



# Society for the Scientific Study of Psychopathy

5<sup>TH</sup> BIENNIAL MEETING  
L'ENFANT PLAZA HOTEL, WASHINGTON, DC  
JUNE 6-8, 2013  
[WWW.PSYCHOPATHYSOCIETY.ORG](http://WWW.PSYCHOPATHYSOCIETY.ORG)

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CONFERENCE LOCAL HOSTS:	JAMES BLAIR STUART WHITE
PROGRAM COMMITTEE:	ADELLE FORTH, CO-CHAIR JOSEPH NEWMAN, CO-CHAIR STEPHEN BENNING ESSI VIDING

### ***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.

- 2011: **HERVEY M. CLECKLEY** (1903 – 1984)  
2009: **JOSEPH P. NEWMAN**  
2007: **DAVID T. LYKKEN** (1928 – 2006)  
2005: **ROBERT D. HARE**

### ***Early Career Contributions Award***

The Early Career Contribution Award was created to recognize exceptional young scholars who have shown considerable promise and productivity in the formative years of their career and who have made a significant contribution to the understanding of psychopathy

- 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.

- 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 Mentions*

- 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 BASKINS-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*

WEDNESDAY, JUNE 5

7:00p-9:00p *Executive Board Meeting (MARQUETTE ROOM)*

6:00p-9:00p *Registration (GRAND BALLROOM FOYER)*

THURSDAY, JUNE 6

GRAND BALLROOM

7:30a-10:30a *Registration (GRAND BALLROOM FOYER)*

8:15a-8:30a *Opening Remarks (David S. Kosson, President)*

8:30a-10:00a *Psychopathy and the Brain: Insights from fMRI (Stuart F. White, Moderator)*

- a) *Down-regulation of neural responses to emotional stimuli among incarcerated psychopaths. Nathan Arbuckle, University of New Mexico, Kent Kiehl, University of New Mexico, Carla Harenski, University of New Mexico, Prashanth K. Nyalakanti, University of New Mexico, Matthew S. Shane, University of Ontario Institute of Technology*
- b) *Amygdala reactivity in a community sample of young adults: The role of callousness. Luke W. Hyde, University of Michigan, Daniel S. Shaw, University of Pittsburg, Erika Forbes, University of Pittsburg, Ahmad R. Hariri, Duke University*
- c) *“What have I done?”: Exaggerated neural response in mOFC during moral reflection is associated with antisocial behaviour and lifestyle psychopathic traits. Ana Seara Cardoso, University College London, Catherine Sebastian, Royal Holloway, University of London, Marine Buon, University College London, Jonathan P. Rosier, University College London, Essi Viding, University College London*
- d) *Differential contributions of diagnostic status and callous-unemotional traits to specific decision-making impairments in youth with disruptive behavior disorders. Stuart F. White, National Institute of Mental Health, Katherine A. Fowler, Centers for Disease Control, Stephen Sinclair, National Institute of Mental Health Julia C. Schechter, Emory University, Catherine M. Majestic, University of North Carolina-Greensboro, Daniel S. Pine, National Institute of Mental Health, James Blair, National Institute of Mental Health*
- e) *Discussant, James Blair, National Institute of Mental Health*

10:00a-10:30a *Break (GRAND BALLROOM FOYER)*

10:30a-11:20a *Student Paper Session (Joseph Newman, Moderator)*

- a) *From mechanism to treatment: Using cognitive remediation as a treatment for psychopathic and externalizing offenders. Arielle Baskin-Sommers, John Curtin, Joseph Newman, University of Wisconsin-Madison*
- b) *Coupling between HPA and HPG hormones among incarcerated adolescents: The influence of callous-unemotional traits. Megan Johnson, University of New Orleans, Andrew Dismukes, University of New Orleans, Michael Vitacco, Georgia Health Sciences University, Elizabeth Shirtcliff, University of New Orleans*
- c) *Psychopathic traits and the use of social and non-social information during associative learning: A computational approach. Inti A. Brazil, Radboud University Nijmegen, Laurence Hunt, University College London, Berend Bulten, Pompestichting, Roy Kessels, Radboud University Nijmegen, Ellen de Bruijn, Leiden University, Rogier Mars, University of Oxford*

11:20a -12:00p *Jevon Scott Newman Award - Inaugural Paper (Joseph Newman, Moderator)*  
*Controversial Issues in Psychopathy Research. Adrian Raine, University of Pennsylvania*

12:00p-12:45p *Lunch (on your own)*

12:00p-12:45p **Registration (GRAND BALLROOM FOYER)**

12:45p-1:45p **R. D. Hare Lifetime Achievement Award (Paul Frick, Chair)**

**Christopher P. Patrick**, Florida State University. *Psychopathy Research: Where We've Been, Where We Can Go*

1:45p-3:00p **Parenting the Callous-Unemotional Child (Caroline Moul, Moderator)**

- a) *Bidirectional associations between dimensions of parental warmth, deceitful-calling behavior and conduct problems in high-risk pre-schoolers.* **Rebecca Waller**, University of Oxford
- b) *Mutually responsive orientation and early childhood callous-unemotional traits: An observational study.* **David J. Hawes**, University of Sydney
- c) *CU traits, learning-style and the development of parent-child attachment.* **Caroline Moul**, University of New South Wales
- d) *Early parenting interventions for conduct problems and callous-unemotional in childhood: Emerging models and evidence.* **Mark R. Dadds**, University of New South Wales

3:00p-3:30p **Break (GRAND BALLROOM FOYER)**

3:30p-5:00p **Paper Session (Stephen D. Benning, Moderator)**

- a) *Speech characteristics mediate the relationships of psychopathic traits with interpersonal presentation and observer emotion.* **Stephen D. Benning**, University of Nevada, Las Vegas, **Emily A. Dowgwillo**, Pennsylvania State University
- b) *Indexing the triarchic domains of psychopathy with the Personality Inventory for DSM-5.* **Dustin Wygant**, Eastern Kentucky University, **Martin Sellbom**, The University of Alabama, **Jaime Anderson**, The University of Alabama
- c) *Corporate psychopathy and leadership.* **Cynthia Mathieu**, Université du Québec a Trois-Rivières, **Robert D. Hare**, University of British Columbia, **Craig Neumann**, University of North Texas, **Paul Babiak**, Anubis-Research
- d) *Psychopathic traits and victim selection.* **Angela Book**, Brock University, **Kimberly Costello**, Brock University, **Joseph Camilleri**, Westfield State University
- e) *The relation of the hypersexuality to PCL-R facets and self-report factors of psychopathy in sex offenders.* **Raymond A. Knight**, Brandeis University

5:00p-8:00p **Registration (SOLARIUM)**

5:30p-6:30p **Welcome Reception, Student/Members Social, Cash Bar & Appetizers (SOLARIUM)**

(In honor of Jevon Scott Newman, student registrants will receive free drink vouchers. Pick these up at registration.)

6:30p-8:00p **Poster Session A (SOLARIUM)**

**FRIDAY, JUNE 7**  
**PARALLEL SESSIONS**

7:30a-10:30a **Registration (GRAND BALLROOM FOYER)**

8:30a-10:00a **Psychopathy and Substance Use: Parsing Individual Differences in Brain Structure and Function, Kent Kiehl, Moderator (GRAND BALLROOM A & B)**

- a) *Psychopathy, substance abuse, and brain correlates of moral judgment.* **Carla Harenski, Keith Harenski, Kent Kiehl**, University of New Mexico
- b) *Psychopathy modulates brain responses to drug cues.* **Lora Cope**, University of New Mexico, **Gina Vincent**, University of Massachusetts, **Justin Jobelius, Prashanth Nyalakanti, Vince Calhoun, Kent Kiehl**, University of New Mexico
- c) *Psychopathy and substance dependence: Differential effects in a target detection task.* **Nathaniel Anderson, Prashanth Nyalakanti, Kent Kiehl**, University of New Mexico
- d) *Differential effects of psychopathy and substance use on gray matter volumes in incarcerated adult and adolescent males.* **Kent Kiehl**, University of New Mexico, **Lora Cope**, University of New Mexico, **Elsa Ermer**, Adelphi University, **Prashanth Nyalakanti**, University of New Mexico, **Vince Calhoun**, University of New Mexico

**Clarifying the Role of Boldness/Fearless Dominance in the Psychopathy Construct, Laura E. Drislane, Moderator (GRAND BALLROOM C & D)**

- a) *Boldness interacts with disinhibition to predict higher criminal offending as indexed by official registry data in a large male epidemiological sample.* **Christopher J. Patrick**, Florida State University, **Andre Sourander**, University of Turku, **Kenneth S. Kendler**, Virginia Commonwealth University, **Guler Arsal**, Florida State University, **Uma Vaidyanathan**, University of Minnesota, **Steven H. Aggen**, Virginia Commonwealth University, **Lauri L. Sillanmaki**, University of Turku, **Henrik Elonheimo**, University of Turku
- b) *Differentiating psychopathy from antisocial personality disorder: A triarchic model perspective.* **Noah C. Venables**, Florida State University, **Jason R. Hall**, University of South Florida, **Christopher J. Patrick**, Florida State University
- c) *Examining the association between fearless-dominance/boldness and maladaptive outcomes: Additive and non-additive effects.* **Martin Sellbom**, University of Alabama
- d) *Layperson and forensic clinician perceptions of boldness and its relation to psychopathy.* **John F. Edens**, Texas A&M University, **Shannon Toney Smith**, Texas A&M University, **John Clark**, University of Texas – Tyler, **Marianne Kristiansson**, Karolinska Institutet, **Karolina Sörman**, Karolinska Institutet, **Olof Svensson**, National Board of Forensic Medicine, Sweden, **Katarina Howner**, Karolinska Institutet, **Shilan Caman**, Karolinska Institutet
- e) Discussant, **Scott O. Lilienfeld**, Emory University

10:00a-10:30a **Break (GRAND BALLROOM FOYER)**

10:30a-12:00p **Psychopathy Within the Social Context: The Interpersonal Behavior of Psychopathic Individuals and its Underlying Mechanisms, Kasia Uzieblo, Moderator (GRAND BALLROOM A & B)**

- a) *Psychopathy within the family context: The influence of psychopathy on the relationship with the child and partner.* **Kasia Uzieblo**, Thomas More University College & KU Leuven, **Lien Geukens**, KU Leuven, **Barbara Soetens**, Thomas More University College & KU Leuven, **Patricia Bijttebier**, KU Leuven
- b) *The moderating role of psychopathic traits on the relationship between attachment style and criminal behavior.* **Sarah L. Hampton**, Rosalind Franklin University of Medicine and Science, **Erica J. Hynes**, Rosalind Franklin University of Medicine and Science, **Michelle Yeh**, McKinsey and Company, **David S. Kosson**, Rosalind Franklin University of Medicine and Science

