mothers and a married couple whose children have come out as sexual minorities. In the interviews, I mainly asked the parents questions regarding their feelings about their children identifying as sexual minorities. I read the transcripts of the interviews and analyzed them in the framework of a narrative approach. Further, I focused on the parents' negative emotions toward their children or perceptions of their children.

Not normal," "alien, strange," and "cannot help but be prejudiced" were the narratives in the parents' negative perceptions of their LGBT children. The parents' negative emotions include a feeling of "powerlessness", "resignation", "guilt". Except for the one couple, all the parents passively accepted the situation that "they have no choice"; however, the parents began to search for an act of "atonement" for their failure to help their children by exploring their options regarding providing support their children from now on.

The result demonstrates that the parents' relationship with their children is something inseverable even if they wanted to, which is reflected in their ambivalent responses. The parents' negative emotions and perceptions are not universally pessimistic. By contrast, the coming out served as an opportunity for the parents to reassess their relationships with their children. I argue that a dynamic aspect beyond the framework of the conventional stage model has been revealed in the process of parents accepting their children who have come out as sexual minorities.

PP 169
CHARACTERISTICS OF MASTERY MOTIVATION OF CHILDREN AT RISK FOR EXPRESSIVE LANGUAGE DELAY: ASSOCIATIONS WITH PARENTING STRESS AND PSYCHOLOGICAL SYMPTOMS

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Children with different disabilities may have different characteristics in mastery motivation, however, the characteristics of children with expressive language delay (ELD) during early childhood are largely unexplored. The study investigated whether children with expressive language delay have differences on mastery motivation comparing with typically developing children (TD), as well as the predicting effects of mastery motivation on parenting stress, anxiety, and depressive symptoms.

Forty children with expressive language delay, thirty-six children with typically developing children (age from 1.5 to 4 years old), and their caregivers, living in northern Taiwan, were recruited. The Bayley Scales of Infant and Toddler Development-Third Edition (Bayley, 2006) were used to assess children's cognitive and expressive language abilities. Children's instrumental aspects including object-cognitive, gross motor, social interaction, expressive aspects of mastery motivation, and parenting stress, psychological symptoms were rated by their caregivers.

Univariate analysis of covariance showed that children with ELD had lower social motivation with adults and children than TD (Fs = 5.46, 5.48, ps < .05), whereas, there were no significant differences on other aspects of motivation. Multiple regression analyses indicated that children's mastery motivation of ELD had significantly association with their parenting stress (Fs = 2.37~ 3.93, ps < .055), particularly the social motivation negatively predicted parenting distress indices of parental distress and parent-child interaction dysfunction (βs = -.51, -.48; ts = -2.36, -2.96, ps < .05) after controlling children's ability. However, children's motivation had no direct predicting effect on parental anxiety and depressive symptoms.

Children with expressive language delay have higher risk on low social motivation and their social motivation associated with parenting stress. It could have important implication for improving children's social motivation to decrease parenting stress.

PP 170

IMPLICATIONS OF PARENTAL AUTONOMY SUPPORT AND PSYCHOLOGICAL CONTROL FOR ADOLESCENTS' SOCIOEMOTIONAL FUNCTIONING: A MULTI-ETHNIC COMPARISON IN CHINA

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The implications of parental autonomy support and psychological control are similar but not uniform in the U.S. and China (e.g., Qin, Pomerantz, & Wang, 2009; Wang, Pomerantz, & Chen, 2007). Moreover, specific types of psychological control have different effects on Western and Chinese children (e.g., Fung & Lau, 2012; Helwig, To, Wang, Liu, & Yang, 2014). However, research on Chinese parenting is predominantly based on Han Chinese, with much unknown about ethnic minority groups.

This longitudinal study investigated the implications of Chinese parents' autonomy support and psychological control for their adolescents' socioemotional functioning, with emphasis on exploring ethnic variations in these links and distinguishing among different types of psychological control (i.e., love withdrawal, guilt induction, and dominance). Focus was on the Han and the three largest, Muslim ethnic minority groups in Xinjiang. At Wave 1, 2037 adolescents (1220 Han, 297 Hui, 413 Kazakh, 107 Uyghur; mean age = 13.53 years; 51% girls) in 7th and 8th grade from three schools reported on their parents' autonomy support and psychological control, their relationship with parents, and their positive and negative affect; they completed the same survey a year later.

Using data from Wave 1 (data from Wave 2 is being entered and longitudinal results will be reported in the poster), path analyses were conducted separately for the four ethnic groups on the links between parenting practices and adolescents' socioemotional functioning, controlling for adolescents' age and gender, paternal and maternal education. Across all groups, parental autonomy support and love withdrawal were associated, respectively, with better and worse emotional functioning and parent-child relationship, suggesting similar implications of parenting across ethnicities. There were also ethnic differences: Parental dominance was associated with more negative parent-child relationship among the Han and the Hui, but not among the more traditional and collective groups of the Kazakhs and Uyghurs.

PP 171

BELIEFS ABOUT CHILDREN'S UPBRINGING: THE VIEWS OF TURKISH MOTHERS AND PRESCHOOL TEACHERS

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The total experience of sensitivity received from multiple sources in the total caregiving network is important (Mesman, Minter, & Angnged, 2016). Early childhood education settings where children spend most of their time can be considered as a part of this network. Literature shows that if parents have beliefs about the value of a particular behavior directed to a child, they are more likely to behave accordingly (Pinderhughes, Dodge, Bates, Pettit, & Zelli, 2000). Differences in beliefs between the mothers and preschool teachers may indicate differences in sensitive toward children and may result in different practices toward children at home and school. However, little is known about the cognitive match in beliefs on sensitive caregiving of parents and teachers. Thus, in the present study, possible differences and similarities in mothers' and preschool teachers' views regarding ideal sensitive behaviors toward children were examined.

The sample consisted of a total of 87 participants (36 preschool teachers and 51 mothers). Mothers' and teachers' views of the ideal sensitive behaviors were measured by the Maternal Behavior Q-Sort Version 3.1 which consists of 90 cards with statements about maternal behaviors (MBQS; Pederson, Moran, & Bento, 1999). Individual interviews were appointed for sorting procedure which lasted approximately 75 minutes with each participant.

The results showed that mothers' and preschool teachers' views were consistent with the behavioral patterns considered as indicative of sensitivity by experts. As the mothers' level of education increased, their views about sensitivity became more similar to expert's views. The views about sensitive behaviors across the mothers and preschool teachers were more similar than different. Beside this similarity, item level variability in how descriptive they found each item for the ideal mother was examined between the two groups and it was found that the responses on the 12 out of 90 items were significantly different.

PP 172

SHARENTING: PARENTAL ADORATION OR PUBLIC HUMILIATION? A FOCUS GROUP STUDY ON ADOLESCENTS' EXPERIENCES WITH SHARENTING AGAINST THE BACKGROUND OF THEIR OWN IMPRESSION MANAGEMENT

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Parents love to share posts and pictures about their children online, a practice referred to as sharenting. Research on sharenting has mostly concentrated on parents' motives. Research on the perspective of the children, is limited and restricted to studies with a quantitative methodology.

Impression management theory states that one's online presentation is determined by one's own strategic use of expressions and by the online behavior of others. Through sharenting, parents thus shape the digital identity of their children. This representation might contradict with the way adolescents strive to represent themselves. The goal of this study is to investigate how adolescents experience sharenting against the background of their own impression management.

Focus groups were conducted among 46 Flemish adolescents (12–14 years old). Based upon the audio recordings, each focus group discussion was transcribed. Two researchers took part in the coding analyses. An almost perfect agreement was found between the two raters' judgements ($K = .84$, $p < .00$).

The results indicate that most adolescents trust their parents when sharing things about them. Sharenting is not really experienced as problematic, although it can be irritating for adolescents who are trying to create a good online impression. Given the high importance of their online representation, adolescents experience difficulties in having no control over what their parents are sharing about them, especially because they are aware of the potential consequences of the sharenting. In order to avoid conflicts with parents or embarrassing situations, adolescents formulated boundaries concerning what types of posts can be shared, how often and with whom.

This study has implications for both parents and adolescents. Parents should be aware of their children's feelings when sharing things about them. Adolescents like to have control over their image, it might thus be a good practice for parents to think before they post.

PP 173

PARENTAL SOCIALIZATION OF PROSOCIAL DEVELOPMENT: PSYCHOMETRIC PROPERTIES OF THE PARENTAL PROSOCIAL PRACTICES QUESTIONNAIRE (PPPQ)

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Background: Despite the growing interest in research on parenting prosocial socialization practices (e.g., scaffolding, praise, coaching; Brownell, 2016), to our knowledge no instruments have been developed for the assessment of such strategies.

The following two studies aimed at verifying the PPPQ factorial structure - a questionnaire designed to assess socialization practices concerning prosocial behaviors in early childhood - and to exploring convergence reliability and validity.

Study 1

Method

Participants. 409 Italian parents (M=36 years; SD=5.4) of children aged 12 to 46 months (191 F; M=28.3 months; SD=7.1).

Instruments. PPPQ (Parental Prosocial Practices Questionnaire; Brazzelli et al., 2018): self-report tool originally composed of 12 items concerning parent's socialization strategies.

Results

Exploratory Factor Analysis and Confirmatory Factorial Analysis showed a good fit for the 9-item model: $x^2_{(31)}$=51.15, p=.013, NC=2.39; RMSEA: 1.65; NFI=.95, NNFI=.97, CFI=.98. The three dimensions: *Coaching* (α=.729), *Contingency* (α=.698) and *Scaffolding* (α=.499) are reliable.

Study 2

Method

Participants. 214 Italian parents (M=34.49 years; SD=5.4) of children aged 12 to 40 months (105 F; M=28.27 months; SD=6.49).

Instruments. PPPQ (Brazzelli et al., 2018); MESQ (Maternal Emotional Style Questionnaire; Coplan, 2005; Ciucci & Menesini, 2008), investigates the emotional maternal style; QSP (Questionnaire on Parenting Styles; Venuti & Senese, 2007), investigates the educational styles of parents.

Results

Confirmatory Factor Analysis showed good indices of adaptation of the 3-factor model and 9 items: $x^2_{(24)}$=44.15, p=.013, NC=1.83, RMSEA: .063, NFI=.93, NNFI=.96, CFI=.96. The three dimensions prove to be reliable: *Coaching* (α=.715), *Contingency* (α=.698) and *Scaffolding* (α=.778). Statistically significant correlations emerged between the PPPQ dimensions and the QSP styles, on the one hand, and the MESQ Coaching style, on the other.

Conclusions: These findings suggest that the PPPQ is a reliable, easy-to-use instrument for evaluating the socialization practices of Coaching, Contingency and Scaffolding implemented to promote the prosocial behavior of children in early childhood.

PP 174
THE ASSOCIATION BETWEEN MOTHER'S ROMANTIC ATTACHMENT PARENTING STRESS AND TODDLER'S ATTACHMENT

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Caregiver's unresponsive and insensitive behaviors are likely to be identified as risk factors for children's healthy development (Bowlby, 1980; Warren, Houston, Egelan, & Sroufe, 1997) and secure attachment in early years (Kerns & Brumariu, 2014). Both providing a nurturing environment for an infant and adaptation to parent role could be stressors (Belsky, 1984). The present study aimed to examine the association between mothers' romantic attachment, parenting stress and toddlers' attachment security in low SES. Mothers (N= 127) of toddlers between 12-38 months (M= 23.46, SD= 6.71) filled several questionnaires including Experiences in Close Relationships-Revised (ECR-R; Fraley, Waller, & Brennan, 2000) and Parenting Stress Index-Short Form (PSI-SF; Abidin, 1995) that consisted of one Total Parent Stress Score and three subscales in terms of Difficult Child, Mother-Child Dysfunctional Interaction and Maternal Stress in a 2-hour home visit for observation. The home observations were coded for Attachment Q-Sort (AQS; Waters, 1987) by two independent coders (inter-class correlation coefficient varies between .80 to .96). Results showed that mothers' attachment anxiety and avoidance were positively associated with total parenting stress: r= .37*** and r= .20*. Mothers who reported their toddlers as more difficult child was negatively correlated to child's security (r= -.31***), while the mother-child dysfunctional interaction was also negatively associated to security, r= -.35***. Also, mother's attachment avoidance was negatively associated with child's attachment security (r= -.29**). In addition, mother's total parenting stress and child's secure attachment were negatively related (r= -.37***). A series of regression analyses will be conducted to examine the pattern of associations. The preliminary results indicated that mothers' partner attachment and parenting stress can play role in child's attachment security in low SES. The findings will help to identify risk factors for attachment security at early development, which would facilitate designing effective interventions, especially for low-SES mothers in Turkey.

PP 175
THE ROLE OF CAREGIVING HELPLESSNESS, SOCIAL SUPPORT AND MATERNAL HOSTILITY IN MATERNAL SENSITIVITY DURING TODDLERHOOD

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Maternal sensitivity, defined as mother's ability to respond their infants' cues in a timely and appropriate manner (Ainsworth, Bell & Stayton, 1971), was shown to be a significant factor for healthy child development and secure mother-child relationship (Wolff & van IJzendoorn, 1997). Previous research has shown that maternal sensitivity was negatively associated with caregiving helplessness (Solomon & George, 1996) and maternal hostility (Lovejoy, 1991), and positively associated with social support (Neuhauser, 2016). In line with these findings, the current study aims to explore the role of caregiving helplessness, maternal hostility, and social support in maternal sensitivity in a low SES group. In a 2-hour home visit, mothers (N=127) of toddlers (*Age Range* =18-36 months) filled a pack of questionnaires including the Brief Symptom Inventory (Derogatis, 1992), Caregiving Helplessness Questionnaire (Solomon & George, 2011) and Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet & Farley, 1988). The recorded home observations of mother-toddler dyads were coded by two independent coders for Maternal Behavior Q-Set (Pederson & Moran, 1995). The inter-rater reliability (Inter-class correlation coefficient) varied from .80 to .94.The preliminary results showed that there is a negative association between maternal sensitivity, and maternal helplessness and mother-child frightened subscale of caregiving helplessness questionnaire (r=-.19, p<.05) and hostility subscale of brief symptom inventory questionnaire (r=-.19, p<.05). Additionally, maternal sensitivity was positively associated with social support (r=.20, p<.05). Maternal hostility was also positively associated with and maternal helplessness and mother-child frightened subscale of caregiving helplessness (r=.46, p<.01). In order to examine the pattern of relationships, a series of regression analyses will be conducted. Understanding how perceived helplessness about child-care, maternal hostility and social support contribute to maternal sensitivity in early years of development, especially in a high risk group of low SES mothers, can be critical to design intervention and prevention programs in Turkey.

PP 176

EXPLORING THE RELATIONSHIP BETWEEN MOTHER-INFANT INTERACTION AND BREASTFEEDING IN THE FIRST YEAR OF LIFE IN GREECE

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Background and Aims: A causative relationship between breastfeeding and the quality of mother-infant interaction has often been reported in the literature. Authors suggest that this positive correlation is enhanced through endocrine and sensory factors involved in breastfeeding. Nevertheless, this conclusion is usually based on retrospective studies. Moreover, many empirical studies have failed to confirm this correlation. This longitudinal and naturalistic study aims to describe the development of mother-infant interaction in the course of the first year of life and to correlate this unfolding relatedness with "successful breastfeeding" (breastfeeding lasting six months or more).

Methods: This study is a part of a doctoral dissertation exploring the personal experience of breastfeeding mothers and other factors, such as mother's personality and her relationship with Significant Others, that may be related to breastfeeding duration. Ten mother-infant dyads from Greece participated in this study. The sample was homogenous concerning mother's age, marital status, educational level, socioeconomic level and working status. Mother-infant spontaneous interactions for 7 minutes periods were video-recorded at infants' home when the infant was 2, 4, 6, 9 and 12 months old. The recordings were micro-analyzed and variables coded were among others: maternal infant-directed speech, responsiveness and touching, eye contact and both partners' emotional expressions.

Results: All mothers succeeded in maintaining breastfeeding for nine to twelve months. Preliminary evidence on the development of mother-infant interaction patterns, however, showed that quality of interactions wasn't always high. Instead, some mothers had difficulties in maintaining a positive relationship with their infant.

Conclusions: While recognizing the limitations of this study, our preliminary findings suggest that the general assumption that breastfeeding has a positive effect on mother-infant relationship is not supported for every mother-infant dyad. Therefore, such an assumption should be avoided by clinicians in order not to cause unnecessary feelings of guilt in mothers with breastfeeding difficulties.

PP 177

PARENTAL INFLUENCES ON CHILDREN'S UNDERSTANDING OF DEATH

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Developing a mature death concept requires understanding of five key biological facts: death is inevitable; irreversible; universal; caused by the breakdown of bodily processes; and, with it, all biological and psychological functions stop. Biological explanations are present in children's death concepts from as early as 4 years old. Once a mature death concept is acquired, at around 10/11 years old, many children tend to combine biological and spiritual ideas to explain what happens after death.

Several factors can shape children's ideas around death, such as experience with animals or death of a loved one. Parental testimony can also play a key role in shaping children's ideas in this domain, yet, contents of parent-child discussions around death have not been explored. We aim to explore the influence of parental beliefs and parent-child discussions of death on developing conceptions of death.

Participants were 70 children aged 5-11 years old and their parents (N=70). Children were interviewed using narratives about the death of a human, dog and deer, and asked what biological and psychological functions continue after death (e.g., Do its eyes work? Does it feel hungry?). Parents were given questionnaires that allowed them to describe a) their own beliefs and experiences around death and b) how they explain death to their child during conversations. Parent and child responses were scored on functionality (stops or continues functioning) and coded for response type (e.g., biological or spiritual). Parent and child responses were compared to assess the extent to which parents influence their child's conception of death. Age, religion, and experience with death were also explored as variables.

Preliminary findings indicate that children integrate information gained through parent-child discussions to develop their own ideas and beliefs around death. Several other sources also appear to influence children's conceptions, such as, television and books.

PP 178

THE ROLE OF MOTHER AND FATHER ATTACHMENT IN CHILDREN'S SOCIOEMOTIONAL-ADJUSTMENT: A BAYESIAN MODEL COMPARISON APPROACH

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Attachment relationships play a key role in children's socioemotional adjustment (Cassidy & Shaver, 2016). Although scholars recommend to consider both mother and father attachment when studying internalizing and externalizing problems, research to date has largely focused on mother-child attachment (Madigan, et al., 2016). To simultaneously evaluate the contribution of attachment security toward mother and father, the current study compared different theoretical models within a Bayesian model comparison approach. This method allowed to compare models in a unified framework using a continuous and informative measure (i.e., evidence) rather than a series of simplified, accept-reject dichotomous decisions typically adopted in the Null Hypothesis Significance Testing approach.

Participants (n = 166, mean age = 9 years and SD = 7 months, 54% girls) were recruited from Italian primary schools. Children completed measures of attachment security (SS; Kerns et al., 2001) and their teachers completed a questionnaire for the assessment of internalizing and externalizing problems (SDQ; Goodman, 2001). Generalized Linear Models were estimated using a truncated Poisson distribution to respect the metric and distribution of dependent variables (i.e., internalizing and externalizing problems). Models were then compared through Watanabe-Akaike Information Criterion weights (WAICw) to identify the most plausible model given the set of alternative models and the observed data (McElreath, 2016).

The most plausible model for externalizing problems (with a 90% probability of being the best) indicated that lower levels of security towards mother were associated with more problems. The most plausible model for internalizing problems (63% probability of being the best) suggested that greater levels of discrepancy between security toward mother and father were associated with more problems.

Our findings support the differential role of father and mother attachment in children's internalizing and externalizing problems, and highlight the usefulness of a Bayesian model comparison approach to directly compare different models in terms of evidence.

Table 1. The five theoretical models tested for each dependent variable and the corresponding WAICw (n = 166).

Models	Predictors	Models WAICw Outcomes	
		Ext	Int
Baseline	Gender + Grade + FAS	0%	0%
Maternal	B.M. + Maternal Security	90%	0%
Paternal	B.M. + Paternal Security	0%	34%
Additive	B.M. + Maternal Security + Paternal Security	10%	3%
Interaction	B.M. + Maternal Security + Paternal Security + Maternal X Paternal Security	0%	63%

WAICw: Watanabe-Akaike Information Criterion weight, represents the probability of being the most plausible model given the alternative models and the observed data; Ext: externalizing problems; Int: internalizing problems;
+: additive effect; X: interaction effect; FAS: socio-economic status; B.M.: Baseline Model.

PP 179

MEASURING ATTACHMENT IN MIDDLE CHILDHOOD: DEVELOPMENT AND PSYCHOMETRIC PROPERTIES OF A NEW SELF-REPORT QUESTIONNAIRE

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Middle childhood is an important, developmental period in which conscious aspects of attachment representations can be effectively assessed (Bosmans & Kerns 2015). Of the few self-reports currently available, some provide a broad evaluation of security vs. insecurity (e.g., SS; Kerns et al., 1996), while others (e.g., ECR-RC, Brenning et al., 2011) differentiate among insecurity dimensions (i.e., anxiety and avoidance). Both types of measures are often administered together, potentially leading to excessive participant burden and a lack of parsimony due to overlapping item content and the use of different response formats, which may negatively impact on data quality. To address these issues, in three studies we developed and evaluated the psychometric properties of a more comprehensive and less time-consuming tool, the Attachment in Middle Childhood Questionnaire (AMCQ), in a sample of Italian school-age children.

In Study 1 (N = 111; Mage = 8.9 yrs), 30 items selected from the SS and ECR-RC were adapted to the same response format (i.e., "some/other" format; Harter 2012) and subjected to an Exploratory Factor Analysis; 21 items were retained. In Study 2 (N = 234; Mage = 9.2 yrs), Structural Equation Models (SEMs) were used to define the final questionnaire. In Study 3 (N = 727; Mage = 10.5 yrs), the latter was subject to a series of SEMs to test its factor structure, invariance across age and gender, and external validity.

The final questionnaire comprised 10 items (5 for anxiety, 5 for avoidance) and a supplementary felt security subscale (5 items). SEMs supported its: factorial validity, structural invariance across gender and age, and concurrent and convergent validity with a host of external measures.

The AMCQ is a promising tool to assess attachment in middle childhood. Future research may evaluate its cross-cultural validity and associations with other assessment methods.

PP 180

INFLUENCE OF MATERNAL EDUCATION ON PRENATAL PARENTING: INITIAL FINDINGS OF COHORT '18

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Background and aims: Prenatal parenting includes parental bonding with the fetus, as well the parents' emotional well-being and risk behaviors during pregnancy. The aim of the present analysis was to assess the associations between prenatal parenting and the level of maternal completed education, using the preliminary, unweighted database of Cohort '18 - Growing Up in Hungary.

Methods: Questionnaire data from 4704 pregnant women in the third trimester of their pregnancy were analysed. Cohort '18 is a countrywide and representative prospective birth cohort study. In its first wave, data is collected from pregnant women, whose child is expected to born between April 1, 2018 and March 31, 2019. Present analysis excluded participants under the age of 18, thus participants' mean age was 30,69 (SD = 5,79).

Results: 28,9% of participants had low level of education, 36,4% had medium level of education and 34,7% had high level of education. Pregnant women with low level of education reported significantly higher rates of prenatal depression, generalized anxiety, pregnancy-related anxiety and prevalence of smoking than others, along with less healthful dietary practices and lower levels of prenatal attachment. Women with medium level of education reported higher level of risk factors than women with high level of education, except on the Maternal-Fetal Attachment Scale, which score was the highest among them. Overall, weak to moderate correlations were found between prenatal depression and anxiety problems, which were slightly correlated to the reported risk behaviors.

Conclusions: Results suggest that education level plays an important role in the maternal well-being and health behavior during pregnancy.

Maternal-Fetal Attachment Scale by maternal education
(mean, confidence interval)
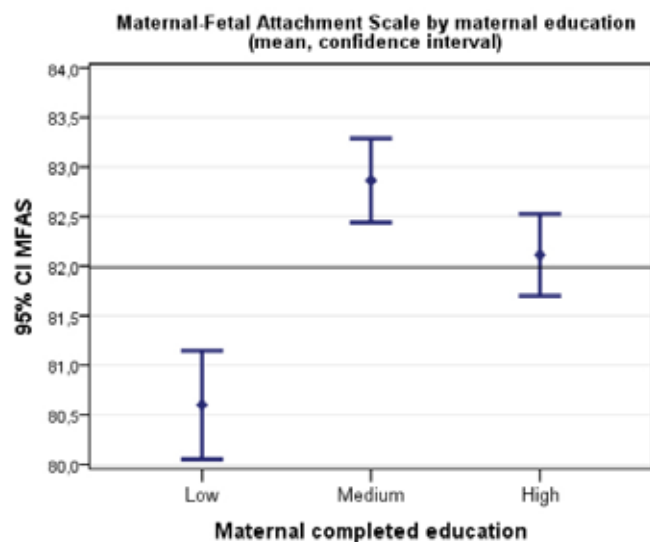
PP 181

RESILIENCE, OPTIMISM AND SATISFACTION WITH THE LIFE OF YOUNG MOTHERS

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Motherhood results not only in new tasks and developmental challenges and is also a source of satisfaction. Effectiveness in dealing with these tasks is related to the psychological characteristics of the individual (Tyszkowa, 2000, Trempała, 2011).

The presented study aims to investigate the relationship between the resilience of young mothers, their optimism and the assessment of their satisfaction with life.

In the study participated 340 mothers in early adulthood (mean age 30.8, SD = 4.32). The selection criteria were: becaming a mother for the first time between the age of 20-39 and possessing at least one child who is under 24 months of age (average 12.5 months; SD = 6.34). For 62% of mothers taking part in the study, it was the first child for 32% second, while for the other 6% - third and subsequent. Almost 80% of all mothers were married while taking part in the study (79.73%), 17.23% of all respondents described themselfs as maidens, and 8 women were divorced.

The life satisfaction was measured with the SWLS (Diener, Emmons, Larsen, Griffin, 1985) (polish adaptation by Juczyński, 2009). The measurement of independent variables was conducted using the Lifespan Individual Resilience Scale (polish adaptation by Malina, 2016) and the Lot-R Scale (the adaptation by Poprawa and Juczyński, 2008).

The study proved that the mothers who are characterized by high resilience are more optimistic about life and more satisfied with it.

PP 182

FACTORS RELATED TO PHYSICAL SEPARATION BETWEEN PRESCHOOL CHILDREN AND THEIR MOTHERS: A JAPANESE STUDY

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The aim of this study was to elucidate the developmental changes in the relationships of Japanese preschool children with their mothers from the perspective of their physical separation.

A diary-based study was conducted to clarify how often mothers and their kindergarten-aged children spent time in different places, and to identify factors related to this issue. Four hundred four mothers recorded their experiences concerning 3 types of separation from their children for 5 consective days: (1) the mother left her child at home when she went out, (2) the mother left her child some place other than home while she went somewhere else, and (3) the child went somewhere without their mother.

Type 2 events were most frequent (1.66 times per 5 days), followed by types 1 and 3 (1.38 and 0.93 times, respectively). Regarding type 1 separations, second- or later-born children were frequently left at home with only their older siblings. In type 2 separations, mothers frequently went somewhere to do something, while their children took some kind of lesson. Furthermore, mothers with second- or later-born children left their children with only their older siblings or friends at various places. Also for type 3 separations, they frequently went to nearby familiar places with only their older siblings.

The findings reveal that Japanese prescool children tend to become independent, when they have their older siblings. Effects that the presence of the other persons has on children's independent activities are also discussed in relation to the social contexts.

PP 183

MATERNAL AND CHILDREN'S DEMOGRAPHIC CHARACTERISTICS AND THEIR RELATION TO MATERNAL SUPPORTIVE BEHAVIOURS AND YOUNG CHILDREN'S SELF-REGULATION OF LEARNING

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Self-regulated learning, parental scaffolding, maternal education, children's SRL skills

This study explores whether demographic factors, such as children's age, gender, and maternal education, are related to the maternal behaviours enacted to support children during problem-solving and to children's skills for Self-Regulation of Learning (SRL). A number of studies have shown that children's age and maternal education are linked to parental supportive behaviours during learning as well as to children's SRL skills. Both direct and indirect links between the above factors have been reported. However, other studies report relations of maternal and child characteristics to specific children's skills but not to others.

The present study examined different maternal behaviours to support children during problem-solving and children's actual SRL skills in two time phases. The participants were 35 mother-child pairs. Children's age varied between 54 and 72 months old (boys=23). A series of visual-spatial and language tasks was administered. The participant children were examined individually but also in pairs with their mother. Structured observation and a micro-analytic approach were used to record maternal supportive behaviours and children's SRL skills and cognitive performance.

The findings from both research times showed that children's age was significantly correlated with some of the maternal supportive behaviours and with almost all of the children's SRL skills and cognitive performance. Children's gender was not significantly associated with the variables examined. Concerning maternal education, it was significantly correlated with some of the children's SRL skills and cognitive performance but only in research Time 1, whereas non-significant associations were detected with regard to maternal supportive behaviours.

In conclusion, young children's age was the factor mostly associated with both maternal and children attributes within a frame of children's regulation of learning. Research should further clarify the role of maternal education in maternal learning supportive behaviours and in children's SRL skills.

PP 184

THE INFLUENCE OF MOTHER-INFANT RELATIONSHIP-BUILDING EXPERIENCES ON JAPANESE MOTHERS' ATTITUDES TOWARDS LIFE AND DEATH

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Background and aims: Mothers build relationships with their infants through various experiences during pregnancy and puerperium. These experiences cause changes in pregnant women's attitudes toward death, generativity, and the importance of life (Taguchi, 2012). A previous study suggested that attitudes toward life and death in adulthood are influenced by the construction of such intimate relationships (Kondo, 2016). However, little remains known about relationship-building experience that influence attitudes toward life and death among Japanese mothers.

Methods: Participants were 103 mothers who had given birth to their first child (M = 30.30 years, SD = 4.53). Each participant completed a questionnaire that consisted of scales on attitudes towards life and death (fear of death, purpose of life, belief in an afterlife, relationship between life and death, and concern for others) and yes/no questions about the experiences the mothers felt had affected relationship-building with their infant (awareness of pregnancy, morning sickness, ultrasound examination, uterine growth, fetal movement, contractions, labor, the baby's first cries, holding the baby for the first time, and feeding).

Results: Multiple regression analysis revealed that "awareness of pregnancy" had positive relationships with "fear of death" (β= .28, $p < .01$, R^2 = .08), "purpose of life" (β = .31, p < .01, R^2 = .09)", and "concern for others after death" (β = .31, $p < .01$, R^2 = .10).

Conclusions: These findings demonstrate that awareness of pregnancy, at which point mothers first experience relationship-building with their infant, influences Japanese mothers' attitudes towards life and death. This suggests that mothers think that the first trimester is an important period for relationship-building. Further research should examine the attitudes towards life and death of Japanese fathers and pregnant women.

PP 185

PERSONALITY TRAITS, COPING AND PARENTING STRESS IN MOTHERS OF PRESCHOOL CHILDREN

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Practical psychology data shows an increase in the level of parental stress in recent decades, not only among parents of children suffering from various diseases or during periods of age-related crises. Some researchers are already beginning to speak not just about parental stress, but parental burnout. In this regard, it is important to reveal the factors of parental stress.

The aim of our research is to study personality traits and coping strategies as risk factors for parental stress.

Sample: 30 mothers (20-39 years) of children aged 2-3 years lived in Saint-Petersburg, Russia.

