





Society for the Scientific Study of Psychopathy

7th BIENNIAL MEETING

Thomas More University, Antwerp, Belgium

May 21-24, 2017

WWW.PSYCHOPATHYSOCIETY.ORG

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SOCIETY AWARDS

R.D. Hare Lifetime Achievement Award

This award is given to a person who has made significant contributions to the scientific study of psychopathy over the course of his or her lifetime.

- 2017: **ADRIAN RAINE**
- 2015: **PAUL J. FRICK**
- 2013: **CHRISTOPHER PATRICK**
- 2011: **HERVEY M. CLECKLEY** (1903 – 1984)
- 2009: **JOSEPH P. NEWMAN**
- 2007: **DAVID T. LYKKEN** (1928 – 2006)
- 2005: **ROBERT D. HARE**

Early Career Contributions Award

This award was created to recognize exceptional young scholars who have shown considerable promise and productivity in the formative years of their career. Beginning with the 2015 presentation, the award was renamed the Jevon Scott Newman Award for distinguished early career contribution to the scientific study of psychopathy and awardees receive an honorarium provided by Joseph Newman and Alida Evans in memory of their son Jevon.

- 2017: **ANDREA GLENN**, The University of Alabama, *The Immoral Brain: Exploring the biological correlates of psychopathy.*
- KOSTAS FANTI**, University of Cyprus, *Assessing psychopathic traits from toddlerhood to adulthood: Neurophysiological, behavioral, and cognitive underpinnings .*
- 2015: **EVA KIMONIS**, The University of New South Wales, *Translating Basic Research to Develop and Test a Novel, Targeted Intervention for Antisocial Children with Callous-Unemotional Traits*
- 2013: **DUSTIN PARDINI**, University of Pittsburgh Medical Center, *Developmental Conceptualizations of Psychopathy: What Do We Know and Where Do We Go?*
- BRIAN HICKS**, University of Michigan, *Developmental Interplay Between Disinhibition and Boldness*
- 2011: **ESSI VIDING**, University College, London, *Genes, Brains and Parents: What Are Children with Callous-Unemotional Traits and Conduct Problems Made of?*
- EDELYN VERONA**, University of Illinois at Urbana-Champaign, *Psychopathy Dimensions and Etiological Pathways: Phenotypes, Genotypes, and Cognitive-Affective Mechanisms*

Cheryl Wynne Hare Poster Award

This award is given from the Cheryl Wynne Hare Memorial Fund in memory of the daughter of Robert and Averil Hare. The award is given to a student who presents the best poster at the meeting.

2015: **GEORGINA AISBITT** & Robin Murphy, University of Oxford. Identifying the Underlying Mechanisms of Impulsivity in Psychopaths

BETHANY EDWARDS & Edelyn Verona, University of South Florida. Gendered Contexts: Psychopathy, Prostitution and Sex Exchange

Honorable Mention:

LAURA THORNTON & Paul Frick, University of New Orleans. Sex, Drugs and Callous-Unemotional Traits in a Sample of Juvenile Justice Involved Males

2013: **JULIE BLAIS** & Adelle Forth, Carleton University. Risky Decisions: The Role of Psychopathy Information in Decisions Regarding Dangerous and Long-Term Supervision Offenders

JOANA B. VIEIRA, Pedro R. Almeida, Fernando Ferreira-Santos, Fernando Barbosa, João Marques-Teixeira, & Abigail Marsh, Georgetown University. Distinct Patterns of Neural Activation Underlie Economic Decisions in Individuals Scoring High and Low in Psychopathic Traits

Honorable Mention:

RACHEL E. KAHN & Paul J. Frick, University of New Orleans, Eric A. Youngstrom & Jennifer Kogos Youngstrom, University of North Carolina at Chapel Hill, Norah C. Feeny, Case Western Reserve University, Robert L. Findling, Johns Hopkins University. Informant Differences Among Primary and Secondary Variants of Callous Unemotional Adolescents

2011: **JOHANNA FEILHAUER**, Maastricht University, Maaikje Cima, Tilburg University, Nancy Nicolson, Maastricht University. Cortisol, Psychopathy Dimensions and Types of Aggression in at Risk Youths

SUSANNE WOLF, Luna C. Muñoz, Joanne M. McBoyle, University of Central Lancashire. Group Dynamics of Adolescents with Callous-Unemotional Traits and Their Risk-Taking: A Linguistic Inquiry

Honorable Mention:

ALEXANDROS LORDOS & Kostas Fanti, University of Cyprus. Why CU Could Stand for "Callous/Unremorseful": Reconsidering the Factor Structure of the ICU

RICK C. WOLF, University of Wisconsin-Madison, Ryan W. Carpenter, University of Missouri, Christopher M. Warren, University of Victoria, Joshua D. Zeier, University of Wisconsin-Madison, Arielle Baskin-Sommers, University of Wisconsin-Madison, Joseph P. Newman, University of Wisconsin-Madison. Reduced Susceptibility to Attentional Blink Deficit in Psychopathic Offenders: Implications for the Attentional Bottleneck

2009: **MEGAN O'LEARY** & Jeanette Taylor, Florida State University. Psychopathic Personality Traits and Cortisol Response to Stress

ARIELLE BASKIN-SOMMERS, John Curtin, Jeremy Bertsch, Joseph P. Newman, University of Wisconsin-Madison. Psychopathic Traits Moderate Electrophysiological Activity and Fear Response

2007: **KAREN J. DEREFINCO** & Donald R. Lynam, University of Kentucky. The Misconception of Psychopathic Low Anxiety: Meta-analytic Evidence for the Absence of Inhibition

HEDWIG EISENBARTH, Georg W. Alpers, D. Segre, A. Angrilla, University of Wuerzburg. Psychopathic Women's Evaluation of Emotional Expressions

CONFERENCE LOCATIONS

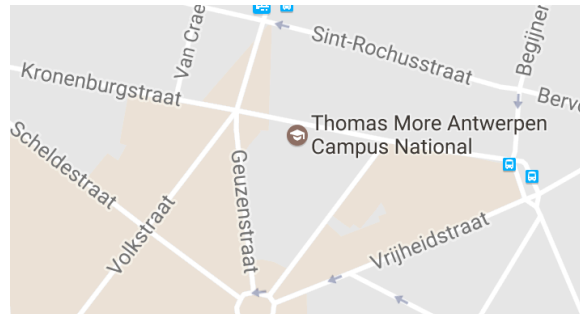
Pre-conference workshop PhD. Day (May 21)

Thomas More

Campus National

Kronenburgstraat 62-68

2000 Antwerp



Opening Reception & Registration (May 21)

Spiegelzaal

Meir 50

2000 Antwerp



Conference Venue (May 22, 23 & 24)

Thomas More

Campus Sanderus

Molenstraat 8

2018 Antwerp



Conference Dinner (May 23)

Elzenveld Hotel & Seminarie

Lange Gasthuisstraat 45

2000 Antwerp



MEETING SCHEDULE

	Sunday May 21	Monday May 22	Tuesday May 23		Wednesday May 24	
		All Sessions	Track 1	Track 2	Track 1	Track 2
		MOL 1.01	MOL 1.01	MOL 3.01	MOL 1.01	MOL 3.01
08:45		Opening Remarks				
09:00	PhD. Day <i>Campus National</i>	Risk and reward in psychopathy	The utility of the various dimensions of psychopathy in designating a clinically important subgroup of antisocial youth	Assessment of Psychopathy in Adults		
09:15						
09:30					Response to Stress in Psychopathy	Facial Emotion Recognition in psychopathy
09:45						
10:00						
10:15		Coffee break 1 <i>Entrance Hall</i>	Coffee break 3 <i>Entrance Hall</i>			
10:30						
10:45		Building a Better Understanding of CU Variants in Youth	Parental Influences on Psychopathy	Prosocial Emotions in Psychopathy: Multimodal Perspectives and Methodologies	Coffee break 5 <i>Entrance Hall</i>	
11:00					Gender in Psychopathy	Psychopathy and Victims: Implications for Victim Selection, Interactional Style, and Impact
11:15						
11:30						
11:45						
12:00		Lunch <i>Entrance Hall</i>	Lunch (Entrance Hall) & Business meeting (MOL 1.01)			
12:15						
12:30						
12:45			Lunch & Poster session 3 <i>Entrance Hall & MOL 1.02</i>			
13:00			R.D. Hare Lifetime Achievement Award: Adrian Raine	Jevon Scott Newman Early Career Award <i>MOL 1.01</i>		
13:15						
13:30						
13:45						
14:00	Differentiating Subtypes of Antisocial Individuals: Psychobiology of ASPD vs. Psychopathy	Cognitive and Neurocognitive Correlates of Callous-Unemotional Traits <i>MOL 1.01</i>				Cheryl Wynne Hare Student Poster Award
14:15				Presidential Address- James Blair <i>MOL 1.01</i>		
14:30						
14:45						
15:00						
15:15	Coffee break 2 <i>Entrance Hall</i>	Coffee break 4 <i>Entrance hall</i>		Coffee break 6 <i>Entrance Hall</i>		
15:30						
15:45		Prediction and Treatment of Psychopathy	Cognitive Aspects of Psychopathy <i>MOL 1.01</i>		Innovations in Classification of Psychopathy <i>MOL 1.01</i>	
16:00						
16:15						
16:30						
16:45						
17:00	Welcome Reception	Blitz talk session 1	Blitz talk session 2 <i>MOL 1.01</i>		Closing Remarks - James Blair & Adelle Forth <i>MOL 1.01</i>	
17:15						
17:30					Spiegelzaal	

17:45	Board meeting				
18:00		Poster session 1 <i>Entrance Hall & MOL 1.02</i>	Poster session 2 <i>Entrance Hall & MOL 1.02</i>		
18:15					
18:30					
18:45					
19:00					
19:15					
19:30					
19:45		Aftermath Foundation Interest Group Meeting (see Details below) CPTI Network Meeting (see Details below)			

Aftermath Foundation Interest Group Meeting: Those who are interested in learning more about the Aftermath: Surviving Psychopathy Foundation are encouraged to gather outside the poster session on Monday May, 22 at 7:30 PM, to depart by 7:45 PM for an 8:00 PM dinner. Those who know they are interested are encouraged to contact Dave Kosson in advance at david.kosson@rosalindfranklin.edu.

CPTI Network Meeting: This is a network for doctoral students and researchers who are interested in psychopathic personality in childhood and in using the Child Problematic Traits Inventory (CPTI) as an assessment tool. The network is about stimulating cross-national collaborations. The meeting will take place on Monday May 22 at 7:30 PM at Thomas More University College in room MOL 4.02 (4th floor). Members and non-members of the network are welcome. If you have any questions, please contact Henrik Andershed at henrik.andershed@oru.se . Link to registering for the meeting: <https://goo.gl/forms/NqIt1eHcaJDZUbZQ2> .

SUNDAY, MAY 21

- 9:00a-3:30p **Pre-conference workshop Ph.D. Day** (Campus National, Kronenburgstraat 62-68, 2000 Antwerp)
- 5:00-7:00p **Registration** (Spiegelzaal, Meir 50, 2000 Antwerpen)
- 5:00-7:00p **Welcome Reception** (Spiegelzaal, Meir 50, 2000 Antwerpen)
- 7:30-8:30p **Executive Board Meeting**

MONDAY, MAY 22

- 7:45-10:30a **Registration** (Entrance Hall, Campus Sanderus)
- 8:45-9:00a **Opening remarks** (James Blair, President, Room MOL 1.01, Campus Sanderus)
- 9:00-10:15a **Risk and Reward in Psychopathy** (Room MOL 1.01, Campus Sanderus)

- a) *Psychopathic traits and the neural response to drug cues: Delving deeper into the relationship between psychopathy and substance use disorders.* **William J. Denomme**, University of Ontario Institute of Technology & **Matthew S. Shane**, University of Ontario Institute of Technology, william.denomme@uoit.net
- b) *Dysfunctional Social Reinforcement Processing in Disruptive Behavior Disorders: an fMRI study.* **Soonjo Hwang**, University of Nebraska Medical Center, **Harma Meffert**, Boys Town National Research Hospital, **Stuart White**, Boys Town National Research Hospital, **Michelle VanTieghem**, Columbia University, **Stephen Sinclair**, National Institute of Mental Health & **James Blair**, Boys Town National Research Hospital, soonjo.hwang@unmc.edu
- c) *Reduced Neural Response Following Attended-to Negative Feedback: A Challenge for Attentional-based Models of Psychopathy.* **Matthew S. Shane**, University of Ontario Institute of Technology, matthew.shane@uoit.ca
- d) *Risk Taking and the Triarchic Model of Psychopathy.* **Robert Snowden**, Cardiff University, & **Nicola S. Gray**, Swansea University, snowden@cardiff.ac.uk
- e) *Reduced sensorimotor responses to laughter in children with conduct problems and high callous-unemotional traits,* **Essi Viding**, University College London, **C.F. Lima**, University College London, **E. O'Nions**, University College London, **R. Roberts**, University College London, **R. Lickley**, University College London, **S.K. Scott**, University College London, & **E. McCrory**, University College London, e.viding@ucl.ac.uk

10:15-10:45a Coffee Break (Entrance Hall, Campus Sanderus)

10:45-12:00p **Building a Better Understanding of CU Variants in Youth**

(Chair: Stephanie G Craig) (Room MOL 1.01, Campus Sanderus)

- a) *Differences in type, severity and method of assessing violence between primary and secondary variants of CU traits in justice-involved adolescent males.* **Emily Robertson**, Louisiana State University, **Paul Frick**, Louisiana State University, **James Ray**, University of Texas at San Antonio, **Laura Thornton**, Boys Town National Research Hospital, **Tina D. Wall Myers**, University of New Orleans, **Laurence Steinberg**, Temple University, **King Abdulaziz University**, **Elizabeth Cauffman**, University of California, Irvine, emilyrobertson16@gmail.com

- b) *Testing models of trauma-linked acquired callousness in a sample of justice-involved youth.* **Patricia Kerig**, University of Utah, **Shannon Chaplo**, University of Utah, **Crosby Modrowski**, University of Utah, **Diana Bennett**, University of Utah, p.kerig@utah.edu
- c) *Distinguishing between primary and secondary callous-unemotional features in youth: The role of emotion regulation.* **Stephanie Craig**, Simon Fraser University & **Marlene Moretti**, Simon Fraser University, scraig@sfu.ca
- d) *Is the role of anxiety in understanding psychopathy variants overemphasized?* **Timothy Stickle**, University of Vermont, **Andrew Gill**, University of Vermont, **Melissa Paiva-Salisbury**, University College Dublin, **Robert Whelan**, University College Dublin, **Hugh Garavan**, University of Vermont, timothy.stickle@uvm.edu

12:00-1:00p Lunch (Entrance Hall, Campus Sanderus)

1:00-2:00p **R.D. Hare Lifetime Achievement Award** (James Blair, Chair, Room MOL 1.01, Campus Sanderus)
Adrian Raine, University of Pennsylvania, Departments of Criminology, Psychiatry and Psychology, Philadelphia, PA: *Psychopathy as a Neurodevelopmental Disorder*.

2:00-3:15p **Differentiating Subtypes of Antisocial Individuals: Psychobiology of ASPD vs. Psychopathy** (Room MOL 1.01, Campus Sanderus)

- a) *Developing a neurochemical model of antisocial personality disorder and psychopathy.* **John Tully**, King's College London, **Declan Murphy**, King's College London & **Nigel Blackwood**, King's College London, john.tully@kcl.ac.uk
- b) *Reward processing biases across stages of information processing among externalizing prisoners.* **Allison Stuppy-Sullivan**, Yale University & **Arielle Baskin-Sommers**, Yale University, Allison.stuppy@yale.edu
- c) *Cortico-striatal connectivity in antisocial personality disorder with high psychopathic traits by monoamine oxidase A genotype and its relationship to proactive aggression.* **Nathan Kolla**, Centre for Addiction and Mental Health Research Imaging Center, **Katharine Dunlop**, Toronto Western Hospital, **Jeffrey Meyer**, Centre for Addiction and Mental Health Research Imaging Center, **Jonathan Downar**, Centre for Addiction and Mental Health Research Imaging Center, nathan.kolla@mail.utoronto.ca
- d) *Ambiguity and decision-making in antisocial personality disorder.* **Arielle Baskin-Sommers**, Yale University, Arielle.baskin-sommers@yale.edu
- e) *Psychopathy and pupil response to emotion within a forensic psychiatric population.* **Daniel Burley**, Cardiff University, **Nicola Gray**, Cardiff University, **Robert Snowden**, Cardiff University, burleyd2@cardiff.ac.uk

3:15-3:45p Coffee Break (Entrance Hall, Campus Sanderus)

3:45-5:00p **Prediction and Treatment of Psychopathy** (Room MOL 1.01, Campus Sanderus)

- a) *Treatment responsiveness of replicated psychopathy profiles.* **Evelyn Klein Haneveld**, Ven der Hoevenkliniek, ekleibnhaneveld@ziggo.nl
- b) *CU traits at school: What do limited prosocial emotions mean for teachers?* **Alice Jones Bartoli**, Goldsmiths, University of London & **Hannah Wilkinson**, Birbeck, University of London, a.jones@gold.ac.uk
- c) *Executive functions in psychopathic offenders: consequences for responsibility and autonomy.* **Luca Malatesti**, University of Rijeka & **Marko Jurjako**, University of Rijeka, lmalatesti@ffri.hr
- d) *The psychopathic youth and the life course: Childhood risk factors for psychopathic traits in adolescents and their outcomes in adulthood.* **Henriette Bergstrom**, University of Derby & **David Farrington**, University of Cambridge, h.bergstrom@derby.ac.uk

- e) *The triarchic psychopathy measure and violence: results from an offender population with personality disorder.* **Nicola Gray**, Swansea University, **Stephen Blumenthal**, Portman Clinic London, **Heather Wood**, Portman Clinic London, **Peter Fonagy**, University College London, **Miranda Allonby**, Portman Clinic London, **Tanja Takala**, Portman Clinic London, **Robert Snowden**, Cardiff University, nicola.s.gray@swansea.ac.uk

5:00-6:00p Three minute “**Blitz Talk**” **Papers- Cheryl Wynne Hare Award Finalists** (Arielle Baskin-Sommers, Moderator, Room MOL 1.01, Campus Sanderus)

- a) *Psychometric properties and criterion-related validity of the Triarchic Psychopathy Interview.* **Peter Cernohorsky**, Maastricht University, **Isabella Palumbo**, Florida State University & **Christopher Patrick**, Florida State University, pcernohorsky@fsu.edu
- b) *Are psychopaths really effective at lying? A linguistic analysis of deceptive speech.* **Grace MacKenzie**, Goldsmiths, University of London, **Gordon Wright**, Goldsmiths, University of London & **Alice Jones Bartoli**, Goldsmiths, University of London, gmcke050@gold.ac.uk
- c) *Psychopathy and childhood abuse: Interactive effects across measures of cognition and emotion.* **Monika Dirgas**, University of Wisconsin & **Michael Koenigs**, University of Wisconsin, dargis@wisc.edu
- d) *High Psychopathy Scores and High Cognitive Load: Speech Disfluencies and Filler Words in Extemporaneously Produced Fictional Stories.* **Mikhail Sokolov**, Carleton University, **John Logan**, Carleton University & **Timothy Whalen**, Carleton University, mishasokolov@email.carleton.ca
- e) *The Role of the Striatum in Psychopathy.* **Oliva Choy**, University of Pennsylvania, **Adrian Raine**, University of Pennsylvania, **Yaling Yang**, Children’s Hospital Los Angeles/University of Southern California & **Robert Schug**, California State University- Long Beach, ochoy@sas.upenn.edu
- f) *High psychopathic traits are related to physiological threat-responses: insights from a community sample.* **Guilherme Wendt**, Goldsmiths, University of London, **Alice Jones Bartoli**, Goldsmiths, University of London & **Daniel Frings**, London South Bank University, pspoigw@gold.ac.uk
- g) *Psychopathic Traits and their Implications for Deviant and Aberrant Sexuality among Undergraduates.* **Ashley Watts**, Emory University, **Madeline Nagel**, Emory University, **Shauna Bowes**, Emory University, **Robert Latzman**, Georgia State University, **Irwin Waldman**, Emory University & **Scott Lilienfeld**, Emory University, ashleywatts@gmail.com
- h) *Empathic accuracy in those with psychopathic traits.* **Lindsay Groat**, University of Ontario Institute of Technology & **Matthew Shane**, University of Ontario Institute of Technology, lindsay.groat@uoit.net
- i) *Towards Parsimony and Developmental Consistency in Measuring Psychopathy: A New Oddball Paradigm.* **Emily Perkins**, Florida State University, **Sarah Brislin**, Florida State University, **James Yancey**, Florida State University, **Colin Bowyer**, Florida State University & **Christopher Patrick**, Florida State University, perkins@psy.fsu.edu

6:00-7:30p **Poster Session 1** (Entrance Hall & Room MOL 1.02, Campus Sanderus)

6:00-7:00p **Registration** (Entrance Hall, Campus Sanderus)

7:30-9:00p **Aftermath Foundation Interest Group Meeting.** Those interested in learning more about the *Aftermath: Surviving Psychopathy Foundation* are encouraged to gather outside the poster session at 7:30 to depart by 7:45 for an 8:00 dinner. Those who know they are interested in attending are encouraged to contact Dave Kosson in advance (david.kosson@rosalindfranklin.edu).

7:30-8:30p **CPTI Network Meeting** (MOL 4.02, Campus Sanderus). A meeting for those who are interested in psychopathic traits in childhood and in using the Child Problematic Inventory (CPTI) as an assessment tool.

Contact Henrik Andershed (hendrik.andershed@oru.se); register for the meeting: <https://goo.gl/forms/NqIt1eHcaJDZUbZQ2>

TUESDAY, MAY 23

8-10:30a **Registration** (Entrance Hall, Campus Sanderus)

**** DUAL TRACK ****

9:00-10:15a **The utility of the various dimensions of psychopathy in designating a clinically important subgroup of antisocial youth – Examining Competing Models** (Moderator: Randall Salekin, Room MOL 1.01, Campus Sanderus)

- a) *Comparing Different Approaches for Subtyping Children with Conduct Problems: Callous-Unemotional Traits only Versus the Multidimensional Psychopathy Construct.* **Olivier Collins**, Leiden University Medical Center, Henrik Andershed, Örebro University, **Randall Salekin**, University of Alabama, **Kostas Fanti**, University of Cyprus, o.collins@curium.nl
- b) *Callous-Unemotional Traits Compared to the Entire Psychopathy Syndrome with and without Concurrent Conduct Problems in Predicting Future and Stable Forms of Antisocial Behaviors during Adolescence.* **Henrik Andershed**, Örebro University, **Olivier Collins**, Leiden University Medical Center, **Randall Salekin**, University of Alabama, **Alexandros Lordos**, University of Cyprus, **Melina Kyranides**, University of Cyprus & **Kostas Fanti**, University of Cyprus, henrik.andershed@oru.se
- c) *Child and adolescent psychopathic traits: Cross-sectional and longitudinal associations with conduct disorder symptoms.* **Melina Kyranides**, University of Cyprus, **Kostas Fanti**, University of Cyprus, **Alexandros Lordos**, University of Cyprus, **Olivier Collins**, Leiden University Medical Center & **Henrik Andershed**, Örebro University, meli_nicole7@yahoo.co.uk
- d) *Self-report delinquency in adolescence in the perspective of psychopathy personality traits: Should we mind about interaction effects? A study on Italian adolescent high school students.* **Andrea Fossati**, LUMSA University, **Antonella Somma**, LUMSA University, **Henrik Andershed**, Örebro University, **Serena Borroni**, LUMSA University & **Randall Salekin**, University of Alabama, fossati.andrea@hsr.it
- e) *Child Psychopathy and Its Dimensions in Relation to Emotional Skills: The Importance of Considering Different Dimensions.* **Randall Salekin**, University of Alabama, **Christopher Gillen**, University of Southern Mississippi, **Abby Clark**, University of Alabama, Natalie Harrison, University of Alabama & **Olivier Collins**, Leiden University Medical Center, rsalekin@ua.edu

9:00-10:15a **Assessment of Psychopathy in Adults** (Room MOL 3.01, Campus Sanderus)

- a) *What does it mean to be mean? Malice, Coldness, and Imperviousness in the Inventory of Psychopathic Meanness.* **Stephen Benning**, University of Nevada, Las Vegas, **Kimberly Barchard**, University of Nevada, Las Vegas, **Shane Westfall**, University of Nevada, Las Vegas, **Stephany Molina**, University of Nevada, Las Vegas, & **Vincent Brouwers**, University of Nevada, Las Vegas, stephen.benning@unlv.edu
- b) *Three- Seven- or Four-factor Structure of the Triarchic Psychopathy Measure (TriPM)?* **Craig Neumann**, University of North Texas, **Donald Lynam**, Purdue University, **Josh Miller**, University of Georgia, **Kasia Uzieblo**, Thomas More University, **Sanne van Dongen**, Erasmus University & **Inti Brazil**, Radboud University, craig.neumann@unt.edu
- c) *Interfacing the Five Factor Model of Personality with the Triarchic Neurobehavioral Trait Framework.* **Laura Drislane**, University of Michigan & **Christopher Patrick**, Florida State University, lauradrislane@gmail.com

- d) *Construct validity of the Psychopathy Checklist: Screening Version (PCL:SV)- A network perspective.* **Andreas Mokros**, University Hospital of Psychiatry Zurich, **Anita Kovacevic**, University of Berne, **Sally Olderback**, Ulm University, **Craig Neumann**, University of North Texas & **Robert Hare**, University of British Columbia, andreas.mokros@puk.zh.ch
- e) *A comparison of DSM-5 Section II and Section III Antisocial Personality Disorder criteria in operationalizing psychopathy.* **Martin Sellbom**, University of Otago, **Dustin Wygant**, Eastern Kentucky University & **Randall Salekin**, University of Alabama, msellbom@psy.otago.ac.nz

10:15-10:45a Coffee Break (Entrance Hall, Campus Sanderus)

**** DUAL TRACK ****

10:45-12:00p **Parental Influences on Psychopathy** (Room MOL 1.01, Campus Sanderus)

- a) *Intergenerational transmission of psychopathy and moderation via separation from the father and offspring sex.* **Katherine Auty**, University of Cambridge & **David Farrington**, University of Cambridge, ka404@cam.ac.uk
- b) *Maternal sensitivity of distress, attachment and the development of callous-unemotional traits in young children.* **Nicola Wright**, University of Liverpool, **Jonathan Hill**, University of Reading, **Helen Sharp**, University of Liverpool & **Andrew Pickles**, Kings College London, nwright@liv.ac.uk
- c) *Are parental attributions regarding callous-unemotional traits associated with parenting in families of children with conduct problems?* **David Hawes**, University of Sydney, **Thea Longman**, University of Sydney & **Jane Kohlhoff**, University of New South Wales, david.hawes@sydney.edu.au
- d) *The role of parenting and child evocative effect on the development of child callous-unemotional behaviors.* **Luke Hyde**, University of Michigan, **Christopher Trentacosta**, Wayne State University, **Rebecca Waller**, University of Michigan, **Daniel Shaw**, University of Pittsburgh, **Jenae Neiderhiser**, Pennsylvania State University, **Jody Ganiban**, George Washington University, **Misaki Natsuaki**, University of California- Riverside, **David Reiss**, Yale University & **Leslie Leve**, University of Oregon, lukehyde@umich.edu
- e) *The development of callous-unemotional behaviors in early childhood: A test of the fearlessness hypothesis in two independent samples.* **Rebecca Waller**, University of Michigan, **Daniel Shaw**, University of Pittsburgh, **Christopher Trentacosta**, Wayne State University, **Jenae Neiderhiser**, Pennsylvania State University, **David Reiss**, Yale University, **Jody Ganiban**, George Washington University, **Leslie Leve**, University of Oregon & **Luke Hyde**, University of Michigan, rewaller@umich.edu