- c) *Shared circuits and empathy in psychopathy.* **Harma Heffert**, University Medical Center Groningen, **Valeria Gazzola**, National Institutes of Health, The Netherlands, **Johan A. den Boer**, University Medical Center Groningen, **Arnold A. J. Bartels**, National Institutes of Health, The Netherlands, **Christian Keyzers**, National Institutes of Health, The Netherlands
- d) *Psychopathic traits in general population and their relationship to self-perception as a negotiator.* **Hilger Schneider**, Stadtallendorf, **Hedwig Eisenbarth**, University of Regensburg & University of Colorado at Boulder, **Kasia Uzieblo**, Thomas More University College & KU Leuven
- e) Discussant, **Mark R. Dadds**, University of New South Wales

**Paper Session, Essi Viding, Moderator (GRAND BALLROOM C & D)**

- a) *Amygdala activity in response to fearful faces in children with conduct problems with/without CU traits.* **Essi Viding**, University College London
- b) *Callous-unemotional traits, aggression, and aversive startle modulation in juvenile offenders.* **Jason R. Hall**, **Eva R. Kimonis**, University of South Florida
- c) *Elevated callous-unemotional traits are associated with altered cortical growth trajectories of the temporal lobe during typical development.* **Gregory L. Wallace**, **Dede Greenstein**, **Philip Shaw**, **Nancy Raitano Lee**, **Armin Raznahan**, **Liv Clasen**, **Alex Martin**, **Jay N. Giedd**, National Institute of Mental Health Intramural Research Program, NIH
- d) *Emotion processing among youth with primary vs. secondary CU traits: Evidence from three studies.* **Patricia K. Kerig**, University of Utah
- e) *Psychopathic traits relate differentially to men and women's deficits in recognition of emotional faces and eye-movement while processing threatening stimuli.* **Leonardo Bobadilla**, **Chris Spencer**, **Lauren Miller**, Western Carolina University, **Elizabeth Lima**, VA Medical Center

12:00p-12:45p **Lunch (on your own)**

12:00p-1:30p **Registration (GRAND BALLROOM FOYER)**

12:45p-1:45p **Business Meeting (GRAND BALLROOM A & B)**

1:45p-3:15p **Novel Approaches to the Treatment of Psychopathic Traits in Youth and Adults, Andrea Glenn, Moderator (GRAND BALLROOM A & B)**

- a) *Brain self-regulation in criminal psychopaths.* **Lilian Konicar**, Eberhard Karls University, **Ralf Veit**, Eberhard Karls University, **Niels Birbaumer**, Eberhard Karls University
- b) *What is the role of serotonin in psychopathy-related aggression? Experimental findings and implications for treatment.* **Jennifer Fanning**, Yale University, **Mitchell Berman**, Mississippi State University
- c) *A randomized controlled trial of Omega-3 supplementation in youth with callous-unemotional traits.* **Andrea Glenn**, University of Alabama, **Yoon Phaik Ooi**, Institute of Mental Health, Singapore, **Tan Yan Lin**, Institute of Mental Health, Singapore, **Lim Shi Jie**, Institute of Mental Health, Singapore, **Weng Shih Jen**, Institute of Mental Health, Singapore, **Adrian Raine**, University of Pennsylvania, **Rebecca Ang**, Nanyang Technological University, **Daniel Fung**, Institute of Mental Health, Singapore
- d) *Treatment of conduct problem youth with interpersonal callous traits: Incremental theories of intelligence.* **Randall T. Salekin**, University of Alabama, **Kim Sokolowski**, University of Alabama, **Abby Clark**, University of Alabama, **Marissa M. Abrams**, University of Alabama, **Whitey S. Lester**, University of Iowa, **Edward D. Barker**, University of London

**Paper Session, Daniel A. Waschbusch, Moderator (GRAND BALLROOM C & D)**

- a) *Callous-unemotional traits and treatment response in elementary school age children with conduct problems.* **Daniel A. Waschbusch**, Florida International University, **Michael T.**

- Willoughby**, University of North Carolina-Chapel Hill, **Sarah Haas**, Florida International University, **Sarah Helseth**, Florida International University, **Kathleen Crum**, Florida International University, **Amy Altszuler**, Florida International University, **J. Megan Ross**, Florida International University, **Erika Coles**, Florida International University
- b) *Callous-unemotional traits in children with a history of institutional care.* **Lucy McGoron**, The Center for the Promotion of Child Development through Primary Care, **Charles H. Zeanah Jr**, Tulane Medical School, **Paul Frick**, University of New Orleans, **Charles Nelson**, Harvard Medical School, **Nathan A. Fox**, University of Maryland
- c) *Psychometric properties and correlates of the Triarchic Psychopathy Measure in the Finnish Army Recruit Study (FARS).* **Andre Sourander**, University of Turku, **Christopher J. Patrick**, Florida State University, **Kenneth S. Kendler**, Virginia Commonwealth University, **Guler Aarsal**, Florida State University, **Uma Vaidyanathan**, University of Minnesota, **Steven H. Aggen**, Virginia Commonwealth University, **Lauri L. Sillanmaki**, University of Turku, **Henrik Elonheimo**, University of Turku
- d) *The predictive value of the TriPM and PPI-R in Dutch addiction care patients and non-clinical subjects.* **Sabrina E. Soe-Agnie**, **H. Nijman**, **Cor de Jong**, Nijmegen Institute for Scientist Practitioners
- e) *Mapping the triarchic model of psychopathy onto theoretical conceptualizations.* **Patrick J. Kennealy**, University of South Florida, **Jason R. Hall**, University of South Florida, **Jennifer L. Skeem**, University of California-Irvine

3:15p-3:30p **Break (GRAND BALLROOM FOYER)**

3:30p-5:00p **Physiological Reactivity to Pleasant and Unpleasant Stimuli in Children and Young Adults With High and Low Callous-Unemotional Traits**, **Luna C. Muñoz Centifanti & Kostas A. Fanti**, Moderators **(GRAND BALLROOM A & B)**

- a) *Mapping the autonomic space: Cardiovascular psychophysiology, emotion recognition, and callous-unemotional traits in boys.* **Luna C. Muñoz Centifanti**, University of Durham
- b) *State empathy in disruptive male adolescents with high versus low callous-unemotional traits.* **Minet de Wied**, Utrecht University, **Anton van Boxtel**, Tilburg University, **Walter Matthys**, University Medical Center Utrecht
- c) *Startle reactivity during violent and comedy film scenes: Comparing individuals with high and low callous-unemotional traits.* **Kostas A. Fanti**, **Georgia Panayiotou**, University of Cyprus
- d) *Emotion recognition in children and adolescents with conduct problems: The influence of callous-unemotional-traits and gender.* **Christina Schwenck**, Goethe University Frankfurt
- e) Discussant, **Christopher P. Patrick**, Florida State University

**A Multi-Faceted Examination of Callous-Unemotional Traits: Construct Validity, Predictive Utility, and Treatment Implications**, **Amy Byrd**, Moderator **(GRAND BALLROOM C & D)**

- a) *Callous-unemotional traits in early adulthood: Validation of the Inventory of Callous-Unemotional Traits and incremental predictive utility.* **Amy L Byrd**, University of Pittsburgh, **Rachel E. Kahn**, University of New Orleans, **Samuel W. Hawes**, University of Pittsburgh Medical Center
- b) *Refining the Inventory of Callous-Unemotional Traits in boys with conduct problems using item response theory.* **Samuel W. Hawes**, University of Pittsburgh Medical Center, **Amy L. Byrd**, University of Pittsburgh, **Craig E. Henderson**, Sam Houston State University, **Rebecca L. Gazda**, University of Pittsburgh Medical Center, **Craig E. Henderson**, University of Pittsburgh Medical Center, **Rolf Loeber**, University of Pittsburgh Medical Center
- c) *The effectiveness of the Stop Now and Plan (SNAP) Program with conduct problem boys exhibiting callous-unemotional traits.* **Dustin A. Pardini**, University of Pittsburgh Medical Center, **Samuel W. Hawes**, University of Pittsburgh Medical Center, **Amy L. Byrd**, University of Pittsburgh, **Jeffery D. Burke**, University of Pittsburgh Medical Center, **Rolf Loeber**, University of Pittsburgh Medical Center

- d) *Adapting parent-child interaction therapy to treat young children with callous-unemotional conduct problems.* **Eva R. Kimonis**, University of New South Wales, **Elizabeth Hunt**, University of South Florida, **Daniel Bagner**, Florida International University
- e) Discussant, **Paul Frick**, University of New Orleans

5:30p-7:00p **Poster Session B (SOLARIUM: CASH BAR & CHEESE/CRACKERS)**

**SATURDAY, JUNE 8**  
**GRAND BALLROOM**

- 7:30a-8:30a **Registration (GRAND BALLROOM FOYER)**
- 8:30a-10:00a **Neurobiological Correlates of Psychopathic Personality (Josanne van Dongen & Hedwig Eisenbarth, Moderators)**
- a) *Reduced cortical “call to arms” is associated with the affective features of psychopathy.* **Laura Drislane**, Florida State University, **Uma Vaidyanathan**, University of Minnesota, **Casey M. Strickland**, Florida State University, **Christopher J. Patrick**, Florida State University
  - b) *When psychopaths search for emotion in facial expressions: Does the subtype matter?* **Hedwig Eisenbarth**, **Susanne Meyer**, **Michael Osterheider**, University of Regensburg
  - c) *Psychopathy and the low arousal hypothesis.* **Josanne van Dongen**, **Andrié Wierdsma**, **Hugo van Steenis**, **Hjalmar van Marle**, Erasmus University
  - d) *Reward anticipation in psychopathy.* **Katinka von Borries**, **D. Geurts**, **I. Volman**, **R. J. Verkes**, **B. H. Bulten**, **R. Cools**, University Medical Centre Nijmegen
  - e) Discussant, **Edelyn Verona**, University of Illinois
- 10:00a-10:30a **Break (GRAND BALLROOM FOYER)**
- 10:30a-11:30a **Presidential Address (David S. Kosson, President)**  
*Get Mad, Not Sad: Parental Rejection, Attachment, and Emotion Regulation in Individuals with Psychopathic Traits*
- 11:30a-12:00p **Lunch (on your own)**
- 12:00p-1:30p **Poster Session C & Light Snacks (SOLARIUM)**
- 1:30p-3:00p **A Review of Recent Developments in the Assessment of Psychopathy Using Self-Report Measures (Joshua D. Miller, Moderator)**
- a) *Who knows best? Assessing self-and other-reports of psychopathy and their relations to externalizing behaviors.* **Shayne Jones**, University of South Florida
  - b) *The Elemental Psychopathy Assessment: A review of its development and extant support.* **Joshua D. Miller**, University of Georgia, **Donald R. Lynam**, Purdue University
  - c) *Casting a nomological net around the Psychopathic Personality Inventory.* **Donald R. Lynam**, Purdue University, **Joshua D. Miller**, University of Georgia
  - d) *Construct validity of the Hare Self-Report Psychopathy (SRP) Scale.* **Craig Neumann**, University of North Texas, **Robert D. Hare**, University of British Columbia, **Del Paulhus**, University of British Columbia
  - e) Discussant, **Scott O. Lilienfeld**, Emory University
- 3:00p-3:30p **Break (GRAND BALLROOM FOYER)**
- 3:30p-3:45p **Cheryl Wynne Hare Student Poster Award (Randall Salekin, Chair)**
- 3:45p-5:00p **Early Career Contribution Awards (James Blair, Chair)**
- a) **Brian Hicks**, University of Michigan. *Developmental Interplay Between Disinhibition and Boldness*
  - b) **Dustin Pardini**, University of Pittsburgh Medical. *Developmental Conceptualizations of Psychopathy: What Do We Know and Where Do We Go?*
- 5:00p-5:30p **Closing Remarks (David S. Kosson, President & Scott O. Lilienfeld, President-Elect)**