Methods: Parenting Stress Index (PSI-IV, Abidin, 2012), Big Five Personality Test (Costa, McCrae, 1985) Ways of Coping Questionnaire (WSQ, Folkman, Lazarus, 1985).

Results. Studying the role of personality traits in the occurrence of parental stress in mothers of preschool children showed that emotionally unstable mothers present a greater risk of having a high parenting stress score. The most conscientious and agreeable mothers reported lower levels of separate scales of parental stress. Extraversion and openness did not influence parental stress.

A study of the relationship between parental stress and coping strategies in mothers of prescool children has shown that higher levels of parental stress are observed in mothers using coping strategies such as confronting coping, distancing, escape-avoidance, and the seeking for social support. No links of parental stress and constructive coping strategies (planful problem-solving, positive reappraisal) were found.

Conclusion. Neuroticism was the personality trait that played the greatest role in parenting stress. The use of non-constructive strategies, as well as strategies for seeking social support, is associated with higher levels of parental stress in mothers of preschool children.

PP 186
FAMILY RELATION AND PARENTING STRESS IN MOTHERS OF PRESCHOOL CHILDREN

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In recent decades, Russia has undergone major changes in the attitude of parents towards a child and its upbringing. We observe a high degree of involvement in the upbringing and development of children, greater demands on themselves as parents, the desire to be an "ideal parent" and, as a result, stress and fatigue in parents. Parental stress can also be associated with a lack of support from loved ones, limited contact with others. The goal of our research is to study relationships with spouse and parents during childhood as a parent stress factor.

Sample: 30 mothers (20-39 years) of children aged 2-3 years lived in Saint-Petersburg, Russia.

Methods: Parenting Stress Index (PSI-IV, Abidin), Marriage satisfaction questionnaire (Alyoshina Y.), Parental relationships in childhood questionnaire (Romanova E., Galimzyanova M.).

Marital satisfaction, the participation of the spouse in childrearing and housework is related to a less stress associated with the partner. Acceptance by the mother in childhood affects the level of mother's attachment to her own child and the overall level of parental stress. Acceptance by the father in childhood leads to the mother's perception of your own child as a calm. A higher risk of parental stress is presented by mothers whose fathers were authoritarian and did not believe in their ability in childhood.

Conclusion: Positive and accepting relationships with parents in childhood play an important role in the occurrence of parental stress in women. Relationship with the spouse only affects the stress associated with the partner.

PP 187
LINKS BETWEEN MATERNAL TEMPERAMENT, PARENTING KNOWLEDGE, AND PARENTING SELF-EFFICACY: THE MEDIATING ROLE OF EMOTION REGULATION

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Recent work has started to focus on the role of parent emotion regulation in relation to caregiving behavior. However, little work has considered links among aspects of parent temperament, emotion regulation, and knowledge of parenting and parenting self-efficacy, both of which have been shown to be notable predictors of caregiver behavior. To addresses these gaps in existing work, the current study examines associations between maternal temperament attributes, emotion regulation and parenting self-efficacy and knowledge. Additionally, the potential mediating role of maternal emotion regulation in the link between maternal temperament attributes and parenting self-efficacy and knowledge is considered.

One hundred seventy-nine mothers of infants participated. Path analyses were conducted to test hypotheses. The results for maternal temperament attributes, emotion regulation and parenting self-efficacy revealed a direct effect between positive affect and self-efficacy, a direct effect between inhibitory control and reappraisal, and a direct effect between reappraisal and self-efficacy. Whereas, the results for maternal temperament attributes, emotion regulation and parental knowledge for parenting strategies showed an indirect pathway between positive affect, suppression and parental knowledge.

In conclusion, mothers with lower positive affect are more vulnerable to use suppression and have less parental knowledge. Whereas, mothers that tend to use more reappraisal and have higher inhibitory control, higher positive affect, also have higher parenting self-efficacy. Taking into account both emotional and cognitive components of self-efficacy and parental knowledge of parenting strategies might lead to new paths to identify parents at risk in community samples. The findings are essentials for designing and implementing parental-emotional-approach preventive programs. The study is the first to investigate the link between parental temperament attributes, emotion regulation strategies and the outcomes on self-efficacy and parental knowledge.

PP 188

PECULIARITIES OF COPING BEHAVIOR IN FAMILIES WITH TEENAGERS WITH PERSONAL HELPLESSNESS

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Issues of coping with difficulties and ways to overcome stresses and crises family is a specific area. The style of coping in the family is due not only to external conditions, the nature of stress, but also the characteristics of family relationships, personal characteristics of family members, we believe it is important and necessary to identify and describe the styles of family coping in families of adolescents with personal helplessness. Personal helplessness is considered as an internal condition that determines the originality of ways to solve life problems, determines the choice of the subject of coping strategies of behavior.

At the stage of research of styles of coping behavior in families with teenagers with personal helplessness 32 families including the father, mother and the child. The method of research of coping behavior in teenagers and their parents was the questionnaire "Coping strategy" R. Lazarus. The study revealed that there are stylistic features of coping behavior in families with teenagers with personal helplessness.

Family coping, acting as an integrative characteristic of the family, includes coping styles of teenagers with personal helplessness and their parents: a sociotropic style of family coping, mobilization style of a teenager in conditions of excessive responsibility, emotionally dominant style of family coping, problem-oriented mother, taking responsibility by the father.

The results of the study can serve as a basis for the development of programs for the correction of personal helplessness in teenagers, the development of coping behavior in subjects with personal helplessness. Data on ways of coping with parents, styles of family coping can be used in psychological work with families with teenagers with personal helplessness in order to improve the quality of marital and parent-child relationships, the formation of skills of productive coping with difficult situations.

PP 189

PRE- AND POSTNATAL EXPOSURE TO MATERNAL SUBSTANCE USE AND ATTACHMENT STYLES IN CHILDREN FROM BIRTH TO PRESCHOOL: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background: Maternal substance use is often associated with insecure attachment of children. Yet, research is inconsistent, and we lack systematic evidence about the association, as well as about the mediating and moderating mechanisms related to parent and child characteristics.

Objectives: To examine the research evidence about the role of maternal substance use on attachment styles in children aged 0-5 years, and further to elaborate the mediating and moderating mechanisms.

Data Sources: A systematic review of English language articles using MEDLINE, PsycINFO, Scopus, Web of Science, and The Cochrane Central Register of Controlled Trials (CENTRAL) was conducted. The search strategy included terms related to pre- and postnatal period, young children, attachment, mother, substance use and substance exposure with no restrictions to dates selected. Additional studies were identified by scanning reference lists of included studies and by consulting experts on the field.

Study Selection: We included studies with children from birth to 5 years and mothers with pre- and/or postnatal substance use if child's attachment style was examined. We also included foster and adoptive mothers if child's substance exposure was known.

Data Extraction Methods: Two reviewers evaluated study inclusion and coded included studies independently using a predefined data extraction sheet. Study quality was assessed with the Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies provided by the National Institute of Health (NIH).

Data Synthesis: Meta-analysis was performed to answer the research questions and main results will be presented at the congress.

Conclusions: This study provides a synthesis of previous research concerning the association of maternal substance use and attachment styles of young children. Our results emphasize parent- and child-related characteristics that shape and affect attachment development among children exposed to maternal substance use.

PP 192

ASSOCIATION BETWEEN PARENTAL REFLECTIVE FUNCTIONING, PARENTAL DISTRESS AND PARENTAL WARMTH: THE ACTOR-PARTNER INTERDEPENDENCE MODEL

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In the process of raising children, the parenting pressure of parents perceived and the warm parenting behavior they performed have important impacts on the healthy development of children. Previous studies have found a link between parental reflective functioning (PRF) and parental distress. The PRF can promote maternal sensitivity, then mothers tend to perform appropriate parenting behavior for the child. However, little is known about whether the relationship between PRF, parental distress, and parental warmth of one parent could be affected by those of the other. To address this issue, this study aimed to examine the association between parental reflective functioning, parental distress and parental warmth in paired data from fathers and mothers using the actor-partner interdependence model.

The data were collected from self-reported questionnaires that were completed by 1,137 couples whose children were fourth-graders from six primary schools in Beijing. They were asked to complete the Parental Reflective Functioning Questionnaire (PRFQ; Luyten et al. 2017), the Parenting Stress Index (PSI; Abidin, 1995) and the adaptation questionnaire of the Child - Rearing Practices Report (CRPR; Chen, Liu, & Li, 2000).

Results from actor-partner interdependence analysis indicated that:

For parental warmth, each dimension of mothers' PRF can predict not only their own parental warmth, but also fathers' parental warmth. Specially, mothers' use of prementalizing modes of reflecting upon their child (PM) can negatively predict warm parenting from mothers and fathers, and mothers' interest and curiosity in children mental states (IC), certainty about children mental states (CM) can positively predict warm parenting from mothers and fathers. However, fathers' PRF only predicted their own parental warmth.

For parental distress, both PM and IC of mothers and fathers have the actor-partner interdependence effect. CM of mothers had the actor-partner effect, but CM of fathers only had the actor effect.

These results showed that actor-partner effects are different between PRF and parental distress, parental warmth, which could be discussed more in further research.

PP 193

THE ROLE OF PARENTAL BURNOUT, MENTAL HEALTH AND EMOTION REGULATION STRATEGIES IN CHILDREN INTERNALIZING AND EXTERNALIZING BEHAVIORAL PROBLEMS

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Particularly mother's mental health and emotion regulation abilities (Derogatis, 1992; Thompson, 1994) are crucial to children developmental problems. At the same time, the newly emerging construct of parental burnout (Roskam, 2018) shapes the relationship between parents and their children and also have consequences for the healthy development of the child (Mikolajczak et al., 2018). Thus this study aims to examine the role of fathers (N=82) and mothers (N=81) parental burnout on the children internalizing and externalizing behavioral problems after controlling parental mental health issues and emotion regulation strategies. Parental Burnout Scale (Roskam et. al., 2017), Brief Symptom Inventory (Derogatis, 1992), Emotion Regulation Questionnaire (Gross & John, 2003), and Children Behavior Check List (Achenbach & Rescorla, 2000) were completed by participants.

The preliminary analysis reveal that mothers' parental burnout have a significant positive correlation with mother's depression ($r=0.45$, $p<0.01$), mother's anxiety ($r=0.34$, $p<0.01$), and children externalizing behavioral problems ($r = 0.33$, $p<0.01$). Based on fathers; parental burnout has a significant positive correlation with father's depression ($r=0.55$, $p<0.01$), father's anxiety ($r=0.54$, $p<0.01$), and children internalizing behavioral problems ($r = 0.26$, $p<0.05$). A Hierarchal regression analysis was conducted to predict children internalizing and externalizing behavioral problems from parental burnout after controlling mental health issues. Results show that mothers' mental health variables explained 9.2 % of the variance ($F_{(2, 78)} = 3.96$, $p < .05$, $R^2 =.09$) to predict children externalizing behavioral problems. As mothers' parental burnout was entered, the model explained children externalizing behaviors with additional 5 % of the variance (($F_{(3, 77)} = 4.26$, $p < .01$, $R^2 =.14$).

Findings contribute to the newly emerging parental burnout literature and also introduce the importance of parental burnout in predicting the children's behavioral problems within a Turkish sample.

PP 194

"WHAT IF YOUR STORY IS SHAPING YOUR RELATIONSHIP WITH FETUS DURING PREGNANCY?" PREDICTION OF PRENATAL ATTACHMENT IN EXPECTANT MOTHERS

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Background and aims: Prenatal attachment is defined as establishing mental and emotional relationship with fetus during pregnancy. This relationship may be accepted as preparation phase to establish reciprocal relationship or attachment style after birth. Nowadays, research findings suggest that mother-fetus interaction and prenatal attachment is substantial; since there is a relationship between prenatal attachment and postnatal attachment. From this perspective, it can be stated that prenatal attachment may help to establish a secure attachment between infants and mother after birth. The goal of this study was to examine the role of parenting style of own mother, childhood trauma and readiness to birth in predicting prenatal attachment among women in 2nd and 3rd trimester of the pregnancy.

Methods: Sample consisted of 150 expectant mothers (M= mean 27.68, S.D.=4.73) with gestational ages between 12 to 38 weeks. Survey method was used to assess the prenatal attachment and the questionnaire consisted of four different scales including Lederman Prenatal Self-Evaluation Inventory, Childhood Trauma Inventory (CTQ), Shortened Perceived Parental Rearing Styles Form (EMBU) and Prenatal Attachment Inventory.

Findings: Results showed that educational level of the mother and her spouse educational level, gestational age, primipara/multipara, types of conception, emotional warmth, over protection, physical neglect, emotional neglect, preparedness to delivery, and the relationship with spouse significantly predicted prenatal attachment level in the last model of the hierarchical regression analysis (R^2=0.40). Moreover, demographics including gestational age and being primiparaous/multiparous significantly predicted prenatal attachment level of expectant mothers. For example, increased gestational age was among the important factor to explain increased prenatal attachment level.

Conclusions: These findings may provide clear understanding for psychological perspective of prenatal process and form the basis of establishing healthy relationships in the postpartum period.

PP 195

ASSOCIATION OF AWARENESS OF PARENTAL AGING WITH IDENTITY FORMATION AND SUPPORT FOR PARENTS IN JAPAN: ADOLESCENCE TO EARLY ADULTHOOD

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Japan's aging society has led to prolonged and increasingly important parent-child relationships. I speculate that greater awareness of parental aging will serve to promote positive adolescent development. In this study, I explored identity formation and psychological and social support for one's parents as developmental indicators. This study aimed to clarify the relationships between awareness of parental aging and identity formation and support for one's parents from adolescence to early adulthood in Japan.

In May 2018, a survey of 1,940 Japanese participants aged 20 to 39 years (940 men, 1,000 women) was conducted online. Items were scored on a 5-point scale and covered awareness of parental aging (both positive and negative) over one year, identity formation as assessed by the ISRI (Identity Stage Resolution Index; Côté, 1997), and efforts to support one's parents (Ikeda, 2018).

Multiple regression analysis was used to predict ISRI scores and efforts to support one's parents based on an awareness of parental aging according to parent-child-gender relationships. The analysis indicated negative associations between negative awareness of parental aging and ISRI score (range β = -.11 to -.08), and positive associations between positive awareness of parental aging and ISRI score (range β=.21 to .23). Positive awareness was also positively associated with efforts to support one's parents (range β = .26 to .31). In addition, negative awareness of parental aging was positively associated with efforts to support one's parents (β = .07, .15) for relationships between parents and children of different genders (e.g., father-daughter and mother-son).

The results suggest that awareness of parental aging promotes identity formation and efforts to support one's parents from adolescence to early adulthood. A future longitudinal study is needed to investigate the causal relationships of awareness of parental aging with identity formation and support for one's parents.

PP 196

EMOTIONAL SOCIALIZATION, DAILY HASSLES AND PARENTAL GOALS IN THE DEVELOPMENTAL PROCESS OF PROSOCIAL BEHAVIOR

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It is known that parenting practices in the early-stages play a critical role in children's psychosocial development. The purpose of this study was to examine the relationships between parental emotion socialization, parental goals, parental daily hassles and children's prosocial behavior. For this purpose, the study will be consist of 200 children between the ages of 4 and 7 years. The participants will fill the Demographic Information Form, Parental Goals Scale, the Coping with Children's Negative Emotions Scale (CCNES), Parenting Daily Hassles Scale (PDHS) and Strength - Difficulties Questionnaire. In the preliminary regression analyses with 111 children, the daily hassles faced by the parents and parental goals including self-direction and compliance, were found as the significant predictors of children's prosocial behavior tendencies. Specifically, mothers' perceptions of their children's prosocial behavior was negatively associated with mothers' reported daily hassles and positively associated with maternal expectations related to child compliance and self-direction. Maternal emotion socialization reactions were also predicted children's prosocial tendencies, reported by mothers. Children's prosocial tendency was positively related to maternal encouragement of emotion expression, while negatively related to maternal distress reactions. These results are a foresight for further studying the mediating roles of the parental goals and daily hassles in the relation of emotional socialization and prosocial behaviors of children. Research results are important to show parenting practices regarding maternal goals and maternal emotion socialization for children's psychosocial adjustment.

PP 197
PARENTAL INDUCTIVE DISCIPLINE AND THEORY OF MIND IN FIVE-YEAR-OLDS

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Background and aims: Inductive discipline that contains reasoning about consequences of child's behavior including how it can affect the mental states of others promotes theory of mind development (ToM) in children. However, empirical evidence relate to so-called 'first-order ToM'. There is no data on the relationship of induction in disciplinary context and advanced ToM, i. e. more complex social skills such as understanding of ambiguity or higher order false belief understanding (Miller, 2012). On the basis of the role played by parent's induction in development of first-order ToM in children, we investigated if this role still remains important according to more advanced ToM skills.

Methods: We tested 120 5-year-olds ($M = 67.75$, $SD = 1.21$ months, 59 girls) and their parents (95 mothers). The children participated in five advanced ToM tasks: three ambiguity tasks (Carpendale & Chandler, 1996; Tafreshi & Racine, 2016) and two second-order false belief tasks (Sullivan, Zaitchik & Tager-Flusberg, 1994). The parents gave an interview in which they were asked to describe their behavior in six disciplinary situations (i.e. child calls somebody names). Responses were transcribing and coding according to power assertion-induction dimension provided by Hart and colleagues (1999), which allows to obtain one sum score reflecting the level of induction used by parent.

Results: Positive correlation occurred between the level of parent's induction and the ambiguity sum score in children ($r = .19$, $p < .05$). We also find positive association between induction and the sum score obtained by children in two second-order false belief tasks ($r = .21$, $p < .05$).

Conclusions: The results indicate that higher levels of induction used by parents in disciplinary context promotes development of more complex ToM skills in children. We discuss these results in the light of theories that point out the role of social interactions in ToM development.

PP 198
WHAT DO PARENTS EXPECT FROM THEIR CHILDREN (WITH PSYCHOLOGICAL PROBLEMS)?

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Nearly all parents have positive expectations about the development of their child. We were interested in whether parents change their expectations if the child has problems in certain areas, like emotion regulation in depressed children.

We applied a questionnaire to parents who sought mental health services for their children and to an unaffected control group, asking them how they expect their child to behave in different situations. The items formed scales concerning emotion regulation, pro- and anti-social behavior, peer relations and academic achievement.

Preliminary data from the ongoing study with 28 parents of children at mental health centers and 169 controls show significantly lower expectations of parents seeking help than in the control group in every assessed domain. Between-group differences in the academic field were medium in a statistical sense, while the other between-group differences were large. Interestingly, when looking more closely at the problem scores in the Child Behavior Checklist (CBCL), we found that only very high scores, higher than the usual cut-off, were associated with lower expectations from the parents.

Our data indicate an adaptation of parents who observed less desirable behavior from their children than parents of healthy children, but parents express only lower expectations if the child shows this behavior at a very high level. Possible implications of the findings for family life and therapy with mentally ill children and their parents are discussed.

PP 199

THE MATURITY TO PARENTHOOD SCALE: ARE YOUNG ADULTS MATURE ENOUGH FOR BEING A PARENT?

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Despite the growing body of research investigating parenthood, the focus is mainly on family functioning, parenting and caring for the children. However, the understudied issue is maturity to parenthood of young adults.

The aim of the current study was to assess psychometric proprieties of the Maturity to Parenthood Scale, a new instrument to evaluate young adults' maturity for being a parent, in three areas: Valence, Behavioral and Cognitive-Emotional. Additionally, empathy and resilliency were analyzed as predictors of maturity to parenthood for both, women and men.

A total of 708 Polish young adults (M_{age}= 23.49; SD= 2.89; 20-35 years; 479 women) participated in the study. Participants were in relationships for at least six months (M_{year}= 3.5; SD= 2.38) and yet childless. Participants were asked to fill in the Maturity to Parenthood Scale (Łada & Kaźmierczak) and a sociodemographic survey. Moreover, another 204 young adults filled in *Resiliency Assessment Scale* (Ogińska-Bulik & Juczyński, 2008) and Empathic Sensitiveness Scale (Kaźmierczak, Plopa, & Retowski, 2007).

Confirmatory analyses showed satisfactory fit indices for the 26 item model: χ^2(296)= 1579.89, *p*< .001, RMSEA= .07; CFI= .94, TLI= .93. Such model evidenced 3 different factors of maturity to parenthood with high internal reliability values. The Cronbach's α for the factors were as follows: for Valence α= .85, for Behavioral α= .88 and for Cognitive-Emotional α=.87. Furthermore, the reliability for general maturity to parenthood was α= .94. In addition, multiple linear regression analyses evidenced that empathy and resilliency were significant predictors of maturity to parenthood, with significant gender effects.

The results of this study show that the Maturity to Parenthood Scale could be a useful instrument to assess young adults' maturity for being a parent. Furthermore, the outcomes confirm that individual differences in empathy and resilliency might impact maturity to parenthood of young adults.

PP 201

A COMPARISON OF ASSOCIATIONS BETWEEN PATERNAL AND MATERNAL PRACTICES AND ADOLESCENTS' CYBERBULLYING: GENDER DIFFERENCES

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Parental practices have been long acknowledged as a critical predictor of children's outcomes (e.g., Bois, Lalanne, & Delforge, 2009; Smokowski, Bacallao, Cotter, & Evans, 2014). Until recent decades, researchers have examined different roles fathers and mothers play in children's behaviour (Lamb, 2004). However, studies addressing different linkages between paternal and maternal practices and fathers' and mothers' same-gender and opposite-gender children's behaviour yielded divergent results (e.g., Bronte-Tinkew, Moore, & Carrano, 2006; Gallarin & Alonso-Arbiol, 2012; Gaylord Harden, Campbell, & Kesselring, 2010). This study aimed to compare the associations between paternal and maternal practices and cyberbullying engagement among male and female adolescents in China.

A total of 277 Chinese adolescents (M_{age} = 15.5, SD_{age} = 1.64, 166 boys) completed measures of parental practices through the Child Report of Parent Behaviour Inventory (Schaefer, 1965), Perceived Parental Autonomy Support Scale (Mageau et al., 2015), and Psychological Control Scale-Youth Self-Report scale (Barber, 1996), as well as cyberbullying involvement using Bullying Behaviour Questionnaires (Konishi, Miyazaki, & Hymel, 2017). Structural equation modeling was used to address the research questions.

As seen in Figure 1, results demonstrated significant effects of paternal warmth and psychological control on boys' cyberbullying behaviours. Also, effects of maternal warmth and psychological control showed similar results. However, regarding parental practices effect on girls' cyberbullying, only paternal psychological control, not maternal, showed a significantly contribution on girls' cyberbullying behaviours (Figure 2).

Given the special role of father in cyberbullying engagement among adolescents, especially girls, interventions that specifically focus on paternal practices in adolescent cyberbullying should be given more attention. Additionally, it would be helpful in the future research to extend the effects of parental practices to other bullying behaviours.

Figure 1. The model of paternal practices as predictors of boys' cyberbullying behaviour. Paths in the structural model include paternal warmth, autonomy support and psychological control to boys' cyberbullying behaviours.*p < .05.
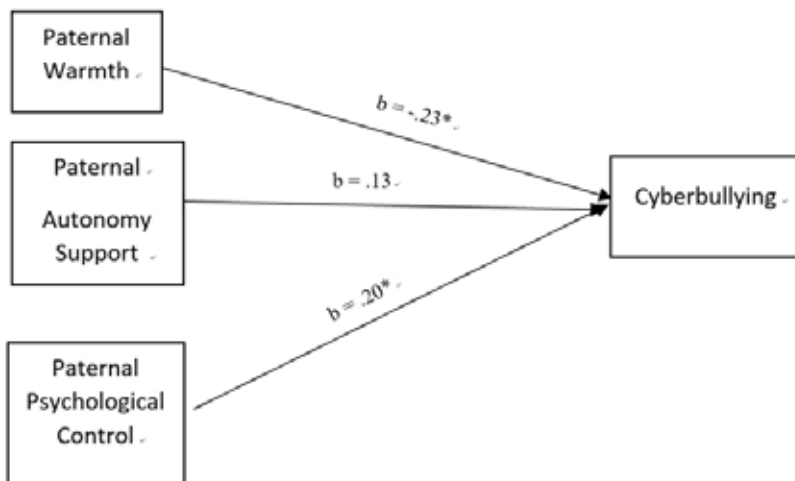
Figure 2. The model of paternal practices as predictors of girls' cyberbullying behaviour. Paths in the structural model include paternal warmth, autonomy support and psychological control to girls' cyberbullying behaviours.*$p < .05$.
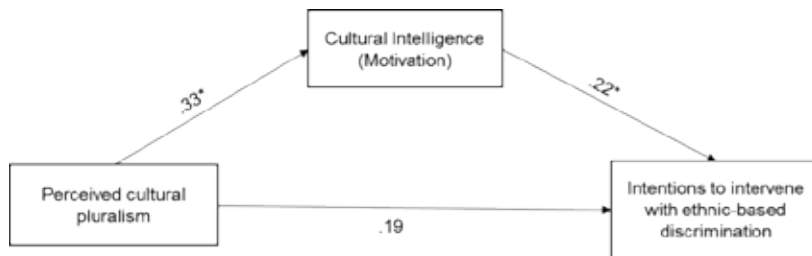
Fig.2 Mediation model for the effect of Cultural Pluralism and Motivational Cultural Intelligence for Adolescents without migration background *$p < .01$

PP 202
THE RELATIONSHIP AMONG PARENTS' STRESS, SELF-ESTEEM AND ADOLESCENTS' WELL-BEING: PARENTS' GENDER DIFFERENCE

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Adolescents' well-being and self-esteem are extremely important for youth to develop positively. Previous researches have explored some factors which could affect adolescents' well-being and self-esteem (Harter, 1993; David et al., 1996; Ersoy et al., 2008; Inchley & Currie, 2013). However, few study investigated the relationship between parenting stress and adolescents' well-being, especially the mediating role of self-esteem and its difference in terms of parents' gender. The present study has two goals. The first one is to explore the relationship between parenting stress and adolescent well-being for mothers and fathers separately. Secondly, this study is to examine the mediating role of self-esteem on the relationship between parental distress and well-being in Chinese adolescents.

There were 2,257 pairs of parent-child (child and one of his/her parent) from 13 public middle schools in Beijing participating in the study and finishing the questionnaires. All of the participants were eighth grade students (1017 girls). Written informed consent was obtained from the students and their parents. Parenting stress was assessed using *Parental Distress sub-scale* (Abidin, 1995). Self-esteem was measured using *Rosenberg Self-Esteem Scale* (RSES) among adolescents. Well-being was measured through self-report using the Survey on Psychological Characteristics of Children and Adolescents aged 6-18 in China.

The results revealed that: 1) there was a significant negative correlation between parenting stress and adolescents' well-being for fathers, but a significant positive correlation for mothers. 2)There was a significant difference of parenting stress in terms of parent's gender, and adolescents' self-esteem partially mediated the relationship between parenting stress and adolescents' well-being for fathers.

These results suggested that adolescents well-being may be affected by parenting stress of parents through adolescents' self-esteem, especially for fathers. The differences of parenting stress and the mediation role of self-esteem in the relationship between parenting stress and adolescents' well-being in terms of parents' gender could be discussed further.

PP 203

MIDWIFES EVALUATION OF THE MATERNAL ANTENATAL ATTACHMENT SCALE (MAAS) IN PREGNANCY CHECK-UPS

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Prenatal maternal-fetal bonding represents the earliest and one of the most basic forms of human intimacy. The strength and the quality of bonding is influenced by maternal prenatal health behavior, mental well-being, internal attachment representations, and predict infant attachment behavior. This attests to a possible public health potential in addressing maternal-fetal bonding as a topic during pregnancy check-ups.

The purpose of this study was to examine midwifes in prenatal clinics' evaluation of the Maternal Antenatal Attachment Scale (MAAS).

39 midwifes completed an anonymous web survey in September 2018, comprising both midwifes' practice profile and a Norwegian translation of the MAAS. The scale on practice profile comprised nine items, capturing the extent to which midwifes ask pregnant women during pregnancy check-ups about health and prenatal bonding issues. Subsequently, the midwifes responded to each of the 19 items in the MAAS, by indicating how useful they found each of the MAAS items to be for their practice.

A one-sample t-test showed that the midwifes found 18 of the 19 MAAS items to be significantly useful for their pregnancy check-up practice. A principal component analysis yielded a two-factor model that we labeled "Health-focused practice profile" and "Relation-focused practice profile" in prenatal care. The midwifes MAAS evaluation scores also yielded a two-factor model based on 13 of the 19 items, labelled "Strength" and "Quality" of bonding, in accordance with the original two subscale solution of the MAAS.

The subscales capturing the midwifes' practice profile and their evaluation of the MAAS were inter-correlated, respectively. Regarding the relationship between the midwifes' practice profile and their evaluation of the MAAS, only the MAAS-Quality of bonding subscale were correlated with the Relation-focused practice (r=.45, p<.01). Thus, neither the midwifes' health-focused practice were correlated with the evaluation of any of the MAAS subscales, nor were the midwifes' evaluation of MAAS-Strength of bonding correlated with their practice profile.

These findings show that the midwifes' evaluation of the MAAS is influenced by their practice profile in prenatal care. The results from this pilot study are a promising first step in assessing prenatal bonding during regular pregnancy check-ups, but these findings need to be replicated in a larger study before considerations for implementing as part of regular pregnancy check-ups could be made.

PP 204

COMPARISONS BETWEEN MOTHER-PRETERM INFANT AND FATHER-PRETERM INFANT INTERACTION

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Prematurity can lead difficulties for the interactions between infant and his family. This study compared the interactive behaviors of 6 dyads mother-preterm infants and 6 father-preterm infants which attended a service to monitor the baby development during the first year of life in a Brazilian public university. Premature infants were between three to four months old. The dyads were analyzed in play interactions using the Intera-Díade protocol which categorizes positive, negative and non-interactive behaviors. Comparisons were performed with the Mann-Whitney test. Results suggest no significant diferences between parents. However, it was observed that fathers showed more behaviors of playing with the baby, e.g. singing to him, tickling, talking and mothers presented more behaviors of calming the baby, looking at him, waiting for the baby's responses to their initiatives. There were no significant differences in the interaction between the infant and his parents, but the babies showed more positive behaviors during interaction with their mothers, e.g., look at her, smile at her, vocalize at her and more non-interactive behaviors with fathers, e.g. exploring the environment. Observing early interactions between parents and their preterm childrens may contribute to the planning interventions that aim to develop parental skills, increase parental responsiveness and promote child development.

PP 205
FUTURE PLANS TO HAVE CHILDREN: ATTACHMENT TO ONE'S OWN PARENTS AND CAREGIVING IN EMERGING ADULTHOOD. EARLY FINDINGS FROM THE LONGITUDINAL ATTACHMENT AND RELATIONSHIPS STUDY (LARS)

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The current study aims to fill a gap in intergenerational attachment and caregiving research during the preconception period. This poster presents early cross-sectional findings from the first 500 participants in The Longitudinal Attachment and Relationships Study (LARS).