**** DUAL TRACK ****

10:45-12:00p **Prosocial Emotions in Psychopathy: Multimodal Perspectives and Methodologies** (Room MOL 3.01, Campus Sanderus)

- a) *Electrophysiological correlates of affective empathy in forensic patients with psychopathic traits.* **Josanne van Dongen**, Erasmus University Rotterdam, **Inti Brazil**, Radboud University, **Ben van de Wetering**, Antas & **Imgmar Franken**, Erasmus University, j.d.m.vandongen@fsw.eur.nl
- b) *Psychopathic traits modulate anterior insula encoding of guilt during everyday moral transgressions.* **Ana Seara Cardoso**, University College London, **Catherine Sebastian**, Royal Holloway, **Eamon McCrory**, University College London, **Lucy Foulkes**, University College London, **Marine Buon**, University College London, **Jonathan Rosier**, University College London & **Essi Viding**, University College London, ana.cardoso.09@ucl.ac.uk
- c) *Prosocial Apathy and psychopathy: When helping others is too much effort.* **Patricia Lockwood**, University of Oxford, **Mathilde Hamonet**, University of Oxford, **Samuel Zhang**, University of Oxford, **Anya Ratnaveh**, University of

Oxford, F. Salmony, University of Oxford, Masud Husain, University of Oxford & Matthew Apps, University of Oxford, patricia.lockwood@psy.ox.ac.uk

- d) *My pain is not your pain: The relationship between psychopathic traits, own pain experience and empathy for pain.* **Inti Brazil**, Radboud University & **J.M. Osterman**, Radboud University, i.brazil@donders.ru.nl
- e) *Dysfunction in animacy information processing in adolescents with disruptive behavior disorders and callous-unemotional traits.* **Laura Thornton**, Boys Town National Research Hospital, **Elizabeth Penner**, University of Nebraska Medical Center, **Kathleen Crum**, Boys Town National Research Hospital, **Zachary Nolan**, Pennsylvania State University School of Medicine, **Stephen Sinclair**, National Institute of Mental Health, **Harma Meffert**, Boys Town National Research Hospital, **Soonjo Hwang**, University of Nebraska Medical Center, **James Blair**, Boys Town National Research Hospital & **Stuart White**, Boys Town National Research Hospital, laura.thornton@boystown.org

12:00-1:00p Lunch (Entrance Hall, Campus Sanderus) and business meeting (Room MOL 1.01, Campus Sanderus)

1:00-2:00 **Jevon Scott Newman Early Career Contribution Award** (Essi Viding, Chair; Room MOL 1.01, Campus Sanderus)

Andrea Glenn, University of Alabama, Department of Psychology, Tuscaloosa, AL USA, *The Immoral Brain: Exploring the biological correlates of psychopathy.*

Kostas Fanti, University of Cyprus, Department of Psychology, Nicosia, Cyprus, *Assessing psychopathic traits from toddlerhood to adulthood: Neuro-physiological, behavioral, and cognitive underpinnings.*

2:00-3:15p **Cognitive and Neurocognitive Correlates of Callous-Unemotional Traits** (Room MOL 1.01, Campus Sanderus)

- a) *Routes to aggression: Common and unique mechanisms contributing to social cognition in adolescents.* **Grace Brennan**, Yale University & **Arielle Baskin-Sommers**, Yale University, grace.m.brennan@yale.edu
- b) *Emotional processing in children with a disruptive behavior disorder diagnosis: The role of callous-unemotional traits.* **Pietro Muratori**, Fondazione Stella Maris, **Lucia Billeci**, Fondazione Stella Maris, **Valentina Levantini**, Fondazione Stella Maris, **Marina Papini**, Fondazione Stella Maris & **Annarita Milone**, Fondazione Stella Maris, pmuratori@fsm.unipi.it
- c) *Callous-unemotional traits are associated with impaired processing of threat in youth with disruptive behavior disorders.* **Stuart White**, Boys Town National Research Hospital, **Laura Thornton**, Boys Town National Research Hospital, **Joseph Leshin**, University of North Carolina, Chapel Hill, **Roberta Clanton**, University of Birmingham, **Stephen Sinclair**, National Institute of Mental Health, **Dionne Coker-Appiah**, Georgetown University School of Medicine, **Harma Meffert**, Boys Town National Research Hospital, **Soonjo Hwang**, University of Nebraska Medical Center & **James Blair**, Boys Town National Research Hospital, stuart.white@boystown.org
- d) *Parsing the link between limbic gray-matter volume and psychopathic traits using latent variable modeling.* **Dustin Pardini**, Arizona State University, dustin.pardini@asu.edu
- e) *The Inventory of Callous-Unemotional Traits in children: Reliability and Heritability.* **Ashlee Moore**, Virginia Commonwealth University, **Daniel Pine**, National Institute of Mental Health, **Ellen Leibenluft**, National Institute of Mental Health, **Roxann Roberson-Nay**, Virginia Commonwealth University & **John Hettema**, Virginia Commonwealth University, moorea2@vcu.edu

3:15-3:45p Coffee Break (Entrance Hall, Campus Sanderus)

3:45-5:00p

Cognitive Aspects of Psychopathy (Room MOL 1.01, Campus Sanderus)

- a) Psychopathy predicts weaker processing of simultaneously presented information: Ramifications for cognitive, affective and behavioral style. **Joseph Newman**, University of Wisconsin-Madison & **Rachel Bencic Hamilton**, University of Wisconsin-Madison, jnewman@wisc.edu
- b) *Psychopathic traits and their relationship with the cognitive costs and compulsive nature of lying in offenders*. **Bruno Verschuere**, University of Amsterdam & **Willem in 't Hout**, University of Amsterdam, b.j.verschuere@uva.nl
- c) *Using Mturk and Inquisit to assess psychopathic traits and cognitive functioning from a large general population sample*. **Sandeep Roy**, University of North Texas & **Craig Neumann**, University of North Texas, SandeepRoy@unt.edu
- d) *Disentangling attentional deficits in psychopathy*. **Sylco Hoppenbrouwers**, Erasmus University, Jaap Munneke, Erasmus University & Jan Theeuwes, Erasmus University, hoppenbrouwers@fsw.eur.nl
- e) *Interpersonal-Affective traits of psychopathy are associated with less efficient neural communication during resting-state EEG*. **Scott Tillem**, Yale University, **Josanne van Dongen**, Erasmus University, **Inti Brazil**, Radboud University & **Arielle Baskin-Sommers**, Yale University, scott.tillem@yale.edu

5:00-6:00p

Three minute "Blitz Talk" Papers (Alice Jones-Bartoli, Moderator, Room MOL 1.01, Campus Sanderus)

- a) *Not so antisocial: Personality and environmental factors that promote prosocial punishment*. **Susanne Estrada**, Yale University, **Michael Stagnaro**, Yale University, **Yarrow Dunham**, Yale University, **David Rand**, UNI & **Arielle Baskin-Sommers**, Yale University, susanne.estrada@yale.edu
- b) *Psychopathy.Comp: The design of a Compassion Focused psychotherapeutic intervention to treat young offenders with psychopathic traits*. **Diana Riberiro da Silva**, University of Coimbra, **Daniel Rijo**, University of Coimbra, **Randall Salekin**, University of Alabama & **Paul Gilbert**, University of Derby, diana.rs@fpce.uc.pt
- c) *Perception of psychopathy at zero acquaintance*. **Christina Bader**, Ulm University, **Sally Olderbak**, Ulm University & **Sabina Kleitman**, University of Sydney, Christina.bader@uni-ulm.de
- d) *Social Judgement Task: Assessing understanding of how instrumental antisocial acts are perceived by children with conduct problems and different levels of callous-unemotional traits*. **Ruth Roberts**, University College London, **Eamon McCrory**, University College London, **Linda Roberts**, Red River College, **Nicole de Lima**, Cardiff University, **Harriet Phillips**, University of Bath, **Rachael Lickley**, Royal Holloway, University of London, **Molly Sharp**, University College London & **Essi Viding**, University College London, r.roberts@ucl.ac.uk
- e) *Ethnic differences in the psychopathy checklist-revised (PCL-R): An Item Response Theory analysis for White, Black, Indigenous and Hispanic samples*. **Seung Lee**, Carleton University & **Adelle Forth**, Carleton University, seungclee@email.carleton.ca
- f) *From the Mouths of Survivors: A Qualitative Analysis of the Impact of Psychopathic Individual on Intimate Partners*. **Mary Ritchie**, University of Western Ontario, **Ester Deck**, Carleton University & **Adelle Forth**, Carleton University, mritchi6@uwo.ca
- g) *Any way you slice it: Cavum septum pellucidum as a marker for psychopathic traits but not antisocial behavior*. **Dana Crooks**, University of New Mexico, **Nathaniel Anderson**, The MIND Research Network, **Matthew Widdows**, The MIND Research Network & **Kent Kiehl**, The MIND Research Network/University of New Mexico, ndanderson@mrn.org
- h) *Psychopathic Traits Positively Correlated with Brain Activity in Community-Recruited Adolescents*. **Rheanna Rimmel**, University of Alabama, **Andrea Glenn**, University of Alabama, **Thomas DeRamus**, University of Alabama-Birmingham, **Jose Omar Maximo**, University of Alabama-Birmingham & **Rajesh Kana**, University of Alabama-Birmingham, rjremmel@crimson.ua.edu

- i) *A systematic review of the neural correlates of reward and loss processing in antisocial behavior and psychopathy.* **Laura Murray**, University of Michigan, **Rebecca Waller**, University of Michigan & **Luke Hyde**, University of Michigan, lmur@umich.edu
- j) *Deviance at its darkest: Serial murder and psychopathy.* **Bethany Walters**, Alliant University, **Isabella Palumbo**, Florida State University, **Laura Drislane**, Florida State University, **Scott Lilienfeld**, Emory University, **Eric Hickey**, Walden University & **Christopher Patrick**, Florida State University, bnwalters@hotmail.com
- k) *Societal taboo: Perceptions, attitudes and beliefs about psychopathy.* **Nicholas Ostapchuk**, Carleton University, **Ken Kelly-Turner**, Carleton University & **Adelle Forth**, Carleton University, nicholas.ostapchuk@email.carleton.ca
- l) *Genetic correlates of psychopathy.* **Pia Hollerbach**, University Hospital of Psychiatry-Zurich, **Sally Olderbak**, Ulm University, **Oliver Wilhelm**, Ulm University, **Christian Montag**, Ulm University, **Craig Neumann**, University of North Texas & **Andreas Moksos**, University Hospital of Psychiatry-Zurich, pia.hollerbach@puk.zh.ch

6:00-7:30P **Poster Session 2** (Entrance Hall & Room MOL 1.02, Campus Sanderus)

6:00-7:00P **Registration** (Entrance Hall, Campus Sanderus)

WEDNESDAY MAY 24

** DUAL TRACK **

9:30-10:45a **Response to Stress in Psychopathy** (Room MOL 1.01, Campus Sanderus)

- a) *Psychopathy and reflexive emotional attention: callous-unemotional traits predict an increased tendency for emotional gaze cueing.* **Lieke Nentjes**, University of Amsterdam, l.nentjes@uva.nl
- b) *Psychopathic traits and emotion regulation.* **Carlo Garofalo**, Tillburg University, **Craig Neumann**, University of North Texas & **David Kosson**, Rosalind Franklin University of the Health Sciences, c.garofalo@uvt.nl
- c) *Prenatal testosterone and externalizing behavior related to callous-unemotional traits in children.* **Alyson Blanchard**, Nottingham Trent University & **Luna Centifanti**, University of Liverpool, Alyson.blanchard@ntu.ac.uk
- d) *Psychopathic Traits and the Ability to Modulate the Neural Indicators of Empathy for Same and Other-Race Targets.* **Jennifer O'Connell**, University of Ontario Institute of Technology, Oshawa, ON, Canada, Nathan Arbuckle & Matthew Shane, jennifer.oconnell@uoit.net
- e) *Amygdala response to distress cues and callous-unemotional personality: moderation by trauma.* **Harma Meffert**, Boys Town National Research Hospital, **Patrick Tyler**, Boys Town National Research Hospital, **Mary Botkin**, Boys Town National Research Hospital, **Anna Erway**, Boys Town National Research Hospital, **Venkata Kolli**, Creighton University School of Medicine, **Stuart White**, Boys Town National Research Hospital, **Kayla Pope**, Boys Town National Research Hospital, **James Blair**, Boys Town National Research Hospital, harma.meffert@boystown.org

** DUAL TRACK **

9:30-10:45a **Facial Emotion Recognition in psychopathy** (Andrea Glenn, moderator, Room MOL 3.01, Campus Sanderus)

- a) *Modulation of facial reactions to emotional stimuli by psychopathic traits- a re-evaluation.* **Hedwig Eisenbarth**, University of Southampton, **Georg Alpers**, University of Mannheim & **David Kosson**, Rosalind Franklin University of the Health Sciences, H.Eisenbarth@soton.ac.uk
- b) *Investigating facial emotion recognition in conduct disorder using eye-tracking.* **Nayra Martin-Key**, University of Southampton, **E.W. Graf**, University of Southampton, **W.J. Adams**, University of Southampton, & **Graeme Fairchild**, University of Southampton, namkre13@soton.ac.uk
- c) *Psychopathy and the detection of insincere facial expressions.* **Andrea Glenn**, University of Alabama & **Rebecca Kastner**, Minnesota State Operated Forensic Services, alglenni@ua.edu
- d) *Psychopaths have deficits in general mental ability, not emotion perception.* **Sally Olderbak**, Ulm University, **Andreas Mokros**, University Hospital of Psychiatry Zurich & **Oliver Wilhelm**, Ulm University, sally.olderbak@uni-ulm.de
- e) *Explicit and implicit facial expressions of emotion in psychopathy.* **Nicole Hauser**, University Hospital of Psychiatry Zurich, **Andreas Mokros**, University Hospital of Psychiatry Zurich, **Janina Kuenecke**, Psychologische Hochschule Berlin & **Sally Olderbak**, Ulm University, Nicole.hauser@puk.zh.ch

10:45-11:15a Coffee Break (Entrance Hall, Campus Sanderus)

**** DUAL TRACK ****

11:15-12:30p **Gender in Psychopathy** (Room MOL 1.01, Campus Sanderus)

- a) *Gender issues in the assessment and manifestation of psychopathy.* **Vivienne de Vogel**, De Forensische Zorgspecialisten, vdevogel@dfzs.nl
- b) *Cognitive and affective theory of mind in children with callous-unemotional traits: Findings from the Pittsburgh Girls Study.* **Emma Satlof-Bedrick**, University of Pittsburgh, **Celia Brownell**, University of Pittsburgh & **Stephanie Stepp**, University of Pittsburgh, ess33@pitt.edu
- c) *Facial reactions to emotional stimuli young women with varying levels of callous-unemotional traits.* **Nathalie Fontaine**, Universite de Montreal, **Pierre Plusquellec**, Universite de Montreal & **Jean-Pierre Guay**, Universite de Montreal, Nathalie.fontaine@umontreal.ca
- d) *Neuro-physiological biomarkers associated with distinct conduct problem subtypes: Taking gender differences into account.* **Kostas Fanti**, University of Cyprus, kfanti@ucy.ac.cy
- e) *Sex matters: An investigation of white matter microstructural differences in male and female youth with conduct disorder and varying levels of callous-unemotional traits in the FemNAT-CD study.* **Stephane de Brito**, University of Birmingham, **Jack Rogers**, University of Birmingham, **Karen Gonzalez**, University of Southampton, **Rosalind Baker**, University of Birmingham, **Roberta Clanton**, University of Birmingham, **Ruth Pauli**, University of Birmingham, **Artie Smaragdi**, University of Southampton, **Kerstin Konrad**, Uniklinikum Aachen, **Gregor Kohls**, Uniklinikum Aachen, **Willeke Menks**, Universitaet Basil, **Christina Stadler**, Universitaet Basil, **Nora Raschle**, Universitaet Basil, **Christine Freitag**, Frankfurt University, **Graeme Fairchild**, University of Southampton & the **FemNAT-CD consortium**, s.a.debrito@bham.ac.uk

**** DUAL TRACK ****

11:15-12:30p **Psychopathy and Victims: Implications for Victim Selection, Interactional Style, and Impact** (Adelle Forth, moderator, Room MOL 3.01, Campus Sanderus)

- a) *Psychopathy and victim selection: The role of nonverbal cues in perceptions of vulnerability to violent and sexual victimization.* **Mary Ritchie**, University of Western Ontario & **Adelle Forth**, Carleton University, mritchi6@uwo.ca

- b) *Psychopathy and variable interactions in a gaming context: Implications for victim selection.* **Beth Visser**, Lakehead University, **Angela Book**, Brock University, **Narnia Worth**, Brock University, **Mirna Batinic**, Brock University, & **Carly Magnacca**, Brock University, beth.visser@lakeheadu.ca
- c) *Communication, support, maintenance and conflicts: Exploring the role of psychopathy in relational behavior.* **Kasia Uzieblo**, Thomas More University College, **Mieke Decuyper**, Thomas More University College, **Laurence Claes**, KU Leuven & **Lesley Verhofstadt**, Ghent University, kasia.uzieblo@thomasmore.be
- d) *Toxic love: Victimization experiences of intimate partners of psychopaths.* **Adelle Forth**, Carleton University, **Sage Sezlik**, Carleton University, **Holly Ellingwood**, Carleton University & **Seung Lee**, Carleton University, adelle.forth@carleton.ca
- e) *Mapping Aspects of Hypersexuality onto Distinct Components of Psychopathy.* **Raymond Knight**, Brandeis University & **Frankly Graham**, Brandeis University, knight2@brandeis.edu

12:30-2:00p Lunch and Poster session 3 (Entrance Hall & Room MOL 1.02, Campus Sanderus)

2:00-2:15p Cheryl Wynne Hare Award (Dustin Pardini, Chair, Room MOL 1.01, Campus Sanderus)

2:15-3:15 **Presidential Address** (Room MOL 1.01, Campus Sanderus)

James Blair, Boys Town National Research Hospital, Center for Neurobehavioral Research, Omaha, NE, *The neurobiology of psychopathy.*

3:15-3:45p Coffee Break (Entrance Hall, Campus Sanderus)

3:45-5:00p **Innovations in Classification of Psychopathy** (Room MOL 1.01, Campus Sanderus)

- a) *An Examination of the Reliability and Validity of the Three-Bifactor Structure of the Inventory of Callous Unemotional Traits: A Meta-Analytic Review.* **Elise Cardinale**, Georgetown University & **Abigail Marsh**, Georgetown University, emc62@georgetown.edu
- b) *Examining the interrater reliability of the Psychopathy Checklist across a large sample of trained raters.* **Julie Blais**, Carleton University, **Adelle Forth**, Carleton University & **Robert Hare**, University of British Columbia, julie.blais@carleton.ca
- c) *Refining Measurement of Callous-Unemotional Traits.* **Sarah Brislin**, Florida State University, **Paul Frick**, Louisiana State University, **Elizabeth Cauffman**, University of California, Irvine, **Tina Wall Myers**, University of New Orleans, **Eva Kimonis**, University of New South Wales, **James Ray**, University of Texas, San Antonio, **Laura Thornton**, Boys Town National Research Hospital, **Laurence Steinberg**, Temple University & **Christopher Patrick**, Florida State University, brislin@psy.fsu.edu
- d) *Childhood psychopathic traits in a population-based sample.* **Karolina Sorman**, Karolinska Institute & Natalie Durbeek, Karolinska Institute, karolina.sorman@ki.se
- e) *Machine learning classifies high and low psychopathy based on functional connectivity in the brain during moral processing.* **Samantha Fede**, University of New Mexico/MIND Research Network, **Vince Calhoun**, University of New Mexico/MIND Research Network & **Kent Kiehl**, University of New Mexico/MIND Research Network, sfede@mrn.org

5:00-5:30p Closing Remarks (James Blair & Adelle Forth, Room MOL 1.01, Campus Sanderus)

POSTER SESSIONS

POSTER SESSION 1

MONDAY, May 22: 6:00 -7:30p (Entrance Hall & Room MOL 1.02, Campus Sanderus)

1. *Psychometric properties and criterion-related validity of the Triarchic Psychopathy Interview.* **Peter Cernohorsky**, Maastricht University, **Isabella Palumbo**, Florida State University & **Christopher Patrick**, Florida State University, pcernohorsky@fsu.edu

The current study reports on the psychometric properties and criterion-related validity of a new interview-based operationalization of the Triarchic model (Patrick, 2010), named the *Triarchic Psychopathy Interview (TriPIN)*. Scales were developed to index the Triarchic facets of boldness, meanness, and disinhibition using item sets from the Boldness Interview (Hall, 2009), Externalizing Spectrum Inventory (ESI; Krueger, Markon, Patrick, Benning, & Kramer, 2007), and Externalizing Spectrum Interview (EXT). A male substance treatment sample (N=179) was used to evaluate and compare the criterion-related validity for these TriPIN scales in relation to (i) self-report Triarchic scales and (ii) other interview- and self-report based criterion variables of psychopathy, being the Psychopathy Checklist - Revised (PCL-R; Hare, 2003) and the Triarchic scales distilled from the Multidimensional Personality Questionnaire (MPQ-Tri; Brislin, Drislane, Smith, Edens, & Patrick, 2015). Additionally, predictive validity of the TriPIN versus self-report Triarchic scales were compared in relation to (iii) normal personality traits, as operationalized by the brief (155-item) form of the Multidimensional Personality Questionnaire (MPQ-BF; Patrick, Curtin & Tellegen, 2002) and (iv) interview and self-report based substance use, as indexed by the EXT and ESI, respectively. The TriPIN scales show good internal consistency and also successfully emulate the internal validity of the self-report Triarchic scales. Furthermore, the TriPIN scales showed (a) good external validity in relation to overall PCL-R psychopathy as well as (b) incremental predictive validity in PCL-R total scores and the Interpersonal facet. The self-report Triarchic scales and TriPIN scales show largely similar relations to MPQ-Tri scores albeit that TriPIN scores seem to reflect overall less Boldness and more Meanness in relation to the MPQ-Tri scales. Possible explanations for this discrepancy are discussed. Relations with normal personality traits are largely similar for both the TriPIN and self-report Triarchic scales albeit that the MPQ scales show slightly preferential relations with the self-report Triarchic scales due to their corresponding measurement domains. The Triarchic scales from either measurement domain demonstrate robust and preferential predictive validity towards substance use within their own measurement domain. The newly developed TriPIN scales successfully emulated the internal and external validity of self-report Triarchic scales within the present sample.

2. *Are psychopaths really effective at lying? A linguistic analysis of deceptive speech.* **Grace MacKenzie**, Goldsmiths, University of London, **Gordon Wright**, Goldsmiths, University of London & **Alice Jones Bartoli**, Goldsmiths, University of London, gmeke050@gold.ac.uk

This poster reports on a two-part study to examine the association between ability to deceive and psychopathic personality traits. In the first part of the study, 141 adult participants (62% female) completed the Psychopathy Personality Inventory - Revised - 40 (Eisenbarth, Lilienfeld, & Yarkoni, 2015) and Perceived Ability to Deceive scale (Schneider & Goffin, 2012). A subset of these individuals were further recruited to take part in a deception challenge study where they were required to watch short videos and either describe what they could see truthfully, or to lie and provide an alternative description (based on Ekman & Friesen, 1974). Videos were either positively or negatively valenced, and the non-truth explanation was required to be of the opposite valence to the video being shown. The verbal descriptions given by participants were coded using linguistic enquiry and word count software (LIWC, Pennebaker, Francis & Booth, 2001). 2 (positive/negative

valence) x2(truth/lie) x2 (low/high PPI-R scores) mixed MANOVAs are used to explore the hypothesis that those with higher PPI-R scores will tell lies that are more similar in style to truths. In the first part of the study, we report a statistically significant positive relationship between psychopathic personality traits and perceived ability to deceive ($r = .55, p < .01$). For the second part of the study, the subset of participants was split into two groups by median PPI-R score. Linguistic analysis suggested that high PPI-R scorers used more 'authentic language' in their deceptive speech than low PPI-R scorers, suggesting that their lies are more similar to truths. Higher PPI-R scores were also associated with higher levels of analytical thinking in the deception conditions, suggesting a more logical way of managing deception. Higher PPI-R scores were also associated with lesser use of first person pronouns in speech. There is tentative evidence here that those with higher levels of psychopathic traits may be more skilled at deception. However, future research must examine whether these deceptions are believable by others, and whether these differences also exist in the context of high-stakes deception.

3. *Psychopathy and childhood abuse: Interactive effects across measures of cognition and emotion.* **Monika Dirgas**, University of Wisconsin & **Michael Koenigs**, University of Wisconsin, dargis@wisc.edu

There is a growing literature suggesting that the experience of abuse during childhood is related to psychopathic traits in adolescence and adulthood. Moreover, there is emerging research suggesting that the presence of psychopathic traits and the experience of abuse during childhood interact to predict more severe dysfunction. For instance, Kolla and colleagues (2013) reported that highly psychopathic individuals with extensive childhood abuse histories engaged in especially high amounts of reactive aggression. The extent to which psychopathy and maltreatment interact across other areas of function (e.g., cognition, emotion), however, is not yet well understood. In order to elucidate the interaction between psychopathy and childhood maltreatment, the present study examined this effect across four behavioral tasks in four samples of incarcerated men. In *Study 1*, participants completed a standard reversal learning paradigm. We found a significant interaction, such that individuals with high levels of psychopathy and high levels of childhood abuse showed the most impaired reversal learning performance. In *Study 2*, participants completed a sentence completion task, which measures the propensity for individuals to engage in self-related and other-related thought. We found a significant interaction, such that individuals with high levels of psychopathy and childhood abuse made more self-focused statements and fewer other-focused statements. *Study 3* examined attentional bias to emotional stimuli using the Kimonis and colleagues (2006) emotional dot probe task. Again, we found a significant interaction, such that individuals with high levels of psychopathy and childhood abuse showed an attentional bias toward distressing stimuli (i.e., over-attended to distressing images in comparison to neutral images). Finally, *Study 4* utilized a facial emotion recognition task with eye-tracking to measure the number of visual fixations made to the eye regions of faces. Once again, we found a significant interaction, such that individuals with high levels of psychopathy and childhood abuse showed the fewest number of fixations to the eyes of fearful faces. Collectively, these results converge to indicate that the experience of childhood maltreatment exacerbates and/or alters cognitive and affective abnormalities displayed by individuals high in psychopathy and, consequently, highlight the importance of considering environmental influences in the development of psychopathy.

4. Psychopathic personality and depression in two large adult community samples: Can certain psychopathic traits protect against depressive features? **Shauna Bowes**, Emory University, **Ashley Watts**, Emory University & **Scott Lilienfeld**, Emory University, sbowes@emory.edu

Because of the prevalence and severity of depression in society, it is important to identify individual differences that may protect against the development of depressive features in predisposed individuals. Certain psychopathic features, such as boldness, may offer one such avenue. In contrast, other psychopathic features, such as disinhibition, may place individuals at increased risk for depressive symptoms. These two possibilities are broadly consistent with research that psychopathic features diverge in their relations with constructs related to depression, such as suicidality, emotional distress, and anger (e.g., Verona et al., 2001). Nevertheless, these findings are somewhat inconsistent across studies and statistical effects are

sometimes weak, due in part to the heterogeneity of psychopathy and depression and mono-operation bias (Hicks & Patrick, 2006). With these limitations in mind, we sought to elucidate the associations among the dimensions of psychopathy and depression in two large racially-diverse North American community samples ($n_1=430$; $n_2=394$) recruited via Amazon's Mechanical Turk (MTurk). We used multiple indices of both psychopathy and depression, including two widely used clinical measures of depression and two self-report psychopathy measures. Consistent with previous research, Boldness features were moderately negatively correlated with depression, whereas Disinhibition features were moderately positively correlated with depression (e.g., Benning et al., 2005). Coldheartedness was negatively associated with depression, although the magnitude of this relation was weak, whereas Meanness was not significantly related to depression. We also examined the statistical interaction between triarchic psychopathy dimensions in statistically predicting depression. Boldness, Coldheartedness, and Meanness all interacted in a protective manner with Disinhibition, such that the relations between Disinhibition and depression were strongest at lower levels of the former constructs. We also found little support for gender differences in the relations between triarchic dimensions and depressive features, although the relationship between Self-centered Impulsivity and depression was significantly stronger among females. Finally, we plan to present analyses examining the incremental validity of psychopathy in statistically predicting depression above and beyond general personality traits, especially neuroticism and extraversion, and the specificity of psychopathy's relations with depression by examining the former's relations with anger and anxiety.