## POSTER SESSION A

THURSDAY, JUNE 6: 6:30P-8:00P (SOLARIUM)

1. **Ariel K. Berman & Raymond A. Knight**, Brandeis University. *The Relation Between the Facets of Psychopathy and Hypersexuality in Juveniles Who Have Sexually Offended.*

Juveniles who have sexually offended (JSOs) are responsible for approximately 20% of reported sexual crimes in the USA, and require concerted research attention. Too frequently decisions about their treatment, management, and the prevention of sexual aggression has been generated from empirical investigations of adults who sexually offend (ASOs). A previous study using hierarchical regression on data from 315 male ASOs found that the Interpersonal Facet of the Psychopathy Checklist, Revised (PCL-R; Hare, 2003) covaried significantly with all three components of a Sexualization latent trait measured by the Multidimensional Inventory of Development, Sex, and Aggression (the MIDSAs) - Sexual Compulsivity, Sexual Preoccupation, and Hypersexuality. The current study replicates these analyses on JSOs (n = 215), using the same measures of the MIDSAs Sexualization latent trait and the four facets of Hare's Psychopathy Checklist: Youth Version. Moreover, the components of psychopathy and sexualization will be integrated into a well-replicated model of sexually coercive behavior against age-appropriate victims (Knight & Sims-Knight, 2004). The results will be compared with the findings for the adults and implications for treatment and management will be discussed.

2. **Hyemin Jeon**, Sam Houston State University, **Eunkyung Jo**, Hallym University, **Hyejin Jang**, Chuncheon Probation and Parole Office, **Carla Munoz**, Sam Houston State University, **Marcus Boccaccini**, Sam Houston State University. *The Relationship Between Personality Traits, Psychopathy, and Recidivism Among Korean Juvenile Offenders.*

Although there is broad research about psychopathy in adults, there is lack of research looking into the effects of psychopathic traits and individual differences for recidivism among juvenile offenders. In this study, psychopathy levels of 82 Korean male juvenile offenders were assessed using the Psychopathy Checklist-Youth Version (Forth, Kosson, & Hare, 2003; PCL-YV) as well as the Personality Assessment Inventory (PAI). Twelve months after the initial data collection, reoffenders were identified by official record. Although neither the total score of PCL-YV or PAI predicted general recidivism among these juveniles, there were significant differences in terms of relationships between PCL-YV and PAI scores between recidivists (N=56) and non-recidivists (N=26). The total score of the PCL-YV was significantly related to AGG ( $r=.30$ ,  $p<.05$ ) of the PAI in recidivists. Factor 2 and Factor 4 were also significantly related to RXR of PAI, respectively ( $r=.34$ ,  $p<.05$ ;  $r=.35$ ,  $p<.01$ ) in recidivists. Interestingly, among non-recidivists, the total score of the PCL-YV was significantly related to BOR ( $r=.52$ ,  $p<.05$ ), as well as Factor 1 ( $r=.55$ ,  $p<.01$ ). Also, ANX was associated with the total score of the PCL-YV and Factor 2, respectively ( $r=.45$ ,  $p<.05$ ,  $r=.40$ ,  $p<.05$ ) in non-recidivists. While recidivists and non-recidivists shared some unstable affective problems, recidivists showed more externalizing problems than non-recidivists. This finding suggests that risk assessment should include dynamic interaction between risk factors.

3. **Roberto C. Guerra & Bradley A. White**, Virginia Polytechnic Institute and State University. *Moderation of Drug Use Problems in Young Men and Women by Psychopathy Dimensions, Gender, and Age.*

Previous research has suggested that dimensions of psychopathy may interact in predicting drug use problems, but such findings may differ by age and gender, and few studies have simultaneously considered the potentially interactive roles of psychopathic traits and demographic factors on drug abuse, particularly in emerging adulthood. Based on previous research, we hypothesized that primary psychopathy and gender would moderate effects of secondary psychopathy on drug use problems. We also considered age as another potential moderator. A mixed-gender sample of undergraduate students (N = 673; 69.2% female) ages 18-21 (M=18.88) completed the Levenson Self-Report Psychopathy scale (LSRP; Levenson et al., 1995) and Drug Abuse Screening Test-10 (Skinner, 1982). Predictions were tested using multiple regression. Drug abuse was associated with age ( $b=.01$ ,  $p<.001$ ) and with the interaction of gender with primary and secondary psychopathy ( $b=.01$ ,  $p<.001$ ). In particular, a positive relationship between secondary psychopathy and drug abuse was only evident in males who reported moderate to high primary psychopathy. We also consider Sellbom's (2011) 3-factor LSRP model in comparison to the conventional 2-factor model. Our findings add to the literature on the role of personality traits in substance use problems in young adults, suggesting a more nuanced manner in which psychopathy facets interact with one another and with demographic variables to predict drug abuse in emerging adulthood.

4. **Sabrina Demetrio**, Dalhousie University, **Stephen Porter**, University of British Columbia-Okanagan. *I Know How You Feel: Psychopathic Traits and Judgment Accuracy for Brief Emotional Expressions.*

There is some evidence that individuals who are high in psychopathic traits may have an enhanced ability to judge others' traits and emotional states. The current study examined the association between level of psychopathic traits and the ability to accurately judge brief emotional expressions. Male and female undergraduate students (N=132) watched 20 videos of brief displays of emotion, and were asked to judge which of five emotions was present in each video. Increased psychopathic traits were significantly related to decreased judgment accuracy for happiness and to increased judgment accuracy for sadness, but

this relationship was partially mediated by a tendency to choose happiness less often and sadness more often. In particular, increased psychopathic traits in female judges were related to increased judgment accuracy for sadness, and increased psychopathic traits in male judges were related to increased judgment accuracy for disgust. The results of the current study indicate that psychopathic traits may be associated with enhanced judgment accuracy for brief emotional expressions rather than deficits. As well, the qualities associated with psychopathic traits may manifest differently in males and females, and it is important to consider sex differences when examining psychopathic traits in non-criminal populations.

5. **Rebecca M. Kastner, Alexandria K. Johnson, Martin Sellbom**, University of Alabama. *Associations Between Psychopathy and Latent Representations of Common and Distinct Forms of Aggression in a Young Adult Sample.*

Current conceptualizations of psychopathy recognize the significant presence of antisocial and aggressive acts as characteristic of the disorder (Hare & Neumann, 2010; Patrick & Zempolich, 1998), but more research is needed to better link specific psychopathy facets to distinct forms and functions of aggression. The present study evaluated several psychopathy measures, including the Triarchic Psychopathy Measure, Self-Report Psychopathy Scale-III (SRP-III), and Levenson Self-Report Psychopathy Scale (LSRP), in relation to an alternative latent bifactor structure of the Reactive Proactive Aggression Questionnaire (RPQ; Raine et al., 2006). We used two undergraduate samples of 325 and 602 participants each. Generally, global psychopathy and its facets were associated more strongly with a latent residual variable reflecting proactive ( $r_s = .027-.516$ ;  $mdn. = .348$ ) rather than reactive aggression ( $r_s = -.182-.298$ ;  $mdn. = -.031$ ) with only LSRP Antisocial ( $r = .298$ ) being significantly and meaningfully correlated with this factor. All psychopathy measures were substantially correlated with latent global aggression ( $r_s = .157-.641$ ;  $mdn. = .498$ ). Thus, when the effect of higher-order aggression is removed, it allowed for better elucidation of the associations among specific psychopathy facets and more distinct measures of proactive and reactive aggression in comparison to general higher-order aggression. Further implications will be discussed.

6. **Chelsea L. Brieman & David S. Kosson**, Rosalind Franklin University of Medicine and Science. *Relationships Between Psychopathy, Socioeconomic Status and Substance Use Disorders: The Importance of the Interpersonal Component of Psychopathy.*

The current study examined the additive and novel interactive effects of psychopathy and socioeconomic status (SES) in the prediction of substance use disorders (SUDs) among 421 county jail inmates in Illinois. The primary aim was to examine the potential moderating impact of psychopathic traits (using PCL-R total and facet scores) on the relationship between a combined parental and individual measure of SES and four different categories of SUDs. Various components of psychopathy interacted with SES to heighten the risk for cannabis and opioid symptoms. At high levels as opposed to low levels of psychopathy, lower SES predicted a greater number of cannabis symptoms whereas higher SES was associated with a larger number of opioid symptoms. In addition, SES interacted with scores on the interpersonal facet in the prediction of cannabis dependence symptoms. For individuals with high scores on the interpersonal facet, lower levels of SES were associated with a higher number of cannabis symptoms. PCL total and the lifestyle and antisocial components were positively associated with most categories of substances. Unexpectedly, interpersonal and affective components were also associated with SUDs. Replicating a finding by Walsh, Allen, and Kosson (2007), the number of cocaine symptoms was positively associated with interpersonal facet scores. This challenges previous findings that SUDs are primarily related to the lifestyle and antisocial facets. The relationship between SUDs and the interpersonal facet warrants further examination. In conclusion, current findings replicated prior studies of psychopathy and SUDs, but the current study also found unique individual and interactive effects of psychopathy and SES in the prediction of SUDs.

7. **Felicia Keith**, Uniformed Services University, **Patrick Kennealy**, University of South Florida, **Jennifer L. Skeem**, University of California-Irvine, **Sarah Manchak**, University of California. *Criterion-Related Validity and Predictive Utility of MPQ Estimated TriPM Scales.*

There has been much debate over criminal behavior's role in psychopathy. Investigations of this have been limited because the predominant measure of psychopathy (i.e., PCL-R) includes several items scored based on criminal behavior. The recent Triarchic Model of Psychopathy (TriPM), which consists of Boldness, Meanness and Disinhibition, offers an opportunity to explore the relative importance of different psychopathic traits in criminal behavior because they are not scored based on crime. First, to help establish the construct validity of the recently developed MPQ-estimated TriPM scales (Drislane et al., in prep), we investigated the convergent and discriminant validity of these scales with measures of personality and psychopathology (i.e., PAI) in a sample of 156 probationers. Consistent with research on Patrick's (2010) original TriPM scales, we found that Boldness was correlated with lack of anxiety, Meanness was correlated with lack of interpersonal warmth, and Disinhibition was correlated with drug problems. Once support for the validity of the MPQ-based scales was established, we next explored the predictive utility of the TriPM for recidivism. Consistent with expectations, we found that only Disinhibition predicted arrests during an 18-month follow up. This suggests that the scales most consistent with the views of classic psychopathy theories (e.g., Cleckley, 1941), in particular Boldness, were not associated with an increased risk for recidivism.