Method: Investigation began in 2018 with the current cohort during emerging adulthood and will culminate in early parenthood. To date, LARS consists of 500 emerging adults who have participated in the first wave of data collection. Emerging adulthood (18-25 years) is the developmental stage immediately preceding peak childbearing age in the developed western world. Of these, 300 have consented to be contacted for follow up surveys about their relationships and future pregnancies. Emerging adulthood typically incorporates major life transitions and experimentation with relationships (Arnett, 2000), providing an ideal starting point for investigation of these issues. Data collection will take place over the next seven years, beginning with phase one in emerging adulthood (2018-2020). Following participants through time, phase two (2020-2021) will investigate stability and change in adult attachment over time, and in preparation for parenthood. Phase three (2021-2024) will investigate perinatal attachment themes, and phase four (2024-2026) will investigate caregiving and early attachment in the next generation.

PP 206
FATHERS' AND MOTHERS' LIFE SATISFACTION, PARENTAL INVOLVEMENT, AND EARLY CHILDHOOD DEVELOPMENT IN LOW- AND MIDDLE-INCOME COUNTRIES: A DYADIC ANALYSIS

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Background and aims: Family systems theory (Cox & Paley, 1997) posits that families are composed of subsystems such as husband-wife, mother-child and father-child dyads and these subsystems within families are in constant interaction with each other. Taking the interdependent nature of these systems into account is therefore crucial when testing family relationships in developmental context. In this study, using dyadic data from mothers, fathers, and children in families residing in low- and middle-income countries (LMIC) that participated in UNICEF's Multiple Indicator Cluster Survey (MICS), we aim to examine how maternal and paternal life satisfaction may influence children's early development through parental involvement.

Method: Using data from 7 countries that participated in MICS round 5 and completed the questionnaires for women, men and children under five, we have tested mediation using a dyadic actor-partner interdependence model where fathers and mothers served as distinguishable dyad members. We used UNICEF-recommended indicators for literacy-numeracy development. Mother and father involvement were measured via number of caregiving activities involving child and parent. Mothers and fathers who engaged in at least 1 of the six activities in the last three days were included. Mother's and father's life satisfaction were measured with items on various domains such as satisfaction with health, current residence and social relationships.

Results: Preliminary analyses reveal that fathers' life satisfaction indirectly links to their 3-and-4-year-old children's literacy and numeracy skills through mothers' involvement in activities supporting cognitive development such as reading books, telling stories, counting, naming, and drawing.

Conclusions: Results of the mediation model provide epidemiological evidence on the importance of parent life satisfaction for early childhood development in LMIC. The partner effect of fathers on mothers' parental engagement is discussed in light of the family systems theory.

PP 207

FOUR-MONTH-OLD INFANTS' INTER-PERSONAL SYNCHRONY OF EMOTIONAL COMMUNICATION: AN INVESTIGATION WITH MOTHERS, FATHERS, AND STRANGERS

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Infants actively communicate and interpret emotional responses during social interactions via the inter-personal synchrony of the three modalities of emotional communication (EC): gaze direction, facial expressions, and vocalizations (Beebe et al., 2016). Inter-personal synchrony of EC within the adult-infant dyad is the temporal coordination of one's EC in response to their interaction partner's prior behavior (Beebe et al., 2010). Healthy parent-infant synchronies are related to self-regulation and socio-emotional development (Feldman, 2007). Although research has investigated these dynamics in mother-infant interactions, comparatively little is known about inter-personal synchronies of father-infant and stranger-infant dyads. This study examines differences in the inter-personal synchronies of four-month-old infants' emotional communication with mothers, fathers, and strangers across dyadic and triadic contexts.

Participants include 60 Dutch families (47% female infants). Observations were micro-coded (frame-by-frame) using the software program, Observer XT 13.0 (Noldus, Trienes, Hendriksen, Jansen, & Jansen, 2000). Gaze and facial expression synchronies were exported as temporal co-occurrence, and vocalizations as temporal sequential analysis. Based on previous literature, we expected: a) increased gaze synchrony in mother-infant dyads, b) similar levels of positive facial expressions with mothers and fathers and lower levels with strangers, c) increased levels of vocalization lag synchrony with strangers.

Preliminary multilevel regression analyses ($N = 34$) showed trends supporting increased gaze with mothers and increased facial expressions with familiar partners. Vocalization synchrony was significantly higher with strangers during dyadic but not triadic interactions. Final results on the entire sample will be presented at the conference.

The current study provides a clearer understanding of infant EC use and their synchronies, as well as insight into the differentiating development of inter-personal synchrony already observable at four months within and between familiar and unfamiliar interaction partners. This further contributes to our understanding of infants' socio-emotional development and their relation to the development of later psychopathologies in children.

PP 208
COMPARISON OF TURKISH, BELGIAN-TURKISH AND BELGIAN ADOLESCENTS' PERCEPTIONS ON PARENTAL BEHAVIOURS AND DEMOGRAPHIC CHARACTERISTICS

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This study aimed to compare Turkish, Belgian-Turkish and Belgian adolescents in regard to their perceptions on parental behaviors. 433 Turkish, 431 Belgian and 218 Belgian-Turks adolescents summing up to 1082 were participated. Participants for the research were students studying in three different schools from Çankaya and Yenimahalle, district located in Ankara, Turkey and students studying in three different schools from Ledeberg and Deinze, district located in Ghent, Belgium. Participants were given ''Dependency Oriented and Achievement Oriented Psychological Control Scale'', ''Other Parenting Dimensions Scale'' and a ''Personal Information Form'' prepared by researcher. Results were analyzed with SPSS 22.0. The data was analyzed by t-test, ANOVA, Kruskal-Wallis test and Pearson Product-Moment Correlation techniques.

The results indicated that Belgian-Turkish adolescents perceive the highest level of dependency and achievement oriented pyschological control. Spesifically, Turkish and Belgian-Turkish adolescents reported more dependency oriented psychological control, yet Belgian adolescents reported more on achievement oriented pscyhological control. The results also showed that Turkish parents got higher scores on autonomy support and responsiveness behaviors. In addition to this, Belgian and Turkish male adolescents reported higher scores on dependency and achievement oriented psychological control and female adolescents reported more parental responsiveness and autonomy support. The results also indicated that the age and paternal responsiveness are inversely proportional in Turkish sample. Similarly, the age and paternal autonomy support are directly proportional in Belgian sample. Only Belgian sample reported that the educational level has an impact on parental behaviors, which was the higher paternal education level promotes higher paternal autonomy support. The results of this research shows similarities with previous research and finally suggestions were made for future research.

PP 209
COMMITMENTS IN CLOSE RELATIONSHIPS AND STUDY IN THE TRANSITION TO ADULTHOOD: EFFECT OF PARENTING

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Previous research highlights the role of the family in the process of identity development (Koepke & Denissen, 2012). Parental support, warm relationship with parents, but also appropriate behavioral control is seen as necessary in healthy identity development and commitment making (Barber et al., 2005). On the contrary, psychological control is related to the lack of ability in commitment making (Luyckx et al., 2007). This study examines the impact of the perceived relationship with parents on the change in identity commitments in the transition to adulthood.

We used Czech adaptation of Groningen Identity Development Scale (Bosma, 1985; Konečná et al., 2010) to measure a level of commitments, Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987) to measure the quality of relationship with parents, Perception of Parental Autonomy-Support and Control Scale (Robbins, 1994) to assess the perceived parental autonomy-support and behavioral control and Psychological Control Scale (Barber, 1996) to assess parental psychological control.

We analyzed data from the longitudinal project Paths to adulthood. Sample is mostly women (75 %), university students, and aged 18 to 26 at the start of the project. This study employed multilevel growth models to analyze the change over three measurements of identity commitments in each domain of romantic relationship, relationship with parents and study. We also estimate the effect of the parenting on this change. Results indicate a slight growth in commitments in all three domains. Commitments are generally higher in relationship domains and in women. There is a positive effect of quality of relationship with mother and autonomy support from father on the level of commitments. There is no effect of parental behavioral or psychological control.

Our results support the notion that the warm and supporting parenting in transition to adulthood is positively associated with achieving commitments in close relationships and study.

PP 210
THE ROLE OF EMPATHY, REFLECTIVE FUNCTIONING, AND INFANT TEMPERAMENT IN THE PRACTICE OF MATERNAL MIND-MINDEDNESS

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Mind-mindedness is the caregiver's tendency to respond to the infant with mind-related comments based on understanding the infant's internal states (Meins et al., 2001). Maternal mind-mindedness predicts children's secure attachment and better socio-cognitive development (e.g., Meins et al., 2013), however little is known about what individual factors in mothers and infants determine levels of maternal mind-mindedness. The present study aims to explore relations between mothers' dispositional empathy, parental reflective functioning (PRF), infant temperament, and mind-mindedness.

Sixty-three British mother-infant dyads (aged 4 to 8 months) participated in this study. Ten minute free-play sessions between mothers and their infants were recorded to assess maternal mind-mindedness towards their infant in the laboratory setting. Mothers' empathy and PRF were measured by self-report questionnaires (Questionnaire of Cognitive and Affective Empathy, QCAE: Reniers, Corcoran, & Drake, 2011; Parental Reflective Functioning Questionnaire, PRFQ: Fonagy et al., 2016). Infant temperament was assessed using a laboratory-based measure.

According to the analysed data, mother's interest and curiosity on their infant's mental states was positively related to mother's cognitive empathy and infant's difficult temperament. However, a high level of certainty about mental states, which is one of subscales of PRFQ, was related to a low level of proximal responsivity of affective empathy. Lastly, a non-mentalising stance of PRFQ was positively related to emotion contagion of affective empathy. As mind-mindedness is being coded, further associations with mind-mindedness will be examined.

These findings may first suggest the relationships between parent's mentalising ability to reflect their children's mental process (PRF), and the parent's empathy. Given that Meins et al.'s (2014) proposal that mind-mindedness is a quality of close relationships rather than a trait-like construct, future findings of mind-mindedness in the study may present different associations from PRF, and thereby suggest further understanding about parental mentalisation and possible antecedents of mind-mindedness.

PP 212
PREVENTATIVE FAMILY ASSESSMENT IN THE BASQUE COUNTRY

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Background and aims: within the framework of an agreement between the Family & Infancy Service and Basque Country University (Faculty of Psychology), a new family preventative assessment service was implemented in Vitoria-Gasteiz City Council.

Methods: a group of 100 families of two year old children, were assessed through home visiting procedure using the HES-2 which assess a wide range of parenting competencies and family context variables, subsequently families were provided with a series of everyday parenting guidelines.

Results: empirical evidence of the effectiveness of family assessment and parenting advice was obtained.

Conclusions: a regular, evidence based, preventative family assessment strategy should be implemented in school, health and social services.

PP 213

VALUES OF MOTHERS SERVING PRISON SENTENCES WITH THEIR CHILD

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The poster concerns the values of women prisoners rising their children in a prison, in particular the value assigned to the role of the mother. The question is whether the women inmates take their motherly responsibilities for love or for because they expect a more lenient treatment or have better conditions of serving a sentence. Considerable part of society have doubts about the true motherly love of women inmates.

The study was performed with the use of the Questionnaire PVQ-R3, which is a modified version of the classical model of values, measured by the Questionnaire PVQ, proposed by Schwartz and coworkers (Schwartz et al., 2012). The study was performed on a group of 25 women serving sentences at the Home for Mother and Child at Prison no. 1 in Grudziądz (Poland).

The values closest to the mothers serving sentences with children include benevolence. According to Schwartz it is taking care of close persons, family members, group of friends. A little closer was benevolence in the dimension of care (BEC) understood as the care for the good of other members of the group than benevolence in the dimension of dependability (BED) means being a dependable and reliable member of the group. The most distant values in the group studied were the power over individuals in the sense of control of other people and power over resources in the sense of control over material and human resources.

PP 214

A PILOT STUDY FOR ATTACHMENT PROCESSES AND HEALTHY DEVELOPMENT OF 0-3 YEAR-OLD CHILDREN STAYING IN PRISON WITH THEIR MOTHER

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In this ongoing project, 31 baby and their mothers who will stay with their mothers in prison and who cannot benefit from the pre-school will be studied. Within the scope of this project, pre-education mothers, the demographic information form for children, AGTE development test, Peabody Receiver Language Test; The mothers are administering the Parent-Child Inclusive Functions Scale, 1-3 years old social emotional rating scale, ACE Trauma Scale, Child Trauma Questionnaire, Marschack Interaction Rating and Emotion Regulation Scale, and individual needs are being determined by taking the opinions of the prison psychologist and social workers. Research applications to be conducted with infants and children are prepared by using game technique. After each season, the activities of the children will be processed and evaluated at the end of the month. The project is planned to last for one year. After one year of work, the materials used will be printed and will be delivered to the new ones in the project. The aim of this study is to make the graduate students of Maltepe University Psychology Department sustainable through supervision and internship courses. At the end of the pilot study, post-tests will be applied to the children and their mothers and the results will be evaluated statistically. Only pre-test results will be shown in this congress.

The aim of this study is to support all development areas of children aged 0-3 with their mothers and to strengthen the emotional bond between mother and child and to increase interaction. At the same time, the aim of the ongoing research is to create a playground for children who cannot play. Developmental assessments will be made in this context. In addition, how the therapy processes affect this process will be investigated.

The Project is carrying out three days a week for one year (Working on Wednesday: Mother's Inclusive Function: Sinem GEZGİN and Neslihan ZABCI, Working on Thursday: Let's Play!: Gülçin KARADENİZ, Working on Friday: Dyadik Trauma Study Derya ALTINAY and Ceren KATİP). It is planned to reevaluate children's language-cognitive, fine motor, gross motor, social skills self-care and progressive language development, mother's behavior, mother's sensitivity and the positive progress in the mother-child relationship.

In our ongoing study, the aforementioned pre-tests were applied. The final tests were planned as June 2019. The results of the tests will be share in the congress.

PP 341
THE INFLUENCE OF PARENTAL SENSITIVITY, DEPRESSIVE SYMPTOMS, AND FAMILY ALLIANCE ON INFANT SYMPTOMATOLOGY: A LONGITUDINAL STUDY IN THE FIRST TWO YEARS

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Background and aims: Several factors, such as parents' depressive symptoms, low sensitivity, or problematic family-level processes, e.g. coparenting conflicts or problematic family alliances, have been associated with a potential development of early difficulties in the infant (feeding, sleeping, crying). However, the empirical evidence about these processes is still fragmented, because many studies have investigated the respective influence of these factors, measured in mothers and fathers, as separate processes. The aim of this study was to investigate how depressive symptoms, parental sensitivity, and family alliance together could predict child symptoms in the first 18 months postpartum.

Method: In a sample of 68 volunteer families, we conducted reapeated assesments (3, 9, and 18 months postpartum) of each parent's depressive symptoms with the Edinburgh Postnatal Depression Scale, parental sensitivity during a brief moment of dyadic interaction (coded with Crittenden's Care-Index), and family alliance during mother-father-child triadic play. Moreover, both parents assessed child symptoms with a 10-item of the Symptom Check List. We analyzed data using Generalized Linear Mixed Models (GLMMs), allowing to account for dependence in the data due to repeated measures of individuals nested in families.

Results: The results showed that psychofunctional symptoms declined over time, were associated with increased parental depressive symptoms, and were unexpectedly greater in cooperative than in problematic family alliances. A significant interaction effect showed, however, that the link between parents' and child symptoms were lower in cooperative family alliances. On the other hand, externalizing symptoms were only predicted by time, with symptoms increasing from 3 to 18 months. Neither parents' nor child gender had any influence on both types of symptoms.

Conclusions: Our findings suggested that parent's depressive state predicted psychofunctional symptoms in the child, but that this link might be buffered by the quality of family alliance.

PP 350
Factors predicting emotional well-being in young children FOLLOWING parental divorce

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It is suggested that in the absence of new stresses and adaptive challenges associated with their parents' separation most children can cope with their new life situation. This study aimed to explore divorce-related factors that could predict young children's (4 to 7 years old) positive developmental outcomes such as attention, self-regulation, ability to take initiatives and positive relationships with others. It was conducted with a representative sample of 130 parents from different regions in Greece who had been divorced for at least a year before the period of study. Based on parents' perception concerning the level of competence and the adversity that children had faced due to divorce process, the sample was divided into two groups (a) those families who considered the child of reference as more "vulnerable" (38.5%), and (b) those who considered the child as more "resilient" (61.5%). Regression analyses showed that among the factors which predicted emotional well-being for children of the former group, who were considered as at risk of coping with the stressors of divorce, were: i) emotional proximity in parent-child relationships, ii) supportive relationship between ex-spouses, iii) absence of parental stress, iv) parents' life satisfaction, and v) family supportive groups. On the other side, i) stressful life events and ii) feelings of rejection predicted higher risk. For the other group of children, i.e. those who were considered as adaptive to divorce stressors it was revealed that i) life-changing events and ii) parents' life satisfaction contributed to better developmental outcomes, whereas i) feelings of rejection, ii) confrontational parent-child relationship, and iii) parents' hostility before divorce could negatively affect children's emotional well-being. The findings are discussed through the prism of the crucial role that divorce-related factors play on the developmental process as well as their implications to divorce intervention programs.

Saturday, August 31st, 2019

Poster Presentations

Session 4

Olympia Foyer 16:15 – 16:45

PP 215

DEVELOPMENT OF JAPANESE COLLEGE STUDENTS' DEMANDS FOR THE RIGHT TO RECEIVE HIGHER EDUCATION

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Background and aims: In 2016, the Japanese voting age was lowered to 18-years. Currently, young Japanese people appear more interested than ever in their right to higher education. Therefore, this study examined how their educational experience informs their perception of educational rights.

Methods: Interviews and a questionnaire survey were conducted. Three college students who participated in political movements on educational rights were interviewed. Meanwhile, 23 students responded to a questionnaire survey.

The interviewees recounted their path to the educational rights movement and how it changed their views. Survey respondents answered questions about their interest in higher education issues (e.g., student fee problems) and what they think is the purpose of college learning.

Results: The interviews revealed that each participant began taking action based on a sense of crisis. Through difficult experiences in the movement, senior students began to express their demands in relation to social history that addresses establishment of human rights.

Meanwhile, according to the questionnaire survey, while more than 70% of students were not interested in student fee problems when they entered college, 10% became interested in them along with greater experience of higher education. With regard to the purpose of college learning, a higher number of students thought a great deal about exploring their way of life (87%) than about knowing our society (65%) and about the Earth's environment (56%).

Conclusions: While the formation of social and historical identity is one of developmental tasks for young people, college students seem more interested in their own lives than in society and history. While politically active students also have this tendency, they gradually begin to express their opinions through words and concepts used in the historic human rights movements.

PP 217

PSYCHOMETRIC EVALUATION OF A NEW INTERPRETIVE SPELLING TEST FOR ENGLISH PRIMARY SCHOOL CHILDREN

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Some children experience difficulties during the process of learning to spell, these children can be at heightened risk of written expression difficulties, may experience low self-esteem, have low academic expectations and may be prone to unemployment. Children with difficulties in any of the skills that spelling depends on will struggle to spell and write to the same level of efficiency or speed as their peers. Therefore, it is important to be able to identify the extent to which children effectively use phonological encoding and whole-word processing of familiar items.

The aim of the current paper is to present a spelling test that identifies these key processes, and which can be used as a useful interpretive tool for teachers and researchers alike.

We report the psycholinguistic characteristics of the items in the new test, together with reliability and validity measures obtained for data from UK children in Reception year to Year 6 (N~500). Finally, we present analyses using Item Response Theory (IRT) that allowed us to determine item characteristics and develop a shorter version of the test.

The results to date have shown that the test is a valid and reliable measurement of spelling skill. We report single cases of individuals with phonological, lexical and mixed deficit profiles, demonstrating the power of the interpretive spelling tool to identify particular areas of spelling difficulty.

PP 218
STUDY ENGAGEMENT AMONG UNIVERSITY STUDENTS

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[2] Ankara University

Introduction: The number of school drop-out and school burn out rates among students are increasing in schools at all levels. For underlying reasons and planning interventions, study engagement is gaining prominence. It is an important component of daily school life and long-term educational life, as it consists of energy, dedication and absorption in students. Study engagement seem to serve a key for understanding the antecedents of school dropout and burn-out. Therefore, it is important to explore study engagement of the students.

Purpose: The present qualitative study aims to investigate how students in higher education, both undergraduate and graduate, experience study engagement and their perception of the concept.

Method: To accomplish this purpose, focus groups were performed. Total 16 volunteer undergraduate and 8 graduate students (N=24) were reached as 3 separated focus groups from 2 different universities in Turkey. Focus group questions consisted of; the perception of studying/academic work, questions to reveal components of study engagement and identifying affective components, behavioral routines and cognitive investment of study and demand-resources in the context of their education.

Results: Most of the undergraduate students were found to fit exhausted-engaged profile proposed by Salmelo_Aro and Read (2017). The perception and priority of studying found to be differed according to the attributions for the study field, to interest and the feeling of responsibility. For the demands of the school, students express that they are feeling positive but overwhelmed, the resources they use are; peer learning and mentors. The graduate students found to be experience flow more often, feeling exited and enthusiasm at the beginning but later on these feelings turn into exhaustion and cynicism towards academic work.

Conclusion: Students' studying experiences and their perceptions are significantly influenced from the level of education and the goals that's been set and the dedication of these goals.

PP 219

SCHOOL-BASED TRAINING FOR EXECUTIVE FUNCTION AND SELF-REGULATION: EFFECTS OF AN INTERVENTION FOR FIRST GRADERS AFTER THE GREAT EAST JAPAN EARTHQUAKE

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Introduction: On March 2011, a massive undersea earthquake and tsunami struck east Japan. Even after eight years, children showed behavioral problems in the elementary school. As one of the methods to solve such problems, it is necessary to improve the children's executive function and behavioral self-regulation, which are related to classroom behavior. We developed an executive function reinforcement program in Japan named Social Thinking and Academic Readiness Training (START). The present study investigated the effects of the START program on executive function, behavioral self-regulation, and classroom behavior in first graders.

Methods: Participants were 101 first graders in Miyagi. The intervention group comprised 55 children (25 girls, M = 79.8, SD = 3.6). The control group comprised 46 children (23 girls, M = 79.6, SD = 3.4). The intervention group attended the 6 academic readiness lessons for 8 weeks. Evaluations were performed pre- and post-program. The behavioral self-regulation task was Head-Toes-Knees-Shoulders (HTKS). Working memory tasks were a Backward Digit Recall and a Hand Movement task. The inhibitory control task was a Fruit/Vegetable Stroop. The teacher's report included a child behavior checklist. Children were observed using a video of the classroom during their activities.

Results: The score on the HTKS task improved in the intervention group. The score on the Backward Digit Recall task improved in both groups. The score on the Hand Movement task marginally improved in the intervention group. The scores on the Fruit/Vegetable Stroop task improved in both groups. According to the teacher's report, attention problems decreased in both groups. Children's action-responsive times decreased in neither group.

The START program improved behavioral self-regulation and working memory in first graders. In the previous study, behavioral self-regulation and working memory were related to school success. The START program is necessary for children after a great disaster.

PP 220

THE INFLUENCE OF AN INTEGRATED SCHOOL SETTING ON THE DEVELOPMENT OF SELF-CONCEPT, SOCIAL ACCEPTANCE AND FRIENDSHIPS

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Social participation of students with SEN is an important goal of inclusive education. Koster, Nakken, Pijl and Van Houten (2009) have defined four key themes of social participation, namely (1) friendships, (2) positive interactions with peers, (3) (social) self-perception and (4) acceptance by classmates. Numerous studies have shown however that students with SEN in inclusive classrooms are more frequently rejected, feel less accepted, have fewer friends and hold more negative self-perceptions compared to both typically developing peers and students with SEN in special education (e.g. Bossaert, De Boer, Frostad, Pijl & Petry, 2015). An alternative to inclusive education is integrated education. Not much is known about the social participation of students with (different types of) SEN within integrated school settings.

The general aim of this study is to fill the existing research gap and examine the social participation of students with and without SEN within an integrated school setting. Related variables (e.g. social skills, behavior, attitude and peer norms) will be included in the study.

The study will be conducted at an unique integrated educational setting within The Netherlands, consisting of four schools; two regular secondary schools (vocational education), a special school for students with cognitive disabilities and a special school for students with behavioral disorders. Over 940 students are in attendance. Sociometric data will be collected. Furthermore, standardized questionnaires (Self-Perception Profile for Adolescents; Harter, 1988) and developed questionnaires focusing on attitudes and peer norms will be used. Teachers will report on social skills and behavior.

Hypnotized is students with SEN within an integrated school setting will hold more positive self-perceptions, have more friends (due to homophily) and feel less rejected in comparison to students within inclusive education. Understanding the relations between the key components of social participation is critical to the development of students with SEN within our educational systems.

PP 221

PREDICTORS OF CLASSROOM TECHNOLOGY USE AMONG MATHEMATICS TEACHERS IN POLAND

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Active teaching methods enhance student learning in science, engineering, and mathematics, when compared with traditional exposition (lecture) centered methods (Freeman et al. 2014), but crafting constructivist course designs in those fields often requires the use of technology. Lack of proper equipment has often been the main justification given by teachers for not introducing active teaching methods (Bingimlas 2009; Pelgrum 2001), but currently most students have a powerful network-wired computer in their pockets, yet banning mobile phone use in schools is becoming a popular legislation (Chrisafis 2018). It seems therefore that some of the barriers for introducing active teaching methods mediated by technology are psychological rather than material.

150 mathematics teachers from primary and secondary schools in Poland answered a survey in which their willingness to use technology during lessons was regressed on: their preferred teaching style (e.g. strict student control); burnout (Oldenburg Inventory) (Baka & Basińska, 2016); need for cognition (Matusz, Traczyk, & Gąsiorowska, 2011); peer and supervisor social support (Widerszal-Bazyl & Cieślak 2000); teachers self-efficacy (Norwegian Scale; Baka, 2017) and recovery experiences (Sonnentag & Fritz 2007).

Classroom technology adoption during mathematics classes was not related to teachers general pedagogical self-efficacy, burnout or preferred teaching style, but was most strongly predicted by their individual need for cognition, $b = .42$, $p < .001$, perceived supervisor support, $b = .29$, $p < 0,05$ and recovery experiences evidencing high need for autonomy, $b = .22$, $p < 0,05$, adjusted $R2 = .22$, $F(14, 104) = 3.4$, $p < .001$.

These results point to the importance of individual, personal characteristics of teachers when considering the best methods to spread innovations in schools. Teachers who most readily decide to use technology in their mathematics courses have the qualities of early adopters, with high need for autonomy, intrinsic motivation and willingness to spend cognitive effort in order to solve complex, novel tasks. When those qualities are joined with a perception that the management of a particular institution is supportive, then innovation takes place.

PP 222

PROTECTING FACTORS FOR ACADEMIC PERFORMANCE IN IMMIGRANT CHILDREN BEFORE TRANSITIONING TO SECONDARY SCHOOL: A LONGITUDINAL MULTILEVEL INVESTIGATION

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Immigrant children and youth are not necessarily at risk for doing worse in terms of developmental tasks and adaptation. However, being an immigrant student has consistently been linked to worse academic achievement. Numerous studies have looked at potential factors promoting academic achievement, such as self-concept, students' relationships in the classroom and the relationships with their parents. Depending on the ethnic composition of the classroom, these factors seem to be important resources for immigrant children. The focus in this research area has mostly been on adolescents in secondary schools with much less longitudinal studies investigating the interplay of these factors in primary school. The transition from primary to secondary school is accompanied with a decrease in academic performance and motivation, and less parental influence. To get a better insight in protecting factors for academic performance just before this transition, we investigated the link between children's self-concepts, the relationships with their parents and teachers, their perception of inclusion in the classroom and academic performance. We used longitudinal data from the beginning and the end of grade 4 of 700 children and their teachers in 48 classes in Austrian primary schools. Multilevel analyses were conducted to investigate change in three achievement domains (German, Maths, general studies) as well as the teacher's assessment of each students' achievement potential, depending on migration background (first and second generation) while statistically controlling for ethnic composition of the classroom. Results showed that there was a difference in change between non-immigrant students and immigrant students in all three investigated domains and the assessment of the teacher. Self-concept and perception of inclusion seem to hinder this decline whereas relationships to parents and teacher did not. The findings suggest that a positive self-concept and the social inclusion in the classroom matter in immigrant children's' development of academic performance.

PP 223

TESTING ACHIEVEMENT GOAL THEORY - A META-ANALYSIS OF THE RELATION BETWEEN GOAL STRUCTURES AND PERSONAL ACHIEVEMENT GOALS

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Achievement goal theory includes both personal motivational features (achievement goals) and contextual features (goal structures). Achievement goals can be defined as competence-relevant purposes or aims students aspire to in achievement settings. Given the importance of achievement goals for a range of achievement related outcomes (persistence, deep-level learning strategies, self-efficacy, well-being, self-handicapping) researchers have sought to gain an understanding of how achievement goals develop and can be shaped. Goal structures constitute the contextual part of achievement goal theory and refer to teachers' instructional practices and the goal-related messages they communicate to students. Achievement goal theory holds that the prevailing goal structures in learning environments (such as the classroom) influence the achievement goals students adopt.

This meta-analysis (k = 68, N = 47,975) examined (a) the strength of the relationships between student ratings of goal structures (mastery-approach goal structures, mastery-avoidance goal structures, performance-approach goal structures, and performance-avoidance goal structures) and personal achievement goals (mastery-approach goals, mastery-avoidance goals, performance- approach goals, and performance-avoidance goals), (b) their development over different educational levels (primary, lower secondary, upper secondary, tertiary education), and (c) moderating variables (conceptual definitions, operationalization, sex, world region, publication status).

Results indicated that each achievement goal was most strongly related to its contextual counterpart (e.g., mastery goals with mastery goal structure). The strength of the relationship changes over the course of different educational levels e.g., becoming more pronounced in tertiary than in primary education. World region moderated some of the relations, and for most combinations of goal structures and achievement goals, measures framing goal structures as a climate produced higher correlations than measures using the teacher as referent.

Building on systematic and best available evidence, this meta-analysis showed that the relations between goal structures and achievement goals are robust and largely unbiased. Challenges and promising routes for future research and theory building are discussed.

PP 224

THE RELATIONSHIP BETWEEN NUMERICAL REPRESENTATION USING SSD AND COUNTING IN YOUNG CHILDREN

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Children acquire the ability to perceive numerical representations from an early age. The development of this ability plays a central role in a child's mathematical abilities. In recent times, studies concerning mental number lines often use number-to-position (NP) tasks, which involve estimating a number on a number line. Siegler and Booth (2004) concluded that children's numerical representations shift from logarithmic representation, in which representations of numerical magnitude increases logarithmically with numerical magnitude, to linear representation, in which representations of numerical magnitude increase linearly with number size. However, Bouwmeester and Verkoeijen (2012) suggest that children show various kinds of estimation patterns. Moeller et al. (2009) observed a two-linear model, and Uragami and Sugimura (2015) found that the low slope and the lope divided linear representation by using different analytical methods of fitted representations and non-fitted representations using the SSD (Sum of Squared Difference) approach. In addition, they investigated the strategy of estimation of the number line and found that many children chose a counting strategy that counts the presented number from 0 with the index finger on the number line.

In this study, I investigate the relationship between certain kinds of linear representation and counting strategies. Twenty-one middle preschoolers (mean age = 4 years and 8 months) and forty-one older preschoolers (mean age = 5 years and 9 months) received a NP task (0–10) and a counting task which involved counting the number of blocks from 1 to 10 while aligning the blocks on a board.

First, I analyzed data using SSD and categorized the types of representations. Six children were categorized as performing linear representations with near 1; eight children were categorized as performing linear representations with the low slope; twenty-seven children were categorized as performing two separate linear representations; only one child was categorized as performing a logarithmic representation; and twenty children were categorized as using non-fitted representations.