5. *High Psychopathy Scores and High Cognitive Load: Speech Disfluencies and Filler Words in Extemporaneously Produced Fictional Stories.* **Mikhail Sokolov**, Carleton University, **John Logan**, Carleton University & **Timothy Whalen**, Carleton University, mishasokolov@email.carleton.ca

Psychopaths' language abilities present an apparent contradiction. Individuals with high psychopathy (HP) scores have been described as having a "gift of glib" (Hare, 1999; Lee, Klaver, & Hart, 2008) but evidence also suggests that HP individuals have difficulty with metaphorical (Hervé, Justus Hayes, & Hare, 2003), and emotional (Gawda, 2013) language. The goal of the present study was to determine if certain paralinguistic characteristics of spoken language are associated with HP scores; based on the hypothesis that HP individuals may be subject to greater cognitive load than individuals with low psychopathy (LP) scores. We operationalized this by examining specific speech disfluencies during the recall of actual events versus extemporaneously-created fictional stories based on different emotions. Participants ($N=41$) were asked to verbalize one 2-minute personal recollection and 6 4-minute fictional stories, each prompted by a photograph. After data cleaning, audio recordings of stories from 34 participants (486 minutes total duration) were analyzed using speech analysis software. A large subset ($N=30$; 420 minutes) of the stories were also transcribed verbatim. Results showed robust speech production differences between the HP and LP groups in the fictional story condition. The largest difference between the two groups was in their use of verbalized speech disfluencies, with the HP group preferring the use of "uh" while the LP group preferred "um". Furthermore, the HP group had significantly more silent disfluencies ($M=45.7$, $SD=11.1$) in their stories than the LP group ($M=37.3$, $SD=10.5$); $t(32)=2.26$, $p=0.015$. Psychopathy scores were also found to be negatively correlated with the number of polysyllabic words produced as a function of total word production ($r=-0.45$, $p=0.013$). The HP group had significantly longer silent speech disfluencies, and produced fewer words, in fictional stories than in recollected personal stories, whereas no differences were observed in the LP group. Overall, these results suggest that HP individuals experience greater cognitive load than the LP group during fictional story production, leading to increased levels of speech disfluencies. We propose that this effect on language production corresponds to the abnormal processing of semantic and affective language information in HP individuals observed in previous work on language perception (e.g., Kiehl, Hare, McDonald, & Brink, 1999; Mackenzie & Logan, 2015).

6. *Investigating limbic white-matter microstructure in adolescents with Conduct Disorder and typically developing control subjects.* **Karen Gonzalez-Madruga**, University of Southampton, **Jack Rogers**, University of Birmingham, **Areti Smaragdi**, University of Southampton, **Roberta Riccelli**, University of Southampton, **Ignazio Pozzo**, University

of Southampton, **Roberta Clanton**, University of Birmingham, **Rosalind Baker**, University of Birmingham, **Stephane De Brito**, University of Birmingham, and **Graeme Fairchild**, University of Southampton, k.gonzales@soton.ac.uk

Antisocial behaviour in adolescents has been associated with structural and functional abnormalities in the limbic system. Recent work has suggested that the anatomical connections between limbic and prefrontal cortex regions are altered in conduct disorder (CD), although findings have been inconsistent and the role of limbic white-matter abnormalities remains poorly understood. The uncinate fasciculus (UF) is a white-matter tract connecting limbic and prefrontal cortical structures. Previous studies have revealed abnormalities of the UF in CD. However, to date, no studies have investigated other major limbic white-matter tracts, such as the cingulum and the fornix. To examine whether adolescents with CD exhibit differences in the integrity of limbic white-matter tracts compared to healthy controls. We collected diffusion Magnetic Resonance Imaging (d-MRI) in sixty-three male adolescents with CD and age- and healthy controls (CD:36; HC:27). Participants were all aged 12-18 years. Data were processed for deterministic spherical deconvolution tractography using StarTrack. Four diffusion measures, Fractional Anisotropy (FA), Mean Diffusivity (MD), Radial Diffusivity (RD) and Axial Diffusivity (AD), were estimated and exported to TrackVis. Virtual in-vivo dissections of the UF, the three subdivisions of the cingulum (subgenual cingulum -SGC, parahippocampal cingulum and retrosplenial cingulum), and the fornix were performed. Our results showed significant WM FA increases and RD reduction in the right SGC of CD subjects relative to controls. In addition, the CD group also showed significantly lower MD and AD values in the right UF compared to healthy controls. There was a significant positive correlation between callous unemotional traits and MD and AD values in the right UF. This study extends our prior knowledge, and shows that as well as the UF, a novel limbic tract, the SGC is implicated in the neurobiological mechanisms underpinning CD. Brain regions linked by the UF and SGC tracts are highly involved in emotion and cognition interactions. Thus, abnormalities in these pathways could lead to deficits in emotion regulation in CD. However, the distinctive contributions of the UF and SGC connections to the neural underpinnings of CD need to be explored further.

7. *The Role of the Striatum in Psychopathy.* **Oliva Choy**, University of Pennsylvania, **Adrian Raine**, University of Pennsylvania, **Yaling Yang**, Children's Hospital Los Angeles/University of Southern California & **Robert Schug**, California State University- Long Beach, ochoy@sas.upenn.edu

Research on the neurobiological basis of psychopathy has highlighted the role of regions such as the prefrontal cortex, amygdala, superior temporal gyrus, and hippocampus. However, few studies have examined the role of the striatum in psychopathy, with mixed findings. Additionally, differences in the striatum between successful and unsuccessful psychopaths have not been examined. This study tests the hypothesis that the volume of the striatum, a region involved in processing reward-related information, is increased in psychopathic individuals. 108 adult men were recruited from temporary employment agencies. Structural magnetic resonance imaging data were assessed alongside psychopathy using the Psychopathy Checklist - Revised. One-way ANCOVA was used to test group differences in striatal volumes. Compared to individuals with low levels of psychopathy, psychopathic individuals exhibited a 7.4% increase in total striatal volumes. The striatum-psychopathy relationship was observed after controlling for demographic variables, antisocial personality disorder, total brain volume, history of head injury, and substance dependence ($p < .001$). Further analysis of the striatal subregions revealed higher volumes in the caudate ($p < .001$), putamen ($p < .01$), globus pallidus ($p < .01$), and nucleus accumbens ($p = .01$) in psychopathic individuals. Differences in striatal volume between subgroups of psychopaths were limited to the globus pallidus ($p < .01$), with unsuccessful psychopaths showing a 2.3% increase in volume compared to successful psychopaths. This study provides the first evidence that differences in the striatum may be observed in successful and unsuccessful psychopathy, supporting the notion that neuropathology differs between subgroups of psychopaths. More generally, findings have the potential to add to the empirical literature on the role of the striatum and shed greater light on the neurobiological etiology of antisocial behavior.

8. *High psychopathic traits are related to physiological threat-responses: insights from a community sample.* **Guilherme Wendt**, Goldsmiths, University of London, **Alice Jones Bartoli**, Goldsmiths, University of London & **Daniel Frings**, London South Bank University, pspoigw@gold.ac.uk

This presentation will discuss novel research on the psychophysiology of psychopathic personality traits. Psychopathy is often linked to hypo-responsive amygdala reactivity to threat, a region of the brain responsible for autonomic functioning, including the cardiovascular system (Blair, 2013; Dampney, 1994). This study presents a new method of understanding differences in the behaviour of individuals with elevated levels of psychopathic traits by exploring the differences in their underlying motivational states, in particular the extent they experience motivational 'challenge' and 'threat'. Challenge states have been associated with positive affective states, coupled with a desire to approach goals positively. In contrast, a threat state is generally associated with negative affective states, disorganized emotions, and a conflict between approach and avoidance (Blascovich & Mendes, 2000). These motivational states, however, have never been investigated in relation to psychopathic personality traits. We report on a study involving 75 participants aged between 18-57 years (mean age = 26.64 years, SD = 8.12). The experiment followed a 2x2 between groups design to examine the effects of experimental condition and psychopathic personality traits. Electrocardiography measures were obtained continuously using a 3 lead configuration via a BIOPAC ECG100C amplifier. Impedance cardiography measures were recorded using a BIOPAC NICO100C amplifier at 100Hz via electrodes (Biopac Systems, Inc., Goleta, CA, USA) in order to provide basal transthoracic impedance (ZO) and its first derivative (dZ/dt), which allow the calculation of cardiac output (CO), heart rate (HR), and pre-ejection period (PEP). Participants also completed the Psychopathic Personality Inventory Genetic Derived form (PPI-R-40; Eisenbarth, Lilienfeld, & Yarkoni, 2015). Overall, our results suggest evidence for heightened sympathetic-adrenomedullary and pituitary-adrenocortical axes reactivity from baseline to prime and to task phases among typical developing adults with elevated levels of psychopathic traits. Follow-up analyses of PPI-R-40 subscales demonstrate particularly interesting correlations with Machiavellian Egocentricity ($p = .04$) and Stress Immunity ($p = .04$), and for Cold-heartedness ($p = .04$) factor.

9. *Psychopathic Traits and their Implications for Deviant and Aberrant Sexuality among Undergraduates.* **Ashley Watts**, Emory University, **Madeline Nagel**, Emory University, **Shauna Bowes**, Emory University, **Robert Latzman**, Georgia State University, **Irwin Waldman**, Emory University & **Scott Lilienfeld**, Emory University, ashleylwatts@gmail.com

Extensive research indicates that psychopathic traits place individuals at risk for a broad swath of deviant or aberrant sexual attitudes and behaviors (e.g., Woodworth et al., 2013). Nevertheless, the majority of this research has relied upon clinical or forensic populations. Thus, the extent to which psychopathic traits place individuals at risk for engaging in deviant sexual behaviors among more normative samples is far less understood. To explore this gap in the literature, we examined the relations between psychopathic traits and (a) five of the most common paraphilic interests (e.g., exhibitionistic, sadistic, fetishistic) and (b) 37 risky sexual behaviors (e.g., one-night stands, sex without protection) among two large samples of undergraduates ($N = 608$). We used a combination of confirmatory factor analysis and exploratory structural equation modeling to first establish the underlying structure of our outcomes and relate these best-fitting models to our psychopathy indicators. Consistent with existing research, base rates of paraphilic interests were appreciable (4% to 14%) and most pronounced for exhibitionism and voyeurism. 78% of undergraduates endorsed at least one paraphilic interest (Joyal & Carpentier, 2016). The disinhibition and meanness psychopathy features were robustly associated with paraphilic interests (r s ranged from .19 to .44), particularly sexual sadism, whereas the boldness features were essentially unrelated to these interests. Risky sexual behaviors were considerably more common among undergraduates than were paraphilic interests. In contrast to psychopathy's relations with paraphilic interests, each of the triarchic dimensions were moderately associated with a general risky sexual behavior factor (r s ranged from .16 to .34). We also tested an alternative

factor structure of risky sexual behavior to elucidate more fine-grained relations among separable risky sex subtypes (Turchik et al., 2015), which yielded four factors. The triarchic dimensions related differentially to these four factors, with some psychopathy features relating negatively to some factors but most others relating positively. As a follow-up to these analyses, we also examined the (a) statistical interaction among psychopathy features in predicting risky sex (Kastner & Sellbom, 2012); (b) specificity of psychopathy's relations with these outcomes by examining narcissism and DSM-5 personality disorders' relations with these same outcomes; and (c) role of gender in these relations. Although there were some notable exceptions, psychopathy features typically manifested the most pronounced relations with paraphilic interests, although antisocial personality disorder features were also strong predictors of these interests. By and large, these relations were comparable across gender.

10. *Psychopathy and facial emotion recognition: An eye-tracking investigation.* **Elyse Mowle**, Texas A&M University, **John Edens**, Texas A&M University, **Brittany Penson**, Texas A&M University & **Jared Ruchensky**, Texas A&M University, elyse_mowle@tamu.edu

Historical conceptualizations of psychopathy emphasized affective deficits as characteristic of the disorder. Contemporary research reports associations between psychopathy and deficits in emotion recognition, with particularly strong effects for recognition of fearful faces. The current study investigated whether individuals elevated in psychopathic traits displayed deficits in recognition of and attention to fearful faces. The Triarchic model (Patrick et al., 2012) – consisting of boldness, meanness, and disinhibition – integrates various theories and suggests that impairments in attentional processing and emotional responding contribute to psychopathy. A sample of 110 students completed the Triarchic Psychopathy Measure, a computerized facial emotion recognition task, and a visual dot probe task. An ASL Eye-Trac 6 eye-tracker was used to investigate whether fixations on the eyes or mouth of an emotional face were associated with deficits in emotion processing. Accuracy of emotion identification was recorded for each participant. Additionally, a facilitation index was calculated for the dot probe task to measure attentional orientating to emotional stimuli. As hypothesized, reduced response time to fearful faces in the dot probe task was associated with elevations in psychopathic traits ($r = .24, p < .05$). Specifically, participants' response time to fearful faces increased as meanness scores increased, $\beta = .24, R^2 = .04, t(89) = 2.28, p < .05$. Boldness and disinhibition were not significantly associated with response time in the dot probe task. Contrary to hypotheses, individuals elevated in psychopathic traits did not display overall deficits in identification of emotional faces or for fear faces specifically. Exploratory analyses indicated that an interaction between meanness and disinhibition predicted correct disgust identification ($\beta = .48, t(41) = 2.76, p < .01$). Deficits in emotion recognition and emotional attention were not associated with eye gaze. The results suggest that psychopathy may not be universally associated with emotion recognition performance. Instead, deficient emotion processing in psychopathic individuals may be due to attentional deficits rather than an inability to identify emotional facial expressions. Broadly, the results of this project add to the growing literature examining emotion processing deficits and eye gaze, and contribute to the literature clarifying the nature of emotion processing in psychopathy.

11. *Empathic accuracy in those with psychopathic traits.* **Lindsay Groat**, University of Ontario Institute of Technology & **Matthew Shane**, University of Ontario Institute of Technology, lindsay.groat@uoit.net

Central characteristics of the psychopath include a severe reduction in concern for the well-being of others, and a lack of empathy (Cleckley, 1941; Hare, 1991). However, the extent to which these reductions are due to an *inability* remains largely unanswered. Recent fMRI studies from our laboratory and others (Arbuckle and Shane, 2016; Meffert et al., 2013) have demonstrated that individuals with heightened psychopathic traits can show increased neural activity within empathy-related regions when asked to try to feel for another person in pain. Thus, the psychopath appears to have an ability to feel concern, and may be chronically unmotivated to do so. The current study employed a well-validated fMRI-based empathic accuracy task (Zaki et al., 2013), within which participants were shown videos of other people, who were either ingroup or

outgroup members, describing positive and negative events from their lives. Participants were asked to continually rate how good or bad they believed the orator felt while describing the events. By comparing the participants' emotionality ratings with the orator's own ratings of their emotional state, the task affords a unique ability to evaluate how accurately the participant can judge another's emotions. To date, 14 participants assessed for psychopathic traits via the Psychopathic Personality Inventory – Revised (PPI-R) have completed the task. Our hypotheses were that those with psychopathic traits would show increased empathy for ingroup and reduced empathy for outgroup members. Thus, individuals with psychopathy may concern themselves more with people that are closer to them, and less with those that are more distant to them. Furthermore, we hypothesized that motivational tendencies would show themselves as neural differences related to the group membership of the target. Preliminary results support these hypotheses: while total PPI-R scores were not related to overall empathic accuracy ($r = -.089$), they showed a positive (albeit non-significant) relationship with empathic accuracy for ingroup targets ($r = .210$), and a significantly negative relationship with empathic accuracy for outgroup targets ($r = -.579$). Similar relationships were found with all three subscales: self-centered impulsivity (total: $r = -.188$; ingroup: $r = .067$; outgroup: $r = -.486$), fearless dominance (total: $r = .115$; ingroup: $r = .424$; outgroup: $r = -.613$), and coldheartedness (total: $r = .019$; ingroup: $r = .247$; outgroup: $r = -.448$). Neural results support these behavioural findings and give further insight into the motivational component of empathy. Along with increased accuracy for ingroup members, those scoring higher on self-centered impulsivity and fearless dominance scales have differential neural activation for those in their ingroup compared to their outgroup, specifically in the amygdala and insula. When viewing videos of ingroup (compared to outgroup) members, those high in self-centered impulsivity and fearless dominance had reductions in amygdala and insula activity. While not explicitly hypothesized, these results may indicate that individuals most able to recognize the others' emotions require less neural activity to accomplish the task. Alternately, it may be that the ability to keep one's own emotions in check may facilitate the understanding of another's emotions. While data collection is not yet completed, these preliminary results give some insight into the motivational component of empathy.

12. *Towards Parsimony and Developmental Consistency in Measuring Psychopathy: A New Oddball Paradigm.* **Emily Perkins**, Florida State University, **Sarah Brislin**, Florida State University, **James Yancey**, Florida State University, **Colin Bowyer**, Florida State University & **Christopher Patrick**, Florida State University, perkins@psy.fsu.edu

According to the triarchic model (Patrick et al., 2009), psychopathy can be characterized as comprising three related but distinct traits: boldness, meanness, and disinhibition. Inspired in part by the National Institute of Mental Health's Research Domain Criteria (RDoC) initiative, recent research has sought to ground our understanding of these dimensional constructs in neurobiological terms across multiple units of analysis, including psychophysiological variables. According to the psychoneurometric approach (Patrick et al., 2013), the inclusion of both self-report and neurobehavioral variables augments both the reliability and validity of our conceptualizations of psychological traits. Therefore, the identification and measurement of psychopathy-related variables on multiple units of analysis helps to further cement our understanding of these traits and may point to potential targets for clinical intervention. Disinhibition is reliably associated with a decrease in P3 amplitude to target stimuli in visual oddball tasks, a brain event-related potential (ERP) response thought to reflect cognitive post-processing (Patrick et al., 2006). Other work with emotion recognition tasks points to decreased amplitude related to meanness for N170, thought to index face categorization, and P2, considered to reflect emotional encoding (Brislin et al., in press). These results underscore the neural bases of salient inhibitory control and affiliative capacity deficits, conceptualized within current accounts of psychopathy as disinhibition and meanness, respectively. However, collecting electrocortical data using both visual oddball and emotion recognition tasks is far from parsimonious and may not be appropriate for direct comparison across age groups, important qualities in any clinical research. This study evaluated two iterations of a paradigm that combined elements of visual oddball and emotion recognition tasks to elicit disinhibition- and meanness-related brain ERPs in two separate undergraduate samples. First, the traditional rotated-heads visual oddball task was altered to include fearful and neutral faces as task-irrelevant "novel" stimuli. Second, a new task was created where all stimuli were faces but varied in frequency by hair color. In the first

iteration, although the “novel” stimuli produced identifiable N170, P2, and P3 components, their amplitudes were not reliably associated with the psychopathy constructs of interest. However, the faces-only task was more successful. These results point to the faces-oddball task as a potentially useful tool in the study of psychopathy from a psychoneurometric approach, eliciting three distinct brain responses that are reliably associated with two salient psychopathic traits, disinhibition and meanness. An additional benefit of the new task is its utility across age groups, as the instructions need not be modified for small children. Therefore, the faces-oddball could fruitfully be employed as a longitudinal tool to examine the neural bases of psychopathy across the lifespan in a brief, noninvasive manner. Overall, the current study examined two versions of a promising new task to collect data on individual differences in neural indicators of psychopathic traits while reducing participant fatigue and negating development-related measurement inconsistencies.

13. *What are core symptoms of criminal psychopathy? A network analysis of the Psychopathy Checklist Revised (PCL-R) in three large samples.* **Bruno Verschuere**, University of Amsterdam, **Sophia van Ghesel Grothe**, University of Amsterdam, **Arjen Noordhof**, University of Amsterdam, **Lourens Waldorp**, University of Amsterdam, **Scott Lilienfeld**, Emory University, **Ashley Watts**, Emory University, **John Edens**, Texas A&M University & **Jennifer Skeem**, University of California, Berkeley, b.j.verschuere@uva.nl.

What is psychopathy? Despite a wealth of research, the core symptoms of psychopathy remain hotly debated. It is, for instance, debated whether criminality is intrinsic to psychopathy, whether boldness is a central feature of psychopathy and whether emotional as opposed to attentional deficits underlie psychopathy. Using network analysis, an innovative and increasingly popular statistical tool, we map the network structure of Psychopathy Checklist Revised (PCL-R) features of psychopathy in two offender samples. Our study is among the first to examine the replicability of network analyses across samples. In two North-American offender samples ($n_{\text{Wisconsin}} = 3963$; and $n_{\text{NIMH}} = 1661$) “Callousness/lack of empathy” was consistently the most central item. In contrast, in a Dutch sample of violent mentally disordered offenders ($n = 2043$), parasitic lifestyle and irresponsibility were most central to the PCL-R network. The findings in the North-American samples align with prototypical ratings of psychopathy, as well as with early theorizing on core features of psychopathy (McCord & McCord, 1964), and Blair’s (1995) Violence Inhibition Model in pointing to the crucial role of “Callousness/lack of empathy” in psychopathy. The convergence between the North-American samples indicates the possibility of replicating and generalizing the results of network analyses. At the same time, the diverging results in the American versus the Dutch samples indicate that (cross-sectional) network-structures do not directly reflect the structure of constructs being studied, but also the specific sample from which the data derive. Specifically, the results may point to differences between forensic psychiatric versus prison samples or to cross-cultural differences in the phenotypic picture of psychopathy.

14. *Developmental precursors of psychopathy using a personality-derived triarchic approach.* **Hailey L. Dotterer**, University of Michigan, **Rebecca Waller**, University of Michigan, **Lora M. Cope**, University of Michigan, **Brian M. Hicks**, University of Michigan, **Joel T. Nigg**, Oregon Health and Sciences University, **Robert A. Zucker**, University of Michigan & **Luke W. Hyde**, University of Michigan, hdotty@umich.edu

Psychopathy refers to a heterogeneous set of harmful traits and behaviors, including superficial charm, callousness, irresponsibility, and antisocial behavior. The triarchic model posits that psychopathy is the combination of three phenotypic constructs: boldness, meanness, and disinhibition, but little research has examined developmental precursors of the triarchic traits. We developed triarchic scales from the NEO Personality Inventory-Revised in a high-risk sample of 561 young adults (ages 17–25; 70.2% male). Correlates and developmental precursors of each scale were examined longitudinally using cross-informant reports from three critical developmental periods (ages 3–5; 9–11; 15–17). We used factor analysis to establish that a bifactor model comprising the three phenotypic constructs and a general psychopathy factor representing shared variance from across the NEO-items showed excellent fit. Higher scores on the general

psychopathy factor were related to greater externalizing and internalizing problems, as well as poor adaptive functioning both concurrently and longitudinally. Boldness was preceded by and concurrently related to greater resiliency and prosociality, as well as fewer internalizing and externalizing problems. Disinhibition was preceded by poorer reactive control and was associated with more externalizing problems and substance use in young adulthood. Finally, meanness was related to lower resiliency and higher internalizing both longitudinally and concurrently.

15. *Dark and vulnerable personality trait correlates of dimensions of criminal behavior among adult offenders.* **Bethany Edwards**, University of South Florida, **Emily Albertson**, University of South Florida & **Edelyn Verona**, University of South Florida, bedwards15@mail.usf.edu

Given the high-level impact of crime, empirical work is needed to identify personality traits, or trait clusters, that may leave individuals more prone to engagement in such behaviors. This study empirically tested the distinction between the dark personality and vulnerable dark personality spectra (Miller et al., 2010) in a large offender sample, and aimed to test how these personality factors relate to criminal dimensions and individual types of crime. Self-report and public record data verified criminal behaviors for 493 (34.7% women) adult offenders, and features of the two personality clusters were assessed using the Psychopathy Checklist: Screening Version, Narcissistic Personality Inventory-16, Hypersensitive Narcissism Scale, and Personality Assessment Inventory: Borderline Scale. Factor analyses broadly supported the distinction between dark and vulnerable dark personality spectra and yielded three dimensions of crime (i.e., crimes against property, crimes against persons, and drug-related crimes). However, relationships between personality traits and crime did not fully support distinct criminal correlates of the dark and dark vulnerable trait spectra. Instead, affective psychopathic traits (dark spectrum feature) were broadly related to engagement in crimes, particularly violent offenses (e.g., murder, assault), whereby crimes involving drug and property offenses were driven more so by impulsive lifestyle psychopathic and borderline personality traits, respectively. Findings warrant further examination, including longitudinal ones, of the extent to which dark personality trait dimensions coalesce as expected or similarly predict high-impact behaviors.

16. *Exploring the relationship between psychopathy and taste perception.* **Mem Mahmut**, Macquarie University & **Breanna Banzer**, Macquarie University, mem.mahmut@mq.edu.au

Previous research indicates higher psychopathic traits are associated with poorer olfactory abilities. Despite the correlation between olfaction and taste perception, only one study has investigated the relationship between psychopathy and taste perception using self-report measures of both psychopathy and taste preferences. To address this gap, the current study examined the relationship between psychopathy and actual taste perception with 80 participants (41 females) who completed a self-report measure of psychopathy and rated four tastants (i.e., bitter, sweet, salty and sour), at four concentrations. For each of the 16 tastants, participants attempted to identify the taste and rated how intense, pleasant and disgusting they found it. The results demonstrated there was no association between psychopathy and taste identification, pleasantness or disgust ratings. However, higher psychopathic traits were associated with higher taste intensity ratings, suggesting psychopathy may be associated with increased taste sensitivity. Reasons for increased taste sensitivity are presented in the Discussion.

17. *Psychopathy facilitates the relative deprivation in combination with low or medium self-esteem.* **Satoru Kiire**, Hosei University, s.kiire0518@gmail.com

Through the review of corporate psychopathy and moral emotion, it is suggested that psychopathy associates with other-directed negative signals of moral emotions (Walker & Jackson, 2016). Other-directed negative signals contain emotions against to someone, like getting back (e.g., anger), disparaging (e.g., contempt), concern feelings (e.g., envy), and schadenfreude. The latter two contents are distinct from the former two contents because these are internal rather than

expressive. It is suggested that the positive relationships between psychopathy and envy or schadenfreude, however, no previous research has investigated the relationship with psychopathy and relative deprivation, which is related to envy (Podder, 1996). Therefore, I tested the relationship in this research as well as the effect of the self-esteem. Seventy Japanese undergraduate students were participated (33 females; $M = 19.1$ years, $SD = 1.02$). Participants completed questionnaires including the LSRP (Levenson et al., 1995, translated by Osumi et al., 2007), Two-Item Self-Esteem Scale (Minoura & Narita, 2013 in Japanese), and Relatively Deprivation Scale (Ochi et al., 2015, in Japanese), on the 7-point scale. Participants also completed the Ten Item Personality Inventory (Gosling et al., 2003, translated by Oshio et al., 2012) as control factors. The multiple regression analysis was conducted to predict the score of Relatively Deprivation. Participants' sex and 5 factors of personality were entered to the model as control in step 1. Primary and Secondary psychopathy (PP, SP) and self-esteem were entered in step 2. Two-way interactions of both psychopathy and self-esteem were entered in step 3. The 3rd model was well fitted ($R^2 = .45$; $\Delta R^2 = .08$, $p < .05$) and the interaction effect of $PP \times$ self-esteem ($b = -.05$, $p < .05$) and the main effect of SP ($b = 0.29$, $p < .05$) were significant. Simple slope analysis showed the positive effect of PP on relatively deprivation only when low and medium self-esteem ($-1SD$: $b = 0.28$, $p < .01$, mean: $b = 0.16$, $p < .05$). This result was consistent with previous researches. Namely, the psychopathy has relation to the relatively deprivation. However, this relationship was not seen in high self-esteem. These results may suggest that envy related with PP when low or medium self-esteem. Therefore, it may be that the psychopathy (especially PP) relates to envy or relatively deprivation when combined with the self-esteem, rather than PP per se.