8. **Amy R. Altszuler, Kathleen I. Crum, Daniel A. Waschbusch**, Florida International University. *Understanding the Public Perception of Psychopathy and Callous-Unemotional Traits.*

As common public concerns may inform research, treatment, and policy decisions involving individuals with psychopathic traits, it is important to understand popular knowledge and attitudes toward these individuals. The current study investigated major themes in the public's perception of psychopathy and callous-unemotional (CU) traits. Two independent coders analyzed reader responses to the Kahn (2012) New York Times Magazine article, "Can you call a 9 Year-Old a Psychopath?". With over 90% reliability, coders segmented original responses ( $n = 420$ ) into distinct units of data that represented the smallest relevant pieces of information. Units were grouped based on commonality. Preliminary analysis of 30% of responses yielded six general themes, listed by frequency: concern/support (24%); description of psychopathy (21%); references to cultural or personal examples of psychopathy (16%); treatment and prevention (13%); diagnosis and labeling (7%); and negative judgment of those involved with the study, treatment, or care of individuals with psychopathic traits (7%). These findings contribute to the understanding of the public's perception of psychopathy, providing insight into the experience of psychopathic individuals. To gain a more detailed understanding of this experience, as well as its potential impact on long-term outcomes in this population, continued analyses will examine sub-themes within response groups.

9. **Rachel E Kahn**, University of New Orleans, **Paul J Frick**, University of New Orleans, **Eric A. Youngstrom**, University of North Carolina at Chapel Hill, **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.*

Karpman (1948) proposed an influential theory of psychopathy subtypes, including a primary (innate/heritable affective deficit) and secondary (product of environmental factors like trauma/abuse) variant. Using a sample ( $n=286$ ) of clinic-referred youths, we conducted model-based cluster analyses and confirmed a three-cluster solution, including a group low on CU traits, as well as two groups high on CU traits (primary and secondary variants) that differed on levels of anxiety and past trauma. Results include a clear and consistent pattern of informant effects, with youths in the primary cluster under-reporting levels of narcissism, impulsivity, CU traits, and total scores on the Antisocial Process Screening Device (Frick & Hare, 2001), relative to what is reported by parents. In addition, youth in the primary cluster under-reported their level of internalizing and externalizing symptoms on the CBCL and YSR (Achenbach, 2003) compared to parent report. Further, subjective ratings of credibility of parent and youth reports revealed clinicians were significantly more likely to rate credibility as poor for youth in the primary cluster compared to the secondary cluster; however, clinicians' subjective ratings of parent credibility did not differ across clusters. Our results suggest primary psychopathy may be associated with a tendency to under-report problems and this tendency could help explain inconsistent findings from past research, which often relied on self-report.

10. **Tina D. Wall**, Eastern Kentucky University, **Dustin B. Wygant**, Eastern Kentucky University, **Martin Sellbom**, University of Alabama. *Boldness Explains a Key Difference Between Psychopathy and Antisocial Personality Disorder.*

Although Antisocial Personality Disorder (APD) represents the closest diagnostic equivalent to psychopathy in the DSM-IV, it has long been recognized as failing to capture the full range of the construct. The current study examined the degree to which *boldness*, a trait domain within the triarchic conceptualization of psychopathy (Patrick et al., 2009) that captures fearlessness, dominance, and low stress reactivity, represents a distinct difference between psychopathy and APD. Utilizing a sample of 108 male prison inmates, the current study examined the extent to which boldness, relative to meanness and disinhibition (indexed by the Triarchic Psychopathy measure; Patrick, 2010), accounted for incremental variance beyond APD symptom counts (indexed by the SCID-II APD module) in predicting the PCL-R total score. Hierarchical linear regression analyses were conducted in which the SCID-II APD symptom count was entered in the first step of the model, and the three Triarchic domains were entered in the second step. APD accounted for 30% of variance ( $p < .001$ ) in predicting PCL-R total scores. The Triarchic domains added 5% of additional variance ( $p < .05$ ). In the final regression model, Boldness ( $\beta = .21, p = .01$ ) was the only significant predictor of PCL-R scores in addition to APD ( $\beta = .47, p < .001$ ). The results indicate that Boldness is a significant trait that helps to explain differences between APD and psychopathy.

11. **Laura E. Drislane**, Florida State University, **Christopher J. Patrick**, Florida State University, **Kenneth S. Kendler**, Virginia Institute for Psychiatric and Behavioral Genetics, **Lauri L. Sillanmaki**, University of Turku, **Steven H. Aggen**, Virginia Institute for Psychiatric and Behavioral Genetics, **Henrik Elonheimo**, University of Turku, **Andre A. Sourander**, University of Turku. *Identifying Primary and Secondary Psychopathy Subtypes in a Population-Based Sample of Finnish Soldiers.*

It has been assumed that a distinct, albeit small, proportion of individuals in the general population show marked psychopathic tendencies. Systematic research on noncriminal psychopathy variants has proceeded slowly due to uncertainties about how to recruit psychopathic individuals from the community at large in an efficient, valid manner. This study used model-based cluster analysis to identify subtypes of high psychopathic men ( $\geq 95^{\text{th}}$  percentile on the Triarchic Psychopathy Measure;  $n = 193$ ) from a larger sample screened for service in the Finnish military ( $N = 4043$ ). Psychopathy facet scores and a measure of anxiety were used as cluster variates. The best-fitting model included two clusters, representing 'primary' ( $n = 110$ ) and

'secondary' psychopathy ( $n = 83$ ). Relative to a low-psychopathy comparison group ( $n = 1878$ ), both psychopathy subgroups showed marked levels of externalizing symptoms and criminal behavior accessed via Finnish National Police Registry. Secondary psychopaths also reported high levels of internalizing problems (e.g., withdrawal, somatization), and scored higher on the disinhibition facet of psychopathy relative to the primary group. Primary psychopaths reported fewer internalizing problems than either the secondary or comparison groups, scored higher on the boldness dimension of psychopathy, and had higher rates of violent crimes than the secondary psychopaths. Implications for conceptualizing psychopathy in non-forensic populations will be discussed.

12. **Allan Heritage**, Vanderbilt University, **Stephen Benning**, University of Nevada, Las Vegas. *Stimulus Processing and Stop Signal Performance in Fearless Dominance and Impulsive Antisociality*.

Individual differences in impulsivity are related to performance on stop signal tasks as well as to processing of the stop signal itself. However, it is unclear how processing of the go stimulus influences stop signal processing and task performance. The current study used event-related potentials to examine the relationship between go stimulus processing, stop signal processing, and performance on a lexical decision stop signal task. Specifically, we focused on how these relationships differed as a function of fearless dominance (FD) and impulsive antisociality (IA). IA was related faster go reaction time, reduced stop signal processing (reduced N1 and P3 amplitude), reduced inhibition accuracy, and longer stop signal reaction time. Fearless dominance showed increased early go stimulus processing (larger P1) followed by decreased later processing (smaller P2), leading to no differences in go task performance. FD showed no relationship with stop signal processing or stop task performance. The finding that FD was differentially related to text processing but not to performance whereas IA was related almost exclusively to deficits in SS processing suggests that FD and IA differentially influence stimulus processing and the task performance strategies used.

13. **Ashley L. Watts**, Emory University, **Sarah Francis Smith**, Emory University, **Wenting Kang**, Emory University, **Scott O. Lilienfeld**, Emory University, **Robert D. Latzman**, Georgia State University. *Implications of Psychopathic Personality Traits for Rape Myths and Attitudes*.

Research demonstrates that individuals who endorse more supportive rape attitudes report a more extensive history of sexual aggression. Rape myths, which are false beliefs used to shift the blame of rape from perpetrators to victims, are associated with hostile attitudes and behaviors toward women. Because psychopathy has long been associated with sexual aggression, we examined the relations among psychopathy, attitudes toward rape victims, and acceptance of rape myths. A sample of 308 undergraduates completed the Psychopathic Personality Inventory-Revised (PPI-R), Attitudes Toward Rape Victims Scale, and a Rape Myths Acceptance Scale, among other measures not examined here. PPI-R total scores and Self-Centered Impulsivity were significantly associated with higher levels of rape myth acceptance ( $r=.18$ ,  $p=.04$  and  $r=.21$ ,  $p=.01$ , respectively). PPI total scores and Coldheartedness were associated with adhering to more supportive attitudes toward rape ( $r=.21$ ,  $p=.02$  and  $r=.28$ ,  $p=.001$ , respectively). Fearless Dominance was not associated with higher levels of rape myth acceptance or supportive rape attitudes. Taken together, these findings suggest that Self-Centered Impulsivity and Coldheartedness, but not Fearless Dominance, are associated with looser attitudes toward rape victims and the acceptance of rape myths, findings that may bear important implications for the contribution of psychopathic traits to sexually aggressive behavior.

14. **Sarah J. Brislin**, Florida State University, **Jens Foell**, Florida State University, **Dongju Seo**, Yale University, **Christopher J. Patrick**, Florida State University. *The Influence of Trait Fear and Disinhibition on Emotion Regulation*.

Prior research has shown that difficulty regulating emotion contributes to a wide range of problems including impulsive aggression (Davidson et al., 2000). This study used functional magnetic resonance imaging (fMRI) to examine the influence of traits closely associated with psychopathy on brain activity during an emotion regulation task. Forty-two females undergraduates ( $M$  age=19.64) completed an emotion regulation task involving processing of pleasant, neutral, and unpleasant pictures in a 3T scanner. Trials included a preparatory phase, in which participants prepared either to simply view or down-regulate their emotions to an upcoming picture stimulus, and a presentation phase, during which pictures appeared and were processed as prepared for. Of particular interest was how trait constructs of fear/fearlessness and disinhibition moderate affective ratings of participants and BOLD activation in brain regions including the amygdala, anterior cingulate cortex (ACC), orbitofrontal cortex (OFC), and prefrontal cortex (PFC) during the preparatory and presentation phases of the procedure. Consistent with prior findings, increased dorsolateral PFC and OFC activation were evident for participants as a whole during the preparatory phase, and increased ventromedial PFC and ACC activation was evident during active down-regulation of emotional response to both positive and negative stimuli. Findings from analyses of trait/brain-response relations will also be presented and discussed.

15. **Noah C. Venables**, Florida State University, **Martin Sellbom**, The University of Alabama, **Laura E. Drislane**, Florida State University, **Kenneth S. Kendler**, Virginia Commonwealth University, **Andre Sourander**, Turku University, **Thomas E. Joiner**, Florida State University, **Christopher J. Patrick**, Florida State University. *Interactive Effects of Boldness and*

### *Disinhibition in the Prediction of Suicide Risk.*

The mitigating effect of psychopathy on suicidal behavior was first introduced in Cleckley's (1946) classic monograph *The Mask of Sanity*. Contemporary research has found consistent evidence for a positive association for impulsive-antisocial features of psychopathy in the prediction of suicide risk, whereas affective-interpersonal features (more consistent with Cleckley's notion) tend to be negatively predictive. However, no research to date has examined whether these two components of psychopathy interact to predict suicidal behavior. The present study sought to address this question by examining the interactive effects of Boldness and Disinhibition dimensions of the Triarchic model of psychopathy (Patrick et al., 2009) in predicting suicide risk in two samples: outpatient clinic patients (N=957) and a cohort of Finnish soldiers (N=3,856). Boldness and Disinhibition were operationalized as MMPI-2-RF estimated Fearless-Dominance and Impulsive-Antisociality scores in the patient sample, and through scores on the Triarchic Psychopathy Measure in the soldier sample. We found evidence for Boldness and Disinhibition interacting to predict clinician assessed risk in the patient sample, and self-reports of previous suicidal behaviors and ideation in both samples. These results provide evidence for a mitigating impact of Boldness on suicide risk in high Disinhibition individuals. Implications for current debates regarding the role of Boldness in psychopathy will be discussed.