Second, I calculated the score for the counting task and classified the counting pattern (e.g., some children aligned blocks with an orienting line from left to right; another set of children aligned them with an orienting line from right to left; while the other children aligned them randomly). In addition, numerical representation types were related to counting scores (F (5, 55) = 6.88, p<.001). All children of the two types of linear representation had full scores, and their scores were higher than those for non-fitted representations. Most children aligned blocks with an orienting line from left to right, but some children aligned them with random or specific shapes like a heart.

Previous studies suggest that children using linear representation can count perfectly, and they know no relationship between counting and alignment pattern. Young children begin to number representations from left to right because many children choose alignment with orient lines from left to right.

PP 225
DEVELOPMENTAL CHANGE OF TEACHING: FOCUSING ON THE POSITIVE AND NEGATIVE ASPECTS

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In recent years, the mental health of teachers has become an urgent problem. There are many studies that focus on teacher burnout, which is often seen in young and middle-career teachers. However, teaching includes not only the negative aspects that cause burnout but also many positive aspects. In this study, we focus on both aspects of the teaching job, and explore in detail the characteristics of burnout in young and middle-career teachers.

Study participants were young and middle-career teachers who experience career fatigue in their teaching jobs. The purpose of this research is to obtain information about aggressive measures that can improve the mental health of teachers. To analyze individual experiences, we chose personal attitude construct (PAC) analysis. PAC analysis is a qualitative research method. By creating a distance matrix of participants' thinking out of the words they use, it is possible to explore in detail their attitude about teaching.

As a result of PAC analysis, the middle-career teacher had more positive items than the young teacher. In the interview, one middle-career teacher said, "It is difficult for me to arrange teaching materials and plan the class. But I think this is positive for me, because I realized that I was able to change it." This may mean that the positive aspects of the job have grown larger than the negative aspects. The reason there were many positive items from middle-career teachers was that they took pride in their growth and self-development.

To improve the job of teaching, it is necessary to consider the meaning of the work to teachers, as well as the psychological burden it places on them. In addition, because it varies from year to year depending on the situation of the class and the relationship with colleagues, it is necessary to respond flexibly, too.

PP 226
REFLECT - A TRAINING PROGRAM TO PROMOTE GENDER EQUITY IN SCHOOLS

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To "achieve gender equality" and to "ensure inclusive and equitable quality education for all" are two strongly linked goals of the UN's 2030 Agenda for Sustainable Development. The basis for achieving both goals is laid in schools, where students develop their (often gender-typed) academic motivation and occupational aspirations. The pedagogical program of reflective coeducation aims to help girls and boys to become aware of the full range of their individual potentials in school together without being restricted by gender stereotypes. Teachers are important starting points for promoting gender equitable quality education as their attitudes and instructional practices influence students' motivation and achievement substantially. Against this backdrop, the teacher training program REFLECT attempts to transfer the principles of reflective coeducation to educational practice by fostering secondary school teachers' competences. REFLECT is theoretically based on the actiotope-model and follows three interrelated aims: (1) Expanding secondary school teachers' objective action repertoire by providing them with the knowledge necessary to change their teaching; (2) expanding secondary school teachers' subjective action space by enhancing their self-efficacy beliefs for motivation enhancement in girls and boys; (3) promoting secondary school teachers' reflection on their own contributions to the formation of gender differences, resulting in changed teaching goals. In a pilot study with 38 teachers and their 564 students, the effectivity of REFLECT was evaluated by means of a training-control-group design with a multi-method, multi-informant approach. The results of the evaluation show the effectiveness of REFLECT. In comparison to the control group, participants' self-efficacy and teaching skills increased, as did students' knowledge and perception of diversity fairness in the classroom. Lessons learned for implementing REFLECT as an approach for reflective coeducation in general teacher education are discussed.

PP 227

POSITIVE PSYCHOLOGICAL CAPITAL OF CHINESE RURAL BOARDING CHILDREN: MEASUREMENT AND ITS RELATIONSHIPS WITH BOARDING CHILDREN'S SOCIAL ADAPTIONS

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Unlike western boarding schools, which focus on elite education, and children have the privilege (Schaverien, 2015), Chinese boarding schools embody fair education, and children live in disadvantage environment. China has the largest number of boarding children in the world. In the urbanization process of China in the past ten years, with the disappearance of small-scale schools in rural areas, large-scale boarding schools in rural areas have sprung up, resulting in a large number of boarding students, especially young boarding children. At present, as the disadvantage group, the research on boarding children mainly focuses on their disadvantage situation. From the perspective of positive psychology, the positive psychological capital (or simply PsyCap) (Luthans, et. al, 2002; 2004; 2005), beyond human and social capital, as a source of sustainable competitive advantage for person.

Two studies were conducted to analyze how optimism, hope, resilience, gratefulness, autonomy, and sociability individually and as a composite higher-order factor influenced boarding children's social adaptions. Results of Study 1 provided psychometric support for a new survey measure designed to assess these 6 facets of PsyCap, as well as composite factor. The results of Study 2 indicated significant positive relationships between these 6 facets and the positive adaptions (subjective well-being, prosocial behavior, academic performance). And there were significant negative relationships between PsyCap and negative adaptions (negative affect, aggressive behavior). Results from Study 2 also indicated that the composite factor may be a better predictor of than the 6 individual facets. These results provide a strong evidence-based recommendation for the use of PsyCap for the Chinese rural boarding children.

PP 228
STUDENT COUNSELING ACTIVITIES USING BOARD GAMES FOR MALADJUSTED COLLEGE STUDENTS IN JAPANESE UNIVERSITIES

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Background and aims: In recent years, student counseling organizations in Japanese universities have been actively supporting students by applying group work (GW), which targets students with poor communication skills, such as those with tendencies related to developmental disorders. The present study considers the effectiveness of GW through the perspectives of clinical and developmental psychology.

Methods: Objective of GW: To improve the students' interpersonal skills. Period of GW activity: For a period of 3 years (a total of 61 sessions). Contents of activity: The counselors and students played board games every week for approximately 3 hours. The participating students were students with poor communication skills, such as users of student counseling (approximately 5-10 students participated for each session). Analysis method: A qualitative analysis was conducted using a questionnaire conducted after each session and detailed observation notes. Question items included the four following items: (i) interest in the activity, (ii) motivation to continue attending university, (iii) interest towards people, (iv) intention to participate in the activity (ten-point scale).

Results and Conclusions: In the present study, five students who had participated in GW continuously for approximately three years were chosen as subjects for analysis. An examination of the questionnaire led to the finding that most students scored over the mid-point (5 points) for interest in the activity and intention to participate in the activity. An analysis of the score transition enabled the classification of these students into a group whose interest in people increased as they participated in more activities, and another group whose interest remained unchanged. However, the observation data indicated that even the students whose interest remained unchanged began to speak more often, such as while devising game strategies or making negotiations. The above suggests that games, which provide a safe and free environment that is unrelated to academic performance, have the potential of functioning effectively as a place for the students to practice their interpersonal skills.

PP 229
READING DIFFICULTIES IN CHILDREN WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)

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While it is well recognised that many children with ADHD have a high rate of dyslexia, few studies have examined the specific profile of reading difficulties across reading components in children with the condition. Little research has examined the influence of co-occurring ASD symptoms on the reading profile of children with ADHD.

Twenty drug naive children with ADHD were recruited from the waiting lists of Child and Adolescent Mental Health Services (CAMHS). All completed tasks of word reading and reading comprehension from the Weschler Individual Achievement Test (WIAT-III) as well as tests of verbal and non-verbal IQ (WASI-II and BPVS-III). Parents completed ADHD and ASD symptom measures. Diagnosis was confirmed by clinical interview including parent and teacher verification.

Findings reveal a specific profile of reading difficulties in children with ADHD. Relationships observed between reading profile and co-occurring ASD symptoms will be highlighted. Further analysis is being conducted.

Further research is required to understand the factors that influence the reading profile of children with ADHD.

PP 231

A SOCIAL-PSYCHOLOGICAL INTERVENTION FOR INCREASING INTRINSIC MOTIVATION IN MATHEMATICS TO ELEMENTARY STUDENTS

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Brief social-psychological interventions in education target students' psychology and can lead to large gains in student achievement. They seem "magical", as they have lasting effects, but their efficacy is justified by targeting to students' subjective experiences and by enacting implicit psychological mechanisms on the basis of solid theoretical background (Yeager & Walton, 2011).

This brief intervention aims at increasing students' intrinsic motivation, i.e., engaging in a behavior or activity for one's own internal satisfaction, as opposed to external rewards, e.g., focusing on the process of doing something, not on the result itself. Intrinsic motivation is essential to creativity. The Theory of Planned Behavior (Ajzen, 1991) served as a guiding framework for designing the intervention as intrinsic motivation has been found to predict both behaviors and behavioral intentions.

The intervention took place in a public primary school in Athens, where high degree of cultural diversity can be observed. Greek is the second language for the majority of the students, among whom there is a significant number of refugee children. Two classes of the second grade were chosen, one serving as the experimental group and the other as the control group. The intervention lasted one week and included activities to promote students' creativity.

The intervention was evaluated using multiple measures and informants, one the reasons being that the students have not attained the Greek language sufficiently. Pre- and post- assessment was accomplished through observation, semi-structured interviews, teachers' questionnaires and students' self-reports.

This social-psychological intervention was inspired by the needs of the school, thus adopting a bottom-up approach. Although many students do not speak the language of the host country fluently, it is important to promote their creativity and to increase their intrinsic motivation for school-related outcomes.

PP 232

SELF-EFFICACY AND ACADEMIC ACHIEVEMENT: A SOCIAL-PSYCHOLOGICAL INTERVENTION FOR DEVELOPING LEARNING STRATEGIES TO ELEMENTARY STUDENTS

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There is growing evidence that "small" social-psychological interventions in education, that target students' thoughts, feelings and beliefs, can lead to academical achievement. These interventions are powerful since they focus on students' subjective experience in school and on recursive processes in the educational context.

The purpose of the present intervention is to improve academical achievement of students by facilitating the development of self-regulatory learning strategies. These strategies maximize engagement of students in learning process. Self-regulatory competence can be encouraged by teaching self-efficacy skills. Self-efficacy refers to the belief or perception that one is capable of organizing and executing the actions necessary to succeed at a given task (Bandura, 1997). Students' sense of self-efficacy can affect the level of their effort and their response to failure or challenge. Therefore, the intervention was focused in strategies that help students build a stronger sense of their own ability to accomplish a goal.

Beneficiaries of the intervention were the students in one of the two second-grade classes of a public elementary school in Athens. The other second-grade class was the control group. In both classrooms, students come from diverse cultural backgrounds, while most students are learning Greek as a second language. Many students face challenges during Greek language classes, hence the intervention activities were targeted at language learning strategies.

To evaluate the effectiveness of the intervention, different forms of assessment were provided. Both quantitative and qualitative methods, such as semi-structured interviews, questionnaires, observation and self-reports, were used. Pre- and post-assessment is included in the evaluation procedure.

Such interventions highlight the contribution of social-psychological factors in creating supporting learning environments into which diverse learners are aware of their capabilities and can accomplish their goals.

PP 233

LEARNING DIFFICULTIES AND MOTIVATION AS PREDICTORS OF VET STUDENTS' ACADEMIC ACHIEVEMENT

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The intertwined development of cognitive and psychosocial functioning influence an individual's life course from early childhood into adulthood. The transition from adolescence to young adulthood is a time of great opportunity - or difficulty. If the transition is troubled, for example one has difficulties in obtaining a secondary school degree, there is a risk of further problems, such as unemployment. In Finland, most of the difficulties in completing secondary education, such as dropping out of one's studies, happen at the vocational education and trainging (VET). This study examines both cognitive (such as learning difficulties) and psychosocial (such as motivational) factors of VET students during their education to better understand this dynamic. For example, do the students with learning difficulties attain a secondary education at the same rate as those without LD? If so, are there mediating factors? Preliminary results show that some students with LD can thrive in school environment, and might even be more persistent than their peers; however those students with LD whose motivation is also at a very low level seem to be most at risk for problems in finishing their education.

PP 235

THE RESTORATIVE EFFECTS OF A SCHOOL OUTDOOR ENVIRONMENTAL EDUCATION PROGRAM IN ITALY

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Outdoor education and experiences of contact with nature in school education might be beneficial for promoting, at the same time, the ecological lifestyles and the wellbeing children, families and teachers. The positive outcomes of these education experiences are arguable on the basis of many theories and empirical evidence on restorative environments, as well as on the foundations of classical pedagogical approaches recognizing the value of the direct experience with natural elements, and the related psychological and educational correlates (e.g., positive emotions, autonomy, self-efficacy, empathy). In this work we present the effect of the participation to an outdoor education intervention on primary and secondary school children and adolescents in Italy, conducted in the Pantanello natural reserve, located in Lazio Region (about 100 km south of Rome). The targeted participants were 153 elementary and secondary school students (experimental group). A control group of 253 students in the same territory was also involved. Before (T1) and after (T2) the outdoor education intervention the students completed a questionnaire meauring pro-environmental attitudes and behaviour, prosociality, connectedness to nature, wellbeing, empathy, life satisfaction ad mindfulness. Findings show that as en effect of the intervention the students in the experimental group increase their connectedness to nature ($F_{(311,1)}$ = 5,545; p = 0,19) and their wellbeing ($F_{(318,1)}$=16,700; p=0,00) while in the control group these variables' values decrease.

Concluding, taking part to the outdoor education program had positive outcomes on the wellbeing and ecological orientation of the involved children.

PP 236

A PERSONAL ATTITUDE CONSTRUCT (PAC) ANALYSIS OF TEACHERS' UNDERSTANDING OF THE NEED FOR CAREER GUIDANCE COUNSELING AT A SENIOR HIGH SCHOOL IN SHANDONG PROVINCE

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As Chinese universities offer an increasing number of majors, it becomes more and more important for students to choose the right subjects to study. Currently, few Chinese college students know what sorts of jobs they will be qualified to do after graduation. In fact, many college students dislike their chosen majors and don't want to work in those fields when they graduate. To change this situation, it is very important to offer career guidance counseling to students in senior high school.

The present study carried out a PAC analysis to assess whether experienced senior high school teachers in Shandong Province appreciated the importance of career guidance counseling. This qualitative-research approach enabled participants to relate freely (through interviews) to particular types of teaching; researchers analyzed the data by assessing the similarity of associative items, and creating and interpreting data clusters. The aim of the study was to improve senior high school career education.

The study findings showed that even experienced teachers had never learned any specific methods for implementing career guidance counseling; they did not understand the subject in any detail because they themselves had never received career counseling.

In future, career guidance counseling in senior high schools should be offered to teachers as well as students. It is very important to fully educate senior high school teachers in the field of career education.

PP 236A

DIFFERENTIATING FACTORS OF SCHOOL EFFECTIVENESS RELATING TO TEACHERS AND STUDENTS AT SECONDARY SCHOOLS

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Intense debate exists internationally on the study of school effectiveness. A variety of definitions have been given on this issue along with research findings that try to enrich the theoretical framework and to specify its applications. Among the factors that play an important role in school effectiveness, the most important are: "students", "teachers" and "school director".

This research aims to investigate how relevant psychological and demographic parameters with the effectiveness of a school system based on teachers' opinions and the students' reports.

In this research 1671 students and 204 teachers participated from secondary schools in broaden area of Athens. Measurements for students include: the psychosocial adjustment and school as a community that cares for pupils. Additionally, for teachers' include: school administration, emotional commitment and openness to change. The school performance of students and their participation in school programs along with the teachers' involvement of in activities beyond their educational duties were used as school effectiveness indicators.

School effectiveness was revealed in terms of students' answers that is associated with students' psychosocial adjustment. Whereas for teachers' answers supportive and with vision management is linked to the staffs' as well as the perceptions of support, care, respect between parents- teachers and parents-students.

PP 237

PRO-ENVIRONMENTAL BEHAVIOR MECHANISMS IN ADOLESCENTS AND THEIR PARENTS

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Background and aims: The "greening" of individual behaviors is an important component of mitigating human-caused environmental problems (Dietz et al., 2009). Pro-environmentally driven actions and attitudes are closely related to the morality domain as well (Thøgersen, 1996). In pursuing the goal to understand the underlying mechanisms of such complex behavior we use the Comprehensive Action Determination Model (CADM) (Klöckner & Blöbaum, 2010). This model postulates that pro-environmental behavior is directly predicted by habitual, intentional, and situational processes, while normative factors have an indirect link to pro-environmental behavior. It has been acknowledged that adolescents are not only the next generation of adults with consumer power (e.g. Bissonnette & Contento, 2001), but they also have a significant saying in family decision making on purchasing behavior. Thus, it is important to explore, does the same mechanisms apply for adolescents and their parents regarding the formation of the pro-environmental behavior, in our case reduced bottled water use.

Methods: The sample consisted of 508 adolescents (M_{age} = 15.10, SD_{age} = 1.40, 49 % were female) and their parents (M_{age} = 42.67, SDage = 6.69, 75.4 % were female). Thirty four percent of the families lived in metropolitan areas or big cities (population of 50 000 residents or more), 29 % - in cities (population of 2 000 to 50 000 residents), and 37 % - in towns and villages (population of up to 2 000 residents). To represent all elements of the CADM, we used one item per variable (e.g. awareness of a need "Bottled water use causes many environmental problems"). All items were rated on a 5-point Likert scale from (1) completely disagree to (5) completely agree, except the item for behavior, which was rated from (1) never or almost never to (5) constantly or almost constantly.

Results and conclusions: Results of the multigroup moderation analysis revealed that CADM model differs for adolescents and their parents (Δx^2(17) = 29.24, p<.05, ΔCFI = .017). Thus, when thinking about interventions and policies to reduce the use of plastic bottles in the society, we should think of different means to reach adolescents and their parents.

PP 238

MORAL EMOTION ATTRIBUTIONS AND JUSTIFICATIONS DIFFER IN PROSOCIAL OMISSION VERSUS INTENTIONAL SOCIAL EXCLUSION SITUATIONS AMONG ADOLESCENTS

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Social exclusion against peers is widespread and a cause of concern all over the world (Killen & Rutland, 2011). Findings suggest that adolescents consider multiple variables when reasoning about exclusion (Tenenbaum, Leman, Aznar, Duthie & Killen, 2018). According to the Affect-Cognition Model (Malti & Keller, 2010), cognitive and emotional skills are progressively integrated throughout development. Moral emotions involve a great degree of cognitive processing, as they require both an understanding of why it is wrong to break a moral rule, and how the rule-breaking negatively affects the well-being of others (Malti, 2016). However, it is still not fully understood how moral emotions and cognitions become integrated. Therefore, the present study compares moral emotion attributions and justifications in prosocial omission versus intentional social exclusion situations.

Adolescents (N= 530, 50.4% girls) aged 13.44 years (SD= 0.41) responded to hypothetical vignettes depicting an intentional social exclusion and a prosocial omission situation. Participants were asked to attribute emotions to the perpetrator, to justify the perpetrator's emotion, to morally judge this emotion and to justify their moral judgement of the perpetrator's emotion.

Attributed emotions to perpetrators differed between the two situations. While the majority of the adolescents thought that the perpetrator in the prosocial omission situation did not care, the majority of adolescents thought that the perpetrator in the social exclusion situation was proud or happy. While emotions in prosocial omission situations were mostly justified with reasons of personal choice, emotions in social exclusion situations were justified with reasons of moral fairness and moral empathy. The moral evaluation of the perpetrator's emotion and its justification differed depending on the kind of moral emotion attributed to the perpetrator; however, the pattern was much clearer in the intentional social exclusion situation.

The results are discussed regarding their theoretical and practical importance.

PP 239

THE IMPORTANCE OF MORAL OBLIGATION IN OREDICTING PRO-ENVIRONMENTAL BEHAVIOR: LONGITUDINAL EXAMINATION

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Fostering pro-environmental behavior (PEB) and designing appropriate interventions that could lead to PEB already in adolescence requires knowledge about its driving determinants (Heimlich & Ardoin, 2008; Steg & Vlek, 2009). Therefore, this study aimed to address this issue investigating for the first time the longitudinal predictors leading to pro-environmental behavior. In this study, we investigated the importance of moral obligations in predicting PEB, when controlling for intentions to apply PEB and behavioral habits.

The sample included 450 adolescents (52% girls, Mage = 15.21, SDage = 0.64). A questionnaire designed was based on the comprehensive action determination model (CADM, Klöckner & Blöbaum, 2010). Included items from the model related to awareness of needs, awareness of consequences, social and personal norms, intentions, habits, perceived behavioral control, access to behavior, and pro-environmental behavior. All variables for the psychological model were measured by single indicator. Adolescents were assessed at three time points at schools, during regular school hours.

Goodness of fit indices indicated that the structure of our hypothesized model was an adequate explanation of the data: x2 (df) = 109,17 (51), CFI/TLI= .971/.914, RMSEA [90% CI] = 0.050 [.037; .063]. Our model included hypotheses about several indirect effects. Thus, the bootstrap method with 5000 random samples was used to determine whether the implied indirect effects within our hypothesized model were statistically significant. Results indicated significant indirect effect of moral obligations on adolescents PEB via intentions and habits: specific indirect (Moral obligation at T1 → Habit at T2 → Behavior at T3) = -.04*; specific indirect (Moral obligation at T1 → Intention at T2 → Behavior at T3) = -.05*; total indirect (Moral obligation at T1 → Habit at T2 + Intention at T2 → Behavior at T3) = -.09**. These findings highlight the importance of fostering moral obligation when seeking to foster adolescents' pro-environmental behavior.

PP 241

CHILDREN´S EVALUATIONS OF MORAL TRANSGRESSIONS: IS HARMING OTHERS MORE TOLERATED IN A SPORT CONTEXT?

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There are some contexts where moral transgressions (such as harming others) can be somewhat tolerated. One of these contexts is sports. There is general agreement in that playing sports can influence social and moral development during childhood. Thus, the present study examined when this tolerance appears and how school-aged children's evaluations of moral transgressions are affected by: (i) the context where the action occurs (football match vs, game activity) and (ii) the agent's intentions.

Participants (6- to 12-year-old, N=147) were presented four different stories in which one character (i.e., agent) produced harm through physical contact (tripping) to their opponent. The action could be either intentionally (in order to win the match/game) or accidentally; and it could happen either in a football match or in a traditional game. The consequences of the immoral action were identical in all cases (the opponent fell down the ground). After each story, children were asked to judge the agent's behaviour using a five point scale and to justify their answers. On the whole, our results revealed that all participants evaluated quite negatively the four actions. More specifically, children at all ages considered worse intentional harm than accidentally harm, regardless the context in which it occurred. Only older participants (10- to 12-year-old) showed a slight tolerance for harming the opponent in the sport context. The analysis of their justifications revealed, firstly, that the more frequent ones referred to the consequences of the actions or were evaluative statements about it. Secondly, that older children were the only ones who recognised the agent's final aim in the intentional actions (the aggression was instrumental). These findings suggest that the sport context only starts to have a light influence on children's judgments about this specific moral transgression at the end of primary school years.

PP 242

INVESTIGATING THE INTERPLAY OF PERCEIVED PARENTAL REJECTION AND PERSONALITY IN PREDICTING PROSOCIAL BEHAVIORS

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Prosocial behavior could be defined as actions intending to help, care or benefit others in need (Cassidy, Werner, Rourke, Zubernis, & Balaraman, 2003; Kumru, Carlo, & Edwards, 2004). Studies claiming critical influence of parenting on child's socialization associate prosocial behaviors with parenting. The results revealed that parental acceptance increases child prosocial behaviors (Putnick et al., 2018), while perceived parental rejection decreases prosocial behaviors (Putnick et al., 2015). Additionally, personality characteristics affect the direction and strength of the relation between parenting and developmental outcomes (Smack, Kushner & Tackett, 2015). The purpose of the present study is to investigate the moderating role of personality on the relation between parental rejection and prosocial behaviors.

A convenience sampling method is used and study participants consist of 300 undergraduate students. Maternal and paternal rejection, the six types of prosocial behaviors (public, anonymous, dire, emotional, compliant, and altruism) and the two factors of personality (extraversion and openness) are measured through undergraduate report of the Adult Parental Acceptance-Rejection Questionnaire (Rohner & Khaleque, 2005), the Prosocial Tendencies Measure (Carlo & Randall, 2002) and the Big Five Inventory (John, Donahue, & Kentle, 1991), respectively.

Moderation models are tested that include the prosocial behaviors as criterion variables, parental rejection as a predictor variable, and extraversion or openness as a moderator. It is expected that among those at higher extraversion or openness scores, the relation of parental rejection on prosocial behaviors is increased considerably.

Although several studies have confirmed the relation between parental acceptance-rejection and psychosocial development on early adulthood, few have explored the potential moderating effects of personality traits namely extraversion and openness on the relationship between parental rejection and prosocial behaviors, nor considered maternal and paternal acceptance-rejection separately.The results of this study can be resource for intervention policies aiming at decreasing adverse effects of maladaptive parenting experiences.

PP 243

HOW CHILDREN'S MORAL JUDGMENT DEPENDS ON THE RECIPIENTS' MORAL CHARACTER: A STUDY WITH PRESCHOOLERS

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Previous research has shown that children prefer prosocial characters over antisocial one Moreover, recent studies showed that children's sociomoral judgments depend on character intentions and perpetrator's past behavior. However, little is known whether children regard recipient's moral character when judge moral behavior of the perpetrator. The aim of the current study was to examine how information about the recipient's moral character influences children's moral judgment of the perpetrator's immoral or moral behavior.

One hundred sixty-one children aged 3-5 watched a target puppet who behaved prosocially or antisocially toward another puppet who previously helped or hindered other character. Afterward, each child was asked about how much they liked the target puppet, how they judged action performed by the target puppet and how happy or sad was the target puppet after the act.

We found that children's liking, moral judgment, and evaluation of perpetrator's emotions depended on the recipient's moral character. The target puppet was liked the most when acted antisocially toward the hindering puppet and the least when acted antisocially toward the helping puppet. Children's moral judgment was more lenient for antisocial behavior directed at the hindering puppet than the same behavior aimed at the helping puppet. We observed a similar effect for emotions. Children believed that the target puppet was less sad when acted antisocially toward the hindering puppet than the helping puppet.

The present study extends the existing research on showing that though children prefer the prosocial over the antisocial character, information about the recipient's moral character changes this preference. Our results suggest that moral judgments made by 3-5-years children might be under the influence of the just world heuristic.

PP 244
CORRELATION OF CONCEPTUAL, INTENTIONAL CAPABILITIES AND FEATURES OF THE MORAL SPHERE OF A PERSONALITY

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The study of the factors of moral personality development in adolescence is particularly acute in the context of studying the productivity of intellectual activity, that is, conceptual abilities and intentional abilities.

Participants in the study were 90 older teens. Research methods: "Interpretation of the moral dilemma", "Conceptual synthesis", "Inference".

The results indicate the lack of conjugacy of manifestations of conceptual abilities and intentional abilities with the peculiarities of the moral choice of research participants. Such results can be explained by the insufficient degree of maturity of these constructs, which are at the stage of formation in the individual mental experience of the individual.

The data presented in the article enrich our knowledge of the manifestations of conceptual and intentional abilities, as well as the peculiarities of the moral and ethical sphere of the individual in older adolescence, and are aimed at expanding the methods of studying both the concept itself and its components, as well as potential factors affecting this design. Of particular importance is the study of the manifestations of conceptual abilities and intentional abilities and the peculiarities of the moral and ethical sphere of the personality in other age periods, to determine the dynamics of the revealed patterns.

PP 245
THE ROLE OF 3RD ORDER FALSE BELIEF IN ATTRIBUTION OF VOLITION

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In a study by Dr. Knobe (2003), which has been widely replicated (see Knobe, 2010), individuals attribute volition to a side effect of a given action if the side effect is negative (harming the environment), but not positive (helping the environment). This finding is termed the 'side effect effect'.   Several authors have debated the role of ToM (or lack thereof) in this effect (e.g., Knobe 2010; Nadelhoffer, 2006; Cova, DuPoux, & Jacob, 2012). However, no study has explicitly tested whether scores on tasks measuring ToM relates to the side effect effect; this was the purpose of our study.

The data presented are from a larger study where we examined several factors that may influence the side effect effect. We have chosen to present the data on how ToM relate to this effect because it has been the least well researched and has implications on the extent to which folk psychology is recruited (if at all) in asymmetrical volitional attributions.

Our study found a minimal relationship between scores on the FB task and correct or incorrect volitional attribution. Importantly, we utilized Bayesian statistics in our analysis. This has the advantage of informing the extent to which the null hypothesis is supported, as opposed to frequentist analyses, which can only fail to reject the null (Wagenmakers, 2013).

There is a debate as to whether ToM is necessary for asymmetrical moral judgment (Knobe, 2010), whether this asymmetry reflects an interference in ToM (Nadelhoffer, 2006). Recently, it has been proposed that the asymmetry is due to volitional words (intentionally, knowingly, etc) taking on a different meaning as a function of whether the side effect is positive or negative-this is the 'simple linguistic account' (Cova, 2016). Our results lend support to the latter, and we will discuss the implications in our poster.

PP 246

LONGITUDINAL RELATIONS BETWEEN SOCIAL COMPETENCE AND WHITE-LIE TELLING IN PRESCHOOLERS

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To effectively navigate the social world children have to learn how to deal with a number of social rules. For instance, participating in interaction interlocutors strive to   maintain each other's face. Protective manoeuvres include polite behaviour towards the addressee (Goffman, 1967), and white lies may be treated as a manifestation of politeness (Brown et al., 1987; Talwar et al., 2007). Concurrently, protecting face in interaction is based on mutual knowledge (Brown et al., 1988) which itself is a form of theory of mind. The aim of the study is to explore the longitudinal relations between white-lie telling and social competence, controlling for the advanced theory of mind (aToM).

134 children (64 girls) participated in the study at age 5.5 and again at age 6.5. White-lie telling was measured with 'Art rating task' (Warneken & Orlins, 2015). To measure aToM Faux Pas Test (Baron-Cohen, et al., 1999) and Second Order False Belief Tasks (Sullivan et al., 1994) were used. Preschool teachers completed Peer Social Maturity Scale (Peterson et al., 2016) when tested children were about 6.

More 6.5-year-olds (49.3%) than 5.5-year-olds (26.1%), lied in art rating task ($x2 = 25.71$, $p < .001$). White-lie telling at 6.5 was predicted by white-lie telling at 5.5 ($B = 3.55$, $p < .001$) whereas previous aToM abilities and social competence were not significant predictors. Moreover, white-lie telling at the age 5.5 was the only significant predictor of social competence at the age 6 ($\beta = 0.26$, $p < .01$).

Over the age from five to six the child's ability to tell white lies increases. Importantly, children who tell the white lies in the politeness setting are rated as more socially competent than those who tell the blunt truth. The results will be discussed in light of Lee's (2013) model of the development of verbal deception.

PP 247

CHILDREN'S SOCIAL DECISION-MAKING FOR DIFFERENT REASONS TO LIE

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Background and Aims: The Decision component of Activation-Decision-Construction-Action Theory (ADCAT) outlines quasi-rational decision-making processes that inform decisions to deceive. The current study is the first to apply ADCAT to a child population. It will explore whether children use similar decision-making processes to adults when deciding to lie, and if they are influenced by their increasing awareness of the social acceptability of lying for different reasons.