18. *Seeking arousal in football fields: Hooliganism and its relation with psychopathic traits.* **Georgiou Giorgos**, University of Cyprus, **Eleni Phylaktou**, University of Cyprus & **Kostas Fanti**, University of Cyprus, ggeorgog@ucy.ac.cy

Football hooliganism is a phenomenon related to socio-cultural factors. Despite the importance of these factors, studies also highlight the relation with antisocial behavior. However, only a limited number of studies focused on the personality traits involved in the construction of "hooligan". Specifically, hooligans seem to seek high emotional arousal and excitement, which they can experience through hooligans' activities. They also seem to be a heterogeneous group, consisting of individuals with leadership tendencies and followers. Psychopathic traits are also associated with antisocial behaviors and seeking for arousal. Thus, investigating hooliganism in relation to psychopathic traits will help to understand in more depth how these traits are associated with football related antisocial behavior. The current study sought to investigate whether hooliganism is related with psychopathic traits. We assume that having leadership tendencies is related with callous unemotional (CU) and grandiose traits, while followers are more likely to be characterized by impulsivity and irresponsibility (II). Last, we want to investigate whether high levels of leadership can predict higher level of arrest compared to followers. Four-hundred seventy-three football fans ($Mean = 22.24$; 10.5% women), supporting five different clubs in Cyprus participated in the study. Meetings with the participants were held in fan clubs or neutral areas, ensuring the confidentiality of the participants. During assessment, participants completed questionnaires assessing hooliganism (FHQ) and psychopathic traits (YPI). Regression analysis revealed that CU traits and II can predict hooliganism, however results did not verify the same outcome for grandiosity. In addition, both being follower or leader significantly predicted high levels of CU traits and II. However, leading was more strongly associated with CU traits ($b = .33$) compared to II ($b = .12$) while following with higher levels of II ($b = .30$) compared to CU traits ($b = .16$). Lastly, findings show that leading predicted higher levels of arresting while following could not significantly predict arresting. Our findings shed light on a well discussed but with limited research evidence assumption, revealing the relation of hooliganism with psychopathic traits and supporting the heterogeneity of this group. We proposed that hooligans with leadership tendencies exhibit higher level of CU traits and are at higher risk to be arrested, whereas followers tend to be more impulsive and irresponsible. By that, we are adding a new perspective in understanding the phenomenon of hooliganism, proposing that prevention and anti-hooliganism campaigns should take in account psychopathic personality factors, in their effort to address this phenomenon.

19. *Self-regulation, cognitive capacity and risk taking: Differentiating callous-unemotional adolescents with and without conduct problems.* **Mariza Hadjicharalambous**, University of Cyprus & **Kostas Fanti**, University of Cyprus, mz.hadjicharalambous@gmail.com

The majority of prior work focuses on understanding the association between callous unemotional (CU) traits and conduct problems, providing limited information on why some youth score high on CU traits but do not engage in conduct problem behaviors. The current study investigated heterogeneity in CU traits in a sample of 150 adolescents ($M_{age} = 13.09$, $SD = 2.76$, 45.6% female), by comparing three groups: control, callous-unemotional traits only (CU-only), and combined callous-unemotional and conduct problems (CU+CP). Participants were administered neuropsychological computerized tasks assessing risk taking, self-regulation and cognitive capacity. Results showed that youth in the CU-only group were more self-regulated and were less likely to make risky decisions compared to those in the CU+CP group. In general, the findings provide information for heterogeneity within CU traits, possibly on neuro-cognitive predisposal. In addition, the characteristics of the CU-only group can provide information for interventions aiming to decrease conduct problems among high risk youth.

20. *Assertive and unapologetic: Impression management style and psychopathic personality traits.* **Alice Jones Bartoli**, Goldsmiths, University of London, **Rachel Nesbit**, Royal Holloway, University of London & **Dawn Watling**, Royal Holloway, University of London, a.jones@gold.ac.uk

Impression management strategies allow individuals to present themselves in the way that they wish to be perceived by others. This study aimed to test the hypothesis that psychopathic personality traits would be associated with a distinct profile of impression management strategies, specifically comprising more assertive strategies, and fewer defensive strategies. Our secondary aim was to explore whether psychopathic personality traits and fear of negative evaluation (FNE) differentially predict reputation management strategies. 157 adults completed the Psychopathic Personality Inventory-Revised (PPI-R, 40-item form; Eisenbarth, Lilienfeld, & Yarkoni, 2015), the Fear of Negative Evaluation (Leary, 1983) and the Self-Presentation Tactics Scale (Lee, Quigley, Nesler, Corbett, & Tedeschi, 1999). Results supported hypotheses, with hierarchical regression analyses indicating that PPI-R scores were associated with assertive impression management strategies, but not defensive; and that FNE was associated with using defensive impression management strategies, but not assertive. These findings shed light on the strategies used by individuals with elevated psychopathic personality traits, and allow us to better understand their behaviour in the social environment.

21. *Psychopathic traits linked to alterations in cortical midline activity during personality judgments of self and others.* **Philip Deming**, University of Wisconsin-Madison, **Carissa Phillipi**, University of Wisconsin-Madison, **Rick Wolf**, University of Wisconsin-Madison, **Monika Dargis**, University of Wisconsin-Madison, **Kent Kiehl**, MIND Research Network, University of New Mexico & **Michael Koenigs**, University of Wisconsin-Madison, pmdeing@wisc.edu

Psychopathic individuals are notorious for their grandiose sense of self-worth and disregard for the welfare of others. One potential psychological mechanism underlying these traits is the relative consideration of “self” versus “others”. Specifying the patterns of brain activity underpinning self- versus other-focused thought in psychopathy could thus help illuminate the neuropsychological basis of the disorder. In a large sample of incarcerated offenders ($n = 57$), we used task-based functional magnetic resonance imaging (fMRI) to identify neural responses to judgments about oneself and a familiar other. Regression analyses related fMRI data to distinct “Factors” of psychopathy. Factor 1 is composed of interpersonal (e.g., egocentricity) and affective (e.g., lack of empathy) traits, while Factor 2 is composed of lifestyle (e.g., impulsivity) and antisocial (e.g., criminal versatility) traits. As hypothesized, Factor 1 scores correlated with greater activation to self-judgments, and decreased activation to other-judgments, in the left medial prefrontal cortex. Additionally, Factor 2 traits

were associated with diminished activation to self-judgments, in relation to other-judgments, in the left posterior cingulate cortex. These findings highlight cortical regions associated with a dimension of social-affective cognition that may underlie psychopathic individuals' egocentricity, callousness, and impulsivity.

22. *Unique and shared variance of callous-unemotional traits and low prosocial behaviour: Testing a bifactor model.* **Alan Meehan**, King's College London, alan.meehan@kcl.ac.uk

Interpersonal callousness (IC) and low prosocial behaviour are related phenotypes, to the extent that certain studies have incorporated 'low prosocial' (here termed LPS) items into measures of IC. To date however, the extent to which the shared and unique variance underlying IC and LPS differentially relate to risk factors and developmental comorbidities has yet to be fully investigated. Using confirmatory factor analyses on age-13 data from the Avon Longitudinal Study of Parents and Children (ALSPAC; UK), a large epidemiological birth cohort, we estimated a bifactor model, capturing the shared (i.e., IC/LPS) and unique variance underlying IC and LPS factors. We then examined bivariate and multivariate associations between IC/LPS, IC and LPS and: (i) prenatal and early childhood risks; (ii) psychiatric comorbidities; (iii) peer relationships; and (iv) cognitive and emotional indicators. The addition of a general factor (IC/LPS) offered a significantly improved fit compared to a two-factor model of IC and LPS. IC/LPS was associated – at the greatest magnitude – with the widest range of risk factors and psychosocial correlates. Elsewhere, IC was distinct from LPS in that it was associated with prenatal and postnatal environmental risk, fearless temperament (age 2), anxiety/depression (age 7-13), and direct victimization and relational bullying (age 8-10), whereas LPS was not. LPS, in turn, was uniquely associated with lower maternal warmth (birth-age 4) compared to IC. Our findings indicate that research that combines IC and LPS may tap into a severe psychiatric and psychological phenotype. However, the unique variances attributable to IC and LPS do show distinct profiles of risk, comorbidity and social-emotional functioning.

23. *Measuring the Triarchic Constructs using the HEXACO-100.* **Jared Ruchensky**, Texas A&M University, **M. Brent Donnellan**, Texas A&M University & **John Edens**, Texas A&M University, jruch34645@tamu.edu

The Triarchic Model of psychopathy (Patrick et al., 2009) identifies three personality dimensions (i.e., boldness, meanness, and disinhibition) as fundamental for understanding this disorder. These dimensions can be assessed using items from existing measures of personality (Brislin et al., 2015). The current work describes efforts to create measures of these constructs using items from the HEXACO-100 (Lee & Ashton, 2016), a normal personality measure that has been previously linked to psychopathy (e.g., Lee & Ashton, 2014). HEXACO-based scales were internally consistent, convergent with scales designed to measure the Triarchic constructs, and associated with criterion variables in ways predicted by theory. This work provides a new assessment tool and further elaborates the nature of the Triarchic constructs. Data for refining and validating new scales were drawn from the responses of 550 undergraduates from a large public university. Participants completed the HEXACO-100 and the Triarchic Psychopathy Measure (TriPM; Patrick, 2010). We also included indicators of psychological adjustment (Life Satisfaction Scale), social dominance (MPQ Social Potency scale), impulsivity (Short UPPS-P Impulsive Behavior Scale), personality pathology (abbreviated Personality Inventory for DSM-5), and interpersonal deficits related to absence of empathy (a scale from the Interpersonal Reactivity Index). Data were collected via online survey and approved by the university's Institutional Review Board. Experts (5 graduate students and 1 PhD-level researcher) rated the HEXACO-100 items for relevance to the Triarchic Model. Items were included on the new scales if five or six experts rated the item as strongly representing high or low levels of the construct. Initial scales were refined by considering correlations with the TriPM scales and internal consistency indices. The provisional HEXACO-Triarchic scales had acceptable internal consistencies ($\alpha = .72-.77$) and convergent ($r = .65-.78$) and discriminant ($r = .00-.24$) validity with the TriPM. Scales also exhibited relations with correlates as expected and largely similar to the TriPM (average difference in $r = .00-.10$). For example, HEXACO-Boldness correlated with social dominance s ($r = .49$) and low negative affectivity ($r = -.52$), whereas HEXACO-Meanness was related to callousness ($r = .46$) and a lack of empathy ($r = -.67$). Results suggest these scales are promising measures of the Triarchic constructs and

will allow researchers to reanalyze previous datasets with HEXACO-100 responses to provide additional insight into the Triarchic constructs. Additional data to further validate the scales will be collected in spring 2017.

24. *The influence of psychopathic traits on scores and behavior in the prisoner's dilemma.* **Mary Baggio**, University of Nevada, Los Vegas & **Stephen Benning**, University of Nevada, Los Vegas, baggio@nevada.unlv.edu

Psychopathy is a disorder characterized by antisocial behavior, emotional impairment, and interpersonal deficits. There is evidence that suggests uncooperative behavior may be one manifestation of the unstable interpersonal functioning, however, there have been inconsistent findings in the literature using Prisoner's Dilemma games to study social cooperation in psychopathy. The current study investigated this in the fearless dominance (FD) and impulsive antisociality (IA) factors of psychopathy in a sample of 177 undergraduates using an iterated Prisoner's Dilemma. We analyzed participant's scores, differences between participant and computer scores, and participant's decisions from the Prisoner's Dilemma game. We examined these variables in the experiment overall, after participant cooperations and defections, and after computer cooperations and defections. Overall, IA was associated with a reduced difference between participant and computer scores. After participant's own cooperation, those higher in FD scored higher than their opponents and were more likely to defect, whereas those higher in IA scored equal to or lower than their opponents and were more likely to cooperate. Also, decisions mediated the relationship between IA and differences between participant and computer scores and tended to mediate the relationship between FD and differences between participant and computer scores. Thus, these factors are related to social cooperation in opposing ways which informs potential future directions for research and may inform important clinical/practical considerations.

25. *The construct of psychopathic personality in early childhood: The Child Problematic Traits Inventory.* **Chara Demetriou**, University of Cyprus, **Kostas Fanti**, University of Cyprus, **Henrik Andershed**, Orebro University & **Olivier Colins**, Leiden University, demetriou.chara@ucy.ac.cy

Psychopathy, as described in adult samples, is a multidimensional syndrome which contains a number of extreme interpersonal, affective and behavioral traits. These traits have been identified not only in adult populations, but also in non-referred children and adolescents of the general population. High scores on all of these dimensions are frequently correlated with more conduct problems and disturbing behavior. An important mission of this research is to effectively assess these traits early in life and to test their relationship with other behavioral and emotional parameters. Although, a critical question is how far down in ages this construct can be and should be. In order to improve diagnostic procedures and promote more effective prevention practices of the development of disruptive and antisocial behavior, the current study aims to gain a deeper insight into the identification of children with psychopathic personality traits during early childhood. More specifically, the present study seeks to investigate the potential association of Grandiose, Callous Unemotional and Impulsive-Need for Stimulation factors with external constructs of interest based theories, namely: conduct problems, cognitive and affective empathy, prosocial behavior, peer relations, and contextual variables such as parental style and distress. Participants in the present study were 850 Greek-Cypriot children, between the ages of 3 and 9, from 47 kindergartens and 69 primary schools in Cyprus. In particular, each child was independently rated on a battery of questionnaires by both parents and teacher. Correlations and Linear Regression analyses suggested that Grandiose-Deceitful and Callous Unemotional dimensions of the psychopathic personality are shown to predict significantly decreased levels of both affective and cognitive empathy, when Impulsivity and Need for Stimulation dimensions predicted negatively only the cognitive dimensions of empathy. Additionally, the behavioral dimensions are shown to predict all those children showing high rates on impulsivity, need for stimulation, sensation seeking, proneness to boredom, parasitic lifestyle, lack of realistic long term goals, and irresponsibility. According to parenting practices, psychopathic personality is negatively correlated with parental involvement and positive parenting, when it shows higher positive correlations with poor monitoring, inconsistent discipline and corporal punishment. With reference to teachers' ratings, the behavioral

dimensions of psychopathic personality are negatively correlated with prosocial behavior, when positively correlated with relational and overt aggression. The other findings and the implications will be discussed.

26. *Latent profiles of antisocial behaviour in a male offender sample.* **Josi Driessen**, Radboud University, **Kostas Fanti**, University of Cyprus, **Craig Neumann**, University of North Texas, **Jeffrey Glennon**, Radboud University Medical Center, **Arielle Baskin-Sommers**, Yale University & **Inti Brazil**, Radboud University, j.driessen@donders.ru.nl

Antisocial behaviour is a heterogeneous construct and is generally associated with antisocial personality disorder (APD) and psychopathy. Currently, the main approach to differentiate between APD and psychopathy is by using the Psychopathy Checklist-Revised (PCL-R) which is a clinician-rated measure to assess psychopathic features (Hare, 2003; Hare & Vertommen, 1991). A growing body of evidence suggests that psychopathy consists of different variants (Skeem, Poythress, Edens, Lilienfeld, & Cale, 2003) and a considerable amount of research focused on identifying these psychopathic subtypes. However, most studies include offenders with high psychopathy scores, are hypothesis-driven and based on the PCL-R measures. The current study investigated antisocial subtypes in a general male offender sample based on a self-report measure of psychopathy (SRP; Paulhus, Neumann, & Hare, 2015). Latent profile analysis identified four antisocial profiles: (1) Generic offenders, (2) Antisocial trait offenders, (3) Impulsive-intermediate offenders, and (4) Psychopathic trait offenders. These profiles were supported by findings on external variables concerning anxiety, affectivity, and delinquency. Overall, these results were in line with previous findings that were based on PCL-R scores (Hare, 2016). Furthermore, our results support the validity and applicability of the SRP.

27. *The influence of psychopathy, motivation and vengeance on punishments of crime.* **Leah Efferson**, University of Alabama & **Andrea Glenn**, University of Alabama, lefferson@crimson.ua.edu

The purpose of this study was to examine the motivations that those higher in psychopathic traits use to punish others in criminal contexts. Those higher in psychopathic traits have been shown to be less retributive when punishing a murderer (Aharoni, Weintraub, & Fridlund, 2007) and this study examined if that relationship can be generalized to a variety of crimes. Those higher in psychopathy have been shown to be more vengeful in personal mistreatments (Book & Quinsey, 2004) and this trait vengeance is associated with more retributive punishments and increased support for the death penalty for offenders (McKee & Feather, 2008). Given this, we also explored the influence of trait vengeance on the relationship between psychopathic traits and punishment allocations. Using self-reports, results found those higher in psychopathic traits allocated less harsh punishments than those lower in psychopathic traits and this was driven by Factor 1 traits. Trait vengeance did not moderate the relationship between psychopathic traits and punishments. Those higher in psychopathic traits were less motivated by behavioral control motivations and there was no association between psychopathic traits and retributive motivations. These findings have implications for how jurors' psychopathic traits may affect their punishment allocations in criminal court.

28. *An fMRI study of affective introspection in children with conduct problems and varying levels of callous-unemotional traits.* **Arjun Sethi**, University College London, **Elizabeth O'Nions**, University College London, **Ruth Roberts**, University College London, **Geoff Bird**, University of Oxford & **Essi Viding**, University College London, a.sethi@ucl.ac.uk

Empathising partly relies on using our own affective experience to simulate others' and is supported by a number of brain areas including the insula, anterior cingulate cortex (ACC), medial prefrontal cortex (mPFC), and amygdala (Bird & Viding, 2014). Our study focused on identifying brain areas co-activated during affective introspection of others' and ones' own emotions and whether boys with conduct problems and high or low levels of callous-unemotional traits (CP/HCU, CP/LCU) differed from their typically developing (TD) peers in the brain areas recruited. 95 boys (31 TD, 31 CP/HCU

and 33 CP/HCU) listened to fear inducing and neutral scenarios accompanied by static images during fMRI scanning and introspected how a) they would feel in this situation ('own emotions' condition), b) how J (a fictional boy) would feel in this situation ('other emotions' condition), or c) how they would feel for J in this situation ('own for other' condition). fMRI data were realigned, co-registered and smoothed (8mm FWHM) using SPM8. The fear-neutral contrast for each condition was entered into conjunction analyses to identify areas commonly activated during affective introspection in each group. The conjunction of each condition ('own emotions', 'other emotions', 'own for other') within the TD group revealed significant clusters ($p < 0.005$, $k > 75$) within the insula, ACC/mPFC, and occipital cortex. Conjunction analyses in the CP/HCU and CP/LCU groups did not identify these areas. Follow-up analyses showed that only occipital cortex activation was statistically significantly lower in CP/HCU and CP/LCU, compared to the TD group ($p = 0.041$; $p = 0.008$). Follow-up analyses using Bayes factor suggested substantial support for accepting the null hypothesis for the insula for the CP/LCU compared to the TD group ($BF_{10} = 0.28$), but support for null could not be confirmed for the CP/HCU group. Moreover, the null hypothesis could not be accepted with certainty in the ACC/mPFC in either group, but could be rejected in the occipital lobe (CP/HCU: $BF_{10} = 3.63$; CP/LCU: $BF_{10} = 19.08$). TD kids show reliable differentiation between processing of fear and neutral scenarios in a number of brain areas including insula, ACC/mPFC, and occipital cortex. This is not seen in either group of children with CP, but direct comparisons between groups could not definitively reject or support group differences (except in occipital cortex). Many previous studies demonstrating group differences within brain areas involved in affective introspection have used incidental affect processing tasks, rather than tasks requiring active introspection. Future studies need to contrast incidental and deliberate processing of affect in these groups.

29. *Attention towards emotional stimuli predicts empathy*: : An alternative explanation on the origin of psychopathic traits and callousness in childhood. **Jacopo de Angelis**, Goldsmith, University of London & **Alice Jones Bartoli**, Goldsmiths, University of London, jdeanor12@goldsmithscollege.onmicrosoft.com

Previous literature indicated that human beings tend to be more attracted by socio-emotional than neutral stimuli. This ability was defined emotional attention and its neural site was found in the amygdala (Vuilleumier, 2005). People and children with psychopathic traits (callous-unemotional traits) were demonstrated to show an atypical emotional attention pattern that consists in a lack of automatic predisposition of being captured by emotional details (Blair & Mitchell, 2009). Nevertheless, there is no evidence clarifying the interplay between this attentional pattern and the core deficit typically observed in this population, that is a strong empathy deficit. In relation to this, our assumption takes into consideration the possibility that emotional attention is a precursor of the ability of empathizing, but also that this interplay is strongly mediated by the ability of recognizing others' emotion, since empathizing depends on the recognition of others' emotional states as well as emotion recognition depends on the ability to allocate automatically attention on socio-emotional details (e.g. face, eyes etc.). As a consequence, emotional attention dysfunction is likely to predict empathy difficulties and callousness. We recruited 27 children from London primary schools (mean age = 10 ± 1.4 ; $F = 44.4$ %). Exclusion criteria included learning disability, low cognitive abilities or ADHD diagnosis. Participants were asked to carry out a computerized tasks assessing the presence of attentional biases towards emotional, social and neutral stimuli (i.e. Dot-Probe paradigm), an emotion recognition task inspired by the UNSW-Emotion Recognition Task (Dadds et al., 2004), and two self-report questionnaires assessing the empathy level, Basic Empathy Scale (BES), and the presence of psychopathic traits, Inventory of Callous-Unemotional Traits – Self-report Youth Version (ICU-Self-Report Youth Version). Preliminary data partially supported our assumption. Specifically, attention towards emotional stimuli was significantly and positively associated with BES scores and negatively associated with ICU scores, though the latter relationship was not significant. Interestingly, no significant relationship between attention towards social stimuli and empathy was found: this probably depends on the fact that the emotional valence of the stimulus, rather than the mere social valence, is a stronger predictor of empathy. Also, no association between emotion recognition, attention towards socio-emotional stimuli, BES and ICU scores was found. Finally, a strong negative correlation between ICU scores and

BES scores was found as already reported by several studies on callousness in children (e.g. Frick & White, 2008). Our data are going to demonstrate the plausibility of a model clarifying the predictive interplay between attention towards emotional stimuli (i.e. emotional attention) and empathic skills in children psychopathy. However, other data are needed to corroborate our assumptions, with particular regards to the role played by emotion recognition.

POSTER SESSION 2

TUESDAY, May 23: 6:00-7:30p (Entrance Hall & Room MOL 1.02, Campus Sanderus)

1. *Not so antisocial: Personality and environmental factors that promote prosocial punishment.* **Susanne Estrada**, Yale University, **Michael Stagnaro**, Yale University, **Yarrow Dunham**, Yale University, **David Rand**, UNI & **Arielle Baskin-Sommers**, Yale University, susanne.estrada@yale.edu

Research using economic decision-making games has examined factors that influence the malleability of prosocial and antisocial behavior. However, little of this research used individuals who actually engage in real-world antisocial behavior. The present study administered six economic games to an unselected community sample enriched for antisocial behavior before and after completion of a prime designed to train cooperation (Peysakhovich & Rand, 2016). Participants played a series of five economic games to assess baseline decision-making. Then, after a 20-minute break, participants completed a cooperation prime consisting of an iterated series of prisoner's dilemma games designed to train individuals on cooperation. Upon completion of this prime, participants completed the first set of economic games a second time in order to assess performance shift. Personality pathology and environment (exposure to violence [ETV]) were the primary predictors of interest. Results revealed that game decisions clustered into two principal components: prosocial cooperation (i.e., giving money to others, returning money to others) and prosocial punishment (i.e., punishment of antisocial behavior in others). Self-report callous affect significantly predicted higher levels of prosocial cooperation ($p = .037$) while self-report criminal tendencies ($p = .046$) and ETV ($p < .05$) were both predictors of engagement in higher levels of prosocial punishment. What is more, cooperative behavior at the first assessment point predicted cooperative behavior at the second assessment point. This relationship was mediated by training on a cooperation prime such that higher levels of learning during the prime were positively related to cooperation at the second assessment point. However, ETV moderated this relationship such that individuals high on ETV were less likely to learn to cooperate through the prime and thus were less cooperative at the second assessment point (95% CI for the indirect effect 0075, .0996). Given these specific factors, more attention should be paid to integrative strategies that promote an ethos of cooperation. This may be particularly important among individuals whose development of this ethos has been stifled by complex personality-environmental factors that militate against cooperation.

2. *Psychopathy.Comp: The design of a Compassion Focused psychotherapeutic intervention to treat young offenders with psychopathic traits.* **Diana Riberiro da Silva**, University of Coimbra, **Daniel Rijo**, University of Coimbra, **Randall Salekin**, University of Alabama & **Paul Gilbert**, University of Derby, diana.rs@fpce.uc.pt

Psychopathy is characterized by a set of interpersonal (e.g., grandiose-manipulative), affective (e.g., callous-unemotional), and behavioral (impulsive-irresponsible) deviant traits. Though frequently described as a high-risk condition difficult to treat, some studies support the idea that psychopathic traits are more changeable if treated properly during childhood/adolescence. Consequently, the treatment of psychopathy has been receiving increased attention by clinicians and researchers. However, treatment outcome research has been conducted without the support of therapeutic interventions specifically tailored for young offender's psychopathic traits. Additionally, any Randomized Controlled Trial (RCT) has yet been conducted to test for the treatment outcomes in this population. Compassion Focused Therapy

(CFT) is considered an effective third wave cognitive-behavioral intervention in the treatment of several psychopathologies, some of them previously considered difficult to treat. Though never tested in psychopathy, CFT seems to be an appropriate approach for the treatment of young offenders with psychopathic traits. Most young offenders with psychopathic traits were raised in environments marked by high rates of trauma exposure and by the lack of warmth and safeness experiences, which, within the lens of a CFT approach, lead the minds of these youth to be calibrated by and for such environments. Specifically, it seems that young offenders with psychopathic traits tend to present: an overdeveloped threat system (highly focused on protection and safety); an unbalanced drive system (focused on rewarding and risk taking behaviors); and an underdeveloped soothing system (characterized by little investment on caring and affiliative relationships and behaviors). These youth also seem to become more likely to handle unpleasant emotions by externalizing coping strategies, like avoidance (i.e., denying or numbing unpleasant emotions) and/or attack others (i.e., turning anger outward). Finally, these youth appear also to think and behave mainly under the influence of a social rank mentality (i.e., competing to pursuit social power, status, and control over the others) and to present great difficulties in empathy and mostly in compassion. This poster presents the design of a research project aiming to test the efficacy of CFT in the treatment of young offenders with psychopathic traits. Specifically, this poster shows: (a) a twenty-session CFT program, designed to meet the intervention needs of young offenders with psychopathic traits and (b) the RCT design. Clinical and research implications will be discussed, namely concerning why and how CFT may be a path that is worth to investigate in the treatment of young offenders with psychopathic traits.