### 16. **Melissa Straiton & David Hawes**, University of Sydney. *Callous-Unemotional Traits and Peer Cooperation in Late Childhood.*

Callous-Unemotional (CU) traits in childhood represent a robust predictor of chronic and severe antisocial behaviour, including adult patterns of psychopathic traits. Much is known about the antisocial and aggressive behaviour of children and adolescents high in CU traits, however relatively little research has been devoted to the broader social processes that characterise the peer relationships of these children. The aim of the current study was to investigate patterns of cooperation expressed by children high in CU traits while engaged in a paradigm designed to assess reciprocal altruism and social strategy. The results indicated that children high in CU traits are significantly less likely to cooperate than their peers, regardless of social context or level of antisocial behaviour. Furthermore, they report experiencing less shame following non-cooperative behaviours than their peers. These results provide support for the CU traits subtyping model of childhood antisocial behaviour, as well as further differentiate the subtype based on their distinct approach to social situations. Finally, the results appear to replicate existing findings regarding the social strategies of adults high in psychopathic traits, thus contributing to the conceptualisation of their specific developmental pathway.

### 17. **Rachel Bencic, Elizabeth Krusemark, Arielle Baskin-Sommers, Joseph Newman**, University of Wisconsin – Madison. *Self-Relevance, Attentional Biases, & Externalizing: Characterizing Attention Responses to Salient Stimuli.*

Dysfunctional processing of salient stimuli is a hallmark of many psychiatric disorders. Research indicates that trait externalizing is associated with over-allocation of attention to motivationally-salient cues (Baskin-Sommers & Newman, in press). The current study sought to characterize salience processing in externalizing through examination of dot probe task performance. Criminal offenders with substance abuse completed a dot probe task incorporating self-relevant, motivationally-salient (drug or alcohol) and neutral images. Following Baskin-Sommers et al. (in press), we predicted that higher levels of externalizing would be associated with stronger orienting to and impaired disengagement from the salient, substance-related stimuli. Externalizing was measured using a composite of MPQ-Negative Affectivity and MPQ-Constraint (i.e., high NA, low CON). Results were consistent with predictions: during short inter-stimulus-interval (ISI) trials (500 ms pictures), higher externalizing scores were associated with faster responding when the probe followed salient cues (i.e., stronger orienting) and lower accuracy when the probe followed a neutral image (i.e., impaired disengagement). Furthermore, higher externalizing scores were associated with greater accuracy on the long-ISI (i.e., 1000 ms pictures) orienting trials. Given the phenotypic overlap between psychopathy and externalizing, we also address the implications of this self-relevant attentional dysfunction for psychopathy.

### 18. **Yelena Khvatskaya**, Binghamton University, **Mark F. Lenzenweger**, Binghamton University & Cornell University. *Which Empathy do Psychopaths Lack?*

The present study aims to examine three aspects of empathy: affective, cognitive, and motor in male and female individuals with psychopathic traits. Psychopaths exhibit deficits in affective but not cognitive empathy. However, no research has looked at motor empathy in psychopathic individuals, which we propose will be deficient in this group. Participants were undergraduate students at Binghamton University (N=200). In the first part of the study, participants completed the Psychopathy Personality Inventory (PPI), the State-Trait Anxiety Inventory (STAI; trait), and the Interpersonal Reactivity Index (IRI). Based on the results from the first part of the study, using extreme-groups strategy, we invited participants scoring in the top and bottom 25th percentile on the PPI to complete the second part of the study. In part II of this study, participants viewed positive, negative, and neutral images and their facial expressions were analyzed to identify emotion displayed during the viewing. In addition, participants identified which of the six basic emotions each image displayed and completed the STAI (state), the Social Desirability scale, and the Bem Sex Role Inventory. In addition to the main hypothesis, we are interested in

examining differences in anxiety and between genders among individuals scoring high on the PPI.

19. **Samantha J. Fede**, University of New Mexico, **Jana Schaich Borg**, Duke University, **Lora M. Cope**, University of New Mexico, **Carla L. Harenski**, University of New Mexico, **Prashanth K. Nyalakanti**, University of New Mexico, **Walter Sinnott-Armstrong**, Duke University, **Joseph P. Newman**, University of Wisconsin-Madison, **Kent A. Kiehl**, University of New Mexico. *Neural Basis of Positive Moral Processing in Psychopathy.*

Psychopaths are notorious for profound moral insensitivity. Prior studies of psychopathy suggest abnormal engagement during moral processing in the amygdala, ventromedial prefrontal cortex (vmPFC), insula, anterior cingulate (ACC), posterior cingulate (PCC), and temporoparietal junction (TPJ). Since these studies only examined negatively valenced moral stimuli, here we included positive moral items to examine whether similar impairments are found. Incarcerated adult males (n = 245) were scanned on a 1.5T mobile magnetic resonance imaging system. Psychopathy was assessed using the Hare Psychopathy Checklist-Revised (PCL-R). Participants rated 150 controversial (e.g. cloning) and noncontroversial (e.g. sharing) moral stimuli as wrong or not wrong. PCL-R scores negatively correlated with hemodynamic activity for controversial versus noncontroversial stimuli in the PCC, ACC, vmPFC, TPJ and dorsolateral PFC. For all “not wrong” stimuli versus baseline, PCL-R scores positively related to engagement of areas associated with controversial choices, including the vmPFC, PCC and ACC. In conclusion, psychopathy was associated with impairments in moral processing across the paralimbic system. Additionally, these results suggest that psychopaths experience abnormal conflict-related activity in response to positive moral stimuli, despite normal judgment.

20. **Nathalie Gauthier**, Brock University, **Narnia Worth**, Brock University, **Tabatha Methot**, Brock University, **Angela Book**, Brock University, **Adelle Forth**, Carleton University. *Psychopathy and Feigned Remorse.*

Two studies examined the ability of people high on Factor 1 (F1) traits to effectively feign remorse. Frank (1988) suggested that the social emotions play a key role in giving the appearance of honesty, which allows individuals who can feign them to take advantage of others, and also stated that faking these emotions is a difficult task. One who did not seem to possess remorse or empathy would not likely win the trust of others. We felt that individuals high on F1 traits would be able to effectively feign remorse, given their manipulative nature and ability to effectively deceive others. Participants in both samples were instructed to tell a true story about a time when they did NOT feel remorse/guilt, but were also asked to tell the story as though they had. In other words, only the remorse was feigned. First, we examined the relationship between F1 and perceived genuineness in faking remorse in a sample of university students. Students with higher F1 scores on the PPI-SF (Lillienfeld & Hess, 2001) were rated as more genuine when feigning remorse, even after controlling for F2. Our second study sought to replicate this finding in an inmate sample. While the number of videos was small, offenders with higher F1 scores on the PCL-R (Hare, 2003) were perceived as more genuine when feigning remorse. The results are consistent with the social predator hypothesis, and with the use of feigned remorse as an effective tool to manipulate other people

21. **Alexandros Lordos**, **Nataly Loumba**, **Evita Katsimicha**, **Kostas Fanti**, University of Cyprus. *Planning Ahead for the Clinical Assessment of Callous Unemotional Traits: Development of a New Standardized Instrument.*

It has been established in the literature that the presence of Callous Unemotional (CU) traits delineates a sub-group of children and adolescents with particularly severe and chronic Conduct Problems. While the clinical importance of CU Traits has been widely acknowledged, few reliable assessment instruments are currently available beyond self-report questionnaires. In this context, a 20-item Sentence Completion Task for Callous Unemotional Traits (CU-SCT) was constructed on the basis of latest theoretical research findings, with sentence stems designed to elicit relevant dimensions such as lack of empathy, shallow emotionality and lack of remorse. The CU-SCT has been administered to a sample of 500 adolescents age 12-15, and responses are being clustered, coded and compared against CU scores using the Inventory of Callous Unemotional Traits, in order to produce a standardized scoring manual and norms. IRT analysis of each item will also take place in order to calibrate the sensitivity and specificity of the instrument. Internal reliability of the overall scale, as well as convergent validity (questionnaire-based measures of CU traits), predictive validity (Conduct Disorder symptoms) and discriminant validity (Executive Dysfunction, Depression symptoms) will be reported at the conference.

22. **Andrew Gill**, University of Vermont. *Gender Differences in Psychopathy Variants and Emotional Disturbance Among Adjudicated Youth.*

Efforts to extend the distinction between primary and secondary variants of psychopathy to children and adolescents with callous unemotional traits have illustrated higher rates of emotional disturbance in secondary groups as shown in adult samples (Kimonis et al., 2012; Vaughn et al., 2009). These findings, however, apply almost entirely to males. Model-based cluster analysis in a sample of 148 incarcerated youths (61% male) distinguished primary and secondary psychopathy as well as a non-psychopathic group. Consistent with previous research, youth in the secondary group displayed significantly greater total anxiety and depression scores than the primary group, regardless of gender. Among several novel findings were those that showed that females in both primary and secondary groups reported significantly more positive and significantly less

negative affect on the Positive Affect Negative Affect Scale than their male counterparts. Furthermore, although scores were similar across gender in the secondary group, females in the primary group reported being significantly more emotionally distressed by social provocations than primary males. Overall findings suggest not only that adjudicated youths characterized by secondary psychopathy show expected elevations in negative emotionality, but that significant emotional disturbance is also evident in incarcerated females across psychopathic variant groups.

23. **Nicholas J. Wagner, W. Roger Mills-Koonce, Michael T. Willoughby, Martha Cox**, University of North Carolina at Chapel Hill. *Negative Parenting, Representations of Family Functioning, and Early Conduct Problems and Callous - Unemotional Traits: A Partial Mediation Model.*

Callous-unemotional (CU) traits are characterized by a lack of guilt, empathy, and a callous use of others and are associated with a greater risk of adult psychopathy. Both predictive and moderating relationships have been shown to exist between conduct problems (CP)/CU and aberrant parenting practices in childhood. However, there is a paucity of research investigating early processes through which negative parenting contributes to the development of CP and CU. The formation of dysfunctional family attachment representations is one developmental process that has been linked with these outcomes. Utilizing data from the Family Life Project, a multi-site longitudinal study (n=1,292), these analyses use a structural modeling framework to investigate the relationship between observed negative parenting behaviors in the first five years of life, coding of dysfunctional family relationships assessed using children's family drawings at first grade, and maternal report of CP and CU at first grade. The final model demonstrated good fit and included a latent factor of negative parenting over time that significantly predicted both CP and CU in first grade. More interestingly, significant indirect effects were observed whereby negative parenting predicted dysfunctional family representation which, in turn, predicted both CP and CU. These analyses are among the first to suggest that representations of family dysfunction are important for understanding the etiology of CP and CU.