Method: One-hundred-and-twenty-six children (aged 6- to 11-years-old) read four hypothetical scenarios representing different reasons to lie: Benefit self with no cost to another; benefit self with a cost to another; benefit another with no cost to self; benefit another with a cost to self. For each hypothetical scenario, they stated their decision to tell the truth/lie, and estimated the probability and valence of being believed, or not, if they did decide to tell the truth/lie. These estimations were inputted into ADCAT to calculate expected values for truth-telling/lying, and motivation to lie.

Results: A lower expected value of truth-telling was associated with a greater likelihood to decide to lie, but only when that lie benefitted oneself with no cost to another. A higher motivation to lie was associated with a greater likelihood to decide to lie to benefit oneself with no cost to another, and to decide to lie to benefit another with a cost to self.

Conclusions: Children's decisions to lie, or not, were largely not associated with decision-making processes outlined in ADCAT. Indeed, expected value of truth-telling and motivation to lie were the only ADCAT variables to influence decisions to lie, and this was only for two reasons to lie. Previous research has showed that highlighting the value of truth-telling can promote honesty. Future research should investigate whether this effect is limited to only certain reasons to lie.

PP 248

INDIRECT AND DIFFERENTIAL ASSOCIATIONS AMONG PERSONAL VALUES IN YOUTH & YOUNG ADULTS: A MODERATED MEDIATION ANALYSIS

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Purpose: The present study describes ten personal values prioritized by young men and women from two countries, and it explores the relationships between two opposing values, Achievement and Benevolence, specifying Stimulation as a mediator between them. It is examined whether such a mediation model could be further qualified by age and gender as moderators.

Participants and Method: The 40-item Portraits Values Questionnaire (PVQ), measuring ten basic values, was administered to 1,000 young adults from two countries. Gender and country differences between the ten values were computed, and hierarchical regression methods were applied to explore mediation and moderation mechanisms among the three selected values and gender and age.

Results: Minor gender and country differences emerged for some of the ten basic values. An indirect relationship among the three selected values was identified. Stimulation was found to operate as a mediator between achievement and benevolence. A conditional process model was established with gender moderating the Achievement – Stimulation path (young men had a steeper slope than young women), whereas age moderated the Stimulation – Benevolence path (younger individuals had a steeper slope than older ones). Gender also moderated the Achievement – Benevolence path (young men had a steeper slope than young women).

Conclusions: For young men, the association between achievement and stimulation values was stronger than that for young women. For the younger persons, the association between stimulation and benevolence values was stronger than for older ones. For young women, the level of benevolence was independent of their achievement level. The present analyses shed new light on indirect and differential associations among personal values, adding a novel perspective to research on mechanisms involved in the basic values.

PP 249

INEQUITY AVERSION IN 6-8-YEAR-OLD IRANIAN CHILDREN: AN ERP STUDY

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Background and aims: Evidence showed that children seek to establish fair allocations of resources across individuals. It has been proposed that disadvantageous and advantageous inequity aversion underlying mechanisms are differ during development. This study aimed to assess 6-to-8-year-old children's behavioral and brain potential responses to fair, advantageous unequal, and disadvantageous unequal offers when as a responder evaluate the fairness of their anonymous partner distributing resources in Ultimatum Game (UG) with a. In the ERP analysis, we focused on early emotional (Feedback-Related Negativity, FRN) and late cognitive (P300) components respectively in frontocentral and centroparietal recording sites.

Methods: Fifteen typically developing children (5♀, 10♂) between 6 and 8 years of age (M= 84mos, SD=3.4) played Ultimatum Game in which they received advantageous unequal (9-1), disadvantageous Unequal (1-9) and fair (5-5) offers from the proposer. Meanwhile, children's brain potentials were recorded.

Results: Behavioral results showed that acceptance rates for less disadvantageous unequal offers was significantly less than fair and advantageous unequal offers. Moreover, disadvantageous offers elicited more FRN (200-300 ms) amplitude as compared to fair and advantageous offers. The P300 (200-600 ms) was more positive for advantageous offers than fair and disadvantageous offers.

Conclusions: These results suggest that 6-8-year-old Iranian children do not sacrifice resources in advantageous offers in order to conform fairness. Inconsistent with previous research on adults, evaluating the violation of fairness –higher FRN- was only observed for disadvantageous offers in children. In addition, advantageous and fair offers elicited higher P300 responses. This suggests that children's approach towards fairness follows self-interest rule during 6-8-years of age. Moreover, this was the first study in children's inequity aversion which detected FRN a component associated with the processing of violation of expectancy and P300 related to reward processing.

PP 250

THE TURKISH ADAPTATION OF THE EARLY PROSOCIAL BEHAVIOR QUESTIONNAIRE (EPBQ) AND PSYCHOMETRIC EVALUATION

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The aim of the current study was to adapt the Early Prosocial Behavior Questionnaire developed by Giner Torréns and Kärtner (2017) to Turkish and to evaluate its validity and reliability. 267 mothers of 1-3 years-old children participated to the study. The participants completed Demographic Form, Early Prosocial Behavior Questionnaire and the Strengths and Difficulties Questionnaire (SDQ). Exploratory and confirmatory factor analysis supported three factors structure representing helping, sharing and comforting. Results also showed that relationships between the subscales (helping, sharing and comforting) and the child's psychosocial development were significant in the expected directions. Criterion-related validity of the scale was also supported. There is no difference in prosocial behavior scores of children according to gender of the child, education and income level of the mother, and the method of collecting the data (online survey system or pen-and-paper method). The subscales had acceptable levels of internal consistency and test-retest reliability. The findings revealed that Turkish Early Prosocial Behavior Questionnaire was a valid and reliable measure for children between 1-3 years-old. The results were discussed with the suggestions to improve the scale.

PP 251

THE INFLUENCES OF MOTHERS' CULTURAL MODELS ON PROSOCIAL BEHAVIORS IN EARLY CHILDHOOD

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Prosocial behavior reflects the culturally structured socialization goals of parents. Parents structure children's prosocial behaviors by following their cultural models. Being responsive to others' needs is a matter either of deliberate choice or interpersonal obligation. Thus, it is important to understand the underlying cultural mechanisms of prosocial behavior (Miller & Bersoff, 1992). Turkey is not easily categorized as individualistic and collectivistic culture. Turkey is a country where individualistic and collectivistic values are seen together (Goregenli, 1995; Kagitcibasi, 1985, 1990). The aim of the current study is to examine relationships between maternal cultural models and their children's prosocial behaviors in Turkey. Besides, temperament of children is evaluated. Autonomous-Related Self in Family Scale, Child Temperament Scale and Early Prosocial Behavior Questionnaire are used to collect data. The data is currently under review. The results will be discussed in the context of culture. It is thought that the findings will contribute to understanding of prosocial behaviors in terms of cultural differences.

PP 252

FACIAL EMOTION RECOGNITION AND SOCIAL COMPETENCE AMONG CHINESE RURAL-TO-URBAN MIGRANT EARLY ADOLESCENTS: THE MODERATING ROLE OF COGNITIVE FLEXIBILITY

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A growing body of research has documented the positive association between facial emotion recognition (FER) and social competence in adolescence (see Trentacosta & Fine, 2010). However, mixed findings have been reported for at-risk populations (e.g., Vanhalst, Gibb, & Prinstein, 2017). Furthermore, little is known about the role of higher order cognitive processes in this association. Building on extant theories of social information processing (Dodge & Pettit, 2003) and executive functioning (Zelazo & Muller, 2002), the current study aimed to compare accuracy in FER and peer-related social competence between Chinese rural-to-urban migrant early adolescents and their non-migrant peers, and examined whether the expected association between these variables was moderated by cognitive flexibility (CF).

A total of 169 rural-to-urban migrant and 157 non-migrant Chinese early adolescents aged 10-13 years (50% girls) were involved in the current study. Participants completed a computerized morphing task using faces from Beaupré and Hess (2005), the Wisconsin Modified Card Sorting Test (Nelson, 1976), and a self-report questionnaire (Spence, 1995).

Results revealed that Chinese rural-to-urban migrants reported less social competence than their non-migrant peers, but showed similar levels of FER accuracy. In regression analysis, the positive association between FER and social competence was moderated by CF and migrant status. Specifically, when FER accuracy was low, migrant youths with higher levels of CF reported better social competence than those with low levels of CF. Among non-migrant adolescents, the positive association between FER accuracy and social competence was significant only at high levels of CF.

The findings highlight the critical role of FER in adolescents' social competence, and suggest that trainings focusing on CF may be particularly beneficial for Chinese rural-to-urban migrant children to enhance the quality of peer relationships.

PP 253

INFLUENCE OF EGO EXPERIENCE AND ATTITUDES TOWARD RELIGION FOR CHANGING VIEWS ON DEATH OF JAPANESE CHILDREN

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This study elucidates a change of view of death for non-Christian Japanese children and shows that ego experience and attitudes toward religion contribute to this change.

From the seventh and eighth grades, 130 Japanese children participated. They had participated in the same study both one year (Time2) and two years ago (Time1). The participants filled out a questionnaire rating their view of death for nine items that determined whether they thought dead individuals were capable of performing nine activities, including physical and psychological activities such as "do the dead wish to return home?" described by Bjorklund and Bering (2004). Next, they filled out 15 items on ego experience defined by questions such as "Who am I?" from Amaya (2005), and 10 items regarding their attitudes toward religion in line with the context of Japanese culture described by Tange (1999) and Kaneko (1997). A latent growth curve model was conducted for scores of 3 times concerning the view psychological activities dead people were thought to be capable or incapable of performing. Conditional latent growth curve models with ego experience and attitudes toward religion as predictors of starting levels and changes in the view of the death were also conducted.

The results showed that the slope and intercept were not significant for the latent growth curve model, whereas the intercept and slope were significant for conditional latent growth curve models ($b = -0.62$, $p < .05$, $b = 0.96$, $p < .05$, $x^2 = 3.99$, CFI = 1). Ego experience predicted higher starting levels ($b = 0.02$, $p < .05$) and slower rates of decline ($b = -0.08$, $p < .05$) in views of death.

It was suggested that personal factors such as ego experience and attitudes toward religion influenced the Japanese children's perspectives on death.

PP 254

CROSS CULTURAL DIFFERENCES IN CHILDREN'S CONCEPTUALIZATIONS OF HAPPINESS AT SCHOOL

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Background and aims: Recently, researchers have started looking at what children and adolescents understand by being happy at school (López-Pérez & Fernandez-Castilla, 2018); as previous research on happiness conceptualizations with adults showed significant cultural differences (i.e., Delle Fave et al., 2016), we aimed to explore if Spanish (n = 223; Mage= 10, 50% girls) and British children (n = 421; Mage= 11, 53% girls) differed in their definitions of happiness at school. Since no previous research on happiness was conducted before with children, we did explore whether cross-cultural differences emerged.

Method: Children were asked to freely report what being happy at school meant for them and their conceptualizations were coded by two researchers (Cohen's k>.82). Thirteen conceptualizations emerged: harmony, positive feelings, leisure, friends, good grades, non-violence, moral actions, purpose, autonomy, competence, positive relationship with the teachers, emotional support, and learning.

Results: Hi-loglinear and loglinear analyses revealed the following cross-cultural differences: Spanish children mentioned more harmony (Z = -2.56; p= .009), leisure (Z= -2.518, p= .013) and emotional support (Z= -2.396, p= .015) than British children, who, vice-versa, mentioned more non-violence (Z=2.277, p= .021), autonomy (Z=2.407, p= .001), teachers (Z=2.629, p= .007), and learning (Z=3.279, p= .001). There were some gender differences, as girls mentioned more competence (Z=2.615, p= .004) and positive relationship with the teacher (Z=2.885, p= .002) than boys did.

Discussion: Current results attested cultural differences in the conceptualizations of happiness, as Spanish children did mention conceptualizations related to group harmony and emotional support which are vital in collectivistic countries (Bobowik, et al., 2010). UK children conceptualizations reflected individual goals which are prioritised in individualist cultures (Godwin & Plaza, 2000). The obtained findings are discussed taking into account the system differences in the school context in both countries.

PP 255
VOLUNTEERING AMONG THE ROMANIAN YOUTH: AN ADAPTATION OF TWO QUESTIONNAIRES

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Volunteering can be considered any activity in which a person freely offers from their resources to benefit others, without expecting any reward. Volunteering has been related to empathy, specifically to empathic concern and personal distress. Studies show that empathic concern is positively associated with helping behavior even when this behavior can be easily avoided, while personal distress is not. Empathic concern is directly related to Agreeableness, a Big Five personality dimension. Research shows that although Agreeableness is not directly related to helping behavior, it is positively associated to the internal psychological states that promote prosocial behavior. The motivation to volunteer has also been studied extensively and there are multiple functions that could be satisfied by volunteering. We are investigating these relationships on a Romanian sample, Romania being a country in which volunteering is a relatively recent formal behavior.

Thus, this study aimed to adapt and validate the Volunteer Functions Inventory (VFI; Clary et al., 1998) and the Interpersonal Reactivity Index (IRI; Davis, 2004) on the Romanian youth population. A number of 342 Romanian students participated in this study, aged between 17 and 26. Eighty-eight percent of the students were women. They were approached during a Psychology course and they were handed the two questionnaires as well as a Big Five personality questionnaire (CP5F). We will conduct a confirmatory factor analysis for the VFI and IRI questionnaires, in order to see if the original factor structure applies on this population as well. We expect that students high in empathic concern, as well as those high in agreeableness will be involved in volunteering activities. This study is the first to investigate these aspects on a Romanian youth population. It is important to understand the existing links between personality, empathy, volunteering and its functions, considering the intercultural differences when studying volunteers.

PP 256
CONTEXT OF RECEPTION FOR BIETHNIC ADOLESCENTS IN KOREA AND THE ROLE OF BIETHNIC IDENTITY IN LIFE SATISFACTION

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The context of how biethnics are received would matter for life satisfaction among biethnic adolescents, especially in a widely monoethnic society, such as Korea. A growing presence of biethnic adolescents in Korea is a recent phenomenon arising from the increase in international marriages between Korean men and marriage immigrant women from other Asian countries. Although these families are generally depicted as economically disadvantaged and socially marginalized, research suggests there may be within group variations in familial and social contexts where their biethnic children are embedded. Taking a person-centered approach, we aimed to identify latent profiles of context of biethnic reception for adolescents across home, peer group and school settings. Further, we examined the role of biethnic identity affirmation in their life satisfaction.

We used the Wave 1 data from the Panel Survey of Korean Multicultural Youth Adjustment. The sample included 358 5th and 6th grade biethnic adolescents born between Korean fathers and marriage immigrant mothers of other Asian heritage.

A two-profile model had the best fit (entropy = 0.84), where adolescents in a favorable context (61.73%) were characterized by greater familial biethnic socialization, less discrimination from peers, and more positive school multicultural climate than those in a less favorable context (38.27%). In hierarchical regression models, biethnic adolescents embedded in a less favorable context reported lower life satisfaction (ß = -.20, p < .001). The benefit of having stronger biethnic identity affirmation was greater for biethnic adolescents in a less favorable context (ß = .75, p < .01) than those in a favorable context of biethnic reception.

Results suggest that helping biethnic adolescents achieve a healthy biethnic identity appears effective for ensuring high life satisfaction. It is particularly hopeful that those even in unfavorable context of biethnic reception may also experience greater life satisfaction when they embrace their biethnic heritage.

PP 257

RACIAL SOCIALIZATION TYPOLOGIES IN BLACK COLLEGIATE WOMEN ATTENDING A PREDOMINANTLY WHITE INSTITUTION: A LATENT PROFILE ANALYSIS

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Background and aims: Racial socialization has been an integral part of developing resilience in African American families and youth (Neblett, 2009).   Racial socialization has been defined as the process by which racial and ethnic minority parents convey implicit and explicit attitudes and beliefs about the meaning of race and/or ethnicity, teach their children about what it means to be a racial and/or ethnic minority, and help their children to cope with racial and ethnic discrimination (Stevenson, 1994). The purpose of the current study was to identify the (1) types of racial socialization messages received by Black college women and (2) characterized differences in racial socialization profiles among Black college women.

Method: The study sample of N = 195 included an average age of 20.52 years. The percentages of students across year in college are as follows: 33% were seniors (4th year), 26.3% were juniors (3rd year), 23.5% were sophomores (2nd year), 11.5% were seniors beyond their 4th year (5th year), and 2.8% were freshmen (1st year). All participants were administered the Teenagers Experiences of Racial Socialization (TERS), which assesses the mode and frequency of racial socialization messages transmitted from parents and family members.

Results: Latent profile analysis identified three distinct racial socialization profiles. The three identified profiles were characterized by: (1) high alertness to discrimination and cultural pride, (2) high alertness to discrimination and low on cultural pride, (3) high on cultural pride and low on alertness to discrimination. Black women reported receiving more cultural pride messages than alertness to discrimination messages.

Conclusion: Further investigation about racial socialization profiles and racial-ethnic identity could provide evidence of the central role both play in the resilience and academic success of Black college women at predominantly White institutions of learning.

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ASSOCIATIONS BETWEEN PERCEIVED DISCRIMINATION AND LIFE SATISFACTION: AN ECOLOGICAL MOMENTARY ASSESSMENT PILOT STUDY OF ADOLESCENTS

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Perceived discrimination is an important predictor of life satisfaction in ethnic minority groups (Villegas-Gold & Hyung Chol Yoo, 2014). Discriminatory practices are related to lower levels of subjective well-being and greater anxiety (Clark, Anderson, Clark, & Williams, 1999). The present study aims to extend these findings by assessing the affective consequences of perceived discrimination with the use of experience sampling methodology. We are interested in within person changes in subjective well-being that occur as a result of perceived discrimination.

International high-school students (N = 30) attending at European school of Luxembourg were recruited to participate in an e-diary study for a period of 10 days. Participants were first and second generation immigrants (Mage = 14.63, SD = .62) from different European and non-European countries, growing up in multicultural Luxembourg. Perceptions of discrimination by peers and teachers were assessed with a self-report questionnaire daily after school. Our measures captured different experiences of discrimination including discrimination based on gender, social status, ethnic origin, and physical appearance. Each evening, participants completed the Brief Multidimensional Students' Life Satisfaction Scales (BMSLSS), which assesses satisfaction with life in general and satisfaction in five domains that are considered important for adolescents: self, family, friends, living environment, and school context.

The findings suggest that experiences of discrimination were associated with lower levels of subjective well-being. Participants were less satisfied with themselves, their relationships, and their school environment during the days they reported higher levels of discrimination experiences.

With this pilot study using ecological momentary assessment, we develop a more dynamic understanding of the within-person variability of different facets of well-being among first and second generation adolescent immigrants and their discrimination experiences in different domains.

PP 259

THE ROLE OF PERCEIVED SOCIAL SUPPORT IN PREDICTING RESILIENCE AMONG SYRIAN REFUGEE ADOLESCENTS

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Due to the internal political conflicts in Syria, started in February 2011, approximately 6.5 million people had to leave their homes. Nearly three million of these people are cross-border migrants causing significant changes in population distribution maps of the neighboring countries of Syria. Turkey hosts most of the Syrian refugees after the civil war. The number of registered refugees in Turkey has exceeded three million of whom 45% of them are children. The number of school-age Syrian refugee children is more than one million and 700.000 of these children are between the ages of 10-18. Previous studies have shown that immigrant children and adolescents are at greater risk for psychological problems such as depression, anxiety, and post-traumatic stress disorder due to problems they have experienced before, during, and after the migration.

This study investigates factors (e.g., family relations, peer relations, social support, school climate) that leads to resilience of Syrian refugee adolescents. Investigation of individual and contextual protective factors is essential because it enables researchers to explain why some adolescents at risk adapt more successfully than others.

The sample consists of 191 Syrian refugee adolescents between the ages of 10-18. Participants completed a questionnaire including demographics, Child and Adolescent Social Support Scale, School Social Climate Scale, Rosenberg Self-Esteem Scale, Perceptions of Parents Scale, The CES Depression Scale, Accultration Scale, Social Anxiety Scale for Adolescents SAS-A, The Child and Youth Resilience Measure (CYRM). Psychological resilience and social support, perceptions about parent and school, self-esteem and acculturation strategies were found to be related. Moreover, immigrated to Turkey Syrian adolescents around the perceived social support, and school social climate were found to be the most influential factors on psychological resilience. As a result, having positive experiences in family and school is the most important factor that can contribute to the psychological resilience of refugee adolescents.

PP 260

CULTURAL ASPECTS OF PROCRASTINATION BEHAVIORS AMONG STUDENTS IN EARLY AND LATE ADOLESCENCE – COMPARATIVE STUDY IN POLAND AND AUSTRIA

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The present study compared procrastination behaviors in students of Polish nationality who reside in Poland (n = 101) and in Austria (n = 105). Students born and living in Austria were recruited from the Polish School for Polonia in Vienna. The age range of both groups was within 12 - 19 years (M = 15,18; SD = 2.05). Therefore, it was decided to divide both populations into two age groups compromising students aged 12 - 15 and 16 - 19, with a similar number of boys and girls in each group. The tendency to delay tasks was assessed with the Pure Procrastination Scale – PPS. The experiment was conducted in February and March 2018. The results revealed higher scores of procrastination in students living in Poland than those residing in Austria. In both groups, however, the younger adolescents showed a lower tendency to procrastinate than those who were older. Intragroup comparisons revealed that boys from the Polish diaspora procrastinated more often than the girls. On the other hand, the reverse procrastination behaviors were noted in the Polish group since here the girls showed higher procrastination behaviors. It was also found that procrastination was higher in the older age group of the Polish sample, while in the case of students from Polonia, it decreased with age. As a result, the tendency to defer tasks was lower in the older age group of students from the Austrian diaspora than in their Polish peers. The impact of cultural and educational demands existing in the two countries was also taken into account.

PP 261

ADOLESCENTS' WELL-BEING AND PSYCHOLOGICAL ADJUSTMENT: A COMPARATIVE STUDY OF IMMIGRANT AND NATIVE ADOLESCENTS FROM SPAIN

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Migratory movements are increasing in the last decades. It was estimated that by 2018 more than 5.3 million immigrants were residing in Spain. In light of this new reality, lines of research regarding Spanish immigrant population are increasingly necessary. Particularly, it will be important to study the immigrant adolescents given that the relevance of this life stage in our society. Furthermore, one of the most studied topics in adolescence is the adolescent health, conceived as a complete state of physical, psychological and social well-being. Therefore, the aim of the present study was to analyze adolescents' well-being and psychological adjustment and to make comparisons between native adolescents, first-generation immigrant adolescents (they live in Spain and their parents are immigrants), and second-generation immigrant adolescents (they were born in Spain and their parents are immigrants). The complete sample was composed of 40.495 adolescents aged 11-18 years who participated in the 2018 edition of the Health Behaviour in School-aged Children (HBSC) study in Spain. Statistical analyses will be performed in order to make comparisons between first-generation immigrants, second-generation immigrants, and natives. The results of this study will show a detailed view of native and immigrant adolescents' well-being and psychological adjustment in Spain regarding to the following specific indicators: frequency of psychosomatic symptoms, life satisfaction and quality of life related to health. In conclusion, this study will contribute to provide intervention guidelines to improve the psychological well-being of Spanish adolescents' in general and Spanish immigrant adolescents in particular.

PP 262

PRESCHOOL TEACHERS' SUPPORT FOR CHILDREN IN A MULTICULTURAL CONTEXT: CASE STUDY OF TAIWANESE PRESCHOOLS WITH JAPANESE CHILDREN

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This study examined support by preschool teachers for children in a multicultural context, focusing on influence of a majority culture. To compare with our previous study in Japan on preschools with many Taiwanese children (e.g., Sakakibara, 2016), in the present study we conducted teacher interviews at three preschools in Taiwan; there, one-third to half of the children were Japanese. Five teachers were interviewed with 11 question items, such as on bilingualism, multicultural preschool practices, and teachers' beliefs about children and ideal teachers. We also undertook supplementary classroom observations (15–60 minutes) at the 5-year-olds' classrooms in the participating preschools. As results, where the children lacked a common language, we identified various efforts made by teachers in facilitating participation in preschool activities; for example, appointing one day for children to bring from home a familiar toy to use in play with fellow children. The importance of collaboration between teachers and parents was reported, especially for younger children. Likewise, establishing a workshop on a regular basis was considered important to promote the language skills of monolingual teachers. It was emphasized that most monolingual Japanese children who enrolled as 3-year-olds were able to speak Chinese by the time they advanced to the 4-year-old classroom; in that process, language interpretations by bilingual children played a key role. Our findings in present study support those of the previous investigation conducted in Japan (e.g., Sakakibara, 2016). However, differences were also identified on the teacher beliefs (e.g., the most important things for children to learn in preschool) and on teacher-child interaction in the classroom (e.g., teachers' vocal tone and facial expression when giving instructions or cautions), suggesting that despite their similarities in management strategies for multicultural context, teachers' cultural beliefs on children and communication styles reflect those of a majority culture.

PP 263

ADOLESCENTS' BYSTANDER INTENTIONS TO INTERVENE WITH ETHNIC-BASED DISCRIMINATION IN SCHOOL: THE ROLE OF PERCEIVED CULTURAL PLURALISM AND MOTIVATIONAL CULTURAL INTELLIGENCE

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Sociocultural contexts such as peer groups, ethnic/racial groups, schools, and communities, are important influences on adolescents' attitudes and behaviour (Lerner, 2005; Bronfenbrenner & Morris, 2006). Previous research indicates that adolescents' perception of cultural pluralism in school is associated with better interethnic relation for adolescents with and without migration background (Schwarzenthal, Schachner et al., 2017). Another line of research examining the cultural intelligence of adolescents states that one aspect of cultural intelligence is motivational cultural intelligence. It refers to an individuals' drive to adapt to different cultural environments as well as their interest in other cultures (Ang et al., 2004). It triggers attention and effort, directs an individual's cultural knowledge and strategies into guided action in cultural experiences. The previous study also found that individuals who are high in cultural intelligence enjoy intercultural interaction, they are willing and open engaging with people from other cultures (Schwarzenthal et al., 2017).

Previous studies focusing on bystander responses demonstrated that cultural openness (i.e. interest to engage with people from other cultures) is one of the psychological factors that is associated with adolescents' likelihood of intervening with ethnic-based discrimination besides other factors such as individual characteristics (e.g. age, ethnicity), and social processes (e.g., ethnic socialization, cross-group friendships) (Abbott & Cameron, 2014; Mulvey, Palmer, & Abrams, 2016; Palmer, Rutland, & Cameron, 2015).

In this study, we examined whether adolescents' perceived cultural pluralism in school is related to bystander intentions to intervene with ethnic-based discrimination and whether motivational cultural intelligence mediates this link for adolescents with or without migration background.

Participants included 518 adolescents (50.4 % female, Mage= 12.78, SD=1.18, 58% with Turkish, Arabic, Eastern European or other immigrant backgrounds) from 15 public schools in Berlin, Germany. Adolescents filled out self-report questionnaires in the schools.

After controlling for age and gender, regression results showed that higher levels of perceived cultural pluralism in school was related to greater willingness to intervene to ethnic-based discrimination as a bystander. The mediating role of motivational cultural intelligence was investigated by using PROCESS macro in SPSS (Model 4, with a bootstrap approach of 5000 drawings; Hayes, 2013) mediation analysis, results showed that motivational cultural intelligence fully mediated the relationship between perceived cultural pluralism and intentions to intervene with ethnic-based discrimination of adolescents both for adolescents with immigration and without immigration background (see Fig.1 and Fig.2). These results suggest that cultural pluralism approach in schools might increase adolescents' motivation to engage in people from different culture, in turn, cultivate intentions to prevent discrimination through increased.
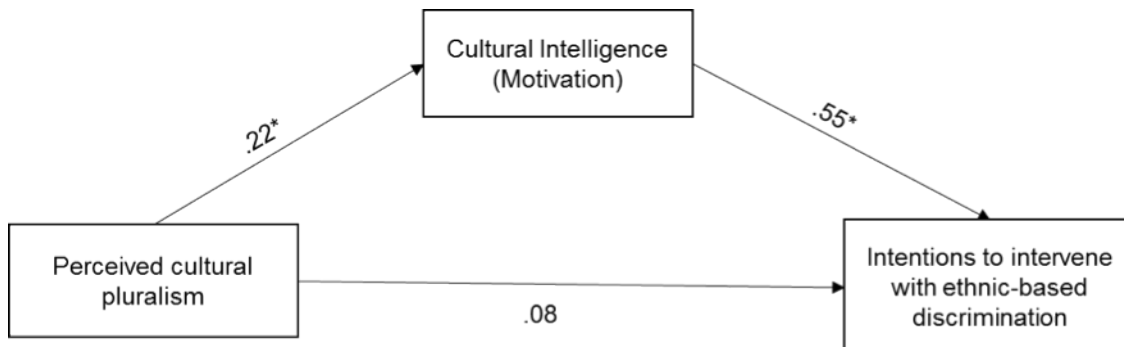
Fig.1 Mediation model for the effect of Cultural Pluralism and Motivational Cultural Intelligence for Adolescents with immigration background *p < .01
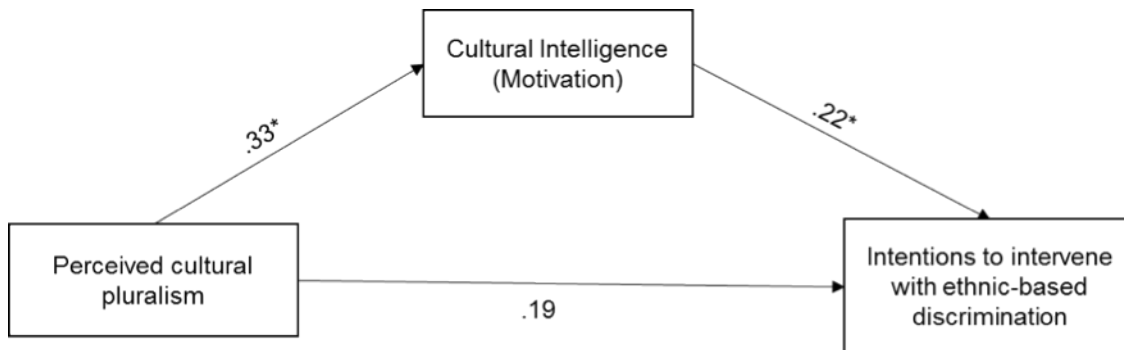
Fig.2 Mediation model for the effect of Cultural Pluralism and Motivational Cultural Intelligence for Adolescents without migration background *p < .01

PP 264
HEALTH-RELATED QUALITY OF LIFE AND ACCULTURATION PROCESS OF YOUNG REFUGEES IN GERMANY

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Background and aims: The European confrontation with a large refugee movement from 2015 poses major challenges for the German healthcare system. In the course of the acculturation process, understanding the health-related quality of life of refugee children and adolescents is becoming increasingly necessary. Within the framework of the YOURGROWTH project, these post-migrant living conditions are analyzed.

Methods: The health-related quality of life of refugee children and adolescents is assessed by the KIDSCREEN-10 Children's Self-Report Measurement, which focuses on global well-being with 10 items. The acculturation strategies are assessed with the Frankfurt Acculturation Scale for Children (FRACC-C) , which measures with 12 items the orientation to culture of origin and the orientation to host culture.

Results: First results of the study are presented. Based on previous results and preliminary analysis, it is expected that the acculturation strategy integration would have a positive effect on well-being.