3. *Perception of psychopathy at zero acquaintance.* **Christina Bader**, Ulm University, **Sally Olderbak**, Ulm University & **Sabina Kleitman**, University of Sydney, Christina.bader@uni-ulm.de

Lilienfeld and Patrick (2009) were the first to show that, based on short video clips of a person talking (5-10 seconds), external raters could accurately detect the targets' level of psychopathy. Holtzman (2011) extended this research and, presenting morphed photographs representing the "average" face of persons high or low on psychopathy, also found external raters could reliably identify the psychopathic face. We attempt to replicate and extend their work through a further investigation of this effect, focusing on three new research questions. First, to what extent are ratings of psychopathy affected by ratings of other traits (e.g., attractiveness and masculinity)? Second, what facial features predict higher ratings of psychopathy and what is the role of emotional expressions? Third, how do the cognitive abilities and personality traits of the responders affect ratings? We investigated these questions in two studies ($n_1 = 111$, $n_2 = 125$) where participants rated targets on several items, including the 12 items of the Psychopathy Checklist: Short Version, as well as attractiveness, masculinity, and extraversion. Targets were 18 to 60 years old, selected from a male forensic sample, and either expressed a single emotion (Study 1), or were presented in a series of pictures expressing the basic emotions (Study 2). We use social relations modelling to partition variance in ratings due to responder and target effects, investigating the extent to which ratings are driven by ratings of other traits (i.e., halo effects). In addition, applying geometric morphometrics to assess patterns in facial asymmetry, as well as software to code facial expressions of emotion, we identify facial features associated with ratings of psychopathy. Finally, we test the extent to which cognitive abilities, including emotion perception, as well as certain personality traits are associated with an improved ability at identifying which targets were psychopaths. Implications will be discussed.

4. *Social Judgement Task: Assessing understanding of how instrumental antisocial acts are perceived by children with conduct problems and different levels of callous-unemotional traits.* **Ruth Roberts**, University College London, **Eamon McCrory**, University College London, **Linda Roberts**, Red River College, **Nicole de Lima**, Cardiff University, **Harriet Phillips**, University of Bath, **Rachael Lickley**, Royal Holloway, University of London, **Molly Sharp**, University College London & **Essi Viding**, University College London, r.roberts@ucl.ac.uk

Children with conduct problems (CP) can engage in instrumental antisocial acts and in particular those with high levels of callous-unemotional traits (CP/HCU) show little remorse for their actions. Instrumental antisocial behaviours may, in part,

result from atypical processing of socially relevant information. Alternatively, a child might process the socially relevant information in a typical fashion, but not care about the consequences of their actions. We investigated whether children with CP and different levels of CU (HCU vs. LCU) have difficulty in processing how instrumental antisocial actions are perceived by others or whether they are perfectly accurate in their perceptions but simply do not care about making a favourable impression. We designed a novel measure called the Social Judgement Task (SJT), which presents children with a series of illustrated stories describing an instrumental antisocial interaction with a peer. The children were asked what others would think of them if they engaged in the interaction described in the story and how likely they would be to engage in the interaction. To date we have tested 62 boys aged 11-16 (Typically developing (TD) $n=15$, CP/HCU $n=22$, (CP/LCU) $n=25$) using the SJT. Data collection is ongoing and due to be completed in April 2017. Given previous research showing intact theory of mind in CP/HCU children, we predict that the CP/HCU group will know that others would view an antisocial action unfavourably and therefore look similar to the TD group in making predictions about others' point of view. As past research has demonstrated that children with CP/HCU know that their actions are wrong but do not feel bad about them, we predict that CP/HCU will be more likely than TD group to report that they would engage in the antisocial action. Given that CP/LCU children are prone to reactive aggression and can feel remorse and anxiety over the consequences of their actions, we predict that the CP/LCU and TD groups are similar in their prediction of others' point of view and report comparable likelihood of engaging in instrumental antisocial acts. These findings will have implications for understanding how different groups of children with CP understand the impact of antisocial actions and the degree to which they care about the consequences of antisocial behaviour.

5. *Ethnic differences in the psychopathy checklist-revised (PCL-R): An Item Response Theory analysis for White, Black, Indigenous and Hispanic samples.* **Seung Lee**, Carleton University & **Adelle Forth**, Carleton University, seunglee@email.carleton.ca

The Psychopathy Checklist-Revised (PCL-R; Hare, 2003) is one of the most frequently used measures in forensic practice to inform criminal justice system decisions (e.g., violent or sex offender risk, sentencing, or civil commitment; Hurducas et al., 2014; Neal & Grisso, 2014). The issue of cultural bias in psychological testing (e.g., intelligence tests for Blacks) has a long history in the multicultural Western societies. Given the large populations of ethnic minorities in criminal justice systems, more information on the cross-cultural validity of PCL-R is needed. One potential bias across different ethnic groups in measures is the *items bias* (i.e., Reynolds, 2000; van de Vijver & Tanzer, 2004). An item is biased if persons from a different cultural background with the same score on the construct (i.e., psychopathy) do not have the same expected score on the item (Shepard et al., 1981). Relatively little research has addressed the potential cultural item bias of PCL-R with different ethnic minority groups (e.g., Cooke et al., 2001). The purpose of this study was to examine whether PCL-R items exhibit differential item function (DIF) within four different ethnic groups: White ($n = 3,679$), Black ($n = 1,823$), Indigenous ($n = 383$), and Hispanic ($n = 140$). Graded response modeling (GRM) and Generalized Partial Credit Model (G-PCM) for polytomous response data were implemented for IRT (R package 'mirt'). Overall, the slope parameter α estimates (discrimination power of items) were moderate (ranging from 0.69 for Hispanic from G-PCM to 1.30 for Indigenous from GRM). Factor 1 items displayed better discrimination power than Factor 2 items ($M = 1.24$ vs. 0.86). To detect DIF, a hybrid iterative technique was used that combines logistic regression and IRT (R package 'lordif'; Choi et al., 2011). Almost all PCL-R items (19 of 20) showed differential functioning across the four different ethnic groups (p values $< .01$ from χ^2 test; Zumbo, 1999). Given that χ^2 test is, however, largely dependent on sample size and increases the chance of Type I error (Cohen, 1988), McFadden's pseudo R^2 values were used for model comparison and DIF item identification (Jodoin & Gierl, 2001). Only two DIF items (Need for stimulation and Pathological lying) were identified (McFadden's R^2 's $> .02$; a critical value for a small effect size; Cohen, 1988). All other items function equally across the different ethnic groups. We will discuss which group(s) contributed to the significant difference on the DIF items.

6. *From the Mouths of Survivors: A Qualitative Analysis of the Impact of Psychopathic Individual on Intimate Partners.* **Mary Ritchie**, University of Western Ontario, **Ester Deck**, Carleton University & **Adelle Forth**, Carleton University, mritchi6@uwo.ca

“Monsters are real, evil exists”. Despite a growing literature investigating the construct of psychopathy, those victimized by psychopathic individuals have largely been neglected. To date, only one published study has qualitatively examined the experiences of these victims (Kirkman, 2005), focusing on female victims previously involved in intimate, heterosexual relationships. These women reported similar experiences over the course of their relationships (e.g., quick progression, infidelities, emotional abuse), many of which Kirkman (2005) considered to be warning signs. Given the lack of research, the current study sought to further explore the experiences of those previously involved in intimate relationships with psychopathic individuals. A sample of 40 males and females were recruited through a posting on the Aftermath Society and asked to rate their ex-partner’s level of psychopathy using a modified version of the Self-Report Psychopathy Scale (Paulhus et al., in press) and Triarchic Psychopathy Measure (Patrick, 2010). Additionally, participants were asked to complete a 1 to 2 hour semi-structured interview delving into experiences that occurred during the relationship (e.g., warning signs, familial concerns, abuse), the subsequent impact of the relationship (e.g., mental, physical, financial), and the availability and effectiveness of support. All interviews have been completed and are currently being transcribed and analyzed qualitatively. Preliminary analyses of a subset of interviews have revealed similar themes to Kirkman (2005; e.g., infidelity, quick progression, emotional abuse). In terms of impact, several participants reported mental and physical health problems, a loss of identity, and a fear of forming new relationships. While a number of participants received support from family and friends, many felt “overwhelmingly depressed” that no one fully understood. Several participants recognized the need for better education and awareness regarding emotional abuse and psychopathy, as well as the creation of forums to connect with other survivors. While numerous participants raised concerns regarding the lack of legal support for those dealing with psychopathic individuals, one quote stands out: “My first sexual encounter was rape [...] but nothing in my whole life has been like this [emotional abuse], and I don’t understand how in this day and age, when there is knowledge that such a thing exists and consequences for pedophiles and sexual abusers, how there are no consequences for psychopaths”. The current study not only provides a voice for those who have been overlooked by empirical research, but also provides guidance as to the type of support that may benefit those victimized by psychopathic individuals.

7. *Any way you slice it: Cavum septum pellucidum as a marker for psychopathic traits but not antisocial behavior.* **Dana Crooks**, University of New Mexico, **Nathaniel Anderson**, The MIND Research Network, **Matthew Widdows**, The MIND Research Network & **Kent Kiehl**, The MIND Research Network/University of New Mexico, nanderson@mrn.org

Cavum septum pellucidum (CSP) is a neuroanatomical variant of the septum pellucidum that is considered a marker for disrupted neural development of the limbic system. Several reports have indicated associations between CSP and a number of psychologically and behaviorally relevant traits including aggression, antisocial behavior, and psychopathic traits. Owing partially to variation in methodology, estimates of CSP in the general population are highly variable and findings have been mixed regarding the precise relationship between CSP, antisocial behavior, and features of psychopathy. The present study evaluated the incidence of CSP via structural MRI among 1652 adult male inmates who had also been scored for psychopathic traits using the Hare Psychopathy Checklist Revised (PCL-R). A comparison sample of 208 non-incarcerated adult males was also evaluated for CSP. Multiple methods of quantifying CSP are evaluated. Our findings indicate that CSP is no more prevalent among incarcerated individuals than among non-incarcerated individuals. CSP size, however, is proportionally related to psychopathic traits among inmates. Notably, Factor 1 of the PCL-R (comprising affective/interpersonal traits) was significantly correlated with the size of CSP, while Factor 2 (comprising lifestyle/antisocial traits) was not. These results are consistent with well-supported relationships between psychopathic

traits and pathophysiological abnormalities in the limbic system. These findings simultaneously underscore important ontological differences between antisocial behavior, per se, and psychopathic traits as a neuropsychological disorder.

8. *Psychopathic Traits Positively Correlated with Brain Activity in Community-Recruited Adolescents.* **Rheanna Remmel**, University of Alabama, **Andrea Glenn**, University of Alabama, **Thomas DeRamus**, University of Alabama-Birmingham, **Jose Omar Maximo**, University of Alabama-Birmingham & **Rajesh Kana**, University of Alabama-Birmingham, rjremmel@crimson.ua.edu

Psychopathic traits in adolescents, and their relationship to moral reasoning, have been less extensively studied than in adults. Moral reasoning is an area ripe for further study because of its potential relationship to decision making in situations where an individual might have to decide between prosocial and antisocial behavior; with impaired moral judgment or reasoning, an individual might be more likely to act antisocially. Previous research in adults and incarcerated adolescents has suggested negative relationships between psychopathic traits and brain activity in limbic and prefrontal areas. In the present study, the neural correlates of moral judgment were investigated in relation to psychopathic traits using fMRI. Twenty-three healthy adolescents (11-17 years) were recruited from the community. In the MRI scanner, participants rated a series of pictures on the severity of moral violation of a 1-4 scale. Youth Psychopathic Traits Inventory (YPI) total scores were regressed onto brain functioning when comparing morally laden pictures to non-morally laden pictures. Unlike findings from adult samples, youth with higher psychopathic traits demonstrated increased brain activity in the orbitofrontal cortex and anterior cingulate, as well as increased brain activity in the amygdala when moral images were compared to neutral images. Data suggest specific deficits frequently seen in adults with psychopathic traits may not be present in young adolescents, or patterns of relationships between psychopathic traits and brain activity may change across development, moving from positive relationships to negative ones. These results could have implications for the timing of interventions, and may suggest interventions targeted at young adolescents have potential for higher effectiveness than those targeted at adults.

9. *A systematic review of the neural correlates of reward and loss processing in antisocial behavior and psychopathy.* **Laura Murray**, University of Michigan, **Rebecca Waller**, University of Michigan & **Luke Hyde**, University of Michigan, lmur@umich.edu

Psychopathy and broader Antisocial Behavior (AB) have tremendous societal costs, motivating investigation of the mechanisms that cause individuals to engage and persist in violent and criminal behavior. Dysfunction in frontostriatal reward neurocircuitry is thought to increase risk that individuals engage in antisocial behavior, despite potential costs including incarceration. However, it is unclear whether AB or psychopathy are linked to a hyper- or hyposensitive reward system and/or if AB and psychopathy may have divergent neural correlates of reward. Moreover, as much of the empirical and review work in this area has focused on youth, a review is needed to summarize the current state of the research base in adults. Thus, the current systematic review examined the extent to which adult AB and psychopathy is related to neural reactivity during both processing of rewards and losses. Our systematic search identified seven fMRI and functional connectivity studies that examined relationships between AB and/or psychopathy and neural response to reward and loss in adults. Of the included studies, three investigated relationships using community or undergraduate samples and four used forensic samples. Furthermore, six studies attempted to parse psychopathy from broader antisocial behavior, either by investigating subtypes or facets of psychopathy, or by comparing those with psychopathy to non-psychopathic criminals or healthy controls. Across studies, there was evidence that psychopathic traits were linked to neural dysfunction during both reward and loss processing. Moreover, impulsive-antisocial components of psychopathy appeared to be specifically associated with hypersensitivity in the ventral striatum during reward anticipation. Furthermore, multiple studies that investigated neural response during the anticipation versus consumption of rewards failed to find significant associations between psychopathy and reward consumption, suggesting that reward processing dysfunction in psychopathy is unique

to anticipating, rather than receiving, rewards. Psychopathy was also linked to greater activity in regions of the prefrontal cortex and anterior cingulate during reward processing. These findings suggest that psychopathy, especially impulsive-antisocial psychopathic traits, is related to a hyper-sensitive anticipatory reward system.

10. *Deviance at its darkest: Serial murder and psychopathy.* **Bethany Walters**, Alliant University, **Isabella Palumbo**, Florida State University, **Laura Drislane**, Florida State University, **Scott Lilienfeld**, Emory University, **Eric Hickey**, Walden University & **Christopher Patrick**, Florida State University, bnwalters@hotmail.com

A common perception that continues to persist among both lay persons and mental health professionals that serial murderers possess a high degree of psychopathic traits; however, little empirical research has been conducted to directly evaluate this claim. This study will showcase the latest results from a study which has assessed levels of psychopathy in well-known perpetrators of serial murder (including Ted Bundy, Angelo Buono, Gary Ridgeway, John Wayne Gacy, Jeffrey Dahmer, Edmund Kemper, Richard Ramirez, Andrei Chikatilo, and Dennis Rader) using the Psychopathy Checklist-Revised (PCL-R; Hare, 2003). For each case, at least four diagnosticians (the authors) independently rated the PCL-R based on biographical information recorded in publicly available books, documentaries, interviews, and case files. Inter-rater reliability was high across all cases. A final PCL-R score was determined for each serial murderer using a consensus-based approach. Differences in scores for particular items across raters were resolved through re-review and discussion of all facts considered relevant. Results indicated that while the serial murderers assessed in this study exhibited high scores on certain facets of psychopathy (in particular, affective features reflecting deficits in guilt, empathy, and connectedness; McCord & McCord, 1964), contrary to popular perception, few cases exceeded the standard threshold for a PCL-R diagnosis of psychopathy (i.e., total score ≥ 30), $M = 26.94$, range = 17.9 (Chikatilo) to 38 (Buono). Individual PCL-R factor and facet scores will be discussed, as well as implications for conceptualizing the association between psychopathy and serial murder. Recommendations for future research on this topic will also be provided.

11. *Societal taboo: Perceptions, attitudes and beliefs about psychopathy.* **Nicholas Ostapchuk**, Carleton University, **Ken Kelly-Turner**, Carleton University & **Adelle Forth**, Carleton University, nicholas.ostapchuk@email.carleton.ca

Research that has examined the potential biasing effects of the “psychopathy” label has shown that defendants who are labelled as psychopaths receive harsher sentences than those who have not been given this label (Blais & Forth, 2014; Boccacini et al., 2008; Edens et al., 2004, 2005). As a result, it is important to understand precisely what potential jurors, and more broadly, laypersons in general consider when they are told that someone has a psychopathic personality. Relatively few studies have examined laypeople’s understanding of this disorder. Furnham, Daoud, and Swami (2009) presented three vignettes to laypeople and found that recognition of psychopathy was quite poor (39%, 61%, and 97% of participants correctly identified psychopathy, schizophrenia, and depression). Two studies have examined laypeople’s knowledge of psychopathy through prototypicality analyses in American and Norwegian samples (Hoff et al., 2012; Smith et al., 2014). Smith and colleagues (2014) included psychotic symptoms and found that laypeople reported these symptoms as prototypical of psychopaths. The present study will report the findings from two samples to further investigate beliefs and attitudes about psychopaths (e.g., etiology, treatment amenability, morality, and legal implications of the diagnosis) using an online survey format. This study will also report the results from the participants’ ratings of their imagined prototype of a psychopath on the thirty-three traits from the Comprehensive Assessment of Psychopathic Personality (CAPP; Cooke et al., 2004) and three psychotic symptoms. A sample of 373 Canadian undergraduates and 300 Canadian and American community participants (data being collected) completed (are completing) the online study. Undergraduate students rated items from the CAPP Dominance, Self, and Attachment domains as highly prototypical of a psychopath. However the students also endorsed psychotic symptoms as being more prototypical of a psychopath when compared to experts from the study by Hoff and colleagues (2012). Attitudes endorsed by the students included increased criminality, immutability of psychopathy, and adaptive features (e.g., higher intelligence). Data from the community sample will be

analyzed to help uncover the generalizability of the public's beliefs and attitudes regarding psychopaths. The findings will be discussed using lay theories of mental illness and implications for the use of psychopathy assessments will be addressed.

12. *Genetic correlates of psychopathy.* **Pia Hollerbach**, University Hospital of Psychiatry-Zurich, **Sally Olderbak**, Ulm University, **Oliver Wilhelm**, Ulm University, **Christian Montag**, Ulm University, **Craig Neumann**, University of North Texas & **Andreas Mokros**, University Hospital of Psychiatry-Zurich, pia.hollerbach@puk.zh.ch

Estimations of heritability coefficients suggest that psychopathic traits have a genetic component and that their manifestation is associated with variation in certain genes. Two genes that have gained attention are the monoamine oxidase A (MAO-A) gene and SLC6A4, the gene coding for the serotonin transporter protein (5-HTT). Both genes have polymorphisms, which mean that they can occur in multiple forms that result in different gene transcription and expression. With respect to the MAO-A gene, the upstream variable number of tandem repeats (uVNTR) polymorphism has been linked to psychopathy. It comes in several variations (alleles) that can be divided into low-activity and high-activity alleles. The presence of low-activity variants has been associated with psychopathic traits, particularly with regard to impulsive-antisocial traits. Similarly, the serotonin gene has a polymorphism (5-HTTLPR) with several alleles. Among them, two variants usually referred to as the long and short alleles have been of relevance with respect to psychopathy. More precisely, the short allele was linked to higher scores on the affective-interpersonal factor of psychopathy compared to the long allele. The aim of the study is to examine whether variation in the MAO-A and SLC6A4 genes accounts for quantitative and qualitative differences in the manifestation of psychopathy. A total of 331 male offenders and community volunteers from Germany consented to provide saliva samples, which are currently genotyped. Based on this gene data, multiple group analyses with latent variables will be performed. We expect carriers of a low activity allele of the MAO-A gene to report higher levels of psychopathic traits in general, and impulsive-antisocial traits in particular. With regard to the serotonin gene SLC6A4, we hypothesize that the short allele is positively associated with psychopathy, especially with regard to affective-interpersonal traits. In addition, the two polymorphisms will be analyzed jointly to examine whether a combination of risk alleles of the two genes leads to higher psychopathy scores. This way we hope to shed light on putative direct effects of genetic variation on psychopathic traits.

13. *Suppression of behavior as a function of punishment and the Triarchic conceptualization of psychopathy.* **Pablo Ribes**, Universitat Jaume I, **Rosario Poy**, Universitat Jaume I, **Ana Juan**, Universitat Jaume I, **Pillar Segarra**, Universitat Jaume I, **Angels Esteller**, Universitat Jaume I, **Victoria Branchadell**, Universitat Jaume I, **Sara Rodrigues**, Universitat Jaume I & **Javier Molto**, Universitat Jaume I, pribes@uji.es

This study examined the role of the phenotypic domains of the triarchic conceptualization of psychopathy (boldness, meanness, and disinhibition; Patrick, Fowles, & Krueger, 2009) in maladaptive suppression of behavior as a function of punishment. Participants —136 female undergraduates assessed for psychopathy using the Triarchic Psychopathy Measure— were administered a computerized version of the probability-learning card game employed by Siegel (1978). The task consisted of 10 specially arranged decks of cards, each of them consisting of 40 cards, with percentages of punishment cards varying in 10% increments from 10% to 100%; the 10 decks were presented to participants in random order. As expected, the mean suppression rate for each deck (i.e., the percentage of cards not played by the participant) increased with the level of probability of punishment, $F(9,127) = 5.33$, $p < .0001$. Interestingly, Disinhibition scores were uniquely related to maladaptive suppression of behavior (less suppression and less amount of money earned, both $\beta s = -.21$, $p s < .05$) only at the 60% probability of punishment, as well as to a longer consecutive sequence of punishment cards (tolerance for punishment, $\beta = .25$, $p < .02$) and shorter reflection times after punishment ($\beta = -.19$, one-tailed $p < .04$) in this deck. Neither Boldness nor Meanness scores contributed independently to the prediction of the dependent measures. Our findings are consistent with evidence of deficient suppression of behavior in psychopathic offenders when the probability of punishment is uncertain (see Siegel, 1978), and parallel previous studies in incarcerated males linking the

impulsive and irresponsible characteristics of psychopathy —the disinhibition phenotype— with a failure to suspend a response set for reward in the face of increasing punishment contingencies that result in maladaptive outcomes (e.g., Moltó et al., 2007). Our data further support the validity of the triarchic conceptualization of psychopathy in disentangling the laboratory correlates of the distinctive phenotypic components of this personality disorder, even in noninstitutionalized samples.

14. *Effects of threat-of-shock on aversive-potentiated startle in clinical and sub-clinical psychopathy.* **Rosario Poy**, Universitat Jaume I, **Angels Esteller**, Universitat Jaume I, **Raul Lopez**, Universitat Jaume I, **Pillar Segarra**, Universitat Jaume I, **Pablo Ribes**, Universitat Jaume I, **Victoria Branchadell**, Universitat Jaume I, **Sara Rodrigues**, Universitat Jaume I, Valeria Cabedo, Universitat Jaume I & **Javier Molto**, Universitat Jaume I, poy@uji.es

In order to clarify the role of the intensity of the aversive foreground in fear deficits displayed by high fearless psychopathic individuals, we recorded blink responses to noise probes while participants view affective pictures during intermixed trials of threat-of-shock (high aversive intensity) and safety (low aversive intensity). Threat/safe trials were signaled by a yellow/blue frame —counterbalanced across participants—, with 6-s pleasant or unpleasant pictures appearing inside the frame in 32 of 48 trials. Participants were 56 undergraduates (32 women) and 49 incarcerated males, all of them assessed for psychopathy using the Psychopathic Personality Inventory-Revised (PPI-R). For both samples, blink magnitudes were larger during threat versus safe trials and for unpleasant versus pleasant pictures, as expected (all $ps < .0005$). Zero-order correlations between PPI-R total and factor (Fearless Dominance, Impulsive Antisociality, Coldheartedness) scores and startle modulation scores for pleasant and unpleasant pictures (as compared to blinks elicited during ITIs) were then examined for threat and safe trials separately. Neither PPI-R score was significantly related to pleasant inhibition or aversive potentiation scores during threat trials in any sample (all $ps > .14$). During safe trials, however, Fearless Dominance scores were negatively related to startle potentiation for unpleasant pictures in both undergraduate and incarcerated participants ($rs = -.33$ and $-.31$, respectively, both $ps < .05$). Subsequent hierarchical regressions revealed that Fearless Dominance scores accounted for a significant proportion of variance in diminished aversive startle potentiation during safe trials (12% and 9% for the undergraduate and incarcerated samples, respectively) when entered on the third step of the model. Our results (1) confirmed that psychopathy-related deficits in defensive (fear) reactivity —as indexed by reduced aversive-potentiated startle for unpleasant pictures in safe trials— are uniquely linked to the fearlessness features of this personality disorder both in incarcerated and nonincarcerated individuals and, most important, (2) supported the proposal that this deficit is moderated by cue intensity: when intense enough (i.e., within threat trials), aversive foregrounds can prompt defensive responses in high fearless psychopathic individuals that are commensurate with that of their low fearless counterparts.

15. *Psychopathic traits in adolescence and adulthood: A validation of the Flemish Version of the Short Form of the Elemental Psychopathy Assessment.* **Mieke Decuyper**, Thomas More University College, **Elieen de Caluwe**, Ghent University, **Kasia Uzieblo**, Thomas More University College, **Sam Ysewyn**, Forensic Psychiatry Sint-Jan-Baptist Zelzate & **Filip de Fruyt**, Ghent University, mieke.decuyper@thomasmore.be

Lynam and colleagues (2011) developed the Elemental Psychopathy Assessment (EPA), a self-report measure designed to assess the basic elements of psychopathy in adults from a Five-Factor Model perspective. More recently, a short-form version of this instrument was derived as a viable assessment tool of psychopathy when assessment time is limited (EPA-SF; Lynam et al., 2013). The present study corroborates on this research, addressing the psychometric properties of the Flemish version of the EPA-SF. Additionally from a developmental perspective on psychopathic traits, the present study explores the reliability, structure, construct and criterion validity of the EPA-SF in adolescents. A community sample of

440 Flemish adolescents (58% female; age 14 – 18 years) and 301 adults (84.40 % female; age 19 – 57 years) provided self-reports on the EPA-SF, the Externalizing Spectrum Inventory-Brief Form (Patrick et al., 2013), and the Reactive Proactive Aggression Questionnaire (Raine et al., 2006). The Youth Psychopathic Traits Inventory (Andershed et al., 2002) and the Children's Social Behavior Scale (Crick & Grotpeter, 1995) were only administered in the adolescent subsample. The measurement invariance of the Flemish version was investigated in the total sample of 741 Flemish adolescents and adults through multi-group exploratory structural equation modeling. The original 4-factor structure of the EPA-SF, including Antagonism, Emotional Stability, Narcissism, and Disinhibition was replicated in the Flemish sample. Results provided support for strong measurement invariance across gender and age. Intercorrelations between the YPI and EPA-SF scales provided support for the convergent validity, while meaningful, significant associations were observed between the EPA-SF scales and externalizing behavior including aggression. To conclude, the Flemish version of the EPA-SF can be considered a promising questionnaire for assessing psychopathic traits in both adolescents and adults.