24. **Courtney Humeny Ian Broom, Nalini Elisa Ramlakhan, John Logan, Robert West**, Carleton University. *The Role of Disgusting and Scary Somatic Markers on Decisions of Psychopathic Undergraduate Students.*

Arguments for an amygdala dysfunction in psychopaths have been challenged by findings suggesting a specific deficit for disgust (e.g., Pham & Philippot, 2010; Kosson et al., 2002; Tybur, Lieberman, & Griskevicius, 2009). The behavioural implication of this deficit has received limited attention. Disgust has been theorized to relate to the ability to empathize, maintain social cohesion, and to avoid norm violations and risk taking behaviours (Wierzbicka, 1986). Research using the Iowa Gambling Task (IGT) has tied theory to social functioning. Performance on the task can be hindered by fear and disgust reactions in healthy participants (Heilman et al., 2010). The current study compared performance on the IGT with modified versions of the IGT containing images of fear, sadness, disgust, and neutral control images. University students were assessed using the Self-Report Psychopathy Scale (Paulhus, Hemphill, & Hare, in press) and were split into high and low psychopathy groups. Anxiety and disgust sensitivity also were assessed. Results (N= 100) indicated an effect of emotion type on task performance but no differences between high and low psychopathy groups. The lack of difference between the psychopathy groups for IGT performance may be because individuals with high levels of psychopathic characteristics from non-offender samples have reduced levels of psychopathy compared to individuals from offender samples.

25. **Susanne Wolf & Luna C. Centifanti**. University of Durham. *Psychopathic Traits and Attention to Distress Cues in Dynamic Faces and Body Poses: Tracking Eye Movements in Young Adults During Emotion Recognition.*

Individuals with psychopathic traits display a reduced sensitivity to distress in others' faces and body poses. It was suggested that insensitivity to signs of distress in others' faces may be due to an attentional neglect to the most important facial features of distress such as the eyes. Research so far has focused on insensitivity to facial but not body cues, using static emotion expressions. The present study aimed to replicate previous findings for dynamic facial expressions as well as explore gaze for emotion recognition from dynamic body poses. For that purpose, fifty undergraduate university students between 18-29 years of age were presented with video clips of emotional faces (Simon et al., 2007), and body poses (Atkinson et al., 2004), separately. Eye movements during the presentation of the emotional stimuli were recorded with the EyeLink2 system capable of a 500Hz sampling-rate. Further, participants have completed the Youth Psychopathic Traits Inventory (YPI; Andershed et al., 2002) as a self-report measure of these traits. Preliminary results confirmed that individuals with high psychopathic traits looked less at others' eyes in line with prior research. Further, individuals in general fixated more on the torso, and for distress emotions, more on arms and legs. Individuals high on psychopathic traits however tended to look more at others' heads and less at torso, arms and legs. Also, emotion recognition accuracy will be discussed in relation to eye movement.

26. **Patricia Lockwood**, University College London, **Catherine Sebastian**, Royal Holloway & University of London, **Eamon McCrory**, University College London, **Zoe Hyde**, University College London, **Xiaosi Gu**, University College London, **Stephane De Brito**, University of Birmingham, **Essi Viding**, University College London. *Callous Traits Are Associated With Reduced Neural Responses to Others' Pain in Children with Conduct Problems.*

Children with conduct problems (CP) persistently violate others' rights and represent a considerable societal cost. These children also display atypical empathic responses to others' distress, which may partly account for their violent and antisocial behaviour. Callous traits index lack of empathy in these children and confer risk for adult psychopathy. Investigating neural responses to others' pain is an ecologically valid method to probe empathic processing, but such studies in children with CP have been inconclusive. Using functional magnetic resonance imaging, we measured neural responses to pictures of others' in pain (vs. no pain) in a large sample of children with CP and matched typically developing controls. Relative to controls, children with CP showed reduced blood-oxygen-level dependent responses to others' pain in bilateral anterior insula (AI), anterior cingulate cortex (ACC) and inferior frontal gyrus: regions associated with empathy for pain in previous studies. In the CP group, callous traits were negatively associated with responses to others' pain in AI and ACC. We conclude that children with CP have atypical neural responses to others' pain. The negative association between callous traits and AI/ACC response could reflect an early neurobiological marker indexing risk for empathic deficits seen in adult psychopathy.

27. **Sarah Francis Smith, Ashley L. Watts, Scott O. Lilienfeld**, Emory University. *Implications of Psychopathic Traits for the Workplace: Menace, Miracle, or Both?*

The implications of psychopathy for the workplace remain poorly understood (Babiak & Hare, 2006; Smith & Lilienfeld, 2013). Although most investigators have focused on maladaptive correlates (e.g., Boddy, 2011), scattered research suggests that psychopathy is associated with some adaptive leadership behaviors in business settings (Babiak, Neumann, & Hare, 2010). We examine the adaptive and maladaptive implications of psychopathy and its subcomponents, including Fearless Dominance (FD) and Self-Centered Impulsivity (SCI), for workplace behavior. Community participants (N = 312) completed the Psychopathic Personality Inventory-Revised (PPI-R; Lilienfeld & Widows, 2005), Levenson Self-Report Psychopathy Scale (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995), a self-report measure of counterproductive workplace behavior (CWB; Bennett & Robinson, 2000), the Multifactor Leadership Questionnaire, Form 6-S (MLQ-6S; Avolio & Bass, 1992), and a measure of leadership activities. FD was positively associated with engagement in leadership activities and adaptive leadership styles and uncorrelated with CWB and passive leadership styles. In contrast, SCI and LSRP-1 (reflecting primary psychopathy) were unassociated with leadership activities but negatively associated with adaptive leadership styles. SCI, LSRP-1, and LSRP-2 (reflecting secondary psychopathy) were positively associated with CWB. SCI and LSRP-2 were positively associated with passive leadership styles. These findings indicate differential patterns of workplace correlates for psychopathy's components.

28. **Kendra A. McGuffin Nespoli & Adelle Forth**, Carleton University. *Psychopathic Traits, Compliance and Likelihood of Falsely Confessing.*

False confessions present a unique problem for the justice system as they are difficult to prove false and can lead to devastating consequences. Research in the area of police-induced false confessions has identified two types of risk factors: personal (i.e., suspect's age, sex, and personality) and situational (i.e., police interrogation techniques) that contribute to an individual's risk of falsely confessing (Kassin & Gudjonsson, 2004). The present study investigated three personality variables: (1) compliance, (2) psychopathy, and (3) anxiety, and their relationship with participants' self-reported likelihood of falsely confessing during police interrogation. Of the 329 students surveyed, 17% (n = 55) reported past experiences with police interrogation and less than 1% (n = 2) reported having made a false confession to police. As expected, likelihood of falsely confessing was positively correlated with compliance (r = .38, p < .001) and anxiety (r = .18, p < .01). Both measures of psychopathic traits were negatively correlated with compliance (SRP-SF: r = -.16, p < .01; PPI-R: r = -.24, p < .001). Exploratory analyses found that psychopathic traits were not correlated with likelihood of falsely confessing. The relationships between variables are discussed along with potential implications for policing and legal procedures.

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

Psychopathy is characterized by reduced empathy, impulsivity and increased risk for both instrumental and reactive aggression. These traits may affect social functioning by compromising the ability to make adaptive decisions in social interactions. We used fMRI to investigate the neural mechanisms recruited by individuals with varying levels of psychopathy to make decisions in the Ultimatum Game. Thirty-five adult participants recruited from the community performed the Ultimatum Game in the scanner and, afterwards, made judgments about the fairness of each offer. Results showed that high psychopathy scorers rejected unfair offers in the same proportion as low scorers, but perceived them as less unfair. Furthermore, in low scorers, the perceived fairness of offers predicted acceptance rates, whereas in high scorers no association was found. Imaging results revealed that responses in each group were associated with distinct patterns of brain activation, with acceptance of unfair offers being associated with dorsolateral prefrontal cortex activity in low scorers and ventromedial prefrontal cortex activity in high scorers. Overall, our findings point to distinct motivations for rejecting unfair offers in individuals who vary in psychopathic traits, with rejections in high psychopathy scorers being probably induced by

frustration. These results may help to disambiguate conflicting findings regarding social decision-making in psychopathy.

30. **Joyce H. L. Lui, Christopher T. Barry, Marion Wallace, Amanda K. Stary**, University of Southern Mississippi. *The Dark Triad and Adolescent Use of Prosocial and Coercive Interpersonal Strategies*.

This study examined whether psychopathy, narcissism, and Machiavellianism (i.e., the dark triad, Paulhus & Williams, 2002) are differentially associated with social strategies in youths. Ninety-one adolescents aged 16-19 (62 males, 28 females, 1 missing) participated. The Antisocial Process Screening Device (Frick & Hare, 2001), the Narcissistic Personality Inventory for Children (Barry et al., 2003), and the Kiddie Mach Scale (Nachamie, 1970) assessed levels of psychopathy, narcissism, and Machiavellianism respectively. The Resource Control Strategy Inventory (Hawley et al., 2003) assessed use of prosocial (e.g., I influence others by doing something nice for someone) and coercive (e.g., I influence others by bullying) interpersonal strategies. Psychopathy, narcissism, and Machiavellianism were positively correlated with each other,  $r_s > .27$ . In multiple regression models, psychopathy, narcissism and Machiavellianism each uniquely predicted coercive strategies, whereas psychopathy positively predicted prosocial strategies, and Machiavellianism negatively predicted prosocial strategies. Results indicate that in addition to a connection to coercive behavior, aspects of psychopathy (e.g., superficial charm) may also relate to attempts to manipulate others through prosocial strategies.

31. **Rebecca Waller**, University of Oxford, **Frances Gardner**, University of Oxford, **Luke Hyde**, University of Michigan. *What are the Associations Between Parenting, Callous-Unemotional Traits, and Antisocial Behavior in Youth? A Systematic Review of Evidence*.

A growing body of research has examined Callous-Unemotional (CU) traits among samples of antisocial youth. Debate surrounds the malleability of CU traits and their responsiveness to parenting and parent-focused interventions. This review examines evidence from 29 studies that investigated various associations between parenting, CU traits, and antisocial behavior (AB). Studies were identified using a systematic search. Retained studies were categorized according to five distinct research questions each addressing associations among parenting, CU traits, and AB in a different way. The results suggest that dimensions of parenting are prospectively related to changes in CU traits. Subgroups of youth with both high levels of CU traits and AB also appear to have experienced negative parenting practices. However, negative parenting is not consistently related to AB in cross-sectional studies for youth with high levels of CU traits. At the same time, parenting-focused interventions appear effective in reducing the level of AB and CU traits in youth. The findings and implications for future studies are critically discussed as they pose challenges for current etiological theories of AB.