Conclusions: Further longitudinal studies are needed to identify predictor variables to understand the health-related quality of life and developmental trajectories of young refuges. Implications for future research of acculturation process of forcibly displaced children and adolescent will be discussed.

PP 267
THE RELATIONSHIP BETWEEN ACCULTURATION STRATEGIES AND IDENTITY STATUSES IN INTERNATIONAL STUDENTS IN TURKEY

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The issues about international students are receiving growing interest from many areas because of the multif-faceted and global importance of the topic. Among those issues, international students' well-being is crucial not only for the international students themselves, but also for the host community. In this study, as indicators of psychological well-being, identity developments and acculturation strategies of the group were taken into account, thus, the study aimed at discovering acculturation strategies and identity statuses of international students in Turkey. In addition to this, the study investigated the relationship between these two states.

The study was a relational screening model. In the study, Acculturation Questionnaire and Ego-Identity Process Questionnaire were administered to 156 international students coming from African and Asian backgrounds. Both instruments were Likert scales. Demographic details of the participants were obtained by Personal Information Form. The collected data was analyzed by using regression analysis on SPSS. The analyses revealed that the most common acculturation strategy of the group was assimilation and identity status was achieved identity. Moreover, the findings indicated a relationship between acculturation strategies and identity statuses. When gender differences were investigated, the findings showed that there was a significant difference between acculturation strategies of male and female participants; nevertheless identity statuses did not show significant difference between genders.

High rates of assimilation strategy (48%) and identity diffusion (%27,6) can lead to concerns on the well-being of international students in Turkey. It can be suggested that cultural awareness and adaptation programs designed both for international students and larger community may help reduce the pressures on and prejudices about international students and improve the well-being of the group. This will eventually contribute to the cooperation, solidarity and mutual understanding between the cultures.

PP 270
DEVELOPMENTAL GENDER GAPS IN PRESCHOOL AGE

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Background and aims: Female educational advantage is evident throughout mandatory schooling in most countries with Norway being one of the countries with the largest gender differences. Our aim was to explore the gender differences in neurodevelopment, behavior and pre-academic skills that precede school entry. The results might provide insight as to why girls outperform boys later in their educational careers.

Methods: This study is based on a sub-cohort of participants in the Norwegian Mother and Child Cohort Study (MoBa). MoBa is a prospective, nationwide population-based cohort. We used questionnaire data from preschool teachers reported for 7 467 children, with an average child age of 67 months. Gender differences and age patterns were explored by fitting flexible regression models predicting pre-academic, behavior and neurodevelopmental outcomes.

Results: We found gender differences favoring girls for all outcomes. For neurodevelopment and behavior, differences in adjusted standardized scores ranged from 46 percent of a standard deviation (CI 0.41, 0.50) in overall school readiness to only 0.8 percent of a standard deviation difference in internalizing behavior problems (CI -0.13,-0.03). We found gender differences for all literacy skills in favor of girls with more girls being able to read and write words and sentences. The gender gap in naming and adding numbers was smaller, but in favor of girls. Increasing age was associated with improved pre-academic skills, but the gender gap was constant across the age range of 61-72 months.

Conclusions: We conclude that gender differences favoring girls exist prior to school entry for a broad range of neurodevelopmental, behavior and pre-academic skills relevant to school functioning.

PP 272

THE ULTIMATUM GAME IN ADOLESCENTS WITH DOWN SYNDROME

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In the current study, we used the Smarties Tube task to examine the role of Theory of Mind (ToM) in the fairness preference of Adolescents with Down Syndrome playing the Ultimatum Game. A group of adolescents with Down Syndrome (Atypical Group AG; N=11) were compared with children with typical development (Typical Group TG; N=11) of the same cognitive level (AG: M=11.8 SD=2.3, TG: M=12.2 SD=1.3, p=.55) Participants were tested using a touchscreen laptop in a simplified ultimatum game and in both roles of proposer and responder. The role was manipulated within-subjects. The order in which subjects played the two roles was counterbalanced, so that half of the subjects started as proposers while the other half started as responders. All participants were also tested on Test of Emotion Comprehension (TEC; Albanese and Molina, 2000).

We run a within subject regression analysis with group, round, children's role order, and the interaction between group and round as predictors and participants offers as dependent variable. Results showed a significant effect of the interaction between group and round (B=.24, SE=.08, p<.001). A slope analysis showed that the effect of the round was significant for the TG (t=3.24, p=.001) but not for the AG (t=.32, p=.75). These results indicate that participants in the TG increased their offers as the game progressed. In a second regression, the ToM score was used instead of the Group. Results showed a significant interaction between ToM and Round (B=.25, SE=.10, p<.001) indicating that subjects in the TG increased their offers as the game progressed. The interaction between TEC and Round was not significant (B=.01, SE=.04, p=.29). Compared to TG, AG tend to keep constant their offer during the game and this difference is likely to be related to TOM.

PP 273

MYTHS IN PSYCHOLOGY. DOES EXPERT KNOWLEDGE PREVENT FROM ENDORSING FALSE BELIEFS?

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Myths in psychology are widespread among lay people. For example, the idea that positive thinking may fight a disease and heal has become a kind of "shared knowledge" that many people credit, at least to some extent. Taking different forms, such ideas are constantly reproduced in the media and are easily available (e.g., a simple internet search on "positive thinking and disease" gives more than 200 millions results in English, in less than 0.40 seconds). The problem, as is well known, is that much of the information found is misleading or completely false.

We present a series of studies assessing myths in psychology among university students of three different disciplines (psychology, education, and engineering, N=150), and a group of university teachers of psychology. Participants were asked to evaluate different statements about psychology including both proven scientific facts and myths, that is, claims without any empirical foundation. We expected that the endorsement of myths would be greater among the engineering students than the social sciences students, and that the university teachers would show the lowest level of false beliefs. Although most of these expectations were confirmed, and more expertirse seems to correlate with fewer false beliefs, we found some of the myths to be prevalent among most of the participants, irrespective of their field of knowledge and expertise. The strength with which some of these myths are rooted in "shared knowledge" can go beyond the rationality of individuals and scientific knowledge, in those who possess it.

Additional data from semistructured interviews, where we disclosed the fallacy of these prevalent myths and the real scientific facts, allowed us to analyze the significance of such myths for people's daily life. We discuss the possible reasons of people's resistance to remove such false ideas from their system of beliefs.

PP 274
THE EFFECT OF OBSERVATION BY PARENTS, ON PRESCHOOLER'S BIAS TOWARD ACTING ON INACCURATE TESTIMONY

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Young children sometimes act on unreliable testimony from a speaker who has been repeatedly wrong in the past (Jaswal et al., 2010). Most explanations for this bias to act on testimony have focused on limits in children's ability to process inaccurate testimony. However, some children may act on testimony from the speaker was because some kind of social goals (e.g., maintaining positive relationship) were in play. This study investigated whether children's receptiveness to testimony from previously inaccurate informants changed depending on whether their parents were looking to them or not.

In the sticker-finding task, the experimenter hid a sticker (outside the children's view) and asserted that the sticker was in the box opposite the one where she had hidden it. This sequence of trials was repeated eight times with the same experimenter. In first four trials, the experimenter was present in front of children while they were seeking in the box but the experimenter was absent in last four trials. The control group needed to seek in the box while their parents was present in all eight trials. The experimental group needed to seek in the box while parents were present in the first four trials but absent in the last four trials. The children (M = 3.94) were observed to ascertain which the box they examined first.

We calculated three-way ANOVA with within-subject factors of trials (first or last) and between-subject factors of group and gender. As a result, the main factor of trials and the interaction between trials and group were significant (p<.05). Simple main effect analyses showed the experimental group were less likely to choose box mentioned by experimenter then the control group in last four trials (p<.10). The results suggested children were more likely to act on unreliable testimony when their parents observe children's act.

PP 276
DO YOU WANT TO PLAY WITH FRIENDS WHO ARE SIMILAR TO YOU OR NOT? CHILDREN'S MOTIVATION TO MAKE FRIENDS

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Background and aims: Preschoolers build relationships with their friends and make their own groups in their daily life. However, what kind of people do children want to build a relationship with? For adults, according to the social motivation hypothesis (Chevallier, Kohls, Troiani Brodkin, & Schultz, 2012), people want to build a relationship with others with similar backgrounds. On the other hand, few studies have focused on children's tendencies to build relationships with others. This study aimed to reveal which kinds of people characteristics children focus on in building relationships based on the social motivation hypothesis.

Methods: Twenty-two preschoolers (12 boys and 10 girls, mean age: 63.2 months, range: 40-76 months) took part in this study. They participated individually at the preschool they were attending. The human ethics committee at Shizuoka University approved this study (18-12). First, two experimenters asked participants' favorite foods, tv shows, and playing during the rapport session. After the rapport session, four tasks were given to the participants. Two puppets which experimenter A operated were shown to the participants for a puppet interview task. In the puppet interview task, children asked two puppets about their favorite foods, tv shows, and playing. One puppet answered all the same answers as children. On the other hand, the other puppet provided different answers. After the interview, experimenter B asked children which puppet they want to play with in the next game.

Results: Nineteen children (86.36 %) chose the puppet who answered all the same as them in the puppet interview task. According to Fisher's exact test, significantly more children chose the puppet that was similar to the children (p < .005).

Conclusions: This result indicates that children have a motivation for becoming friends with people who are similar to them. This result supports the social motivation hypothesis.

PP 277

THEORY OF MIND AND SCHOOL-AGED CHILDREN'S ABILITY TO BEHAVIORALLY AND VERBALLY DECEIVE

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Inspired by a behavioral procedure originally developed to study preschoolers' ability to conceal information in a competitive game involving deceptively hiding one's trails (Sodian et al., 1991) our study examines the link between theory of mind (i.e., ToM) and school-aged children's (N=244; 9- to 11-years old) ability to verbally and behaviorally deceive through progressive steps within a newly developed trails hiding procedure. While most deception tasks assess children's ability to tell self-protecting lies (in order to avoid punishment or social rejection) and personal gain lies (i.e., for material or social gain), we thought that intentional deception can be better investigated in a task that involved 'playing a fun trick' to a friend puppet by hiding his ball.

We expected that the ToM ability will have a significant influence on children's deceptive ability on both levels (behavioral and verbal). Thus, children with a better ToM ability would be better able to: a) spontaneously remove true evidence and plant false evidence to mislead another (the behavioral level) and also, b) they will construe more creative lies and maintain their initial false statements across questioning and in the face of physical evidence of their misbehavior (the verbal level) than children with a lower ToM ability.

Preliminary results confirmed that theory of mind enabled children to better behaviorally and verbally deceive. ToM also contributed to the sophistication of the lies told and to children's ability to maintain their lies when confronted with the evidence of their deceptive acts.

Besides covering a gap in the literature – by investigating elementary school-aged children's ability to behaviorally deceive - the results of this study allow us to better understand the intentional deceptive ability of children in a fun situation where the deception is not intended to protect the self or to bring a personal gain.

PP 278

DORSAL AND VENTRAL STREAM ASPECTS ON SOCIAL PERCEPTION IN CHILDREN BORN VERY PRETERM

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Very preterm birth (VPT<32 gestational weeks) is associated with long term consequences on social function, for example, an increased likelihood of peer problems in children. The mechanisms behind these difficulties are not yet fully understood, but as dysfunctions in visual perception abilities are common, a deficit in social perception could help explain findings. Two aspects of social perception in turn related to social functioning is detection of Biological Motion (BM) and the ability to recognise facial emotional expressions. Brain processing of BM is primarily a dorsal stream function, and processing of facial expressions rely primarily on the ventral visual stream.

The aims were to investigate if a) VPT children and Full term born (FT) children differ in social perception; b) are dorsal and ventral stream aspects of social functioning affected equally?

Thirty-three 12-years-old VPT and 20 FT children were investigated. The standardised NEPSY II Affect recognition (AR) assess the ability to interpret emotional facial expressions. Ability to detect BM was measured with a Tobii-TX300 eye-tracker whilst the children were looking for 8 walking point-light men, masked by random dot motion. Mean detection time was calculated. Both measures (AR test scale-scores and BM detection time) were compared to FT peers, using independent t-tests.

There was a significant difference between mean BM detection time for FT and VPT children (M=7.7, SD=3.3 vs. M=12.1 SD=6.4; t=-2.59, p = .002). At the same time, affect recognition did not show any significant difference between groups (FT (M=9,3, SD=1.6) vs. VPT children (M=9,7, SD=1.8); t=-,8, p=.4.

Results indicate that VPT children have deficits in social perception compared to FT peers. However, dysfunction might affect dorsal stream functions more than ventral stream functions, as BM detection differed from peers whilst AR did not. This would agree with theories of dorsal stream vulnerability resulting from preterm birth.

PP 279
INDIVIDUAL DIFFERENCES IN CHILDREN'S MORAL SELF AND THEORY OF MIND

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This study examined the relation between individual differences in the development of moral self and theory of mind (ToM) in a sample of children aged 4 to 7.5 years. Across two sessions, children (N = 80) were administered: (a) a revised version of the Moral Self Scale (Kochanska, Murray, & Coy, 1997), which assesses dimensions of the moral self in childhood (e.g., internalization of rules, propensity to guilt, apology, reparation), (b) a battery of first- and second-order ToM tasks, and (c) a measure of expressive language ability (Vogindroukas, Protopapas, & Sideridis, 2009). Individual differences in children's moral self were positively correlated with ToM: Children with higher scores in the moral self measure had better performance on the ToM battery. The relation between the two abilities remained significant even when children's age and language ability were statistically controlled. These results suggest that ToM may be a crucial factor for the emergence of individual differences in young children's moral self. Implications of these findings for the field investigating the relationship between children's conscience and ToM are discussed.

PP 280

GUILT UNDERSTANDING AND THEORY OF MIND TRAINING CAN IMPROVE CHILDREN'S PERFORMANCE ON THE HAPPY VICTIMIZER TASK

Misailidi P.[1], Brouzos A.[1], Delliou M.[1], Vassilopoulos S.[2], Baourda V.[1]

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The happy victimizer phenomenon refers to young children's propensity to attribute positive emotions to transgressors despite recognizing that moral violations are wrong. This study investigates the effectiveness of a conversation-based training program that aimed to attenuate the happy victimizer attribution pattern by promoting 4- to 6-year old children's guilt understanding and theory of mind. Fifteen children took part in the program (intervention group) and 10 in the evaluation of its effectiveness (control group). Participants were pre- and post-tested on a battery of tasks assessing: (a) the happy-victimizer attribution pattern, (b) understanding of guilt, and (c) the ability to attribute mental states and emotions. The program consisted of eight training sessions. During each session, children in the intervention group were read stories about moral transgressions. After listening to the stories, they took part in group conversations about the guilt feelings and the mental states of the transgressors. Analyses revealed that at the completion of the program, the intervention group attributed significantly more often negative emotions (e.g., guilt, sadness) to the transgressors, whereas children in the control group consistently attributed positive emotions. The practical and theoretical implications of these findings are discussed.

PP 283

PRO-ENVIRONMENTAL BEHAVIOR TRENDS IN LITHUANIAN ADOLESCENTS

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Mykolas Romeris University,Lithuania

Climate change is considered one of the most important global questions in need for a speedy and evidence-based answer (European Commission, Paris Agreement, 2015). Up till now most of the pro-enviromental research are focused on adult's intentions, values and behavior. Adolescence has been defined as manifold developmental stage providing many opportunities for formation of pro-environmental attitudes and behaviors (Krettenauer, 2017). So, adolescence is an important age group for applying pro-environmentally oriented behavioral change (e.g. Clark, 2007). It has been found that amongst most comon harmful behavior for the environment in Lithuania (Malinauskiene et al., 2018) is purchasing water in the single-use bottles (69,4 % of all adolescents). The main aim of the current study is to examine the relationships among adolescents' purchasing water in the single-use bottles and awareness of consequences, awareness of need, awareness of policy, intention, access to behavior, habit, perceived behavioral control, social norm, knowledge about climate change and attitudes towards environmental sustainability. Data from the household conducted in Lithuania. Number of household: N = 508. Age range: 13-17 years (M=15,10; SD=1,39). Gender: 49,4 % girls. A questionnaire design was based on the comprehensive action determination model (CADM, Klöckner & Blöbaum, 2010). All variables were measured by single indicator. Also a question about climate change and attitudes towards environmental sustainability was included. Purchasing water in the single-use bottle is negatively related to adolescents' awareness of consequences, intention, and positively – with habit. Regression findings showed that the overall model comprising factors explained only 22 % of the total variance in adolescents' purchasing water in the single-use bottle (R^2 = 0.22, adjusted R2 = 0.20, F = 10.95, p < 0.001). Awareness of consequences, intention, and habit is most important in predicting purchasing water in the single-use bottle in adolescence.

Sunday, September 1st, 2019

Poster Presentations

Session 5

Olympia Foyer 10:30 – 11:00

PP 285
DO TEENS WITH AN INBORN ERROR OF METABOLISM ASSESS PSYCHOLOGICAL ASPECTS DIFFERENTLY THAN THEIR PARENTS?

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Background and aims: Inborn errors of metabolism (IEM) often require medical monitoring along with a restrictive diet and/or drug treatment. As a life-long medical condition, these constraints likely affect various aspects related to psycho-social functioning in patients and their families, such as quality of life, mental health, and coping strategies. However, it remains unknown whether affected children differ in their perception of these psychological aspects compared to their parents.

Methods: Participants included 10 IEM-diagnosed teenagers (M_{age}=15 years, range: 14-17; 7 boys) along with one of their parents. We used a self-report vs. parent-report versions of the Phenylketonuria Quality of Life Questionnaire (Bosch et al., 2015 ; Regnault et al., 2015) in order to assess health-related quality of life and the Strengths and Difficulties Questionnaire (Ravens-Sieberer et al., 2008) in order to assess teenager's mental health. Last, we used the self-reported Cognitive Emotion Regulation Questionnaire (Jermann et al., 2006; d'Acremont & Van der Linden, 2007) in order to assess individual coping strategies. Answers were compared with Student's t-test.

Results: Teen-aged children did not differ from their parents in terms of individually assessed health-related quality of life (p=.661). Concerning mental health, the only difference appeared to be in teenagers self-reporting more conduct problems (M=3.1, SD=1.97) compared to their parents (M=1.22, SD=1.56; t(17)=2.83, p=.036). Last, in respect to coping strategies, we found that parents scored significantly higher on all subscales, except on positive refocusing (p=.391) and on putting into perspective (p=.149).

Conclusions: Aspects related to both physical and psychological evaluation were perceived in similar ways by IEM-diagnosed teenagers and by their parents. However, parents showed more coping strategies, both adaptive (e.g., acceptance, refocus on planning, positive reappraisal) and maladaptive (e.g., self-blame, blaming others, rumination, catastrophizing). Special care should be given to parents in order to help them decrease maladaptive coping and to teenagers to increase adaptive coping.

PP 287

CHILDREN WITH DUCHENNE MUSCULAR DYSTROPHY- COGNITIVE FUNCTIONING

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Duchenne Muscular Dystrophy (DMD) is a rare genetic disease that involve especially muscles but also other tissues in patient`s body (Li et.al., 2015). Parents often report problems in school (ex. low marks, miss communication with colleagues). Cause of this problems are some: lack of dystrophine gene in brain, but also social consequences of exclusion and proposition of home studing.

The aim of this study was to examine if children with DMD has cognitive problems, and if yes which kind of problems and if there is a correlation between age or appearance of first symptoms and cognitive functioning.

Forty six male patients between 5 and 18 yrs. ($M= 11,37$) participated in the study. Stanford Binet Test 5th edition (polish adaptation Sajewicz-Radtke, Radtke, Lipowska, 2017) was used to examine five factors of cognitive ability: fluid reasoning, knowledge, quantitative reasoning, visual-spatial processing and working memory. Demographic data was collected.

The lowest results the patients obtained in the area of knowledge (*$M=80.41$; whereas in population every factors has $M=100$*). It could be explained by the motor limitations and individual teaching at home. Furthermore they obtained low scores also in *working memory* (*$M=80.72$*) and *quantitative reasoning* (*$M=83.7$*). The higher scores patients received in fluid reasoning, but it was still under medium scores in population (*$M=90.39$*). There is no correlation between age (progression of the disease) or appearance of first symptoms and cognitive functioning. That suggest looking for correlations in the type of the mutation. The results will be presented for every factor separately and in general. Possible explanations and influences of everyday living will be also presented.

The study indicated the existence of a problem and the possibility of mitigating the negative effects of deficits in cognitive functioning. This was not previously considered due to the belief that the disease concerns only the muscle tissue.

PP 288

TEMPERAMENTAL GOODNESS OF FIT IN PRESCHOOLER WITH AUTISM SPECTRUM DISORDER AND THEIR ELDER SIBLING

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Previous studies have shown that the sibling relationship of children with autism spectrum disorder (ASD) has an impact on the adjustment of children with ASD. According to the temperamental goodness of fit, our research explores the predictability of temperament of the child with ASD to sibling relationship and parental differential treatment. Furthermore, our study investigates the role of parental differential treatment in the relation of temperament, sibling relationship.

40 ASD children, their elder sibling and mother were invited to participate in this study. Elder siblings (typical development children) were asked to fill up the Sibling Relationship Questionnaire-Revised (SRQ-R) as evaluated the sibling relationship, the Sibling Inventory of Differential Experience (SIDE) as assessed the parental differential treatment. Mothers were asked to fill up the Behavior Style Questionnaire (BSQ) as their ASD children's temperament, the Middle Childhood Questionnaire (MCTQ) as their typical development children's temperament, and SRQ-R.

Research found that: 1. mother's perception of the warm and conflicting sibling relationship is no significant difference to elder sibling's perception. 2. The difference in the intensity of the reaction between the siblings significant predicted of the mother's perception of warm sibling relationship. 3. The difference of temperament between ASD children and elder sibling, which buffer the negative effect of ASD children's low temperament on conflicts sibling relationship. 4. The mother's differential treatment moderate the effect of ASD temperament on sibling relationship.

In summary, sibling relationship of ASD children, it is neither similarity theory nor complementarity theory as the interpretation of temperament goodness of fit, but to consider the level of ASD children in specific temperament. Mother's differential treatment also play an important role on sibling relationship of ASD children.

PP 289

PROFILE OF EXECUTIVE FUNCTION DEFICITS IN ADOLESCENTS WITH CONDUCT DISORDER (CD)

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According to DSM-5, adolescents with CD show aggressive, oppositional and dissocial behaviours which are persistent and repetitive. Contemporary findings suggest that destructive behaviour emerges from combination of different risk factors, mainly neurobiological features of the person, attachement disorders, harmful parental behaviours and pathological family environment. Deficits of executive functions could be indicators of neurobiological factors. The aim of the study was to investigate profile of EF in adolescents with psychiatric diagnosis of conduct disorder. Participants of the study were 21 patients from child and adolescent neuropsychiatric hospital and 20 matched controls. Methods of EF assessment were: fonological verbal fluency, Wisconsin Sorting Card Test (WCST), Stroop Test and Comprehensive Trail Making Test. Results: The results of analysis suggest that the clinical group differ from control group only in some, not in all executive functions. There were no significant differences between groups in cognitive flexibility (WCST) and in planning of visual searching task (CTMT trails 1,2,3). The clinical group were poorer in comparison with control group in the Stroop test, so they have greater difficulties in interference control. Also the two groups differed in an indicator of switching between categories in CTMT (trails 4 5). In a verbal fluency task more perseverations and less shifts were found in adolescents with conduct disorder. The conclusion is that adolescents with conduct disorder have poorer control mechanisms than neurotypical group.

PP 291
NARRATIVE CO-CONSTRUCTION IN MOTHER-CHILD WITH AUTISM SPECTRUM DISORDER

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Mother-child co-constructions of past experiences and fictional stories are related to the child's understanding of mental states. Adults' style of co-construction about past events and stories includes rich details, which are associated with more elaborate responding by children in the same co-construction. Moreover, adults' descriptions of emotions and mental states facilitate children's representations of others. An understanding of mental states is important for developing a sense of challenge in children with Autism Spectrum Disorder (ASD). However, no research has focused on co-construction with adults by ASD children. Therefore, the present study explored relationships between the ASD children's understanding of mental states and co-constructions in mother-ASD child. We predicted that ASD children whose mothers frequently engaged in clarifying conversations about mental states would succeed on tasks for the understanding of mental states.

Participants were 8- to 12- year-olds children with ASD. They watched an animation together with their mothers and then co-constructed narratives about the story. The ASD children also completed tasks to assess their ability to reason with mental states.

The main results were as follows: (1) Mothers of children with ASD displayed two distinct narratives styles. "High-elaborative" mothers asked children's thoughts or feelings related to characters' action than "Low-elaborative" mothers. (2)As predicted, ASD children of "High-elaborative" mothers passed more tasks for the understanding of mental states than ASD children of "Low-elaborative" mothers.

These results suggest that the development of understanding of mental states in ASD children were related positively to their mothers' elaborative style.

PP 293

EYE MOVEMENT FUNCTION AND THE PERCEPTION OF DIFFICULTY IN READING AFFECTS ACTUAL READING PERFORMANCE IN UNIVERSITY STUDENTS

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Introduction: We have revealed that the influence of the perception of difficulty in reading and eye movement function on reading skills varies depending on the life stage (Mitani et al., 2016). The purpose of this research is to add evidence from the viewpoint of brain science and physiological psychology about past findings.The present study investigated the differences in reading performance and brain activities (bilateral prefrontal areas) between two types of responsiveness of the autonomic nervous system(Study 1), the effect of eye movement function reading (pronunciation / silent reading) in university students(Study 2).

Methods and Material: The participants are 60 university students (21.51±2.61 y, ratio of men to women - 27:33). The reading and writing support needs scale (Mitani et al., 2014) was used to evaluate the perception of difficulty, and Reading and writing fluency task (Mitani et al., 2016) was used to evaluate reading performance. We adopted the NIRS (Hb131S 4ch wireless NIRS) and observed a change of oxyHb in bilateral prefrontal area during a reading task as an index of brain activity. The participants were divided into two groups according to the mental workload measured by puls volume

Results and Discussion:

Study 1: Non-word reading time was significantly longer in the high mental workload group, and they showed low activity of the left prefrontal area.

Study 2: There were no significant differences between the two groups in the reading result (eye movement). However, the result of NIRS indicated difference on prefrontal activity.

Some results were different from the findings in the childhood. We need to pay attention to different aspects depending on the life stage for the assessment of the dyslexia. The mental workload should be considered in addition to reading performance for university students.

PP 294
MOTHER'S PERCEPTION OF A CHILD WITH FACIAL DYSMORPHISMS

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Facial dysmorphisms are often an integral component of numerous genetic syndromes. The coupling of the forms of dysmorphism occurring in a child's face with intellectual disability can significantly change their image in the minds of those from its immediate environment.

The aim of the research was an evaluation of the perception of the mothers having children with a moderate degree of intellectual disability with facial dysmorphism and without it.

Eighty three mothers of children suffering from moderate intellectual disability participated in the study. The first group (n=52) was composed from mothers of children with intellectual disability displayed facial dysmorphisms, and the second (n=31) was made from mothers having child with intellectual disability without facial dysmorphism. The experiment made use of the semantic differential method comprising a 20-point scale of adjectives and their antonyms in parameters: *ability, personal traits, values, appearance.* The mothers were asked to provide an evaluation of their own perception of their child.

The results showed the absence of any significant statistical differences in the perception of children with dimorphism by both groups of mothers with regard to tested parameters: (1)personal traits – they perceived their children as empathic, thoughtful and sociable; (2)values – they perceived their children clever, hardworking and meticulous; (3)appearance – they perceived their children good-looking and having a nice shape. Noticeable differences occurred in the perception of functional ability. The mothers of children with intellectual disability and facial dysmorphism viewed their children as being more attractive and independent than the mothers of children without dysmorphism.

Mothers from both groups had a subjective, highly positive image of their intellectually disabled children in relation to the majority of the tested parameters. The mothers of children with intellectual disability and dysmorphism viewed their children as being more active, resilient, independent and physically stronger than those who had children without dysmorphism.

PP 295

SUPPORTING LEARNING IN INTELLECTUAL DISABILITY: ACCESSIBILITY TO TEXTUAL RESOURCES

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The growing attention on knowledge accessibility for people with ID has led many European countries to establish guidelines for simplifying textual resources. Comprehensibility, however, is a complex process requiring more than just providing simplified text. The ease-of-comprehending of a text depends on the interplay between readers and content characteristics. The aim of this work is to use an evidence-based approach to analyze the impact of a textual simplification process on fluency, comprehension and readiness level of people with intellectual disability.

Participants were 20 young adults with ID matched to 20 typically developing (TD) subjects with similar reading skills. Participants were presented with an original and a simplified version of the same text. The reading task allowed us to collect the following measures: (1) *a first legibility judgment* (availability to read), (2) *reading fluency* (speed and correctness), (3) *comprehension* level (with few basic multiple-choice text-based questions), (3) a *second legibility judgment*.

Results showed that people with ID, as well as TD subjects, perform better in a reading task when the textual resources have been previously simplified. The performance improve considering all the evaluated measures: legibility judgment, fluency, comprehension level. A between-subjects analysis of ID subjects performance revealed a big heterogeneity across participants in fluency and comprehension measures which suggest the need of creating different levels of textual simplification (i.e. high, medium, low level of simplification)

Our results highlight the fact that it is important to include an evidence-based approach into the process of thinking and implementing design for all strategies for people with ID. An approach focused on the process, rather than on the product of knowledge, may allow a change of perspective: the implicit objective of knowledge accessibility is no longer that of "homogenizing", but it becomes urgent to "diversify", perhaps identifying and understanding a wide range of user needs.

PP 296

RESPONSE BY NURSERY TEACHER TO CHILDREN WITH DISABILITIES IN PROSOCIAL SITUATIONS COMPARISON OF THE PRESENCE OR ABSENCE OF DIAGNOSIS

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Background and aims: Inclusive childcare has progressed, and not only social skills training, but also the importance of allowing children with disabilities to experience interpersonal conflict situations within group care is being re-examined. Thus, this study examines nursery teachers' perceptions of response to interpersonal conflict situations involving children with disabilities, especially in prosocial situations where positive behavior also occurs. In addition, this study investigates the difference depending on the presence or absence of disabilities' diagnosis.

Methods: Participants: 48 nursery teachers. **Procedure:** Questionnaires containing a prosocial situation example were distributed. There was a 25-strong diagnosis-aware group, whose questionnaire said the child in question "has ASD", and a diagnosis-unaware group, consisting of the remaining participants. **Summary of example:** When R and M are engaged in origami, not far away, T takes U's origami paper. Everyone gathers round U, who is crying. Meanwhile, R suddenly shoves T and they fight. The class becomes upset, and the care provider rushes over. **Question:** If you were the care provider in question, how would you respond?

Results and Conclusions: The questionnaire contained five reactions: "listen to what child says", "get child to apologize", "explain how child could have behaved differently", "make child think about situation", "consider situation with all those nearby".

In the diagnosis-unaware group, each response was chosen by about five participants. In the diagnosis-aware group, replies were clustered, with eight participants selecting "explain how child could have behaved differently" and ten "consider situation with all those nearby". When disability is clear because of diagnosis, there seemed to be a tendency for nursery teacher, rather than entrusting the solution to the individual, to not only teach relevant skills, but also to look for a solution including those nearby. The desire of nursery teacher to educate the whole group by arriving at mutual understanding could be glimpsed.