16. *Startle Magnitude: Differences among Primary and Secondary Psychopathic Individuals in emotional and neutral scenes.* **Maria Petridou**, University of Cyprus, **Melina-Nicole Kyranides**, University of Cyprus & **Kostas Fanti**, University of Cyprus, mpetridou@ucy.ac.cy

The present study examined how individuals differentiated based on their levels of Callous Unemotional traits (CU-traits), Conduct Problems (CP) and anxiety react with regard to startle magnitude while exposed to emotional (violent/ erotic) and neutral scenes. Data were collected originally from a large sample of Greek Cypriot adolescents. Based on adolescents self-reports on CU traits, CP and anxiety four groups were identified using Latent Profile Analysis: Primary Psychopathic individuals with high level of CU, CP and low anxiety; Secondary Psychopathic individuals with high level of CU, CP and anxiety; Highly Anxious individuals with low CP and CU-traits; and Controls with low levels of CP, CU-traits and anxiety. Participants from these four groups were contacted three years later ($N = 83$, 53.4% females, $Age = 19.92$, $SD = 0.99$), and invited to view emotional scenes while monitoring their startle magnitude. Results showed that individuals with primary psychopathic tendencies exhibited reduced startle response to violent scenes, while they showed enhanced response in erotic and neutral scenes. On the contrary, adults with secondary psychopathic tendencies indicated increased startle magnitude response in violent and erotic scenes, which is associated with fearfulness and over processing of highly arousal stimuli. Secondary Psychopathic Individuals and Controls did not differ on their startle response when viewing neutral scenes. These findings suggest that differences in anxiety and startle reactivity play a crucial role in understanding heterogeneity in antisocial behavior. Therefore, our outcomes could have implications for differentiated interventions among psychopathic individuals with lower and higher anxiety levels based on the identified emotional processing differences.

17. *Using ecologically valid rewards to study reward-based learning in offenders with different levels of psychopathy.* **Johanna Glimmerveen**, Radboud University, **Inti Brazil**, Radboud University, **Erik Bulten**, Pompestichting Nijmegen & **Joseph Mes**, Radboud University, j.glimmerveen@donders.ru.nl

The abnormal processing of reward and punishment typically observed in individuals with psychopathy has been primarily studied within the framework of associative learning. However, studies focusing on reward-based learning mostly involve abstract reinforcers such as small amounts of money or mere points to be earned. Moreover, in studies where 'real' rewards (such as small goods or snacks) are at stake, researchers often make implicit assumptions regarding the affective value of the rewards and individual differences in reward evaluation are generally ignored. The present study aimed at taking these inter-individual differences into account by systematically investigating the effect of qualitatively different rewarding stimuli on learning and behavioral adaptation in violent offenders with varying degrees of psychopathy. More specifically, ecologically valid rewards were used of which the subjective values were explicitly determined by each individual

participant. Participants rated a list of rewards that could be arranged within the institutional setting (e.g., guitar lessons, a welding workshop, a package of cookies) on their current attractiveness using a Visual Analogue Scale (VAS). Subsequently, a passive avoidance task with changing stimulus-outcome contingencies was performed three times: once for the highest rated reward, once for the lowest rated reward, and once for no reward. Both behavioral and ERP (FRN; P300) data were collected and analyzed separately for the acquisition and reversal phase. A signal detection framework was used to compute the discriminability index (d') and decision criterion (c). Behaviorally, it was expected that participants with higher levels of psychopathic traits would show impaired performance during both acquisition and reversal. More specifically, these impairments were expected to be reflected in their responses to punished stimuli, especially when responses to these stimuli were previously rewarded. It was further hypothesized that these impairments would be most prominent in the no reward and low reward conditions, but that performance would improve in the high reward condition. On the electrophysiological level, higher amplitudes of the FRN difference waves (loss-win) and of the P300 were expected in the high reward condition as opposed to the low reward condition, and in the low reward condition as opposed to the no reward condition. The results of this study will be discussed during the poster presentation.

18. *The psychoticism personality dimension and its association with the Triarchic model of psychopathy in psychiatric patients.* **Andrea Aiguabella**, Hospital Universitari de Santa Maria, **Deborah Casany**, Hospital Universitari de Santa Maria, **Cristina Tellez**, Hospital Universitari de Santa Maria, **Victor Esteve**, Hospital Universitari de Santa Maria, **Carmen Alessanco**, Hospital Universitari de Santa Maria & **Iolanda Battala**, University of Lleida, akiskeri@gss.scs.es

In 1976 Eysenck proposed that psychopathy is at the extreme end of the Psychoticism (P) personality dimension. This dimension has been associated with various affective, cognitive and behavioral deficits as seen in primary and secondary psychopathy (Corr, 2010). Our aim was correlated psychopathy with the P dimension of personality modeled on Eysenck. This study, in contrast with others that used other psychopathic scales, uses the Triarchic Model of Psychopathy (Patrick, Fowles, Keneger, 2009) that provides the basis for reconciling the different approaches for the description of psychopathy. These authors propose three constructs (Meanness, Boldness and Disinhibition) whereby the different phenotypic domains could integrate different conceptual models of psychopathy. It is a cross-sectional study that was carried out and the data were collected with the Psychopathic Triarchic self-reported psychometric test (TRiPM) and the Eysenck Personality Questionary-Adult (EPQ-A) (Eysenck, 1975). The sample included patients admitted in a Adult Psychiatric Day Hospital who agreed to conduct the study during the period between February 2013 to December 2015, a total of **163 patients** (mean age 37, women 63%). The means (\pm DS) of the different evaluated subscales are: Boldness **19.54** (9.878), Meanness **12.02** (7.536), Disinhibition **23.35** (10.134) and Total score **54.75** (17.055) of TriPM, and Psychoticism factor 67.87 (29.988) of EPQ-A. Direct and statistically significant correlations were found between the "Psychoticism" component of the EPQ-A questionnaire and the "Disinhibition" subscale of the TriPM (0.308 $p < 0.001$), as well as with "Meanness" (0.248 $p < 0.003$). The same correlation was found between "Psychoticism" and Total score of TriPM (0.249 $p < 0.002$). An inverse, but not statistically significant correlation was found between Boldness and Psychoticism (-0.097). According to the results found out in this clinical population, the Psychoticism dimension (impersonal, emotionally indifferent, and lacking empathy and remorse) was associated with impulsiveness, irresponsibility, oppositionality and hostility (Disinhibition) and with individuals who trend towards cruelty, callousness, predatory aggression and excitement seeking (Meanness). It wasn't associated with Boldness scale (nexus of high dominance, low anxiousness and venturesomeness). These results are partly in line with other authors (Eysenck, 1976; Corr, 2010; Heym, 2012) showing that the P dimension of EPQ-A could be related only to a part of psychopathy according the triarchic model. Further investigations expanding the sample size are necessary, as well as develop new studies in this field.

19. *Dysfunctional error-related processing in incarcerated youth with elevated psychopathic traits.* **Michael Maurer**, MIND Research Network/University of New Mexico, **Vaughn Steele**, National Institute on Drug Abuse, **Lora**

Cope, University of Michigan, **Gina Vincent**, University of Massachusetts Medical School, **Julia Stephen**, MIND Research Network, **Vince Calhoun**, MIND Research Network/University of New Mexico & **Kent Kiehl**, MIND Research Network/University of New Mexico, jmmaurer@unm.edu

Adult psychopathic offenders show an increased propensity towards violence, impulsivity, and recidivism. A subsample of youth with elevated psychopathic traits represent a particularly severe subgroup characterized by extreme behavioral problems and comparable neurocognitive deficits as their adult counterparts, including perseveration deficits. Here, we investigated response-locked event-related potential (ERP) components (the error-related negativity [ERN/Ne] related to early error-monitoring processing and the error-related positivity [Pe] involved in later error-related processing) in a sample of incarcerated juvenile male offenders ($n = 100$) who performed a response inhibition Go/NoGo task. Psychopathic traits were assessed using the Hare Psychopathy Checklist: Youth Version (PCL:YV). The ERN/Ne and Pe were analyzed with classic windowed ERP components and principal component analysis (PCA). Using linear regression analyses, PCL:YV scores were unrelated to the ERN/Ne, but were negatively related to Pe mean amplitude. Specifically, the PCL:YV Facet 4 subscale reflecting antisocial traits emerged as a significant predictor of reduced amplitude of a subcomponent underlying the Pe identified with PCA. This is the first evidence to suggest youth with elevated psychopathic traits can detect when an error has occurred, but do not fully process error-related information to the same extent as youth with low levels of psychopathic traits.

20. *Psychopathic Personality Traits and Their Implications for Vocational and Avocational Interests*. **Madeline Nagel**, Emory University, **Ashely Watts**, Emory University, **Brent Murphy**, Emory University & **Scott Lilienfeld**, Emory University, mgnagel@emory.edu

Lykken (1995) proposed that psychopathic traits can be channeled into a variety of paths, in some cases even prosocial ones. Despite scattered evidence that psychopathy is associated with engagement in leadership or high-risk occupations, such as firefighting and business (Lilienfeld et al., 2014; Falkenbach & Tsoukalas, 2011), little research has explored the possibility that psychopathic personality traits are associated with a broader array of vocational (i.e., careers) and avocational (i.e., hobbies) interests. Drawing on a community sample recruited through Amazon M-Turk ($N = 400$), the present study examined the relations between psychopathic traits and both vocational and avocational interests. PPI-R Fearless Dominance (FD) was moderately positively associated with all six of Holland's (1997) RIASEC model of vocational interests, indicating that boldness traits may be associated with a general interest in career opportunities. In contrast, PPI-R Self-Centered Impulsivity (SCI) was moderately positively associated with an interest in Realistic, Artistic, Enterprising, and Conventional careers and was not significantly related to Investigative and Social careers. These findings indicate that disinhibited individuals may express interest in hands-on, expressive careers that entail little social interaction. LSRP Factor 1 followed a similar pattern to SCI, and was moderately positively associated with Realistic and Enterprising interests and slightly positively correlated with Conventional careers, likely for similar reasons. The PPI-R Coldheartedness (C) subscale was only slightly positively associated with Enterprising interests, whereas LSRP Factor 2 was not significantly associated with any vocational interests. This lack of strong interest in any of the RIASEC career paths may reflect a general disinterest in productive lifestyle choices, with the exception of competitive, Enterprising interests. In the poster, we plan on presenting further analyses examining psychopathic traits' relations with avocational interests in light of the possibility that personality traits are better predictors of how individuals choose to spend their free time, as opposed to their careers which may be determined to a greater extent by other social factors (e.g., socioeconomic status). In addition, we will examine psychopathy's relations with participants' current occupation to attempt to replicate and extend previous findings (e.g., Lilienfeld et al., 2014). Finally, we will examine the specificity of psychopathy's relations with vocational and avocational interests by examining narcissism's relations with these outcomes, as well as potential gender differences in these previous associations.

21. *Psychometric properties of the Clinical Assessment of Prosocial Emotions (CAPE 1.1) in young male offenders.* **Beatriz Molinuevo**, Universitat Autònoma de Barcelona, **Vanessa Pera**, Universitat de Lleida, **Esther Martinez**, Universitat Autònoma de Barcelona, **Albert Requena**, Universitat Autònoma de Barcelona, **Xenia Blaya**, Generalitat de Catalunya, **Noemi Torrent**, Fundació Serveis de Suport, **Juan Martinez**, Generalitat de Catalunya, **Anna Camarasa**, CSMIJ Sant Joan de Deu, **Albert Bonillo**, Universitat Autònoma de Barcelona, **David Garreta**, Universitat Autònoma de Barcelona, **Carmen Tello**, **Iolanda Batalla**, Universitat de Lleida, & **Rafael Torrubia**, Universitat Autònoma de Barcelona, Beatriz.Molinuevo@uab.cat

The DSM-5 has included a new specifier for the diagnosis of conduct disorder (CD). It is labelled 'with Limited Prosocial Emotions' (LPE) and integrates Callous-Unemotional (CU) traits in the CD diagnosis. The Clinical Assessment of Prosocial Emotions: Version 1.1 (CAPE 1.1) is a new tool in development for assessing the LPE specifier [1]. This study aimed to test: (a) the internal consistency and inter-rater reliability, and (b) the criterion, convergent, and discriminant validity of the Spanish version of the CAPE 1.1 in 51 young male offenders from two juvenile detention centers (age range = 15-22 years). Youth were evaluated using the self-report versions of the CAPE 1.1 and the Inventory of Callous-Unemotional traits (ICU), the Psychopathy Checklist: Youth Version (PCL:YV), and the Raven's Progressive Matrices (RPM). Participation of the social educator of the youth in the institution was requested to respond the CAPE 1.1 and the ICU informant versions. Two independent clinicians scored the CAPE 1.1 and other two independent raters scored the PCL:YV (an interviewer and an observer in each case, both present during the interview). The CAPE 1.1 showed good internal consistency (Cronbach's alpha and MIC). The inter-rater agreement was slight for item 1, moderate for item 2, and substantial for items 3 and 4, and for the LPE specifier (Cohen's Kappa). As regards to criterion validity, the LPE specifier evaluated by the CAPE 1.1 showed fair to moderate agreement with the ICU: the nine-item set, stringent method (EXTREM) proposed by Kimonis et al. (2015) [2]. The CAPE 1.1 had good convergent and discriminant validity. Youth with the LPE specifier scored higher in the ICU (Callous and Unemotional subscales, and total score) and in the PCL:YV (facets 1 and 2, and total score). There was no relationship between the CAPE 1.1 and the RPM. In conclusion, the CAPE 1.1 can be used, for research purposes, as a reliable and valid tool for measuring the LPE in young male offenders. Item 1 scoring criteria should be revised. More studies oriented to analyze the relationship with external variables are needed.

22. *Emotional preferences and psychopathic personality traits.* **Foteini Spantidaki-Kyriazi**, Tillburg University, **Stefan Bogaerts**, Tillburg University & **Carlo Garofalo**, Tillburg University, c.garofalo@uvt.nl

Abnormalities in emotional experience are a central feature of psychopathy (Hare, 1991; Patrick, 1993), yet the nature of such abnormalities is still uncertain. Cleckley (1976) described that psychopathy was underlain by a general deficit in major affective reactions, attenuated nervousness and guilt. Subsequent theories have posited more specific deficits in the experience of fear (Lykken, 1957), sadness (Blair, 2003), and self-conscious emotions (Meloy, 1988). Even though the majority of studies have documented deficits in the *processing* of and *responsiveness* to emotional information (Brook et al., 2013), there seems to be some inconsistency regarding the subjective emotional *experience* of individuals with psychopathic traits (Hoppenbrouwers et al., 2016). Furthermore, besides differences in the scope of the emotional deficit (general vs. specific), most theories agree on considering the affective features of psychopathy as biologically or temperamentally determined (Fowles & Dindo, 2006). The aim of the present study is to provide an alternative (or complementary) explanation of the emotional functioning associated with psychopathic traits focusing on emotional preferences (what people *want* to feel; Tamir, 2016). Based on accounts of psychopathy in terms of low affiliation (Meloy, 1988; Sherman & Lynam, 2016), it is hypothesized that psychopathic traits will be related with greater preferences towards antagonistic emotions and lower preferences towards vulnerable and prosocial emotions. Furthermore, we will examine whether these preferences were explained by individual differences in emotional knowledge, that is, the belief about the utility of emotions (e.g., anger is useful for competition). Finally, we will test if emotional knowledge and emotional

preferences explain the relationship between psychopathic traits and trait emotional experience. A multimethod design is implemented, including self-report measures of psychopathic traits and both direct and indirect measures of emotional preferences. Preliminary results are in the expected direction, but are not included here due to small $N (= 20)$ and likely instability of coefficients. Data collection is ongoing across different samples and results on a sample of 150+ participants will be available by the end of March, 2017.

23. *A multi-sample examination of psychopathic traits and impulsivity subtypes.* **Ashley Hosker-Field**, Brock University, **Angela Book**, Brock University & **Anthony Volk**, Brock University, Ashley.m.hosker2@brocku.ca

Although it is widely accepted that psychopaths are impulsive, this broad assumption has recently been questioned. Research concerning the psychopathy-impulsivity relationship has demonstrated a number of inconsistencies. As such, the purpose of this work was to clarify and reconcile the differential empirical findings. Psychopathy and impulsivity were examined in an online sample (study 1), and a student sample (study 2), using the Self-Report Psychopathy Scale, the UPPS Impulsive Behavior Scale, and the Barratt Impulsiveness Scale. Behavioural measures of impulsivity were also included in study 2. The psychopathy-impulsivity relationship was expected to differ based on the psychopathy factor and type of impulsivity under investigation. Results indicated that Factor 2 was uniquely positively associated with all types of self-reported impulsivity in both studies, and unrelated to behavioural measures of impulsivity. Conversely, Factor 1 was uniquely negatively associated with lack of premeditation and non-planning, and unrelated to all other impulsivity types in both studies. Results generally demonstrated that Factor 2 psychopathy traits such as irresponsibility and poor behaviour control contribute to an increased tendency towards a variety of impulsive behaviours. However, Factor 1 psychopathy traits including deceitfulness and manipulation are associated with a lower likelihood of exhibiting impulsive behaviour. More specifically, Factor 1 traits may actually result in a greater tendency to engage in premeditated, planned behaviour. Importantly, these relationships appear to be consistent across student and on-line samples. To further explore the associations among these constructs, study 3, based on a youth sample, is currently underway. Psychopathic traits were examined using the Antisocial Process Screening Device and impulsive behaviour was assessed utilizing items from the HEXACO Personality Inventory. Results are generally expected to mirror what was found in studies 1 and 2. Study 3 results will provide further evidence regarding the consistency of the psychopathy-impulsivity relationship. Collectively, the current research will provide a more nuanced understanding of the behavioural tendencies that are typical among individuals who exhibit specific psychopathic traits. Moreover, this research may also speak to methodological (measurement) and statistical issues (i.e. suppression) that are relevant in the psychopathy and impulsivity literature.

24. *Evaluating unique relationships between psychopathy, empathic accuracy, and instrumental aggression.* **Allison Brown**, Rosalind Franklin University, **Michael Brook**, Northwestern University & **David Kosson**, Rosalind Franklin University, allison.brown@my.rfums.org

Empathy deficits are a key feature in the clinical syndrome of psychopathy. Additionally, modern conceptualizations of psychopathy often include increased potential for various forms of violence and aggression, including instrumental aggression. A wealth of research has emphasized the relationship between empathy and aggression in non-psychopathic populations, highlighting the role of empathy in increasing prosocial and decreasing antisocial behaviors. However, the unique relationship between empathy and aggression has not been broadly investigated. Further, less research has focused on individual components of empathy; specifically, the relationships between psychopathy, cognitive empathy and instrumental aggression are not fully understood, and different methods of measurement may contribute to varying findings regarding the relationships between these constructs. A sample of 100 male inmates incarcerated at a Midwestern county jail completed a task measure of cognitive empathy (EAT; Brook & Kosson, 2013). Each participant was also scored on a clinical rating of psychopathy (PCL-R; Hare, 2003). The proposed study is designed to assess the relationship between cognitive empathy and instrumental aggression by assessing each of these participants on a measure of instrumental aggression (AICS; Cornell et al., 1996) and determining if performance on a task of empathic accuracy predicts real world instrumental aggression, while considering the impact of psychopathy.

25. *Two distinctive cognitive mechanisms of reactive aggression in psychopathic traits.* **Ayame Tamura**, Hiroshima University & **Sugiura Yoshinori**, Hiroshima University, dt46256@hiroshima-u.ac.jp

Executive functions are negatively associated with reactive aggression. However, it is still unclear whether this negative relationship is also shown in psychopathy because the relationship between psychopathy and executive functions has not been consistent (Maes & Brazil, 2013). On the other hand, response modulation theory suggested that high selective attention or cognitive control towards goal relevant information might be underlying affective problems in psychopathy (e.g., Larson et al., 2013; Newman & Baskin-Sommers, 2016). Empathy, which is another factor for inhibiting aggression, includes general emotional process. Therefore, there is possibility that this cognitive mechanism also explains low empathy in psychopathy. The current study comprehensively examined two distinctive cognitive mechanisms of reactive aggression in psychopathic traits by measuring the individual differences of executive functions ability. A mixed-gender sample of undergraduate students ($N = 132$, mean age = 20.56 ± 4.46) completed the three executive functions (i.e., updating, shifting, and inhibition ability) tasks and the questionnaires which were consisted of the Levenson Self-Report Psychopathy scale (Levenson et al., 1995), the Interpersonal Reactivity Index (IRI; Davis, 1983), and the Proactive-Reactive Aggressiveness scale (Hamaguchi et al., 2008). In mediated moderation model, we found that the positive relationship between psychopathic traits and reactive aggression was mediated by cognitive empathy when shifting ability was high. While psychopathic traits was negatively associated with reactive aggression when shifting ability was low. The result suggests that people with high psychopathic traits and high shifting ability can flexibly shift their attention to their goal from other's mental states, as a result, they will show reactive aggression. In the case of low shifting, it is inferred that people who score highly on measuring of psychopathic traits cannot shift their attention from anger, which will lead increased reactive aggression. This finding suggests the two different mechanisms of reactive aggression in psychopathic traits.

26. *Reconsidering psychopathy through TCI among Japanese students.* **Yuki Nishimura**, Keio University & **Nobuhiko Kijima**, Keio University, ynishi@z8.keio.jp

Aim: Psychopathy is a heterogenous concept. Many researchers study about psychopathy, however, we aimed to consider how psychopathy is explained by the personality aspects. Method: Subjects were 866 undergraduate students who participated in the psychological class at Keio University (557 male; 309 female) between 2014 and 2015, and 613 of them were consented. Psychopathy was assessed using SRP₄ and personality construct was assessed using Cloninger's TCI. 277 of the students responded to both assessments. Result and discussion: The SRP₄ has four sub-scales; Interpersonal Manipulation (IPM), Callous Affect (CA), Erratic Life Style (ELS) and Criminal Tendencies (CT). The TCI has four Temperament sub-scales; Novelty Seeking(NS), Harm Avoidance(HA), Reward Dependence(RD), and three Character sub-scales; Self-Dependence(SD), Cooperativeness(CO), and Self-Transcendence(ST). Hierarchical Multiple Regression analyses showed that IPM was explained by high NS and low CO, CA was explained by sex, low HA&RD, and low CO respectively, but ELS and CT are not explained by the personality scales so much. From the viewpoint of personality theory, it is suggested that the tendencies of IPM and CA might be able to be improved by the growth of Character, but ELS and CT are not.

27. *Understanding the familial context of children with conduct problems and CU traits.* **Evita Katsimicha**, University of Cyprus & **Kostas Fanti**, University of Cyprus, ekatsimicha@gmail.com

Objective: The current study investigated whether there are differences on parenting factors between children who exhibit Callous-Unemotional (CU; i.e. lack of empathy, guilt, lack of caring behaviors) traits and Conduct Problems (CP) and how these affect the quality of parenting. More specifically, it was investigated the association of familial risk (e.g.,

poor monitoring, corporal punishment, inconsistent discipline, parental psychopathology) and protective (e.g., parental involvement and positive parenting) factors in relation to heterogeneous groups of antisocial children. In addition, it was examined how parental psychopathology influences children. **Method:** The sample consisted of 120 parents (50% male) of children aged 12 years old, who completed a battery of questionnaires regarding parenting practices and psychopathology. To compare the identified group differences on the dependent measures, a series of MANOVAs were performed. **Results and implications:** Results showed that youth high on CU traits experienced lower positive parenting and maternal involvement, but higher poor monitoring, corporal punishment, and inconsistent discipline compared to youth low on CU traits. Children high on CP experienced more corporal punishment and inconsistent discipline from their mothers compared to children low on CP. There were also two significant interactions between the effects of CP and CU traits on maternal involvement and inconsistent discipline. Youth high on both CP and CU traits experienced the lowest levels of parental involvement and higher levels of inconsistent discipline. Specifically, mothers of children with high scores on either CP or CU traits reported higher distress, dysfunctional interactions, and higher likelihood of the child being difficult compared to mothers whose children scored low on either CP or CU. According to three significant interactions, mothers of children high on both CP and CU traits reported higher levels of distress, more dysfunctional interactions, and that the child was more likely to be difficult. Moreover, mothers of children with high scores on either CP or CU traits reported higher anxiety compared to mothers whose children scored low on either CP or CU. Children scoring high on CP were more likely to have mothers scoring high on depression and APD. Findings of the current study can suggest more effective treatment targets related to the distinct profile of the child on CU traits and CP and specific parenting practices.

28. *Structural equation modeling of psychopathic traits in Chilean female offenders using the Self-Report Psychopathy Short Form (SRP-SF) Scale: A comparison of gender-based item modifications versus standard items.* **Ely Leon Mayer**, National University of La Plata, **Jorge Folino**, National University of La Plata, **Hedwig Eisenbarth**, University of Southampton & **Craig Neumann**, University of North Texas, craig.neumann@unt.edu

Literature on the SRP scale reveals its strong psychometric properties, associations with the PCL-R, and an array of biopsychosocial correlates (Paulhus, Neumann, & Hare, 2016). Also, SRP studies from different cultures and with female samples are increasing, though important questions remain about the manifestation of psychopathic features across cultures and in females. Thus, the current study sought to assess psychopathic traits in Chilean female offenders and to test gender-focused item modifications of the SRP-SF. **Method:** South American female offenders ($N = 210$) were assessed with the PCL-R. Also, half of the sample completed the standard SRP-SF, and the other half completed a modified form of the SRP-SF with several items that were written to be more relevant for females with psychopathic traits. The underlying latent structure of the PCL-R and both versions of the SRP were examined, along with classic statistics. **Results:** The gender modified items (except 6 & 8) had higher average item scores, suggesting greater endorsement of psychopathic features. The SRP-SF and PCL-R were significantly correlated, though a stronger association was found for the modified SRP ($r = .69$, $p < .001$), compared to the standard SRP ($r = .39$, $p < .001$). For 10 cases who completed both the standard and modified SRP, a correlation of $r = .74$ ($p < .001$) was found. Using the total sample, the four-factor model of psychopathy had excellent model fit for the PCL-R items ($CFI = .97$, $RMSEA = .04$), consistent with previous female offender research. Each SRP version was modeled separately to determine how well the four-factor model fit. For the standard SRP, results indicated acceptable fit ($CFI = .92$, $RMSEA = .05$). Most items loaded strongly and significantly on their respective factors, however, some items showed sub-optimal factor loadings (items 3, 16), or could not be modeled due to limited variance (20, 22, 25, 29). For the modified SRP, results also indicated adequate fit ($CFI = .92$, $RMSEA = .06$). Notably, there were fewer problems with item variance for modified SRP items, and all but item 20 could be modeled. Structural equation models (SEM) were tested separately for each SRP version. A super-ordinate SRP factor predicted a broad factor reflecting chronic misconduct. SEM results for the standard version ($CFI = .94$, $RMSEA = .08$)

indicated the SRP factor significantly predicted chronic misconduct (beta = .50). For the modified version (CFI = .96, RMSEA = .06) the SRP factor predicted chronic misconduct to a greater extent (beta = .72).