32. **Iolanda Batalla**, Hospital de Santa Maria, **Javier Bosque**, Ponent Prison, **Monica Nieves**, Miquel Marti i Pol Day Hospital, **Laura Bosa**, Hospital de Santa Maria, **Vanessa Pera**, Sant Joan de Deu, **Josep Pifarré**, University of Lleida, **Ramon Batalla**, Hospital of Figueres, **Rafael Torrubia**, Universitat Autònoma de Barcelona. *Co-occurrence of PCL-R Psychopathy and Personality Disorders in Male Offenders Without Major Mental Disorders*.

The objective of this study was to analyze the association between psychopathy and personality disorders (PDs) in a sample of prison inmates without Axis I psychiatric pathology (except for substance-related disorders). A sample of 103 male prisoners, who did not meet the exclusion criteria (Axis I diagnosis, neurodegenerative diseases, and  $IQ < 70$ ), was used. The results indicate that the Psychopathy presents a greater association with PDs of Cluster B, followed by Cluster A, and it has no association with those of Cluster C. Except with the antisocial PD, comorbidity with Axis II disorders tends to be lower than that observed in the studies that include samples with Axis I pathology. Lastly, a low association between the affective facet and PDs was observed. These results could be taken into account in the new *DSM-V* if the authors intend to include the psychopathic personality traits in the new definition of the antisocial PD.

33. **Catherine Shaffer, Evan McCuish, Kevin Douglas, Jodi Viljoen, Raymond Corrado**, Simon Fraser University. *The Relationship between Psychopathy and Prison Perceptions in a Sample of Violent Young Offenders*.

Research on young offenders' perceptions and experiences of imprisonment rarely focuses on serious and violent populations. The present study examined the relationship between factor scores on the PCL: YV and perceptions and experiences of imprisonment in a subsample ( $n = 159$ ) from the Vancouver Longitudinal Study of Incarcerated Young Offenders. Perceptions and experiences of imprisonment were measured using four subscales: Aggressive Tendencies, Exposure to Violence, Perceptions of Fear and Safety and Perceptions of Environment. Factor scores were calculated according to Hare's 4-factor model that includes Interpersonal (F1), Affective (F2), Lifestyle (F3) and Antisocial (F4) features. Total PCL: YV and F4 scores were significantly related to Aggressive Tendencies and Exposure to Violence. No relationship was found between factor scores or total scores and Perceptions of Fear and Safety or Perceptions of the Environment. Forensic implications and risk management strategies are discussed.

34. **Melanie Chinchilla**, Rosalind Franklin University of Medicine and Science **David Kosson**, Rosalind Franklin University of

Medicine and Science, **Steve Miller**, Argosy University, **Meghan Lowe**, Rosalind Franklin University of Medicine and Science. *Psychopathy is Associated with Prominent Public Health Problems in a Community-Based Sample*.

Alcohol abuse, substance abuse and violence perpetration are inter-related and preventable health-risk behaviors that contribute to morbidity and mortality among adolescents and adults in the United States. Although psychopathy has been widely examined within criminal justice populations, there are few studies that examine psychopathy within the general population. Psychopathy has been correlated with high levels of substance abuse, violent and non-violent criminal offenses, and also appears to be one of the best predictors of violent criminal recidivism. The goal of this study was to examine associations between psychopathy and established public health problems within a general population sample in the United States. The current analyses utilized data from the fourth wave of the National Longitudinal Study of Adolescent Health. Initially, the association between violence and alcohol consumption was found to be significant. When the influence of psychopathy on both constructs was controlled for, this association was significantly reduced. In a second, substantially smaller community sample, a similar though marginally significant pattern was found. These findings suggest that psychopathy not only accounts for variance observed in health-risk behaviors, but also explains some of the variance between the health-risk behaviors. Although the current analyses are cross-sectional, findings suggest that psychopathy warrants further investigation as a possible contributor to shared variance between these well-established public health problems. Such findings bolster the assertion that psychopathy should be considered a relevant public health problem.

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

The goal of this study is to gain a better understanding of how psychopathy, risk, and treatment information is communicated by experts and how this same information is interpreted by decision makers. Court ordered forensic assessments presented during dangerous offender hearings were identified and matched with the judges' written and oral statements obtained from a publicly available database. This procedure resulted in a total of 120 cases. Preliminary results found that 86% of risk assessment reports specifically assessed psychopathy. Of particular importance is the fact that 33% of the assessments examining psychopathy contained some form of incorrect information (e.g., equating psychopathy with antisocial personality disorder, etc.). A logistic regression analysis indicated that the treatment and risk information derived from the psychopathy assessment was not predictive of the final judgment. In fact, total psychopathy scores did not differ between dangerous and long-term offenders. This study provides useful information on the methods employed by experts and the way in which risk and treatment information is communicated to decision makers. Given that psychopathy evidence is sometimes used erroneously, it is important to continue to critically examine how and when it is used especially in the context of risk and treatment recommendations.

36. **Christopher Gillen**, Carleton University, **Emily MacDougall**, University of Alabama, **Randall Salekin**, University of Alabama, **Adelle Forth**, Carleton University, **Abby Clark**, University of Alabama, **Heather Merriman**, University of Alabama. *Psychopathy, Substance Use, and Motivation to Change: Evidence for a Holistic Approach to Assessment and Treatment*.

While psychopathy and substance abuse (SA) are risk factors for juvenile recidivism, little research has investigated their relationship. This study is the first to investigate if SA age of onset and severity are related to psychopathy across levels of risk and to investigate how SA, psychopathy, and motivation to change interact to predict risk. Risk and motivation to change were measured with the RSTI Self-Report (RSTI-SR), while SA severity and age of onset were assessed with the CRAFFT. Psychopathy was measured with the APSD and YPI: Short Form. Analyses from 52 adolescent offenders found that SA severity correlated with APSD total and impulsive scores ( $r_s = .37$  to  $.41$ ), while age of onset was negatively related to APSD total, callous, and impulsive scores ( $r_s = -.55$  to  $-.44$ ). Findings were only significant for the half of participants who scored highest on risk. A hierarchical regression was conducted to investigate the interaction between motivation, APSD, and CRAFFT scores on risk. The two-way interaction was significant above main effects ( $F$  change (3, 34) = 4.06,  $p = .014$ ). Simple slopes revealed that risk decreased when motivation increased at low APSD scores and that SA was related to risk at high APSD scores. Results provide evidence for a holistic approach to investigating SA and psychopathy. They indicated that SA is related to behavioral psychopathic traits in high risk offenders and that these traits also moderate the relationships between risk and SA and motivation.

## POSTER SESSION B

FRIDAY, JUNE 7: 5:30P – 7:00P (SOLARIUM)

1. **Michael Wilson**, University of Illinois at Chicago, **Kiril Bosgunov**, Bulgarian Addictions Institute, **Jasmin Vassileva**, University of Illinois at Chicago. *Opposite Relationships Between Psychopathy and Risk Behaviors in Abstinent Drug Users and Controls.*

Psychopathy has been associated with risk behaviors within substance-dependent individuals (SDI). We examined relationships of psychopathic traits with risky sexual and drug use behaviors and pathological gambling (PG) within a Bulgarian sample of heroin-dependent, amphetamine-dependent, and polysubstance-dependent individuals who were currently in protracted abstinence. Two hundred ninety subjects (103 non-SDI, 61 heroin-, 53 amphetamine-, 64 polysubstance-dependent) were assessed with the Psychopathy Checklist: Screening Version and measures of risky sexual and drug use behaviors and PG. Relationships of psychopathy, drug user type, and their interactions with risk behaviors were examined via multiple linear regressions. Psychopathy was positively associated with PG and sexual risk behaviors in the full sample. Exploring these associations separately in SDI and controls revealed counter-intuitive negative associations between psychopathy, PG and sexual risk behaviors among SDI, in contrast to positive associations among these constructs in controls. Both heroin- and polysubstance-dependence were associated with risky drug use and polysubstance-dependence was additionally associated with sexual risk. Our findings suggest that other personality or psychopathology risk factors may be more predictive of sexual risk behaviors and PG in abstinent SDI, whereas in healthy controls with no history of addiction, psychopathy is a viable risk factor for these maladaptive behaviors.

2. **Kathleen Mary Montry, Kristen Michelle Klipfel, Stephanie Smith, David S. Kosson**, Rosalind Franklin University of Medicine and Science. *Investigating the Relationship Between Psychopathy and Traumatic Brain Injury: An Unexpected Finding.*

It is commonly assumed that traumatic brain injury (TBI) is positively correlated with psychopathy. Few research studies, however, have explicitly investigated this relationship. Data collected from 143 incarcerated adult male inmates at a county jail in the Midwest were analyzed to further examine the relationship between psychopathy scores, measured by the Psychopathy Checklist-Revised (PCL-R), and the presence of TBI, as well as the number of symptoms and loss of consciousness (LOC) associated with the brain injury. Analyses revealed there was no correlation between the presence of TBI and psychopathy total scores, nor did the presence of brain injury correlate with scores on any of the individual facets of psychopathy. There was also no relationship between the number of symptoms inmates reported as related to their injury and overall psychopathy scores, nor was there a relationship between number of symptoms and scores on any of the four facets. Finally, there was no relationship between loss of consciousness and psychopathy total scores. Interestingly, however, there was a significant negative correlation between both the interpersonal and affective facet scores and LOC but no correlation found between the lifestyle and antisocial facets and LOC,  $r = -.172$ ,  $p = .04$ ;  $r = -.246$ ,  $p = .003$  for the interpersonal and affective facets, respectively. To further explain this relationship, additional analyses investigating several possible moderating variables are discussed.

3. **Sarah M. Guarraci, Jaelyn L. Fishalow, Casey M. Strickland, Laura E. Drislane, Christopher J. Patrick**, Florida State University. *Validation of a Recruitment Strategy Using Transdiagnostic Dimensions.*

In order to study clinical phenomena from non-treatment seeking samples, research participants were recruited based on their levels of endorsement on individual differences measures related to constructs of interest. The present study examined the utility of the Triarchic Psychopathy Measure (TriPM; Patrick, 2010) for the purpose of selecting individuals meeting criteria for Cluster B and other personality disorders (PDs). Participants ( $n=139$ ) were recruited from a large undergraduate sample and from the community based on their scores on TriPM Disinhibition and Boldness such that participants with extreme scores on either Boldness or Disinhibition were overrepresented in the sample. Participants with high Disinhibition scores endorsed higher rates of Antisocial PD (11.7%) than did participants with low Disinhibition scores (1.4%;  $\chi^2=11.22$ ,  $p<.01$ ). Narcissistic PD was displayed more frequently by participants with high Boldness Scores (5.3%) than by participants with low Boldness scores (0.0%). Avoidant PD was more prevalent among participants low on Boldness (23.8%) than participants with high Boldness scores (2.1%;  $\chi^2=24.04$ ,  $p<.001$ ). Therefore, this strategy allows for recruitment of individuals with clinically significant levels of psychopathology based off of transdiagnostic dimensions.