PP 297

ACCULTURATION AS A FACTOR OF SUCCESSFUL SOCIAL AND PSYCHOLOGICAL ADAPTATION OF DEAF AND HARD-ON-HEARING STUDENTS

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Integration of deaf people into the society of hearing is productive when they can maintain their connection with the world of the deaf for emotional and social support. Identity is considered as a specific psychological resource or protective factor that allows a deaf person to live in the world of the hearing. Comparison of different types of acculturation allows to select the most effective types and define the meaning of "cultural anchor" for a deaf person.

We studied 137 deaf and hard-on-hearing students in different educational situations. In the context of the identity-related discussion we studied the personality characteristics in deaf and hard-on-hearing students (Big Five –Costa & McCrae, TRF – Becker), coping-behavior (WCQ - Lazarus & Folkman) and other factors associated with deafness depending on the students' self-identification type (Self-Esteem and Coping strategies - Jambor & Elliott, 2005).

The results of analysis showed that the degree of hearing loss played a crucial role. People with smaller violations, and attributing themselves to the "world of the hearing" had good personal resources, actively used strategies, problem-solving, acceptance of responsibility, positive revaluation, however, they were less emotional, and people with more severe loss, who identified themselves with the deaf culture and using only sign language, lived in a specific "deaf environment" that does not test their self-esteem.

"Bicultural affiliation" was the most effective in terms of adaptation. They were distinguished by good mental health, a wide coping repertoire connected with the experience of living "for the deaf among the hearing and among the deaf."

The lack of belonging to certain culture (marginality) leads to personality disintegration and desadaptation: deaf and hard-on-hearing students with marginal identification had a lower level self-esteem, worse psychological health and personal resources, and the lowest level of extroversion, self-confidence and life satisfaction. Supported by RFBR project 19-013-00406.

PP 298

DETAILED COGNITIVE PROFILE IN 6-YEAR-OLD CHILDREN BORN EXTREMELY PRETERM; THE EXPRESS STUDY

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Children born extremely preterm (EPT, gestational age <27 weeks) risk overall impairments in intellectual abilities. Most studies focus on Full Scale IQ (WISC-IV). However, there is a need for more studies investigating separate cognitive indexes and their subtests.

To investigate the cognitive profile of EPT born children at age 6.5: do EPT children show greater impairments in specific subtests within a index compared to full term peers?

Intellectual ability was assessed using the WISC-IV at 6.5 years in a national cohort of all children born EPT between 2004 and 2007 in Sweden (n=359), and full term born controls (n=367).

All 10 WISC-iv subtests needed to obtain the FSIQ were administered.

Results were calculated for the Z-values computed from the control group using paired t-tests for indexes and sub tests.

EPT children scored significantly lower compared to controls on all indexes and sub tests (p<.001). When comparing different cognitive domains, EPT children showed similar level of impairment in verbal functioning and processing speed. However, greatest impairments were found in working memory and perceptual reasoning. The largest impairments were found for the subtests block design, arithmetic and symbol search. Within each index, there were significant differences between subtests, indicating detailed domain specific impairments in EPT children. The scores for block design, arithmetic and symbol search differed significantly from other subtest within respective WISC-IV index (p<.002).

Children born EPT perform worse than full term controls in multiple domains of cognitive functioning. The three subtests in which EPT children had the largest impairments (i.e. block design, arithmetic and symbol search) are tasks that target visuospatial construction, working memory through mathematical questions and visual search of abstract symbols. All three sub tests rely on abstract perceptual functions in different ways.

PP 299

INVESTIGATING CONSENSUS AMONG DRAMATHERAPISTS ON KEY ASPECTS OF DRAMATHERAPY FOR CHILDREN AND YOUNG PEOPLE WITH AUTISM SPECTRUM DISORDER: A DELPHI STUDY

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Background and aims: Dramatherapy is a form of psychotherapy that entails the intentional use of drama and theatre-arts creative processes. There is evidence to suggest that dramatherapy can support people with autism by engaging a broad range of techniques, however, there is limited empirical research in this field. The present study aims to investigate the consensus among dramatherapists on key aspects of dramatherapy, namely the components and the techniques employed as well as the structure and the facilitation of the sessions for children, adolescents and young people with autism.

Methodology: The study used the Delphi method, a structured process focused on achieving specialists' consensus on an important issue, by using a series of questionnaires, known as 'rounds'. A two-round Delphi method was completed by a purposive sample of 33 participants with qualification in dramatherapy and relevant professional and/or academic experience.

Results: The participants identified and reached consensus on overall 33 aspects of dramatherapy. They highlighted the plethora of drama techniques and creative processes used in dramatherapy sessions which can enhance self-expression, communication and well-being. They advocated the tailormade sessions, the therapeutic alliance, the safe therapeutic space, the therapist's flexibility and calmness as well as the use of clinical supervision. The regularity and clear structure of the sessions were endorsed. Attention was also drawn on the individual needs by avoiding generalized assumptions and respecting the personality of each client.

Conclusions: The value of the Delphi method is indicated, especially for scientific areas where there has been limited research, as ideas are generated from a knowledgeable pool of participants. The study provides implications and recommendations for practice and research. Awareness of areas of consensus may offer the dramatherapists an opportunity for further reflections on their practice with people with autism and may aid on research designs by developing some ideas or thoughts.

PP 300

PARENTAL CONCERNS, ATTITUDES AND MEDIATION STRATEGIES RELATED TO VIDEOGAME (OVER)USE IN 7-TO-17-YEAR-OLDS WITH AND WITHOUT AUTISM SPECTRUM DISORDER

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Background and aims: Playing videogames is a favourite leisure activity for many children and adolescents, including those with Autism Spectrum Disorder (ASD). Their parents, however, frequently have mixed feelings about these screen-based activities, pondering whether these behaviors are harmful or helpful in their child's development. This study aims to better understand videogame (over)use in youth with and without ASD, the concerns and attitudes of parent, and the mediation strategies that parents adopt to manage their children's gaming.

Methods: Parents of 244 youth with ASD and 625 without ASD (both distributions: 7-17 years, M_{age}=12, SD=2.4) completed an online survey. Measurements included four indicators of (over)use (hours/day, problematic videogaming, obsessive and harmonious passion), parents' perceived negative and positive impact (on peers, family, school, conduct), and their use of active, restrictive or social game mediation strategies.

Results: Salient group and gender differences emerged, indicating a cascade pattern, with boys with ASD showing the most maladaptive gaming outcomes (overuse, negative impact), followed by boys without ASD. There was also elevated (yet less) concern for girls with ASD but little concern about girls without ASD. Notably, all parents also recognized 'harmonious passion for gaming' in youth with and without ASD. The quality of passion-for-gaming (obsessive vs. harmonious) was a more relevant predictor of outcomes than quantity of hours spent on games. Very few group and gender differences were found in relation to mediation strategies. Also, only limited associations were found between mediation strategies and outcomes in both groups. Only social mediation (playing together) turned out to be a significant 'buffering' factor for negative gaming outcomes. In all groups, an autonomy-supportive style related to more harmonious passion for gaming.

Conclusion: This research indicates the relevance of a more balanced view on videogame (over)use and suggests that tuning into a child's passion for gaming might help to develop more adaptive gaming habits.

PP 303

THE SOCIAL WITHDRAWAL AND SOCIAL ANXIETY FEEDBACK LOOP AND THE ROLE OF PEER VICTIMIZATION AND ACCEPTANCE IN THE PATHWAYS

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Social withdrawal and social anxiety are believed to have a bi-directional, cyclical influence on one another, but it is unknown if the influence is indeed bi-directional, especially within-person. In adolescence, peer experiences may play a central role in the relationship between withdrawal and social anxiety because of the importance of the peer group in youth's social development. In this study we investigated the temporal sequencing and strength of effects between social withdrawal and social anxiety, and examined the roles of peer victimization and peer acceptance in the pathways between withdrawal and social anxiety. Participants included 2,772 adolescents from the population-based and clinical cohorts of the Tracking Adolescents' Individual Lives Survey (TRAILS). Data was included from three measurement waves, when participants were 11, 13, and 16 years old. Parent-reported withdrawal, self-reported withdrawal, social anxiety, victimization, and peer acceptance were measured at every wave. The bi-directional within-person associations between these variables were investigated using random-intercept cross-lagged panel models (RI-CLPMs). Results indicated that social anxiety at 11 years consistently predicted increased self-reported withdrawal at 13 years, even when accounting for peer experiences. The reciprocal effect, from self-reported withdrawal to social anxiety, was not found at any age. Changes of parent-reported withdrawal were not associated with social anxiety, or vice versa. Negative peer experiences predicted increased self-reported withdrawal from 11 to 13 years and increased parent-reported withdrawal from 13 to 16 years. In conclusion, youth became more withdrawn when they became more socially anxious, and increasing withdrawal is, in turn, associated with greater victimization and lower peer acceptance. Contrary to previous research, there might not be a cyclical pattern between social withdrawal and social anxiety in adolescence. Finally, adolescents and their parents have unique interpretations about adolescents' withdrawn behavior, suggesting that a multiple-informant approach is warranted when investigating social withdrawal during these ages.

PP 304
WHY DO LEFT-BEHIND CHILDREN HAVE POOR MENTAL HEALTH?

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Background: China's urbanization in recent three decades has given rise to massive rural-to-urban migration, with millions of children left behind in rural areas as a result. This parental absence has been associated with social withdrawal tendency and poor mental health among these children (Qin & Albin, 2010). However, little is known regarding whether two main subtypes of social withdrawal could account for their psychological distress.

Aims: This study aimed to explore whether children's shyness and unsociability would mediate the left-behind experience and psychological distress.

Procedure: Four hundred and one (F=199, M=202) Chinese middle school students with the mean age of 14.9 (SD=1.23) were recruited from two schools and completed a demographic questionnaire, Children's Shyness Questionnaire, Child Social Preference Scale (subscale of unsociability) and General Health Questionnaire-28.

Results: One hundred and fifty-six (38.9%) students had left-behind experience with one or both parents left home for work in cities for more than six months. Compared to the control, left-behind children scored significantly higher in psychological distress (t=2.23, $p<0.05$), shyness (t=2.26, $p<.05$) and unsociability (t=2.79, $p<0.01$). Shyness rather than unsociability fully mediated the relationship between left-behind experience and psychological distress (Indirect effect: BootLLCI= -1.76; BootULCI=-0.11).

Conclusion: Left-behind children were prone to mental health problems especially for those who engage in social interaction with a high level of hesitation due to anxiety.

PP 305
THE EVALUATION OF SEPERATION ANXIETY BY WORKING MODEL OF SELF, SECURE BASE SCRIPT, PSYCHOLOGICAL CONTROL OF PARENTS

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In the literature, separation anxiety is seen as a natural consequence of the binding that occurs in each attachment style. It's been shown that some attachment patterns in infancy (avoidant attachment exc.) are particularly associated with anxiety in early childhood. Moreover, it's known that children who have positive relationships with their parents are able to create a positive self model and low levels of anxiety related to attachment. On the other hand; psychological control, which is closely related to the parents's own anxiety processes, indicates negative attachment patterns and high levels of anxiety in children. According to this model which corresponds to the mental representations of the attachment, the child develops emotion, thought and behavior processes as a result of the secure base scripts created within the framework of repeated experiences they had with their parents. The aim of this study is to evaluate the separation anxiety seen in preschool children with secure base script, positive self model, and psychological control of parents.

For this purpose, the sample of the study will be consist of 150 kindergarten students and their mothers living in Mersin. The mothers will fill the Demographic Information Form, the Separation Anxiety Scale-Parent Form and the Parental Attitude Research Instrument. The researcher will perform Doll Family Story Completion Test and Puppet Interview with the children.

The preliminary regression analyses conducted with 50 preschool children showed that; parent's overconfidence and harsh discipline, insecure stories of children, and negative and rigid self-evaluations positively predicted separation anxiety. These results are a foresight for further studying the mediating role of the psychological control of the parent in the relation of mental representation of attachment to the child's separation anxiety.

The data obtained from all participants will be analyzed by structural equation modeling and discussed within the relevant literature.

PP 309

THE DIFFERENTIAL EFFECTS OF CHILDHOOD EMOTIONAL ABUSE ON DEPRESSIVE, ANXIETY AND STRESS SYMPTOMS IN ADULTHOOD: THE MEDIATING ROLES OF INSECURE ATTACHMENT

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Background and aims: Childhood emotional abuse (CEA) is a major public health concern associated with depressive, anxiety and stress symptoms in adulthood. Previous literature suggests that later psychosocial outcomes are dependent on the type of emotional abuse endured. A bi-dimensional model of CEA comprising acts of omission and commission was hypothesised, with differential pathways to adult outcomes. Adult attachment was predicted to mediate the relationships.

Methods: 324 participants were recruited from a non-clinical population. A cross-sectional retrospective design was employed, in the form of an 84-item online survey. Various subscales from widely used and validated measures of CEA were selected based on the hypothesised model of CEA. The retrospective design facilitated insight into the links between early experiences and later depression, anxiety and stress symptomatology. Insecure attachment (anxiety/avoidance) acted as both predictor and mediator variables, measured through the Experiences in Close Relationships scale. Psychological outcomes were measured through the Depression, Anxiety and Stress-21 scale.

Results: A Principal Components Analysis empirically supported a two-factor solution; omission and commission. Regression and mediational analyses evidenced emotionally abusive acts of omission and commission were independently predictive of depressive symptoms, and indirectly mediated by both dimensions of insecure attachment. However, only acts of commission were predictive of later anxiety and stress symptoms, where indirect relationships were mediated by insecure anxiety attachment.

Conclusions: CEA has damaging effects on psychosocial functioning across the lifespan.

This study empirically confirmed the presence of a bi-dimensional model of CEA, comprising omission and commission parenting behaviours. Furthermore, the differential effects of these types of CEA in relation to later psychosocial functioning. Attachment insecurity emerged as a partial mediator of the relationship. The results emphasise the need for flexible and holistic prevention and resilience-led intervention programs for childhood trauma and mental health. Future research should consider the influence of later life events and multiple forms of trauma.

PP 310

DEVELOPMENT OF INTERPERSONAL ACCEPTABILITY AND EXCLUSIVITY IN ELEMENTARY, JUNIOR, AND HIGH SCHOOL STUDENTS

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The purpose of the present study was to examine the development of interpersonal acceptability and exclusivity. Subjects were 226 (104 boys, 122 girls) elementary school students, 92 (44 boys, 48 girls) junior high school students, and 112 (33boys, 79 girls) high school students in Japanese public schools. They were asked to answer the questionnaire about the interpersonal acceptability, the exclusivity, the experience of the interaction with various people, and the width of the interest. Main results were as follows: (1) Junior high school students had higher exclusivity than elementary and high school students. (2) Girls had higher interpersonal acceptability than boys. (3) The experience of the interaction with various people and the width of the interest affected on the interpersonal acceptability in elementary and junior school students. (4) On the other hand, only the experience of the interaction with various people affected on the interpersonal acceptability in high school students. It was suggested that it is necessary to change the educational program increasing interpersonal acceptability by grade and gender.

PP 311

SOCIAL PREDICTORS OF INDIVIDUAL DIFFERENCES IN SYRIAN REFUGEE CHILDREN'S MENTAL HEALTH OUTCOMES

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Background: Of the refugees displaced by the Syrian conflict, approximately one million are in Lebanon. Half of these are children, who face war trauma, displacement, and continuing adversities such as lack of basic resources, limited access to education, and child labour. Due to this, refugee children are at severe risk of psychological problems, but there remains wide variation in their responses. Social factors such as family relationships may account for some of these individual differences, but this relationship is yet to be studied in Syrian refugee children.

Methods: We aimed to investigate the impact of war trauma, current refugee environment, and social factors on individual differences in outcomes in a sample of 1,600 Syrian refugee children aged 8-16 years in informal tented settlements in Lebanon. Children and their primary caregiver completed questionnaires on a range of outcomes (PTSD, depression, anxiety, externalising behaviour, wellbeing) and risk and protective factors (e.g., child maltreatment, social support) as part of the BIOPATH study.

Results: War events significantly predicted all outcomes (β = -.06 to .30) bar externalising, while experiences of current adversity such as bullying (β = .08 to .09) and child abuse (β = .07 to .20) were significantly predictive of psychopathology. Aspects of the parent-child relationship were predictive of all outcomes; for example, positive home experiences predicted less depression (β = -.09, p = .001) while negative treatment predicted greater symptoms of PTSD (β = .10, p = .001), anxiety (β = .08, p = .012), and externalising problems (β = .08, p = .007). Finally, social support predicted lower depression (β = -.13, p < .001) and higher wellbeing (β = .23, p < .001).

Conclusions: Current aspects of the social environment play an important role in Syrian refugee children's mental health outcomes beyond the effects of war and displacement.

PP 313

CASUAL SEX IN EMERGING ADULTHOOD: IS IT HEALTHY?

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Research on the association between casual sex and emotional and psychological distress produced inconsistent findings. Two studies will be presented in order to examine in a more comprehensive manner the association between casual sex and wellbeing. Study 1: As part of a larger longitudinal study 121 emerging adults (mean age 22.63) reported on the number of friends with benefits and frequency of casual sex. In addition, they reported on the motivation for involving in casual sex, autonomous versus non-autonomous (Vrangalova's, 2015). No pattern of casual sex explained wellbeing or addiction problems two years later. However, involvement in casual sex due to non-autonomous reasons (such as being persuaded) associated with future higher likelihood of drug and cannabis use as well as a higher frequency of getting drunk in the last month. Study 2, conducted within a personality framework examined whether casual sex is associated with lower behavioral regulation or rather with sensation seeking. 234 young adults (mean age 23.51 years) were asked to report on the number of relationships shorter than two months, number of friends with benefits and number of involvement in casual sex in the last two years. In addition, participants completed the Whiteside et al., (2005) Impulsive Behavior Scale from which extracted the measures of Urgency (difficulty in regulating impulsive behavior) and Sensation Seeking. Preliminary analyses (still under process) showed consistently that the different forms of casual sex are associated only with elevated Sensation Seeking.

The extent which casual sex among emerging adults is autonomously motivated and associated with sensation seeking represent an adaptive developmental process will be discussed.

PP 316

VIOLENCE IN RESIDENTIAL YOUTH CARE CENTERS FOR CHILDREN AND ADOLESCENTS WITH A MILD INTELLECTUAL DISABILITY: EXPERIENCES OF (EX-)RESIDENTS

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The primary goal of residential youth care is to help children and adolescents who face complex problems develop safely. However, violence within the care context, by residents or professionals, might interfere with this goal. The present study was part of a large-scale investigation regarding violence in Dutch residential youth care for children and adolescents with a mild intellectual disability between 1945 and 2017. Semi-structured interviews were conducted with 14 (ex-)residents to examine 1) the types of violence they experienced during their stays, 2) how this violence could have happened and 3) how this violence affected their (later) lives. Interviews were transcribed verbatim and analyzed using the NVivo 12 Pro-software. Specific attention was paid to changes in violence over time. Results are under embargo until May 2019, but can be discussed at the conference. The findings underscore the importance of taking residents who report experiences with violence serious, considering their needs and involving them in decision-making. In addition, the results emphasize that residents have valuable ideas for improving the safety in residential care.

PP 317

NARCISSISM AND CHILDREN'S AFFECTIVE REACTIONS TO STATUS GAIN AND LOSS: AN EXPERIMENTAL ELECTROMYOGRAPHY STUDY

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Narcissistic children and their parents seem invested in social status (i.e., obtaining a high rank in the social group). How do they affectively experience the gain or loss of status? We investigated this in a randomized experiment using facial electromyography. Children's narcissism levels were assessed using the Childhood Narcissism Scale. Children (N=83, ages 8-13) created a personal profile and competed for status (i.e., receiving likes) with fictitious peers in an online social network. They were randomly assigned to gain status (receive many likes) or lose status (receive few likes). Unbeknownst to children, parents viewed the course of the game in a separate computer screen. Children's and parents' affective reactions during the task were captured with facial Electromyography (EMG), which detects spontaneous facial muscle activity indicative of positive affect (i.e., zygomaticus major activity, causing a smile) and negative affect (i.e., corrugator supercilii activity, causing a frown). Results show that children's narcissism intensified the negative affective impact of status loss. Children's narcissism intensified the mixed positive and negative affective impact of status gain for children, and the positive affective impact of status gain for parents. Thus, for narcissistic children, status loss was unambiguously negative, and status gain was bittersweet. For their parents, however, status gain seemed to be unambiguously positive, which suggests that they downplay the affective costs that status acquisition might entail for their children. These results shed light on the affective dynamics that might fuel narcissistic status pursuit, as well as on how these dynamics might be transmitted from parents to children.

PP 318
CONTINUING BONDS AND BEREAVEMENT EXPERIENCES OF MIDDLE-AGED AND ELDERLY JAPANESE PEOPLE

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Recently, the important role of continuing bonds with deceased adjustment to bereavement has been focused. This study investigated the relationship between continuing bonds and bereavement experiences of middle-aged and elderly Japanese people. An online survey was conducted with 10,311 Japanese adults aged between 40-79 years. Participants provided data on their basic attributes, as well as information on the experience of bereavement by responding to seven question items on family relationship to the deceased, degrees of antemortem and present attachment to the deceased, the period of bereavement and the degrees of anticipation of death, distress in bereavement, and subjective recuperation. They also completed the WHO-Five Well-being Index, and the Continuing Bonds Scale Japanese version. The valid responses (N=7,902), of 8,020 participants responding they had bereaved a loved one were analyzed. How aspects of the bereavement experience affected continuing bonds with the deceased indicated that generally, the antemortem attachment to the deceased , and distress in bereavement had the strongest effect on continuing bonds. However, there were differences based on the family relationship with the deceased. Results also indicated that the passage of time had no effect. Moreover, continuing bonds were negatively related to subjective recuperation. It is suggested that the more individuals become subjectively adjusted to bereavement, the weaker became continuing bonds. These findings are discussed in terms of adjustive-maladjustive aspects of the continuing bonds with the deceased.

PP 319
ASSOCIATION BETWEEN FALLING AND PHYSICAL, COGNITIVE, AND MENTAL FUNCTIONS IN THE ELDERLY WITH EXERCISE HABITS

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The purpose of this study was to clarify the association between the presence or absence of fall experience and physical, cognitive, and mental functions in elderly people with exercise habits. The subjects consisted of 158 elderly people (age $\geq$ 60 years) with exercise habits who participated in a physical fitness test in the community. Physical, cognitive, and mental functions were compared between subjects who had experienced a fall within the last 1 year and those without this experience using two-way analysis of variance. Significant improvement was observed in the results of the 30-second chair stand test as a parameter of lower limb muscle strength compared with those in the previous year, but no main effect of the year was observed in the other items (grip strength, sit-and-reach distance, walking ability, cognitive function test, depression scale). However, the depression tendency was significantly more marked in the group with fall experience than in the group without such experience, but the other items showed no significant main effect of the group. In addition, the x^2 test revealed that the elderly group with fall experience within the last 1 year more readily falls. As a result of categorization according to the combination of fall experience and mental function, the incidence of falling was 63% in the high-risk group and 10% in the low-risk group. These results suggest that exercise habits in elderly people are associated with physical, cognitive, and mental functions irrespective of the presence or absence of falling, and falling can be predicted based on the past fall experience and decreased mental function.

PP 320

DO PREMORBID MOTIVATIONAL ABILITIES PREDICT DEPRESSION AND APATHY IN PATIENTS WITH MILD COGNITIVE IMPAIRMENT AND ALZHEIMER'S DISEASE?

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The concept of cognitive reserve (CR) i.e. how flexibly and efficiently individuals make use of their brain resources, does not explain the entire gap between the degree of brain damage and clinical manifestation. This leads to the assumption that also other factors contribute to healthy brain aging.

Forstmeier & Maercker (2008) developed the complementary concept of motivational reserve (MR) comprising motivational abilities (self-efficacy, decision-, motivation- and activation regulation) that contribute to the ability of the brain to tolerate age- and disease-related changes in a way that cognitive function is still maintained. The effect of MR on cognitive decline was replicated in several studies.

The present study investigated the protective or debilitating effect of premorbid motivational abilities on the development of depression and apathy in elderly with dementia. We expected that depending on the stage of progression of dementia (mild cognitive impairment (MCI) or Alzheimer's (AD)), motivational abilities do have different effects on psychological well-being. We hypothesized that in patients with AD high MR is associated with a higher risk of depression and apathy, but in patients with MCI with a lower risk.

Data were analyzed from the longitudinal study "Motivational Reserve in Alzheimer s" (MoReA), which was conducted at four measurement points (Baseline, yearly follow-up). The assessment consisted of medical and neuropsychological state-of-the-art assessment of cognitive and motivational variables. The sample consisted of 111 participants, of which 64 were diagnosed with MCI and 47 with AD (Forstmeier & Maercker, 2015). All analyses were controlled for various variables, such as age, gender, etc.

The data analysis is currently in process but will be presented completely at the conference.

The findings emphasize the relevance of psychological aspects in the progression of cognitive impairments. Based on the modifiability of MR, treatment and prevention programs for MCI and AD need to implement special training to foster mental well-being.

PP 321
YOUNG ADULTS AND THEIR ATTITUDES TOWARDS ORGAN TRANSPLANTATION AND LOCUS OF CONTROL

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The aim of this study was to determine the attitude, knowledge and personality determinants of organ donation and transplantation in a population of young adults.The aim of the study was to check whether the attitudes toward organ transplantation are caused by the external or internal locus of control. In the study participated 30 young people (mean age 21). All of the participants were in education. Most of them (85%) were educated to a high school level. Over two-thirds of participants (75%) identified themselves as Christians, rest of them had no religion or were atheists (25%).

The locus of control was measured with the Rotter Locus of Controle Scale. The measurement of attitudes towards organ transplantation was conducted using the Attitudes Toward Organ Transplantation Scale.

The study provided that young adults present in general positive attitude toward organ transplantation. Young people with external locus of control present more negative attitudes toward transplantation than people with internal locus of control.

PP 322
THE EFFECT OF SELF-PERCEPTION IN CHILDHOOD ON THE RELATIONSHIP BETWEEN SOCIOECONOMIC STATUS DURING CHILDHOOD AND HELP-SEEKING STYLES IN ADOLESCENCE

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Socioeconomic status is a consistent and reliable predictor of various outcomes across life span development, including physical and psychological health. Previous research has shown that children in families with low socioeconomic status do not seek help from friends, teachers, and parents as they may not regard themselves as worth helping. Such failure to seek help connects to negative outcomes such as depression and low academic performance. However, if these children perceive themselves in a positive way, even in part, they may be able to develop an adoptive help-seeking style. This study examined the moderating effect of self-perception in childhood on the relationship between socioeconomic status during childhood and help-seeking styles in adolescence. A total of 252 undergraduates participated in a questionnaire survey assessing socioeconomic status and self-perception in childhood and help-seeking styles in adolescence. The results of a hierarchical multiple regression analysis showed a main effect for socioeconomic status during childhood on a maladaptive help-seeking style in adolescence and an interaction effect between socioeconomic status and self-perception in childhood on the adolescent's help-seeking styles. The results of simple slope analysis showed that if a participant's self-perception in childhood is relatively high, then his/her help-seeking style in adolescence is not maladaptive regardless of socioeconomic status in childhood. The present research findings suggest one of the ways to support children from families with low socioeconomic status. Specifically, it can be helpful for teachers and parents to support in children a positive perception of themselves by identifying and confirming the child's positive aspects. Future research should focus on concrete behaviors of parents and teachers and on more strict causal relationships by using longitudinal methods and experimental design.

PP 323

THE RELATIONSHIP BETWEEN BEREAVEMENT EXPERIENCES AND WELL-BEING IN MIDDLE-AGED AND ELDERLY JAPANESE

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The relationship between experiences of bereavement and well-being was investigated in middle-aged and elderly people. An online survey was conducted with adult Japanese participants aged between 40-79 years. Participants provided data on basic attributes and were inquired about one experience of bereaving a loved one by seven questions inquiring about the relationship to the deceased, year of bereavement, the degree of antemortem and present attachment to the deceased, suddenness of the death, bereavement distress, and subjective recuperation from bereavement distress. They also completed the WHO-Five Well-being Index. Of the participants, 2,366 responded about their bereavement experiences in middle age (range 40-64 years; middle-aged group), and 1,034 responded about their experiences in old age (range 65-79 years; elderly group). Results of comparing bereavement experiences and well-being based on the group indicated that the most frequent response of both groups to the question on the relationship to the deceased was "parent" (over 50%). It was followed by "friend" in the middle-aged group, whereas it was followed by "sibling" for men and by "spouse" for women in the elderly group. The time since death ranged from less than a year to 24 years but differed between groups such that the elderly group responded with more recent experiences than the middle-aged group. The degree of antemortem attachment to the deceased and the WHO-5 scores in the elderly group were higher than those in the middle-aged group. Moreover, WHO-5 scores of bereaved spouses were lower in the elderly group. Multiple regression analysis of each group suggested that antemortem attachment and whether living alone or not predicted the well-being of both groups. The importance of a developmental perspective when supporting bereavement is discussed based on these findings of similarities and differences between middle-aged and elderly people.

PP 324

A STUDY OF POSTTRAUMATIC GROWTH FROM THE GREAT EAST JAPAN EARTHQUAKE

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Purpose: Many disaster victims of The Great East Japan Earthquake in 2011, particularly in Fukushima, were forced to relocate due to the Fukushima Daiichi nuclear disaster. Not only does an experience like this impose drastic change on the victim's lifestyle, it is also thought to have various psychological effects. Accordingly, this study was carried out to reveal the relationship between the experience of relocating after the earthquake and Posttraumatic Growth.

Methods: The survey was conducted by online in January 2019. There were a total of 300 participants aged 20 to 69 and from one of three groups: (1) those who lived in Fukushima at the time of the earthquake and did not relocate afterwards, (2) those who lived in Fukushima at the time of the earthquake and did relocate afterwards, (3) those living in the Tokyo at the time of the earthquake.

Results: A one-way ANOVA was performed using the status of residence and relocation as the explanatory variable and the Posttraumatic Growth subscales of Relating to Others, New Possibilities, Personal Strength, and Spiritual Change and Appreciation of Life as dependent variables. The results demonstrated that Posttraumatic Growth and all subscales were significantly different between the groups ($F_{(2,297)}=5.958$, $p<.05$; $F_{(2,297)}=4.669$, $p<.05$; $F_{(2,297)}=3.969$, $p<.05$; $F_{(2,297)}=6.810$, $p<.01$; $F_{(2,297)}=6.090$, $p<.01$). Those who experienced the earthquake from Fukushima had significantly higher scores for Posttraumatic Growth, Relating to Others, Personal Strength, and Spiritual Change and Appreciation of Life than those who experienced it from the Tokyo regardless of whether they relocated. Those who relocated after experiencing the earthquake in Fukushima scored higher than those who experienced the earthquake in Tokyo for the subscale of New Possibilities.

Conclusions: This suggests that victims tend to adapt and grow psychologically even if they have experienced a serious lifestyle change, in this case relocating due to the earthquake.

PP 325

THE RELATIONSHIP OF THE STATUS OF RESIDENCE AND RELOCATION, AND THE FEAR OF LOW-DOSE RADIATION

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Background and aims: The Great East Japan Earthquake of 2011 caused severe damage to Fukushima and other prefectures of the Tohoku region. A part of Fukushima Prefecture was contaminated by radioactive substances from the Fukushima Daiichi nuclear power plant accident, which continues to exhibit low-dose radiation even now. We examined how the relocating after the earthquake was related to the fear of radiation.