29. *Mimicking a Don Juan: Psychopathic traits as a sexual exploitation tactic.* **Kristopher Brazil**, Carleton University & **Adelle Forth**, Carleton University, kristopherbrazil@email.carleton.ca

Attenuated emotional experience is a main component of the psychopathy construct (Hare, 2003). Much research has identified and explored a decreased capacity in psychopathy to *recognize* emotion in others, especially sad and fearful expressions (e.g., Blair et al., 1999, 2001). Despite this, however, some research suggests a retained capacity to *express* certain emotions, particularly in deceptive contexts (Book et al., 2015; Porter et al., 2011). *Affective mimicry* involves just this, the lack of experiencing emotion with the retained capacity to express emotion to others (Jones, 2014). Mimicking emotional expressions may permit individuals with attenuated emotional processing to remain socially viable and able to cash in on resources that come with living in a social group—e.g., security, sustenance, sexual relationships. An alternative model is proposed that along with the core personality traits of psychopathy, affective mimicry may be a tool for short-term sexual exploitation whereby males gain the trust and sexual interest of females by appearing socially competent, dominant, and attractive (see e.g., Holtzmann & Strube, 2012; Lilienfeld et al., 2012). An expectation of this model is the retained ability in psychopathy to deceptively and competently express emotions in socially and sexually important contexts. The current study investigates whether males higher in psychopathic traits (1) can more convincingly mimic emotions of remorse and (2) because of this “skill,” preferentially influence trust and interest in forming a relationship with females more so than males. Videos of fifty male participants are used, split into low and high psychopathy groups. In these brief 2-minute videos, the participants describe with feigned remorse a true story involving themselves where they hurt or insulted another person. One hundred males and females will view and rate a subset of these videos for indices of how convincing was the story (e.g., genuineness of emotion shown, believability of the story) and indices of trust and liking for the person in the video. The proposed model predicts that males higher in psychopathic traits will receive higher ratings of a convincing story and receive higher indices of trust and liking from female participants compared to male participants. Interpretation of the results are informed using an evolutionary foundation of the possible function of psychopathic traits in ancestral environments.

POSTER SESSION 3

WEDNESDAY, May 24: 12:30 -2:00p (Entrance Hall & Room MOL 1.02, Campus Sanderus)

1. *Additional Conceptions of Psychopathic Traits in Offenders: Interpersonal Measures and Triarchic Model of Psychopathy.* **Dahlnym Yoon**, Medical University Berlin/ University Medical Center Hamburg-Eppendorf, **Franziska Brunner**, University Medical Center Hamburg-Eppendorf, **Martin Rettenberger**, The Center for Criminology & **Peer Briken**, University Medical Center Hamburg-Eppendorf, dahlnym.yoon@charite.de

Recent studies suggested possible benefits of additional measures of psychopathy, which supposedly comprise interpersonal or adaptive psychopathic traits of an individual (Drislane & Patrick, 2016; Vitacco & Kosson, 2010). Integrating such differing conceptions in addition to the psychopathy according to Hare (1991) could provide differentiated view on individuals in forensic settings. This study investigated psychopathic traits measured with non-PCL-based instruments and their relevance to recidivism risk in 105 incarcerated male offenders. **Methods:** Interpersonal behaviors assessed by the Interpersonal Measure of Psychopathy (IM-P; Kosson et al., 1997) and boldness, meanness, and disinhibition measured by the Triarchic Psychopathy Measure (TriPM; Drislane et al., 2014) were examined in their relationship with psychopathy measured by the PCL-R and recidivism risk measured by the Historical Clinical Risk management-20 (HCR-20; Webster et al., 1997), and their incremental validity above and beyond the PCL-R detecting

high recidivism risk. **Results and Implications:** The IM-P and the TriPM showed significant correlations with the PCL-R scores and the HCR-20 risk factors. Both instruments were able to detect individuals with high recidivism risk, whereas their overall scores were not incrementally valid above and beyond the PCL-R. The TriPM boldness domain, however, increased the predictive accuracy of the PCL-R. The current study offers evidence of advantages assessing additional psychopathy constructs in forensic contexts. Further examinations especially on the concept of boldness, on which the debate regarding its relevance towards psychopathy is ongoing (i.e. Crego & Widiger, 2014; Lilienfeld et al., 2015), is warranted, since it seems to be able to contribute to more accurate forensic risk assessment.

2. *Deception and psychopathy: Associations between psychopathy, social desirability and lying behavior.* **Dagmar Stockman**, Ghent University, **Bruno Verschuere**, University of Amsterdam, **Craig Neumann**, University of North Texas & **Kasia Uzieblo**, Thomas More University College, dagmar.stockman@ugent.be

Deception is regarded as one of the most prominent features of psychopathy (Cleckley, 1976). Deception refers to deliberately misleading others to hide the truth (DePaulo et al., 2003). It is considered to be a multi-faceted construct consisting of different facets such as lying and impression management. However, it remains unclear which facets of deception are related to psychopathy. Furthermore, most studies have solely relied on self-report measures to assess deception. The aim of this study is to investigate which facets of deception are associated with psychopathy. More specifically, the current study explores the relationship between psychopathy, social desirability, self-deception, impression management, lying behavior, the underlying motives for lying and attitudes towards lying. Psychopathy was assessed with the Self-Report Psychopathy scale Short Form (Paulhus, Neumann, & Hare, 2016) and the Triarchic Psychopathy Measure (Patrick, 2010). Social desirability was measured with the Eysenck Personality Questionnaire – Revised: Lie Scale (Eysenck & Eysenck, 1991) and the Balanced Inventory of Desirable Responding V6 (Paulhus, 1994). Lying behavior was assessed with the Lying Frequency Questionnaire (Serota, Levine, & Boster, 2010) and an online scrambled words task (Wilermuth, 2011). These constructs were assessed in a large community sample ($N = 671$; $M = 37.35$, $SD = 15.27$; 80.8% female). In addition, a diary study was administered to a subsample ($N = 199$; $M = 35.99$; $SD = 16.32$; 86.3% female) to assess lying behavior in everyday life. Preliminary results indicate that psychopathic traits are moderately negatively associated with social desirability, impression management and self-deception, and positively with lying frequency. Furthermore, individuals with higher levels of psychopathic traits report more excitement and positive feelings during and after lying and less guilt during lying. These results suggest that individuals with higher levels of psychopathic traits are more deceptive towards others, but engage less in positive impression management and self-deceptive response styles. The current study helps us to understand how deception in individuals with higher levels of psychopathy occurs.

3. *Factor analysis of a self-reported measure of psychopathy: SRP-III.* **Claire Ducro**, MCF University Lille & **Thierry Pham**, University of Mons, Claire.ducro@univ-lille3.fr

Without underestimating the validity of standardized clinical measures, the time spent for their evaluation and rating may limit their usefulness to certain contexts. It is in this perspective that Hare and his colleagues developed a self-reported measure of PCL-R (Psychopathy Checklist Revised, Hare 2003): SRP-III (Self Report Psychopathy; Williams et al., 2007). As highlighted by the factorial structure of SRP-III, four facets including: Antisocial behavior, Interpersonal manipulation, Cold affect, and Impulsive thrill seeking were highlighted. Each of these facets included ten items. The SRP-III (Paulhus et al., 2009) has demonstrated good convergence and discriminant validity (Jones & Paulhus, 2010, Williams et al., 2009, Williams et al., 2010). Nevertheless, various studies point out inconsistent results concerning these dimensions and therefore an unsatisfactory model (Debowska, et al., 2014, Neal & Sellbom, 2012, Seibert, et al., 2011). The central point of these questioning is the place of antisocial behavior in the disorder of psychopathy. Some argue that these behaviors are important criteria (Hare & Neumann, 2005; Neumann, et al., 2014, Vitacco, et al., 2005) others suggest that these behavioral trends are not essential (Boduszek, et al., 2015, Cooke & Michie, 2001, Skeem & Cooke, 2010). Despite these

discrepancies in the relevance of the facet antisocial behaviors in the evaluation of psychopathy, measures of psychopathy such as PCL-R or SRPIII are essential for clinical or research practice (Dhingra & Boduszek, 2013; Lee & Ashton, 2005). The objective of this study, financed by the CNRS (National Center for Scientific Research, France), is to evaluate the psychometric qualities and to analyze the factorial structure through confirmatory analyses of the SRPIII. The study population consists of 355 French nationals, male or female, not inmate, nor forensic, aged over 18 years. The results of this study will be discussed in the light of the international literature.

4. *Empathic accuracy in female adolescents with Conduct Disorder and higher versus lower levels of callous-unemotional traits.* **Nayra Martin-Key**, University of Southampton, **Guy Allison**, University of Southampton & **Graeme Fairchild**, University of Southampton, ga6g12@soton.ac.uk

The majority of research on empathy in individuals with Conduct Disorder (CD) has focused on males. While existing research with female participants has largely found that females with CD show emotion recognition and affective empathy deficits similar to those observed in males with CD, most studies have relied on self-report questionnaires to assess cognitive and affective empathy, as well as tasks assessing recognition of static facial expressions. Therefore, it remains unclear whether such impairments in empathy would still be observed if more objective measures and ecologically-valid stimuli were used. We used an empathic accuracy (EA) paradigm to study EA, emotion recognition, and affective empathy in 23 female adolescents with CD and 29 female typically-developing controls (aged 13-18). The CD sample was divided into subgroups with higher (CD/CU+) or lower (CD/CU-) levels of callous-unemotional traits using a median split procedure. Participants watched video clips of actors recalling happy, sad, surprised, angry, disgusted or fearful autobiographical experiences and provided continuous ratings of emotional intensity (assessing EA), as well as naming the emotion (emotion recognition) and reporting the emotion they experienced themselves (affective empathy). There were no significant group differences in EA or emotion recognition. However, females with CD displayed reduced affective empathy responses to happy and fearful clips compared with typically-developing controls, $ps < .01$, $rs \geq .39$. The CD/CU+ and CD/CU- subgroups did not differ in EA, emotion recognition, or affective empathy. Our results extend previous research by demonstrating affective empathy deficits in females with CD using a more ecologically-valid task.

5. *How many twigs off this branch? Associations of psychopathic, narcissistic, and borderline traits with heroism.* **Chloe Laeremans**, Thomas More University College, **Kasia Uzieblo**, Thomas More University College & **Carlo Garofalo**, Tilburg University, 10577362@student.thomasmore.be

In his seminal account of psychopathy, Lykken (1996) argued that "the hero and the psychopath may be conceptualized as two twigs on the same genetic branch" (p. 29), as they were supposed to share the same fearless disposition. To date, only one study has directly examined the associations between psychopathic traits and levels of heroism, operationalized as a form of altruism that involves at least some degree of risk to the performer (Franco et al., 2011). Smith et al. (2013) found some evidence for an association between psychopathic traits and heroic altruism, especially concerning fearless dominance traits, with weaker associations reported for the impulsive and antisocial traits of psychopathy. In the present study, we sought to extend current knowledge by testing associations between psychopathy (assessed with the Self-Report Psychopathy-III; Paulhus, Neumann, & Hare, 2016), heroism, and altruism in three independent samples recruited from the general community ($N_1 = 145$, $N_2 = 86$, $N_3 = 50$). To examine whether the hypothesized associations with heroic altruism were specific to psychopathy or generalize to other personality disorder traits, we also administered self-report measures of narcissism (Pathological Narcissism Inventory; Pincus et al., 2009) and borderline personality disorder (MacLean Screening Instrument for BPD; Zanari et al., 2003). Preliminary analyses indicate significant bivariate associations between heroism, the interpersonal and lifestyle facets of psychopathy, and narcissistic grandiosity, whereas the association with borderline traits was less consistent. Multiple regression analyses examining the unique contribution of maladaptive personality traits on heroism revealed that only the lifestyle facet of psychopathy and borderline traits were significantly

related to heroism. Although heroism and altruism were strongly related, no significant associations between altruism and measures of maladaptive personality traits emerged. These findings seem to suggest that associations between psychopathy and heroism may be less specific than previously described, and rather reflect traits shared with other personality disorders (e.g., narcissistic grandiosity, or borderline-like impulsivity). Future studies should examine what motivates heroic behavior in individuals with maladaptive personality traits, focusing on a willingness to boost one's self-esteem or a tendency to leap into risky actions without forethought.

6. *It didn't hurt that much: Moral disengagement in psychopathy.* **Bart Maes**, Thomas More University College, **Carlo Garofalo**, Tillburg University & **Kasia Uzieblo**, Thomas More University College, ro587048@student.thomasmore.be

Amoral behavior is considered a core feature of psychopathy. Despite the vast amounts of empirical research on morality in psychopathy, little of it has investigated the specific cognitive mechanisms underlying morality in psychopathy. According to Bandura (1999) people use cognitive mechanisms that are advantageous to a selective disengagement of moral censure. This allows people to engage in self-serving behaviors that are in contract with moral principles while not experiencing negative self-evaluative emotions (e.g., shame and guilt). Bandura also states that such moral disengagement is prominent in individuals exhibiting antisocial behavior. A recent study suggests that in youthful offenders moral disengagement might indeed have mediating effects on criminal onset, but only in individuals with lower levels of psychopathy (DeLisi et al., 2014). The latter study however neglected to explore the specific different cognitive mechanisms of moral disengagement in relation to psychopathy. The current study examined associations between psychopathy facets (i.e., interpersonal manipulation, callous affect, erratic lifestyle, and criminal tendencies; assessed with the Self-Report Psychopathy-III; Paulhus, Neumann, & Hare, 2016) and moral disengagement practices (i.e., moral justification, euphemistic language, advantageous comparison, displacement of responsibility, diffusion of responsibility, minimizing the consequences, dehumanization and attribution of blame; assessed with the Moral Disengagement Scale; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996) in three independent community samples ($N_1 = 74$, $N_2 = 149$, $N_3 = 50$). Preliminary regression analyses indicated that SRP-III total scores, and more specifically interpersonal manipulation and erratic lifestyle only predicted the distortion of consequences. Callous affect and criminal tendencies did not predict any moral disengagement practice. When examining the possible moderating role of gender, regression analyses revealed no significant interaction effects. These findings indicate that the moral control in people who exhibit a more manipulative, dominant interpersonal style and an erratic lifestyle, is mainly weakened by minimizing, disregarding or distorting the effects of one's action. Future research should examine whether this cognitive mechanism mediates violent and criminal behavior in psychopathy.

7. *Fifty shades of gray: Exploring the relation between psychopathy and deviant sexual fantasy.* **Jannes van Houtven**, Thomas More University College, **Kasia Uzieblo**, Thomas More University College & **Carlo Garofalo**, Tillburg University, ro486696@student.thomasmore.be

Psychopathy refers to maladaptive personality traits that encompass affective, interpersonal and behavioral features in the presence of early and persistent antisocial behavior (Hare & Neumann, 2008). Psychopathy is a strong predictor of violent behavior – including sexual violence (Kosson et al., 1997; Munoz et al., 2011; Olver & Wong, 2006). Previous research suggests that psychopathy may also be associated with sexual deviance, and that the interaction between psychopathy and sexual deviance increases the risk of sexual violence (Hawes et al., 2016). Notwithstanding, only few studies have looked at associations between psychopathic traits and specific forms of sexual deviance besides sadism (Williams et al., 2009). This study sought to examine associations between psychopathy facets (i.e., interpersonal manipulation, callous affect, erratic lifestyle, and criminal tendencies; assessed with the Self-Report Psychopathy-III; Paulhus, Neumann, & Hare, 2016) and six different deviant sexual fantasies (i.e., sadism, frotteurism, voyeurism, pedophilia, exhibitionism and rape) in three

independent community samples ($N = 149$, $N_2 = 263$, $N_3 = 50$). Multiple regression analyses indicated that erratic lifestyle positively predicted sadistic, frotteuristic and rape fantasies and that callous affect predicted frotteuristic fantasies. Notably, these effects remained significant after controlling for narcissistic and borderline traits. When examining the possible moderating role of gender, regression analyses revealed two significant interaction effects. Specifically, the relations between callous affect and sadistic fantasies and between interpersonal manipulation and voyeuristic fantasies were only significant for men. These findings indicate that psychopathic traits may be related to an increased tendency to indulge on sexually deviant fantasies, especially among men. Future research should examine how these deviant sexual fantasies are related to deviant sexual behavior in psychopathic individuals.

8. *TriPM-assessed psychopathic traits in a Swedish pretrial forensic sample – associations with clinical and socioeconomic variables.* **A. Fakihi**, Karolinska Institute, **S. Caman**, Karolinska Institute, **K. Poghosyan**, Karolinska Institute, **J.F. Edens**, Texas A&M University & **K. Howner**, Karolinska Institute, fakihi.aiman@gmail.com

Psychopathy assessments are routinely conducted by forensic and correctional services internationally. In Sweden, psychopathy assessments are conducted by the National Board of Forensic Medicine (e.g., as part of risk assessment evaluation of life-sentenced offenders) and by the Prison and Probation Services. To date, research is lacking on associations between different constellations of TriPM-assessed psychopathic traits and theoretically relevant clinical variables, particularly in forensic populations. Males and females undergoing pretrial forensic psychiatric evaluation (FPE) at the National Board of Forensic Medicine in Sweden ($N = 91$) completed three self-report measures: the TriPM, the Interpersonal Reactivity Index (IRI) and the State-Trait Anxiety Inventory (STAI). Clinical and socioeconomic (SES)-criterion variables were retrieved from the individual FPEs including: mental health problems (e.g., psychiatric comorbidity, substance abuse, suicide attempts, anxious symptoms), criminal history (e.g., number and types of crimes), psychosocial background factors (e.g., bullying), SES indicators (intelligence, education, occupation) and empathy. Data collection is complete and preliminary findings demonstrate negative associations between TriPM-Meanness and IRI-total scores as well as scores on specific IRI-subscales (e.g., Empathic Concern and Perspective Taking). The results also demonstrate that TriPM-Disinhibition and Boldness are associated with STAI-scores in opposite directions (positively and negatively, respectively). Results regarding the clinical and socioeconomic variables will be presented at the conference. Given that psychopathy assessments have a certain impact on individual outcomes for incarcerated individuals, assessment instruments should be revised and improved. Therefore, it is of interest to evaluate novel approaches to complement existing methods. Increased knowledge about clinical profiles for individuals with different constellations and levels of TriPM-assessed psychopathic traits could provide rich descriptions of individuals undergoing forensic evaluation. Assessing dimensional psychopathic traits is also in line with emergent trends: the alternative model for personality disorders in the DSM-5 which was formulated with the aim to assess dimensional traits that co-occur in several psychiatric diagnoses.

9. *Psychopathic-like traits in identifying high-risk profiles of young offenders.* **Laura Lopez Romero**, Universidade de Santiago de Compostela, **Estrella Romero**, Universidade de Santiago de Compostela & **Jose Gomez-Fraguela**, Universidade de Santiago de Compostela, laura.lopez.romero@usc.es

Psychopathic-like traits have been widely recognized as predictors of serious and persistent patterns of problematic behavior, being considered as potential identifiers of high-risk profiles of antisocial youths. When defining psychopathic personality, most authors have traditionally agreed in describing it as a constellation of co-occurring affective (e.g., callousness), interpersonal (e.g., narcissism), and behavioral (e.g., impulsivity) traits. However during the last decades, Callous-unemotional (CU) traits, representing the affective dimension of the psychopathic construct, have emerged as a key construct in identifying serious patterns of problematic youths, leading to the inclusion of a new specifier for conduct disorder in the latest edition of the DSM. Bearing this in mind, the current study has been designed with the intention of 1)

identifying different groups of youths offenders based on the presence of psychopathic traits; 2) examining whether the presence of psychopathic-like traits indeed identifies a high-risk group of young offenders, and 2) testing whether CU vs. Psychopathic personality, are best predictors of serious and pervasive antisocial behavior. Data of 964 male offenders, aged 14 to 22, was gathered from two independent but complementary studies conducted in Spain (n = 266; mean age = 17.29), and Perú (n = 698; mean age = 17.12). From a person-oriented perspective, data was firstly analyzed in order to identify different groups - profiles - of young offenders based on the presence of psychopathic-like traits (i.e., CU, narcissism, impulsivity), with replication analyses for both the Spanish and Peruvian samples. Then, it was examined which configuration of traits (e.g., CU only vs. co-occurring affective, interpersonal and behavioral traits) represents the high-risk profile, leading to identify a more serious, violent and pervasive group of antisocial youths. Through these results, new evidence about the role of psychopathic-like traits in the prediction of serious problematic behavior in forensic samples will be provided. In addition, by testing the CU vs. psychopathic personality conceptualization, these findings may shed new light not only in terms of theoretical psychopathic conceptualization, but also in terms of risk assessment/management. Once elucidating whether CU alone or all co-occurring psychopathic traits are the best indicators of risk, new specific advances could be delineated for intervention and prevention purposes.

10. *An ERP Study of Emotional Attention and Regulation in Undergraduates with Psychopathic Traits.* **Danielle diFilipo**, City University of New York, **Taylor Valentin**, City University of New York, **Kayla Talbot**, City University of New York & **Jill Grose-Fifer**, City University of New York, danielle.difilipo@gmail.com

Psychopathy is characterized in part by shallow emotion and a lack of empathy. A number of studies have shown that individuals with psychopathy show atypical responses to facial expressions of basic emotions. In this study, we used ERPs to investigate how the neural correlates of emotional face processing varied with different levels of psychopathic traits in undergraduates across two conditions. Psychopathic traits were measured using scores from the Psychopathy Personality Inventory—Revised (PPI-R). In the first condition, participants passively viewed happy, fearful, and sad faces from the NimStim set of emotional faces while completing a simple distraction task. In the second condition, participants were instructed to upregulate their emotional response to the same pictures. EEGs were recorded using 64 scalp electrodes in both tasks. Participants with low and medium PPI-R Coldheartedness scores, but not those with high scores, showed significantly more negative N170 amplitudes in the emotion regulation condition compared to the passive viewing condition. In addition, only those with low Coldheartedness scores had significantly larger LPP amplitudes (400-600 ms) in the emotion regulation condition compared to passive viewing of happy faces. These results suggest that those with higher levels of psychopathic traits, specifically callousness, have deficits in regulating their attention to emotionally salient information, even when explicitly instructed to do so, in both early and later time windows. These results support previous findings of atypical emotional processing in psychopathy.

11. *Validity of the factor structure of the Hare Psychopathy Checklist-Revised* (PCL-R) in forensic patients.* **Thierry Pham**, University of Mons, **David Kosson**, Rosalind Franklin University & **Marie-Christine Stafford**, Centre de Recherche Philippe-Pinel, thierry.pham@umons.ac.be

Despite substantial evidence for the fit of the three (Cooke & Michie, 2001) and four-factor (Hare, 2003; Hare & Neumann, 2005) models of Psychopathy Checklist-based ratings of psychopathy in North American samples of adult males and adolescents, there is much less evidence about the fit of these models in European samples and in samples examined with psychopathy measures in languages other than English. To address this issue, we conducted a confirmatory factor analysis of PCL-R among French speaking forensic patients. The sample includes male 336 adults patients from a security hospital inside the Social Defense Law System. The mean age was 43 years and IQ Wais-R was 75. We used the M Plus program for conducting confirmatory factor analyses with the WLSMV estimator to test the fit of the three- and four-factor models. Analyses indicated generally adequate fit for both models in the sample. We found generally good fit for

both the three factor and the four factor models as indicated by CFI and TLI above .90 and WRMR below 1.0, although the fit for the RMSEA is only marginal ($RMSEA < .09$). We also examined the correlates of the psychopathy facets ($N = 236$) with criminal charges as defined by the index offences. We also examined the correlates of these facets and ratings of personality disorder symptoms using the SCID-II (First et al., 1997). The pattern of correlations with criminal charges and personality disorders were consistent with prior studies and suggest that the psychopathy facet scores provide valid measures of the underlying constructs. Comparison of the zero-order and partial correlations demonstrates that much of the relationship between scores on the facets was attributable to the shared variance among the factors. However, the correlations are somewhat different than what we have reported for the prison sample (Pham, Kosson, & Stafford, submitted). Hence, the differences between forensic psychiatric and prison samples seem consistent for criminal activity and for personality pathology. These findings raise the possibility that the shared variance among components of psychopathy may be more critical than is commonly recognized.

12. *Aberrant Paralimbic Functional Connectivity in Juvenile Offenders with Psychopathic Traits.* **Devin Ulrich**, University of New Mexico, **Michael Maurer**, University of New Mexico, **Prashnanth Nyalakanti**, MIND Research Network & **Kent Kiehl**, University of New Mexico/MIND Research Network, dulrich@mrn.org

Youth with psychopathic traits make up a small but particularly dangerous percentage of the incarcerated juvenile population. These individuals are often more likely to engage in life-course persistent criminal behavior making them an important population to study in order to properly target interventions. Decreased gray matter volume and concentration in paralimbic regions has been associated with psychopathic traits in both adult and juvenile samples. Several studies have also found aberrant functional connectivity within the paralimbic circuit (e.g., between the amygdala and orbitofrontal cortex) in samples of adults high in psychopathic. However, to our knowledge, few, if any, studies have assessed whether paralimbic system dysfunction maps on to the dimensional construct of psychopathic traits in juvenile samples. The present study sought to measure the dimensional relationship between functional connectivity within the paralimbic circuit at rest and psychopathic traits in a large sample of incarcerated juvenile male offenders ($N > 200$) using seeds from four bilateral paralimbic regions of interest (i.e., amygdala, orbitofrontal cortex, posterior cingulate cortex, and temporal pole). Analyses examined relationships with neural connectivity to PCL-YV total, Factor 1 and 2, and Facet 1 - 4 scores. Preliminary results for ongoing analyses in a small sample ($n \approx 40$) of incarcerated female juvenile offenders are also reported.

13. *Gender differences in relationships between psychopathic traits, sexual motivations and sexually coercive behavior.* **Amy Hoffmann**, University of South Florida, hoffmann@mail.usf.edu

Sexual coercion is a serious problem perpetrated by both men and women. Recently, greater attention has focused on exploring gender moderation in the relationships between key constructs (including psychopathic traits) and sexual coercion (e.g. Muñoz, Khan, & Cordwell, 2011; Schatzel-Murphy et al., 2009). The current study examined relationships between psychopathic traits and variables relevant to sexual coercion including motivations for sex (e.g., power, emotional need) and coercive behaviors. The sample consisted of 763 undergraduates (55% female) attending a large southeastern university. Psychopathic traits were assessed using the SRP-III, sexual motivation was measured using the Affective and Motivational Orientation Related to Erotic Arousal Questionnaire, and coercion was assessed using a modified version of the Post-Refusal Sexual Persistence Scale. The first set of regression models conducted on sexual coercion revealed a three way interaction between Factor 1 (F1), Factor 2 (F2) and gender. In men, F2 was positively associated with coercion especially at low levels F1, but was unrelated to coercion in women. Instead, it was F1 in women that was positively related to coercion at low but not high F2, whereas F1 was unrelated to coercion in men. Although sex motivations were not differentially related to coercion in men and women, another set of analyses revealed a three-way interaction between F1, Emotional Need motivation, and Gender. Whereas psychopathy relations with coercion did not differ by emotional need

motivations, in women higher F1 scores tended to show a stronger relationship with coercion when emotional need motivations were high rather than low. Together, these results support literature suggesting that not only do the roles of psychopathic traits and sexual motivations in sexual coercion differ by gender (e.g. Hill, 2003; Hoffmann & Verona, in prep), but that F1 may manifest differently in men and women (e.g. Verona, Sprague & Javidani, 2012). Specifically, the combination of high manipulative-callous traits (F1) and Emotional Need motivations seems to enhance sexual coercion in women, whereas antisocial and disinhibited traits (F2) more generally were risky for men. This suggests that while perhaps emotional dysregulation is an important risk factor for sexual coercion, it promotes coercive behaviors differentially in women and men who show higher manipulative-callous traits.