Method: The survey was conducted by online in January 2019. There were a total of 300 participants aged 20 to 69 and from one of three groups: (1) those who lived in Fukushima at the time of the earthquake and did not relocate afterwards, (2) those who lived in Fukushima at the time of the earthquake and did relocate afterwards, (3) those living in Tokyo at the time of the earthquake (control group). The participants completed a survey comprising 10tems of the scale for the fear of low-dose radiation.

Results: A one-way ANOVA was performed using the status of residence and relocation as the explanatory variable and the scale for the fear of low-dose radiation as dependent variable. The results demonstrated that the total score and 5items scores were significantly different between the groups. (the total score: $F_{(2,297)}=7.138$, $p<.05$/ 'I worry that the children's playground in the neighborhood is contaminated with radioactive material', 'My body is badly affected by radioactive material' and 2itemes; $F_{(2,297)}=46.03-5.163$, $p<.01-.05$). Those who lived in Fukushima at the time of the earthquake and did not relocate afterwards had higher scores of the fear of low-dose radiation than those living in Tokyo at the time of the earthquake and/or those who lived in Fukushima at the time of the earthquake and did relocate afterwards.

Conclusion: The result suggested that relocating after Earthquake reduced the fear of low-dose radiation.

PP 326

ADOLESCENT'S TEMPERAMENT AS A MODERATOR IN THE PREDICTION OF MULTIPLE-INTELLIGENCE THEORY ON STUDENTS' ACADEMIC ACHIEVEMENT-INVESTIGATION ON ADOLESCENTS WITH LOWER RANKING IN HIGH SCHOOL ENTRANCE EXAM

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Parents and teachers often attributed students' poor academic performance to lack of effort. In fact, students who score low in "verbal/linguistic" or " logical/mathematical " in Harvard Gardner's Multiple Intelligence (MI) theory usually have a disadvantage in school's mainstream academic assessments. This study hypothesized that students with lower percentile raking in school-entrance are inclined to have weaker "verbal/linguistic" or "logical/mathematical" among Gardner's nine MI. Aside from intelligence, prior research showed that temperament also accounted for the variance in academic achievement. Thus, this study investigates whether students' temperament moderates the relation between MI and academic achievements.

A total of 136 high school students (M = 17.33, SD = 0.78, range = 16.56~20.89 yr.) majoring in Early-Childhood-EduCare, a specific group representing poor conventional academic performers participated in this study. Students' MI were measured with the Chinese version of "Multiple Intelligences Developmental Assessment Scale: Form C" and their temperament were measured with the Chinese version of "Adolescent Temperament Questionnaire". Their academic achievements were collected at the end of 2018 Spring semester.

Results indicated that students have a weakness in "verbal/linguistic" and "logical/mathematical", as predicted. And regarding adolescent temperament, we found "intensity of reaction" (the expression of positive and negative emotions ranging from apathetic to irritable/boisterous) to be an important moderator. Students' lower "intensity of reaction" temperament could facilitate the positive effect of MI on academic achievement. With MI having a 14%~17% of the variation in students' academic achievement, it suggests that students' insufficient efforts could not solely be blamed for their poor academic performance.

This study also highlighted the importance of possessing a stable emotion reactivity temperament in adolescence when discussing the relation between MI and academic achievement.

PP 328
ESTIMATION OF ASYMMETRIC VON MISES SCALING WITH MISSING LONGITUDINAL DATA

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Asymmetric multidimensional scaling, directional statistics, von Mises distribution

Asymmetric multidimensional scaling (AMDS) is a multidimensional scaling technique used to analyze asymmetric relationships among objects (e.g., variables, items, people). For example, the strength of likability from person A to person B is different from that from person B to person A. AMDS can analyze and visualize such asymmetric relationships.

Asymmetric von Mises scaling (AMISESCAL) is a type of AMDS. It uses the von Mises (vM) distribution to express the asymmetric relationships among objects. AMISESCAL shows the result using a two- or three-dimensional map. For example, when a sociometric data matrix is analyzed using this method, the nodes of reciprocal lovers are located close to each other on the map. In addition, each node has a vM distribution that functions like a weighted arrow. Then, the vM distribution of each node directs the target(s) of a lover's one-sided love.

The analysis object of this method is a one-mode two-way asymmetric matrix. However, the elements in the matrix are not always observed, especially in a matrix of longitudinal data, because such data have many dropouts. The purpose of this research is thus to improve the method to be able to deal with such missing data.

We propose a stress function that can deal with missing data by using missing indicators that appropriately remove the terms in the stress function corresponding to the unobserved elements. The missing indicator is a dichotomous variable coded 1 if the data element is observed and 0 if the data are missing. Finally, we show an example of analyzing a dataset that has missing structural data.

PP 329
A BAYESIAN APPROACH FOR COMPARING ENVIRONMENTAL SENSITIVITY MODELS

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According to the Environmental Sensitivity meta-framework (Pluess, 2015), children differ in the degree to which they are influenced by the environment, with some children more susceptible to stimuli than others. Several models and theories have been proposed to capture an increased sensitivity to environmental stimuli, among which the Diathesis-stress model (Monroe & Simons, 1991), Differential Susceptibility (Belsky & Pluess, 2009; Belsky et al., 2007), and Vantage Sensitivity (Pluess & Belsky, 2013). For statistically comparing models of environmental sensitivity, and examining interaction effects, thus far two approaches have been proposed in the literature by two research teams (Roisman et al., 2012; Widaman et al., 2012 and Belsky et al., 2013). In the current contribution we extend both approaches by using Bayesian estimations via Markov chain Monte Carlo. We illustrate, with a simulated example of 300 subjects - including parenting as the environmental variable and behavioral problems as the outcome -, the advantages of Bayesian estimations and how to implement the Bayesian approach by using STAN programming language (Carpenter, Gelman, Hoffman, Lee, Goodrich, Betancourt, Brubaker, Guo, Li & Riddell, 2017). In addition, we show how to use posterior distributions for a more informative approach that allow to compare a set of models for identifying the best one, overcoming limitations associated with the null-hypothesis significance testing and allowing to integrate prior knowledge into new data.

PP 330
PERSONAL AGENCY: ASSESSMENT MODEL IN EMERGING ADULTHOOD

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The sense of personal agency is characterized by the self-perception of an individual as being competent enough to exercise control over his or her life course. This multidimensional process is composed by self-determined goals, an internal locus of control, self-efficacy beliefs and it is focused on the future. Currently, the construct of personal agency assumes particular relevance given the growing unpredictability of society that places greater social challenges to emerging adults. Although studies regarding personal agency have increased in the last two decades, the assessment of this variable has been inconsistent across studies. This study aims to propose and test a measurement model of personal agency in emerging adulthood. The sample is composed of 692 emerging adults aged 18 to 30 years. Participants responded to self-report measures about self-regulation, locus of control, self-efficacy, and future expectations through an online survey. Confirmatory factor analysis revealed adequate adjustment indices confirming the four-factor model to assess personal agency. Moreover, 2nd order factor analysis confirmed that the four factors converge to a latent variable that we named "personal agency". The factors presented moderate to high correlations between each other and in the theoretically expected direction. Total model and all factors showed adequate reliability. Furthermore, measurement invariance across participants' gender, age as well as two levels of sociocultural risk was ensured. This evidence is relevant because the sense of personal agency should not be understood as dissociated from the psychosocial context of individuals and of sociocultural risk. The results provide preliminary evidence supporting the theoretical assumptions of the personal agency model. Future studies should gather further construct validity for the model.

PP 332
CHALLENGING CHILDREN TO THINK: INTERVENTION PROGRAM WITH GAMES

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This study investigated three semesters of an intervention program held at the Laboratory of Learning and Development Studies (University of Sao Paulo, Brazil), in which elementary school children with learning difficulties played games and had to deal with problem-solving situations. The purpose was to identify the contribution of the interventions for them to face challenges and overcome difficulties. The method consisted in analyzing information about procedures and attitudes which were recorded in two protocols (about playing games and attitudes in the game context). Results showed that: (1) for most of the children, there was stabilization at higher scores to control impulsiveness and to build up new strategies; (2) in general, there was a willingness to evaluate the play performance, even in the cases where oscillations still occurred; (3) due to the attitudinal dimensions, in *time* it was noticed a predominance of medium and high quality scores, which favored children to deal with difficulties in *interactions*, which also registered higher scores at the end of the third semester; and (4) children finalized the participation in the program at different levels of rebalancing (*reequilibrium*), most of whom made progress and showed good conditions to be discharged. To conclude, the intervention program promoted challenges that increased awareness and enhanced the learning and development processes. They also allowed stabilization of both the playing procedures and the attitudinal dimensions, favoring autonomy and overcoming previous difficulties.

PP 333

MULTIDISCIPLINARY SCHOOL-BASED INTERVENTION REDUCES NEGATIVE SYMPTOMS IN VICTIMS OF BULLYING

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Bullying is an intentional, repeated, long-term and unjustified aggression perpetrated by some students on their peers (Smith et al., 2008) Bullying prevalence is around 35% in Western countries (Modecki et al, 2014). Bullying impact on victims' health is severe: low self-esteem, poor school adjustment, anxiety, depression and sleep difficulties (Center for Educational Statistics, 2016). Since prevention is a matter of public health, many school-based intervention programs have been developed (eg. KiVa, Kärnä et al, 2011). We present the results of a transversal intervention conducted by the Spanish Association for Bullying Prevention.

The program is composed of prevention talks addressed to the school community plus three modules (9h, addressed only to victims). Modules include self-defense (learning non-offensive techniques to respond to potential aggression); theatre (learning how to express emotions assertively) and psychology (increasing low self-esteem). Victims are identified through the analysis of the self-applied TEBAE test (Piñuel & Gisbert, 2016). This test informs about perception of being bullied; bullying intensity and its impact over the victims' health. Modules assessment is done comparing pre/post TEBAE punctuations.

A total of 101 children out of 1191 (5%, sex was not registered) reported being victims of peer bullying (second grade: 24 (21%, N=110); third grade: 31 (16%, N=184); fourth grade: 6 (4%, N=140); fifth grade: 14 (8%, N=177); sixth grade: 9(4%, N=201); seventh grade: 3(2%, N=122); eight grade: 4 (4%, N=95); ninth grade: 8 (9%, N=86); tenth grade: 2 (2%, N=76)) across five public non-religious schools. Modules were successful because victims reported receiving significantly fewer (Z=-7.587, p<.001) less severe (Z=-6.555, p<.001) bullying actions as well as feeling significantly fewer negative symptoms (Z=-2.393, p<.05). However, the program failed to reduce bullying prevalence in previously non-victim population. Therefore, further interventions should apply modules to all students to avoid displacing victimization to new subjects.

PP 334

PSYCHOLOGICAL VARIABLES RELATED TO GRIT AMONG ADOLESCENTS IN SOUTH KOREA: A LONGITUDINAL STUDY FROM AGE 4 TO 14

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Grit is defined as "perseverance and passion for long-term goals" (Duckworth, Peterson, Matthews, & Kelly, 2007, p. 1087). Although research on grit has been carried out over the past decade, most studies have been conducted with Eastern populations, especially college students. Moreover, most studies focus on the effects of grit, but relatively few studies have examined the identifying signs of grit. Therefore, in the present study, 106 Korean adolescents were examined, and the signs of grit were examined in longitudinal settings.

In Study 1, the relationships between implicit theories of intelligence, academic achievement, and grit were explored. All variables were collected via self-reporting. The results showed that grit fully mediated the relationship between the implicit belief of intelligence and academic achievements ($z = 2.29$, $p < .05$). In Study 2, signs of grit in adolescence were studied using 10-year longitudinal data. At age 4, parental education level, unrealistically optimistic beliefs, and the delay of gratification were measured. Parental education level was reported by the parents of the participants. Unrealistically optimistic beliefs were measured to investigate participants' overestimated cognitive bias regarding their ability or future, adopted from Choi and Kwak (2007). The ability to delay gratification was assessed using a waiting period, originally developed by Mischel and Baker (1975). In addition, grit was measured by self-reporting when children turned 14 years old. Using stepwise regression analysis, we found that only the ability to delay gratification predicted grit in adolescence ($B = .02$, $p < .05$). While two factors of grit were analyzed independently, the delay of gratification only predicted perseverance of effort ($B = .01$, $p < .001$), not consistency of interest. The results of the present study suggest the possibility of early intervention in children with a low ability to delay gratification to prevent low grit in adolescence.

PP 335

INTERVENTION PROGRAM OF EXECUTIVE FUNCTIONS IN CHILDREN

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The importance of executive functions for learning and development has been increasingly recognized. The concept refers to cognitive and metacognitive processes that allow the individual to exercise self-control and regulate their behavior to face environmental demands and all information processing, enabling their engagement in adaptive, self-organized and directed behavior to goals. This study investigated seven children with typical development and seven children with ASD in terms of their executive functions before and after intervention. The purpose was to identify the contribution of an intervention program for mental flexibility. The research is part of an international cooperation agreement between the Laboratory of Learning and Development Studies (University of Sao Paulo, Brazil), and the *Laboratoire de Psychopathologie et Processus de Santé* (University Paris Descartes, Sorbonne Cité Paris V, France). The following materials were used as instruments to evaluate the executive functions before and after intervention: Stroop Animal Test, adapted to Brazilian Portuguese, that evaluate inhibitory control, and The Trails Making Test for preschool children, forms A and B, that evaluate mental flexibility. For children with ASD, a preliminary evaluation was done to exclude other neurodevelopmental disorders. The intervention program (10 sessions) was structured according to the Simon Task paradigm and consisted of four tasks: Arrows, Grenouille, Memory and Final Situation. For both groups of children, the results indicated more expressive gains on mental flexibility than on inhibitory control in terms of precision and speed of accomplishment according to the proposal tests. Conclusions. In conclusion, children with typical development have improved their mental flexibility after intervention. Children with ASD have had more difficulties focusing their attention which showed the necessity of more studies about children with atypical development.

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ENCOURAGING PARENTS THROUGH REASONING - TRAIN-THE-TRAINER: DEVELOPMENT, IMPLEMENTATION, EVALUATION AND DOCUMENTATION OF A TRAINING CONCEPT

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The poster presents the design, implementation and results of the project 'EfA-TT'. In this project, a parental training (EfA), which had been interdisciplinary developed and positively evaluated over many years, was advanced into a practical Train-the-Trainer concept (TT) and tested once more for its effectiveness.

Findings of implicit research processes show that reasoning competence in childhood correlates positively with linguistic interactions at a family home. Reasoning competence is also positively associated with children's school success. Therefore, EfA was created as a primary preventive program to improve linguistic and social learning conditions in a family home. EfA addresses parents in different, also difficult socio-economic circumstances, including multilingual parents with enough German knowledge. Parents are taught to support their children in the development of their linguistic-discursive skills through reasoning processes. EfA can lead to a reduction of family conflicts and a better handling of children's school matters. In order to reach these goals, linguistically founded theories were linked with epistemological psychological contents. To achieve a wide dissemination, qualified trainers should train themselves only with the help of the developed training materials and videos afterwards they should be able to implement the training exactly as planned.

In order to examine the effectiveness of EfA-TT impartially, a quasi-experimental pre-post-follow-up survey study with a control group was conducted.

In the experimental group (N_{EG} = 21), a significant increase in parental self-efficacy related to reasoning was measured. Furthermore, two subscales of linguistic stimulation (explanations and emotional openness) were rated significantly higher immediately after the training. The effects on self-efficacy and explanations were proved to be sustainable after including the follow-up results. There were no significant changes in the control group (N_{KG} = 21). These results emphasize EfA-TT as a good approach to support a poorly researched field.

PP 337

DIFFERENT APPROACHES TO TACKLING BULLYING: STRATEGIES CHOSEN BY SCHOOL PERSONNEL AND THEIR PERCEIVED EFFECTIVENESS

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Background and aims: Direct confrontation of bullies by adults is the most common way to handle cases of bullying in school. According to a large international survey, virtually all school personnel (97 %) believed that it should be made clear to the perpetrator that bullying behavior is not tolerated (Rigby & Bauman, 2010). Yet, when given clear guidelines for both confronting and non-confronting approaches (Garandeau et al., 2014), and the opportunity to choose between the two, it is still unknown which approach school personnel would prefer. This study examines a) which strategy school personnel choose, b) the extent to which they stick to the chosen approach, and c) how effective they perceive it to be.

Methods: Data were gathered from Finnish schools implementing the KiVa® anti-bullying program during 2010–2015 using online questionnaires. Since the broad roll-out of KiVa in Finland, school-based KiVa teams were asked at the end of each school year to indicate the method they had used when handling cases of bullying. Besides "confronting approach" and "non-confronting approach" (as described in KiVa manuals and introduced in pre-implementation training), the respondents could choose "depends on the bullying case", "depends on the team member", "we've used our own approach" or "I don't know". They rated on a 5-point likert scale how effective they perceived their handling of bullying had been. The number of schools providing the data varied from 475 to 709 across years.

Results and conclusions: According to preliminary analyses, the Kiva teams tended to adopt confronting, rather than non-confronting approach. Over time, rather than sticking to the two recommended approaches, they made adaptations (e.g., combining the two). In the final analyses, we will compare the perceived effectiveness of each strategy and examine how that affected its (dis)continued use. The final results will provide practical implications for bullying intervention.

PP 338

DEVELOPMENTAL MODERATORS OF THE EFFECTS OF AN INCREMENTAL THEORY OF PERSONALITY INTERVENTION ON BULLYING AND CYBERBULLYING

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Background and aims: this study examines the effects of a single-session incremental theory of personality intervention, consisting of teaching the belief that people can change, on bullying and cyberbullying perpetration.

Methods: two indicators of developmental level –grade and testosterone levels– were explored as moderators. A total of 535 adolescents (boys: 50.2%; age: 12–17 years) participated in a double-blind randomized controlled trial. Bullying and cyberbullying were measured at baseline, one-week posttest, and 6-month and 12-month follow-ups.

Results: The intervention reduced cyberbullying only among adolescents with low and medium testosterone levels. The intervention on bullying was only effective in Grade 8 and had no effect in Grade 9 and 10.

Conclusions: Some preventative interventions can be more effective among adolescents with lower level of development and can cause a reactance effect among older adolescents.

PP 339
PROMOTING SOCIAL COMPETENCE AND PREVENTING AGGRESSION IN PRIMARY SCHOOL: AN INTERVENTION BASED ON SOCIAL INFORMATION PROCESSING

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Social Information Processing interventions (Li et al.,2013) promote children Social Problem Solving (SPS) competence and social skills. Our aim is to test the effectiveness of a SPS training in an Italian context.

Participants were 105 children (41 girls, mean age =8,7) who attended six classes in the same school. Project lasted two years. Three classes were assigned to Group1 (N=61), and three classes to Group2. Both groups were tested at T1 (beginning 3rd Class), T2 (end 3rd Class), T3 (beginning 4th Class) and T4 (end 4th Class). Group1 was trained only the first year, in 3rd Class, between T1 and T2. Group2 was trained the second year, in 4th Class, between T3 and T4. In T1, T2, T3 and T4 children filled SPS-Questionnaire (adapted from Schonfeld et al. 2012), and in T3 and T4 they also filled PVA (Physical Verbal Aggression Questionnaire, Caprara et al. 1991). Three two-way mixed ANOVAs were conducted, with groups as between-factor and (1) proportion of SPS-competent responses, (2) SPS-aggressive responses, and (3) PVA as repeated measures, respectively.

All the ANOVAs showed an interaction between groups and repeated measures. SPS-competent responses ($F_{1,106}=5.10;p=.03$) were similar in the two groups at T1; higher in Group1 at T2 and T3, and similar in the two groups at T4, thanks to an increase in Group2. SPS-aggressive responses ($F_{1,106}=5.85;p=.02$) were similar at T1; lower in Group1 at T2 and T3; and similar in the two groups at T4, due to a decrease in Group2. PVA ($F_{1,106}=10.53;p=.002$) at T3 was lower in Group1 but grew up during the year, while remained stable in Group2.

The improvement of competent responses, the decrease of aggressive responses and the control of aggression in each training year is a promising result, but suggests the need for a longer duration of the intervention, to obtain stable effects.

PP 340
PREVENTIVE SCREENING OF PROBLEM BEHAVIOR THROUGHOUT A KINDERGARTEN-YEAR

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High rates of psychopathology in preschool children, the risk of chronification and parental barriers to seek professional help require to study how preschool-teachers can contribute to the identification of children at risk. In the German elementary system an increasing number of very young children have to master critical transitions from home to institutional care and also within care transitions. Concerning this matter still too little is known about courses of problem behavior, especially about preschool teacher's potential to apply screenings of problem behavior in conjunction with parental perceptions. Thus, preschool teachers and parents' perceptions of young children's problem behavior was studied longitudinally four times including the critical transitions from nursery school to Kindergarten as well as 2 non-critical points of time in the Kindergarten year.

A complete Kindergartengroup (N = 17) with children between 3 and 6 years was observed 3 times within a German Kindergarten year (at the beginning, in the middle and at the end) by parents with the Child Behavior Checklist 1 – 1.5 years (CBCL) and with the Caregiver – Teacher Report Form (C–TRF). Additionally all Children who changed from nursery school to Kindergarten were assessed at the end of their day nursery time. SES, preschool teachers' knowledge of behavioral problems was controlled and parents' educational style was assessed.

Whereas parents reported no hints to intervention relevant behavior, Kindergarten professionals found throughout a Kindergarten year more indicators of behavioral problems than epidemiological research recently reported. Meaningful differences were found for preschool teachers assessments throughout the year. Parental educational style seems to moderate results.

Results are discussed with reference to comparable research results, and especially conclusions for improved prevention are embedded into an interdisciplinary account. Suggestions for further studies are made to overcome shortcomings of the reported research for practice.

PP 342

A RETROSPECTIVE STUDY ON VICTIMIZATION EXPERIENCES IN PATIENTS FOLLOWED UP BY A NEUROPSYCHIATRIC DEPARTMENT

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Bullying and victimization are universal public health concerns that affect a significant proportion of adolescents bringing serious consequences for health (Wolke and Lereya, 2015). There are no studies investigating the effect of bullying on the health of children and adolescents conducted on clinical populations. The aim of this study is to analyze the prevalence of victimization among clinical sample and to study the association between victimization and clinical symptoms.

A retrospective study was conducted on a sample of 452 patients: age ranged from 2 to 18 years (M=13,46; ds=3,3). Logistics regression analysis was performed to determine the probability that a clinical diagnosis is predicted by the occurrence of victimization.

Of 452 patients, 15% reported being victimized. The odds of presenting a depressive disorder was 2.2 times higher in victimized patients than in not victimized (OR 2,2; 95% CI 1.3 to 18.5), and the odds of presenting a post-traumatic stress disorder was 4,8 times higher in victimized patients than in not victimized (OR 4,8, 95% CI 1.1 to 4.2).

Victimization is associated with increased risk of depressive disorder and of post-traumatic stress disorder. The description of victimization experienced by the victims should be considered during a psychiatric risk assessment.

PP 343

"ON THE ROAD TO… GROWTH" ("IN VIAGGIO PER… CRESCERE"). EMPOWERING COPING SKILLS IN ADOLESCENTS TO PREVENT SUBSTANCE USE

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The likelihood of developing a substance use disorder is greatest for those who begin alcohol or other drug use in their early teens, therefore adolescence is a key period to implement preventive programs. Literature reviews and meta-analytic studies have shown that highly interactive programs implemented in schools, and based on a combination of social competence and social influence approaches seemed to have effective results in preventing any drug use (Faggiano, Minozzi, Versino, Buscemi, 2014).

Aim: To test the efficacy of a self-help manual for adolescents to promote coping skills and prevent substance use. The manual entitled "On the road to… growth" ("In viaggio per crescere", Becciu-Colasanti, 2010) intends to enhance personal and social skills through interactive methods.

Method: Health professionals have tested the manual with an experimental group of secondary school students (n=161, M=35,4%, F=64,6%), while control group (n=131, M=39,7%, F=60,3%) didn't received any structured intervention. Students in the experimental group have worked with the manual during a 20-hour interactive training. Coping skills and substance use were assessed at pre-test (T1) and post-test (T2) in both groups. Problem Questionnaire - Coping Across Situation Questionnaire (PQ-CASQ) (Seiffge-Krenke, 1995) was used to test coping skills and Questionario ESPAD-Italia (CNR, 2011) was used to test substance use (alcohol, tobacco and cannabis).

Results: At T2 students in the experimental group have enhanced their coping skills (ACTIVE COPING from 15,6 to 17,5, p = 0,002; INTERNAL COPING from 12,4 to 14,3, p = 0,004) and they have reduced their alcohol use (from 59,7 to 56,5, p = <0,0001) and their cannabis use (from 5,1 to 4,0, p = <0,0001) in the last 30 days, with respect to control group. Results were encouraging in showing the efficacy of the manual with respect to coping skills, alcohol use and cannabis use.

PP 344

THE EFFECTIVENESS OF SEXUAL ABUSE PREVENTION PROGRAM IN EARLY ADOLESCENCE: FINDINGS FROM A NEW SAMPLE

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The sexual abuse prevention program for adolescents in early adolescence was developed and found effective about protection from sexual abuse. The aim of this study was to evaluate the effectiveness of a program that was prepared and effective for adolescents in early adolescence with a second study.

The sample consisted of 128 participants attending the 5th and 6th grade. The education group (n= 50) and the comparison group (n= 78) were at the same school. The mean age of participants was 10.6 years. Pre-test and post-test measures were taken from these groups by using Sexual Health Information and Attitude Inventory, Safe and Unsafe Case Evaluation Form, Social Anxiety Scale for Adolescents, and Emotional Awareness Questionnaire. This program is 12 lessons long, 80 minutes a week. Prevention program has six modules such as adolescence, sexuality, gender, safe relationships, and protection from sexual abuse.

Data were analyzed by mixed 2 X 2 ANOVA. The results of this study showed that the information levels of child abuse, child sexual abuse, sexuality, gender roles, and adolescence increased. In addition, after education it is showed that protection skills from sexual abuse also increased whereas there was no change from pre-test to post-test in the comparison group. There is no change from pre-test to post-test according to say no, safe relationships information skills, emotion awareness, and social anxiety levels.

Protection from abuse, adolescence, sexuality, gender roles information levels and the protection skills from sexual abuse which are increased indicate that the education program is also effective. Emotional awareness and social anxiety scores didn't change, it can be interpreted that the program has no negative side effects. It is recommended that the program is developed in terms of saying no and establishing safe relationships.

PP 345

SEVEN-YEARS EVALUATION OF RESIDENTIAL PROGRAM FOR CHILDREN AND YOUTH WITH MENTAL HEALTH PROBLEMS

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The non-government organisation ''*pro mente: kinder jugend familie*'' offers various services for children and youth with mental health problems. Within the program Sociotherapy residential quarters for children and youth with mental health, social and development problems, which are often accompanied by family problems, are provided. The aims of Socio-therapy are mental stabilization, providing support to accomplish developmental tasks and to foster coping strategies. These goals are achieved by promoting social-emotional competencies and social ressources. Together with staff members from *Sociotherapy* and the *"Evaluation and Innovation"* unit of pro mente a tailor-made evaluation concept was developed. The main aims of the evaluation are to prove the program goals as well as the acceptance of *Sociotherapy* via direct and indirect measures. Questionaires for the supervising staff and youth were developed and delivered every six month of their stay in the Sociotherapy between January 2011 and January 2018. For the evaluation data from 160 children and adolescents (64% girls) aged between 11-18 years (MW=14.7, SD=1.51) from the first and final measurement were analysed. Self-reports and reports from supervision staff yielded improvement of mental stabilization, accomplishment of developmental tasks, and increasing functional coping strategies with small to medium effect sizes. Findings with respect to socio-emotional competencies were mixed with improvements in self-regulation and emotion-regulation but declining self-reflection. Furthermore, adolescents and the supervising staff reported higher quality of relationships, indicating improvement of social ressources. Finally, measures yielded that adolescents were highly satisfied with *Sociotherapy* at the end of their stay. These findings are discussed with regard to strengths (e.g. external validity) and limitations (e.g. absence of controll groups, small sample sizes, missing data) occuring in observational implementation studies.

PP 347

PAPILIO – PROMOTING SOCIAL-EMOTIONAL DEVELOPMENT AND PREVENTING BEHAVIORAL PROBLEMS IN EARLY CHILDHOOD: A PERSON-CENTERED APPROACH

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Early childhood is a crucial time for the development of various social-emotional skills and is a unique opportunity to lay the foundation for healthy development. However, early childhood problem behaviors are known as risk factors for difficulties during adolescence and adulthood, including, depression, antisocial behavior, substance use, and delinquency. This study contributed to the field of early childhood education development by using a longitudinal design to examine the impact of a preventive intervention program "Papilio" on children's social-emotional development in Germany.

The Papilio program was evaluated using a 1-year-randomized controlled trial design with an intervention and waiting-control group that provided data at the pretest and posttest. A total of 627 children (M_{AGE} = 56.77 months at pretest; 49% girls) from 50 daycare centers participated in the program. At the pre- and posttest, teachers rated children's behaviors using the Strength and Difficulties Questionnaire (SDQ).

Latent profile analysis at pretest identified three distinct profiles for children with the different patterns in SQD subscales: 1) high internalizing problem group, 2) prosocial group, and 3) high externalizing problem group. Further longitudinal multilevel modeling revealed that compared to the control group, children in the intervention group showed a significant decrease in problem behaviors and significant increase in prosocial behavior. Furthermore, results showed that the group with high internalizing problems and the group with high externalizing problems benefited the most from the Papilio program. Overall, the results proofed the effectiveness of Papilio in promoting healthy development and preventing maladaptive social-emotional development in early educational and daycare settings.

PP 349

USING SENSORY INTEGRATION THERAPY TO TREAT TWINS DIAGNOSED WITH AUTISM SPECTRUM DISORDER. A CASE STUDY OF PARENTAL EXPERIENCE

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Background and aims: Diagnosis of ASD evokes strong stress reactions in parents (Esptein et al., 2008, Corbett et al. 2009). The process of dealing with them depends on the parent's resources, as well as the severity of the child's difficulties (Phetrasuwan and Shanodor-Miles, 2009, Konstantareas and Papageorgiu, 2006, Baranek et al., 2006).

Among many therapies addressed to people with ASD, the method of sensory integration (SI) is also mentioned as supportive. Its effectiveness towards people with ASD – in the light of numerous controversies around this approach – is relatively well-documented (Case-Smith et al., 2015).

The aim of the study was to explore and analyze the meaning that the parents of the child with ASD attribute to the experiences associated with the diagnosis and therapy of SI.

Method: Interpretative Phenomenological Analysis (Smith, 2012). A case study of a couple - parents of twin boys, aged 5, diagnosed with ASD, who participated in the SI diagnosis and therapy.

Results: The mother's and father's statements do not differ significantly when they report facts. Both emphasized the most important functions of SI diagnosis: educational, supporting, indicating the direction of further actions.

Different answers concerned the image of children, personal reflections on the possible causes of challenging behaviours, the reception of the diagnostic report, and the benefits of SI therapy for each family member.

Conclusions: The mother and father of children diagnosed with ASD assign different meanings to SI method experiences. Their narrations about facts are congruent, but the reflection on the meaning of the SI approach provides different interpretations. It builds a thorough image enriched with content essential for each parent, paying attention to the importance of listening to several voices of the caregivers – equivalent participants of the therapeutic process.

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