14. *The role of parental care in moderating antisocial behavior in youth with Callous-Unemotional traits.* **Nathalie Gauthier**, Brock University, **Angela Book**, Brock University & **Anthony Volk**, Brock University, nathalie.gauthier2@brocku.ca

Callous-Unemotional (CU) traits in youth (similar to the interpersonal and affective traits of psychopathy in adults) are an important predictor of antisocial behavior and delinquency. While the majority of research indicates that CU traits promote a predisposition to maladaptive behaviors and conduct problems, some research has focused on factors that can explain different expressions of these traits, exploring models of “successful” psychopathy. Parenting style has been suggested as a moderating factor, as negative parenting styles are associated with increased conduct problems and antisocial behavior in youth high in CU traits. Recent experimental findings have also shown that increasing responses of parental warmth reduced externalizing behavior in preschool children high in CU traits. While a great deal of the research in CU traits and parenting quality focuses on preschool samples and incarcerated youth, these findings were also supported in adults. In our previous research, parental quality predicted differences in antisocial behavior in an adult community sample high in psychopathic traits. The current study sought to extend our previous findings, and address the need for research in adolescent community samples, to help understand non-criminal, or “successful” psychopathy. Based on previous research, gender differences were expected in CU traits and delinquency. It was also expected that the quality of parental care would moderate the relationship between CU traits and delinquency in boys, based on our previous study. Specifically, it was predicted that parental neglect would increase reported delinquency in adolescent boys high in CU traits. It was also predicted that parental warmth would reduce delinquency for adolescent boys higher in CU traits. As predicted, boys were significantly higher in CU traits and delinquency, thus analyses were conducted separately by gender. In girls ($n = 222$), while higher parental neglect and higher CU traits predicted increased reports of delinquency independently, no moderation was found. For boys ($n = 163$), the quality of parental care significantly moderated the relationship between CU traits and reported delinquency. Specifically, parental neglect increased delinquent behavior in boys high in CU traits, while parental warmth reduced reported delinquency. This was consistent with our previous findings in adults, indicating that parental care can help explain differences in antisocial behavior in psychopathy.

15. *Psychopathic traits and multimodal emotion in dynamic stimuli.* **Angel Mackenzie**, Carleton University & **John Logan**, Carleton University, angel_mackenzie@carleton.ca

Psychopathy has been associated with reduced processing of emotional information in both visual and auditory channels. However, these studies generally used static stimuli (e.g., facial expressions in photos) or isolated emotion cues (e.g., emotional speech expressing semantic or prosodic emotion only). Using dynamic emotion stimuli (e.g., video clips), Regenbogen et al. (2012) found that when emotion information is presented via various “channels” (a language-based semantic channel, a prosodic channel, or visual channel based on facial expression), recognition accuracy is reduced as fewer channels are presented and one or more are made neutral. Regenbogen et al. also found that semantic emotion was the easiest type of emotion cue to recognize, followed by facial expression, with prosodic emotion producing the lowest

accuracy. In the present study we asked whether removing a channel and presenting varying combinations of emotion cues would differentially affect emotion recognition for individuals high in psychopathic traits. Specifically, would increased ambiguity created by removing channels in emotional stimuli exaggerate the emotion-processing deficits associated with psychopathic traits? It was predicted that individuals high in psychopathic traits (HP) would be poorer at identifying emotion overall, and that increasing the ambiguity of the stimuli by removing channels would exacerbate the reduced emotion-processing demonstrated by HP relative to low scoring (LP) individuals. Video clips ~13 seconds in length (from Regenbogen et al, 2012) were presented to 349 undergraduate participants who varied in psychopathic traits as measured by the Self Report Psychopathy Scale (Paulus et al., 2016); high and low psychopathy groups were established using upper and lower quartiles. Participants were required to categorize the emotion expressed in the video from among four options – happy, sad, fear, or disgust – based on either auditory-only, visual-only, or combined audio-visual channels. HP individuals were less accurate than LP individuals at identifying the emotion accurately in two of three conditions: the visual-only channel and the combined audio-visual channel. However, in the audio-only channel (supplying only prosodic cues to emotion) HP and LP individuals performed comparably – both groups demonstrated very low accuracy (~20% correct). HP individuals demonstrated general emotion-processing impairments relative to LP individuals, although the expected interaction between psychopathic traits and number of channels presented was not observed. Thus, other than under circumstances of extreme stimulus ambiguity which produced a floor effect of response accuracy for all participants, individuals high in psychopathic traits demonstrated general deficits in processing of emotion cues relative to low scoring individuals.

16. *Interactive cognitive and affective deficits in psychopathy: Attention and working memory for emotional faces.* **Allan Heritage**, Vanderbilt University, **Laura Long**, University of Houston, **Geoffrey Woodman**, Vanderbilt University & **David Zald**, Vanderbilt University, a.heritage@vanderbilt.edu

Psychopathy is a pervasive and persistent personality disorder characterized by low fear, diminished empathy, and a propensity to be manipulative, mixed with impulsivity and aggression. Historically, it has been hypothesized that the psychopathic personality is the result of either an underlying affective deficit or a cognitive deficit. The affective hypotheses have proposed as the primary underlying deficit an inability to experience fear, and by extension to learn from punishment, and to recognize fear in others. The cognitive hypotheses have proposed as the primary underlying deficit impaired shifting of attention from goal relevant or rewarding stimuli to contextual cues. More recently research has begun to suggest that some combination of cognitive and affective deficits together may actually be implicated. The current study tested the hypothesis that deficient interactions between cognitive and affective processes are at the core of the psychopathic personality. Specifically, we predicted factor level relationships such that impulsive-antisocial traits would relate most strongly to cognitive deficits whereas affective-interpersonal traits would relate most strongly to affective deficits. Interactive deficits in both cognitive and affective processes were predicted to relate to overall levels of core psychopathic traits. To test this hypothesis, we recruited 46 community participants and measured psychopathic personality traits using both the Psychopathic Personality Inventory (PPI) and the Triarchic Psychopathy Measure (Tri-PM). We then used event-related potentials (ERPS) recorded during a memory guided visual search task for emotional faces to measure the influence of processing emotional faces on attention and working memory as a function of psychopathic traits. Our results suggest that specific relationships exist between cognitive processes and the impulsive antisocial factors of psychopathy, and between affective processes and the more interpersonal affective factors of psychopathy. Factors that measure callousness and lack of empathy specifically were related to cognitive and affective processes together. This relationship with both cognitive and affective processes suggests that it may be those factors related to callousness and lack of empathy that capture the core of the psychopathic personality and the underlying interactive cognitive-affective deficits.

17. *Psychopathy, ethnicity and non-violent recidivism: A longitudinal study.* **John Anderson**, Rosalind Franklin University, **Zach Walsh**, University of British Columbia, Okanagan, **Elena Vaudreuil**, Rosalind Franklin University & **David Kosson**, Rosalind University, john.anderson@myrfums.org

Psychopathy has long been noted to play an important role in the prediction of criminal behavior and offending. Specifically, psychopathic traits have been shown to be predictive of violent recidivism among offenders. However, the construct has rarely been used to specifically predict nonviolent recidivism. Plus, few longitudinal studies have been conducted on American offenders, and even fewer longitudinal studies have examined the three largest ethnic groups in The United States of America. Given that offenders are charged with many more nonviolent than violent crimes, the current study examined psychopathy, assessed by the Hare Psychopathy Checklist- Revised (PCL-R; Hare, 2003), as a predictor of nonviolent and general recidivism in a sample of 424 male American offenders over an average of 72 months. It was found that psychopathy predicted arrests for both nonviolent and general crime in the entire sample. After controlling for socioeconomic status, psychopathy predicted nonviolent recidivism in European Americans and African Americans but not in Latino Americans; and it predicted general recidivism in African Americans, but not in the other two ethnic groups. There were no Psychopathy X Ethnicity interactions for prediction of nonviolent or general recidivism, suggesting that psychopathy does not differentially predict either type of recidivism in one ethnic group over another. With regard to factors predicting nonviolent recidivism, Factors 1 and 2 each predicted nonviolent recidivism, though there was no statistically significant difference in their predictive ability in the entire sample, or in any specific ethnic group. There was also a Factor 1 X Factor 2 interaction in the prediction of nonviolent recidivism for the entire sample, and among Latino Americans, but not among African Americans or European Americans. These findings have several implications. Firstly, it is noted that the PCL-R is predictive of nonviolent recidivism in addition to violent recidivism. Secondly, the instrument is not differentially predictive of recidivism in any of the three largest ethnic groups in the United States. Importantly, ratings on each major component of psychopathy have been shown to predict nonviolent recidivism, and a combination of the two factors may be especially predictive. This provides further evidence that the PCL-R may be an effective tool for predicting criminal behavior in diverse populations, though further examination in larger samples of Latino Americans and other ethnic minority groups is clearly warranted.

18. *In charge or insecure? Exploring the role of power in the psychopathy and aggression relationship.* **Sean McKinley**, University of South Florida, **Edelyn Verona**, University of South Florida & **Brent Murphy**, Emory University, sjmcinley@mail.usf.edu

Psychopathy and aggression are constructs that have been extensively linked in the literature, with most forms of aggression associated with Factor 2 and more subtle forms of aggression (e.g., indirect, relational) perhaps associated with Factor 1. Less work has examined how power and dominance may play a role in understanding psychopathic aggression. Whereas Factor 1 was hypothesized to be associated with dominance and a sense of power, Factor 2 may be indicative of an anxious, insecure relationship with power. Finally, feelings of power were hypothesized to mediate Factor 1 and aggression, and attention to and desire for power were hypothesized to co-mediate Factor 2 and aggression. One hundred twenty-four participants with data on these measures were obtained from a larger longitudinal study on gender, violence, and substance use. Psychopathic traits were measured at baseline using the Psychopathy Checklist: Screening Version; aggression was assessed with the Forms of Aggression Questionnaire administered at baseline and the Aggression Questionnaire at baseline, six-month and one-year follow-up time points; and dominance and power were assessed with the Sense of Power and the Power and Dominance System Scales administered at either baseline, six-month, or one-year follow-up. While Factor 1 and Factor 2 showed significant zero-order relationships with physical aggression (F1: $r = .20$, $p < .05$; F2: $r = .31$, $p < .01$) and property-related aggression (F2: $r = .29$, $p < .01$) at baseline and follow-up, they did not predict aggression at follow-up when controlling for baseline aggression. In terms of power-aggression relationships, desire for power (but not feelings of power) predicted verbal aggression ($\beta = .37$, $t(117) = 3.00$, $p < .01$, $[.04, .17]$) and

indirect aggression ($\beta = .46$, $t(117) = 3.85$, $p < .001$, $[-.06, .19]$) at combined follow-up time points, above the influence of baseline aggression. Interestingly, feelings of power (but not desire for power) predicted a *decrease* in indirect aggression at combined follow-up time points ($\beta = -.32$, $t(118) = -3.05$, $p < .01$, $[-.16, -.03]$). Bootstrapping analyses were conducted to test for indirect effects of power on the psychopathy-aggression relationship; no mediating effects were observed. Results suggest that, although psychopathic traits are related cross-sectionally to aggression, certain dimensions of power may be better predictors of future non-physical forms of aggression than psychopathy – particularly a strong desire for power. Although power mediation was not observed in this sample, future research should explore the idea in “successful” psychopathy samples.

19. *Physiological correlates of triarchic psychopathy constructs as assessed by clinical interview.* **Isabella Palumbo**, Florida State University, **Peter Cernohorsky**, University of Maastricht, **James R. Yancey**, Florida State University & **Christopher J. Patrick**, Florida State University, palumbo@psy.fsu.edu

Research on physiological responding in criminal offenders assessed for psychopathy using Hare’s (2003) Psychopathy Checklist Revised (PCL-R) has demonstrated differential correlates for the PCL-R’s two factors. Factor 1 is generally associated with reduced cortical and peripheral reactivity to emotional stimuli, whereas Factor 2 tends to be associated with reduced event-related potential (ERP) response to non-affective stimuli in cognitive tasks. The triarchic model of psychopathy was formulated in part to clarify the basis for differing correlates of psychopathy factors (Patrick & Drislane, *J of Personality*, 2015). The current study sought to examine whether physiological correlates of the two PCL-R factors in an offender sample might be accounted for by constructs from the triarchic model, assessed using the same method (i.e., clinical interview). Participants consisted of incarcerated adult males who were assessed for psychopathic features using the PCL-R, and for levels of boldness, meanness, and disinhibition using a clinical interview protocol, the Triarchic Psychopathy Interview (TriPIN). The items for the TriPIN cover content domains similar to those of the well-established Triarchic Psychopathy Measure (TriPM), with items presented in an interview format and sequenced to optimize content-flow. Scores on the PCL-R and the TriPIN were examined in relation to reactivity on two laboratory tasks: (1) an affective picture-viewing task in which abrupt noise probes occurred at unexpected times during viewing of picture stimuli, and (2) a three-stimulus oddball tasks including infrequent target stimuli calling for button-presses, along with novel non-target stimuli. Physiological measures included peripheral and ERP response to picture presentations, startle-blink and ERP (P₃) response to noise probes occurring during picture stimuli, and electrocortical (P₃) response to target and novel stimuli in the oddball task. Based on prior work, differential physiological correlates are expected for PCL-R Factors 1 and 2. Statistical analyses for the current work focus on the extent to which differential correlates for the two PCL-R factors are accounted for by scores on the triarchic model constructs as assessed by the TriPIN. Findings are interpreted in terms of their implications for understanding of psychopathy and for current initiatives directed at incorporating neuroscience concepts and methods into assessments of mental health problems.

20. *The influence of callous-unemotional traits on different aspects of emotion processing in children with conduct problems.* **Daniela Hartman**, Justus-Liebig University Giessen, daniela.hartman@psychol.uni-giessen.de

The findings regarding differences in different aspects of emotion processing of children with conduct problems (CP) have so far been rather inconsistent. One example for these inconsistencies are the findings regarding the ability to recognize emotions. Some studies support the finding that children with CP have a deficit in recognizing fear while others found the opposite to be true. Such inconsistencies are often attributed to the lack of considering different subgroups among children with CP. One way to specify such subgroups is the occurrence of elevated Callous-Unemotional-Traits (CU-traits). To better understand how CU-traits mediate differences in emotion processing, this study investigates three different aspects of emotion processing (emotion recognition, empathy and affective reactivity) in children with CP and with and without CU-traits. In contrast to previous studies, the study includes two control groups, healthy children with and without CU-

traits. The study includes children aged 7-14 years and consists of three different experimental tasks. The first and second task, are computer based emotion recognition tasks. The first task is used to investigate differences in the ability to recognize the negative emotions fear, sadness and anger (reaction time) as well as differences in the empathic responses to the presented stimuli. The latter is achieved with the help of the FACET System (iMotions) which assesses the facial activation of the participants. In the second task eye-tracking is used to study whether differences in the attention to different parts of the face underlie possible differences in the ability to recognize emotions. During the third experimental task the participants are presented with pictures of the International Affective Picture System (IAPS). Differences in affective reactivity to these stimuli are investigated with subjective (self-report) and objective (heart rate and skin conductance) measures. Preliminary results reveal correlations between elevated CU-Traits and a deficit in the ability to recognize anger as well as a diminished empathic response and the number of fixations on the mouth region of the face in all emotions. No significant influence of CU-traits on the affective reactivity measures could be observed.

21. *Organized crime in Mexico from within.* **Esther Dorta**, Salamanca University & **Francisco Herrera**, Salamanca University, estherdorta@gmail.com
22. *Psychopathic traits, affective arousal, and eye gaze patterns to facial expressions in undergraduate students.* **Yu Gao**, Brooklyn College and the Graduate Center of the City University of New York & **Shawn Fagan**, Brooklyn College and the Graduate Center of the City University of New York, yugao@brooklyn.cuny.edu

Successful empathetic responding involves accurate emotion recognition of facial expressions, a skill that is largely disrupted in individuals high on psychopathy. Recent research proposes that psychopathic individuals have impaired emotion recognition due to attention orienting deficits to salient facial features like the eyes. Psychopathic individuals also display blunted autonomic responding to emotional stimuli; though, whether this is due to attention orienting deficits remains to be clarified. In this study, we looked at the effects of cueing on facial emotion recognition, and how different factors of psychopathy contribute to emotion recognition accuracy. Social attention (eye gaze patterns), affective arousal (skin conductance responses), and emotion recognition accuracy in response to happy, sad, angry, fearful, and neutral facial expressions (15 images per emotion) were examined in undergraduate students who completed the Psychopathic Personality Inventory-Revised (PPI-R). Higher self-centered impulsivity scores were associated with reduced visual fixation to the eye region in general, as well as poor accuracy for recognizing fearful expressions when cued to pay attention to the eye region. However, these relationships were only significant among those with lower fearless-dominance scores. Findings suggest that emotion recognition deficits are more pervasive in those high on Factor 2 psychopathy, which encapsulates the behavioral and social deviance issues common to the disorder, and that these deficits are not influenced by physiological arousal.

23. *Boldness psychopathic traits predict reduced gaze toward fearful eyes in violent offenders.* **Steven Gillespie**, Newcastle University, steven.gillespie@ncl.ac.uk

Research with developmental, and adult non-offender samples has shown a relationship of psychopathic traits with reduced attention to the eyes. The tendency to attend to the eye region is thought to be crucial for the recognition of others emotional facial expressions. However, the relationships of psychopathic traits with eye scan paths in a forensic sample have not yet been investigated. In this study we examined the eye movements of incarcerated violent male offenders (N=30) during an emotion recognition task. Participants were presented with faces that varied in emotion (anger, disgust, fear, happy, sad, surprise), intensity (55%, 90% expressive) and sex. We found that across various eye-tracking parameters the eye scan paths of violent offenders varied with the type and intensity of the emotional expression. Moreover, Boldness

psychopathic traits, but not Meanness or Disinhibition, were associated with reduced overall dwell time and fixation counts, and slower first fixation latencies, on the eyes compared with the mouth. These results are the first to show a relationship of psychopathic traits with reduced attention to the eyes in a forensic sample, and suggest problems in the orienting of attention toward emotionally salient aspects of the face.

24. *Psychopathy's relations with physical and relational aggression. The roles of sex and gender.* **Olivia Preston**, University of Southern Mississippi, **Joye Anestis**, University of Southern Mississippi, **Ashley Watts**, Emory University & **Scott Lilienfeld**, Emory University, Olivia.preston@usm.edu

Extensive research points to sex differences in prevalence and perhaps correlates of psychopathic traits. Gender roles – degree of conforming to attitudes, behaviors, or emotions typically associated with masculinity or femininity – have received considerably less attention, despite findings that gender roles can relate strongly to behavior (Bem & Lewis, 1975). For example, masculinity is positively associated with antisocial behavior, whereas femininity is negatively associated with such behavior (Castro, Carbonell, & Anestis, 2011). Moreover, gender roles may statistically predict aggression above and beyond biological sex, as masculinity tends to be positively related to aggression in women, whereas femininity tends to be unrelated or negatively related to aggression in women (Reidy, Sloan, & Zeichner, 2009). Other related findings have been mixed; in one study, the relationship between psychopathy and associated personality disorders (e.g. antisocial) was moderated by sex but not gender role (Hamburger, Lilienfeld, & Hogben, 1996). This study is the first to examine potential moderating and mediating impacts of gender roles on the well-established relationship between psychopathic traits (Psychopathic Personality Inventory – Revised [PPI-R]) and aggression (physical, relational). Data were collected from a mixed-sex sample of 360 undergraduates at a large southeastern university. Indirect effects analyses revealed both moderating and mediating effects of gender roles beyond those of sex. Masculinity moderated the relations in a potentiating manner between (a) Self-Centered Impulsivity (SCI) and Coldheartedness (CH) and (b) physical aggression. In addition, masculinity buffered against the relations between Fearless Dominance (FD) and relational aggression; femininity did not moderate any relations between psychopathy and aggression. Exploratory analyses revealed differential moderation effects of masculinity for males and females. In mediational analyses, femininity – but not masculinity – mediated the relationship between sex and both SCI and CH. Femininity mediated the relationship of SCI and CH to both aggression types, whereas masculinity mediated that of FD to both aggression types. Mediation differences suggest variety in how psychopathic traits may relate to aggression in nonincarcerated samples. Overall, these findings underscore the importance of considering gender role above and beyond sex in psychopathy's relation to external correlates.

25. *Identifying Antisocial Youth through Broad and Specific Measures of Personality.* **Kimberly Mularczyk**, Brock University, **Angela Book**, Brock University, **Zoptio Marini**, Brock University & **Danielle Molnar**, Brock University, kmularczyk@brocku.ca

Identifying high-risk, psychopathic youth early in development has the potential to improve intervention outcomes. However, much on youth psychopathy is still unknown, as psychopathy research has traditionally focused on adult males, or samples drawn from forensic, clinical, or university settings. Additionally, whether a broad measure of personality, or a measure of psychopathy, may be more applicable for assessing a broader range of antisocial outcomes is still debated. For example, with an undergraduate sample recruited from a Canadian university, Book and colleagues (2015) found that a broad measure of personality, the 60-item HEXACO Personality Inventory (HEXACO-PI; Ashton & Lee, 2009), explained 93% of the shared variance within a measure of sub-clinical psychopathy, a subscale of the 27-item Short Dark Triad (SD3; Jones & Paulhus, 2014). Different measures of personality can also have unique differences in terms of their costs (e.g., stigmatizing labels) and benefits (e.g., cross-cultural validity) in assessment domains. With a community sample of 428 adolescents between 13-18 years old recruited from the Niagara region of Ontario, my Master's research focuses on determining the compatibility between the HEXACO PI-R (Lee & Ashton, 2004) and the Antisocial Process Screening

Device-Youth Version (APSD-YV; Frick & Hare, 2001). Second, my research seeks to determine whether the HEXACO PI-R and the APSD-YV differ with respect to their incremental predictive utility for capturing a range of deviant (e.g., disrespect of authority) and delinquent (e.g., theft) outcomes among adolescents. To investigate the first question regarding compatibility, a canonical correlation analysis (CCA) was used. The results of the CCA revealed that the measures of individual difference significantly overlapped with one another and that as predicted, the HEXACO model accounted for the highest amount of variance in the psychopathy measure. In the CCA, the full model was statistically significant, $F(18, 1097.92) = 19.852, p < .001$, yielding a Wilk's λ of .451, indicating a 55% overlap of shared variance. To determine the incremental predictive utility of the HEXACO PI-R and the APSD-YV, a path analysis is currently being conducted and additional findings will be shared. Psychopathy is strongly related to greater instrumental violence, less empathy for victims, and less concern over being punished (Hare, 1993). Assessing high-risk youth with reliable tools early in development can be critical in improving youths' quality of life and preventing harm to others. The current study has implications for the assessment of antisocial constructs with adolescents in clinical, forensic, and academic settings.

26. *Mediation of sensation seeking on the association of narcissism and aggression.* **Georgia Frangou**, University of Cyprus & **Kostas Fanti**, University of Cyprus, gflmlp@gmail.com

It is important to investigate the association between narcissism, sensation seeking, and aggression. Studies regarding narcissism and aggression have revealed confusing results as some of them suggested an association with only proactive aggression and others with both proactive and reactive aggression. There are a few researches that investigate the relationship of narcissism with sensation seeking. Those that studied the two variables have shown an association of narcissism with certain sensation seeking characteristics. This study aims to investigate whether sensation seeking mediates the association between narcissism and aggression. The sample in this study consists of 2306 Cypriot high school students from Cyprus. Most students completed the assessment twice within a 6 month interval between administrations. Narcissism was evaluated with Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979) and Antisocial Process Screening Device—Youth Version (APSD; Frick and Hare 2001), aggression with Proactive and Reactive Aggression Questionnaire (PRAQ; Raine et al. 2006), and sensation seeking tendencies with Sensation Seeking Scale Form -V (SSS-V; Zuckerman, Eysenck, and Eysenck 1978). After running a linear regression, high scores on Time 1 NPI explained high scores on Time 2 proactive aggression over time above and beyond other variables, even after controlling for Time 1 proactive and reactive aggression, with sensation seeking partially mediating this association. The two subscales that were more strongly associated with aggressive behavior were Disinhibition and Boredom Susceptibility. In contrast, narcissism did not predict reactive aggression, although sensation seeking was positively associated with reactive aggression. All subscales of sensation seeking except Experience Seeking subscale were significantly associated with reactive aggression. In conclusion, narcissism explains proactive but not reactive aggression. Both direct and mediating effects were identified for sensation seeking. Results can reveal a great pool of information regarding the type of appropriate interventions for the adolescent population with narcissistic traits. Hopefully, this study will explain the previous mixed results about the association of narcissism with both proactive and reactive aggression. This way, insightful information about the heterogeneity of narcissism will enrich the science of psychology. This study will serve as a pillar to further investigate covert and overt narcissism, the association with sensation seeking characteristics, and aggression.

27. *Psychopathy's Impact on the Criminal Justice System: Examining the Conviction to Charge Ratio.* **Sara Millspaugh**, Rosalind Franklin University & **David Kosson**, Rosalind Franklin University, sara.millspaugh@my.rfums.org

It is well established that psychopathic individuals are more likely than nonpsychopathic individuals to commit crimes; therefore, there is a need to research how psychopathic individuals interact with the criminal justice system (CJS). An important question related to the interaction between psychopathy and the CJS is the extent to which psychopathic offenders are successful in their ability to obtain favorable outcomes for themselves within the CJS. There is a conflict in

the current literature such that several prior studies suggest that psychopathy is associated with success in the CJS whereas other studies suggest that there is not such an association. Therefore, the current study aims to further our understanding of this issue by examining whether psychopathic offenders are less likely to be convicted of the offenses with which they have been charged. In order to examine this question, the current study will analyze the conviction to charge ratio (CCR; i.e., number of convictions/number of charges) among approximately 200 inmates in a county jail. Psychopathy was assessed with the Psychopathy Checklist-Revised (PCL-R; Hare, 2003). Correlations and multilevel modeling will be used to examine whether psychopathy ratings predict a lower CCR for violent and nonviolent offenses. Further, we will examine the differences among the two factors of psychopathy, Factor 1 (i.e., interpersonal/affective traits) and Factor 2 (i.e., antisocial lifestyle traits), in the prediction of CCR. We will also examine whether any relationship between psychopathy and CCR is a function of two confounding variables: estimated intelligence quotient (IQ) and socioeconomic status (SES). Results and implications for the value of assessing psychopathy in the CJS will be discussed.

28. *The relationship between problematic personality traits, executive functions and conduct problems in preschool children.* **Silvija Rucevic**, University of Osijek, **Tijana Borovac**, University of Osijek, **Sandra Vuckovic**, Centre for Providing Services in the Community- Osijek & **Dino Krupic**, University of Osijek, s.rucevic.03@cantab.net

The aim of this study was to investigate the relationship between problematic personality traits (grandiose-deceitful, callous-unemotional and impulsivity-need for stimulation), some aspects of executive functions (planning and risky decision-making) and conduct problems. The study was conducted in a sample of randomly selected 165 children (mean age = 5.28 years; 51% of boys)-parent dyads, currently involved in the longitudinal study ECLAT. In order to achieve greater variability in psychopathic traits, problem behaviors and executive functioning, children were recruited from both mainstream ($n = 115$) and high-risk ($n = 50$) kindergartens. Planning and risky decision-making were measured using the Hungry Donkey Task (i.e. long-term consequences index and bias for infrequent loss index) and the Balloon Analogue Risk Task-BART (i.e., reward and punishment responsivity, and cost-benefit ratio), while parents and teachers filled out questionnaires assessing the child's personality traits (Child Problematic Traits Inventory) and conduct problems (Strengths and Difficulties Questionnaire. All three dimensions of problematic personality traits were positively and moderately associated with conduct problems. Moreover, the Grandiose-Deceitful and Callous-Unemotional dimensions were negatively related to the bias for infrequent loss index. In addition, two the aforementioned dimensions were positively related to the cost-benefit ration. In other words, children who were rated higher on the affective and interpersonal dimensions of problematic personality traits were more likely to choose doors that provide smaller, but more frequent losses in the Hungry Donkey Task. In addition, they made less risky choices in the BART task. In contrast, the Impulsivity-Need for Stimulation dimension was negatively associated with the long-term consequences index. In addition, conduct problems were negatively related to the cost-benefit ratio suggesting that children who exhibit behavioural problems tend to make riskier decisions during the BART task. Finally, relative contributions of individual variables included in this study were examined. After controlling for the child's sex, age, intelligence and working memory (WISC-IV-HR; Block design and Digit span), only three dimensions of problematic personality traits were significant postdictors of conduct problems. The findings have implications for assessment of problem behaviours in young children.