4. **Elise Cardinale & Abigail Marsh**, Georgetown University. *Amygdala Activation During Adolescents' Moral Judgments as a Function of Callous-Unemotional Traits.*

Psychopathy has long been associated with deficits in responding to fear-related stimuli. We recently found that this deficit extends to making moral judgments about causing others fear and is linked to reduced amygdala activity. This study replicated these findings in a sample of adolescents, ages 10-17, with varying degrees of externalizing conduct problems and callous-

unemotional (CU) traits as assessed by the Inventory of Callous and Unemotional Traits (ICU). Each participant completed an fMRI scan during which they evaluated the moral acceptability of making statements designed to elicit one of five basic emotions (fear, anger, disgust, happiness, sadness or neutral) to another person. Higher levels of CU traits were associated with amygdala hypoactivity during moral judgments about causing fear, which also predicted heightened severity of externalizing behavior. We also found that the Callous subscale was strongly predictive of amygdala activity, while neither the Unemotional nor Uncaring subscales were. These findings indicate that in an adolescent sample with serious conduct problems, core affective traits associated with psychopathy are associated with reduced amygdala activity when judging the moral acceptability of causing fear and that this reduced activity is predictive of externalizing behavioral problems. Additionally, our findings suggest that the callous subscale of the ICU is most closely linked to amygdala dysfunction during moral judgments.

5. **Sonja Krstic & Raymond A. Knight**, Brandeis University. *The Role of Allostatic Load and Developmental Timing of Abuse in the Etiology of Psychopathy.*

Although the development of psychopathy seems to be the result of the intricate interplay of genetic, neurobiological, and environmental influences, and extensive research has attempted to address the unraveling of its etiology and life-course, many aspects of its developmental unfolding remain unknown. Evidence supports both the significance of certain genetic (Kim-Cohen et al., 2006; Viding, Blair, Moffitt, & Plomin, 2005) and psychoneurological correlates (Kiehl et al., 2001; Raine & Yang, 2006). Additionally, adversarial experiential influences, such as childhood maltreatment in the form of physical and sexual abuse, have been found to predict psychopathy and its facets (Graham, Kimonis, Wasserman, & Kline, 2012; Krstic & Knight, 2012). The present study seeks to extend previous research on the developmental antecedents of psychopathy by examining the temporal patterning of emotional, physical, and sexual abuse, by exploring the differential effects of early childhood and later adolescent abuse, and by examining the impact of cumulative abuse as well as specific abuse types. Outcome measures include the interpersonal, affective, lifestyle, and antisocial facets of psychopathy from the Psychopathy Checklist-Revised (Hare, 2003). Developmental experiences have been gathered from a detailed contingency-based computerized inventory of 529 sex offenders. Data have been analyzed by structural equation modeling and regression analyses.

6. **Monika Dargis, Alex Mattern, Allison Brown, Michelle Tsonis, Joseph Newman**, University of Wisconsin-Madison. *Psychopathy and Sexual Offending: The Relationship Between Psychopathic Traits and High PCL-R Scores of Mixed Sex Offenders.*

Past research has revealed a relationship between psychopathy and sexual offending. Notably, offenders who sexually assault a minor as well as an adult (mixed offenders) earn higher total and Factor 2 (i.e., impulsive-antisocial traits) scores on the Psychopathy Checklist-Revised (PCL-R; Hare, 2003) than child sex offenders, rapists, and non-sex offenders (Porter et al., 2000; Oliver & Wong, 2006). In addition, the Factor 1 scores (i.e., interpersonal-affective traits) of mixed offenders are higher than child sex offenders (Porter, Brinke, & Wilson, 2009). The implications of these associations remain unclear, though this pattern may reflect mixed offenders' greater criminal versatility, greater impulsivity, or problems with sexual deviance. Using data from 2,242 male prisoners, we attempted to replicate and clarify these findings. Consistent with Porter et al. (2009), mixed offenders earned higher Factor 2 scores than rapists, child sex offenders, and non-sex offenders. However in our sample, mixed offenders and rapists earned higher PCL-R total scores and Factor 1 scores than both child sex offenders and non-sex offenders. Contrary to speculation, these relationships were not mediated by criminal versatility or sexual deviance (i.e., sexual promiscuity) as measured in this study. However, impulsivity, as measured by Facet 3 of the PCL-R, did mediate the differences between mixed sex offenders and the other offender groups.

7. **Chelsea L. Brieman, Sarah Van Moffaert, Cody V. Schraft, David S. Kosson**, Rosalind Franklin University of Medicine and Science. *Experiencing Parental Rejection: The Association Between Parental Rejection and Psychopathic Traits Among Adult Male Offenders.*

Negative parental attitudes, such as hostility and rejection are typically associated with poor psychological, emotional, and behavioral development (McCord & McCord). More specifically, individuals who experience perceived rejection by primary caregivers tend to exhibit emotional instability and are at heightened risk for displaying hostility and aggression (Roehner, 2007). Schraft and colleagues (2011) reported that scores on a new measure of parental antipathy/rejection, (Knight et al., 1994) were positively associated with Psychopathy Checklist: Youth Version (PCL:YV) ratings among a sample of adolescent offenders. However, more research is needed to assess the robustness of relationships between antipathy and psychopathy. The current cross-sectional study investigated the association between parental antipathy and psychopathic traits as assessed by the Psychopathy Checklist-Revised (PCL-R) in a sample of adult offenders. Participants were 241 male inmates at a county jail in Illinois who ranged in age from 18 to 44. As hypothesized, parental antipathy scores were associated with PCL-R total scores, as well as with scores on the lifestyle and antisocial facets. In addition, after controlling for the number of ASPD symptoms (and for demographic variables), perceived parental antipathy added to the prediction of PCL-R total scores, lifestyle scores, and was marginally predictive of antisocial facet scores after controlling for ASPD symptoms. These findings suggest that

parental antipathy is uniquely related to psychopathic features, and indicate that several potential confounding factors do not explain the relationship between parental antipathy and psychopathy scores.

8. **Liane J. Leedom**, University of Bridgeport, **Linda Hartoonian Almas**, Aftermath: Surviving Psychopathy Foundation, **Emily Geslein**, University of Bridgeport, **Brandon Lleras**, University of Bridgeport. *The Impact of Psychopathy on the Family: A Mixed Methods Inquiry*.

The impact of psychopathic individuals on their family members has received little scientific attention since the Mask of Sanity (Cleckley, 1964) where Cleckley relied on family members' descriptions and accounts when evaluating psychopathic patients. This IRB approved, mixed method study has two primary aims: 1) To document family members' descriptions of the social behavior of psychopathic individuals and 2) to assess the impact of psychopathic individuals on their spouses and children. In Phase 1, memoirs written by spouses (N=10) and adult sons and daughters (N=8) of psychopathic individuals were located using Google and Amazon, obtained and subjected to qualitative thematic analysis using MAXQDA. Also used in this analysis, were author feedback, news interviews, and published reports/interviews of the psychopathic individual. Results of this analysis enabled the development of a model of the relationship between PCL-R Facets and experiences of family members and a model depicting perceptions of the psychopathic parent by developing children. The findings of Phase 1 are being triangulated with those from Phase 2 subjects (current N=30, spouses, adult sons and daughters of psychopathic individuals). Subjects complete an extensive battery of questionnaires including: history, PSCAN, SCL-90, and Follingstad Psychological Abuse Inventory. They also participate in an interview regarding their experiences with the psychopathic family member and PCL-R psychopathy symptoms.

9. **Joanna Lamkin**, University of Georgia, **Allan Clifton**, Vassar College, **Joshua D. Miller**, University of Georgia. *Application of Social Network Analysis to Determine Perceiver Effects Related to Psychopathy*.

Social network analysis (SNA) is a way to mathematically represent the structural dynamics of a group of people (i.e., a network). SNA can reveal patterns that may help to explain interpersonal dysfunction. Few studies have used this method to investigate psychopathy, despite its social consequences (e.g., antisocial behaviors). In this study, we used SNA to obtain a better understanding of the social worlds of individuals with psychopathic traits. We predicted that psychopathic individuals would describe their social group negatively (i.e., demonstrate a negative perceiver bias), regardless of structural position (e.g., someone's connectedness in the network). After self-rating their own personality, a sample of undergraduates (n = 148) listed thirty close acquaintances. Participants rated each acquaintance's personality, closeness of their relationship, and relationship of the acquaintance to the other 29 individuals listed. The findings suggest that psychopathic individuals demonstrate negative perceiver effects toward even their close friends. Furthermore, the negative effect applied even to central (i.e., well-connected and influential) acquaintances in their networks. This negative perceiver effect may explain some aspects of the interpersonal dysfunction associated with psychopathy, as it influences expectations about the behavior of others. It may also help to inform clinical treatment strategies, which are considerably needed for this population.

10. **Stephane De Brito**, University of Birmingham, **Renate Reniers**, University of Birmingham, **Gregory L Wallace**, National Institute of Mental Health, **Catherine Sebastian**, Royal Holloway, University of London, **Eamon McCrory**, University College London, **Essi Viding**, University College London. *Brain Cortical Thickness and Folding in Boys with Psychopathic Tendencies*.

Several voxel-based morphometry studies in adults with psychopathy and children with psychopathic tendencies have reported grey matter volume abnormalities in these populations in comparison to healthy controls. In voxel-based morphometry analyses, however, grey matter volume represents a mixture of cortical thickness and surface area differences (where surface area is proportional to the degree of cortical folding) and as such can be difficult to interpret with respect to measurable biological properties of brain tissue. Furthermore, since these two indices of brain structure are highly heritable, yet may be unrelated genetically, they could potentially represent important, separable candidate endophenotypes for shedding light on the pathway from genetic risk to psychopathic tendencies. To date, however, no study has examined cortical thickness and folding in children with psychopathic tendencies. Using a previously published dataset (De Brito et al., 2009), we will conduct surface-based morphometry analyses as implemented in FreeSurfer to compare whole brain cortical thickness and folding in 23 boys with psychopathic tendencies (mean age = 11 years 8 months) and 25 typically developing boys (mean age = 11 years 6 months). Volumes of subcortical structures will also be gathered and analyses will control for group differences on cognitive abilities and hyperactivity-inattention symptoms

11. **Nathalie M. G. Fontaine**, Indiana University, **Mark T. Berg**, Indiana University, **Ken B. Hanscombe**, King's College London, **Eamon J. P. McCrory**, University College London, **Essi Viding**, University College London. *Associations Between Trajectories of Callous-Unemotional Traits, Different Types of Peer Victimization and Psychopathology*.

Callous-unemotional (CU) traits differentiate a group of children at particularly high risk for engaging in aggressive behavior, notably bullying. While studies have examined the contribution of CU traits to bullying, little attention has been paid to the

associations between CU traits and peer victimization. Using data from the Twins Early Development Study (TEDS), our study examined the associations between trajectories of CU traits in children (between 7 and 12 years old), peer victimization in adolescence (14 years old), and psychopathology (16 years old). The trajectories of CU traits (stable high, increasing, decreasing and stable low) were identified through general growth mixture modeling. Four different types of peer victimization were considered: physical victimization, verbal victimization, social manipulation and attacks on property. The analyses were controlled for several onset indicators assessed at 7 years old, including sex, conduct problems, hyperactivity and socioeconomic status. Our findings suggest that stable high levels and increasing levels of CU traits in childhood, above and beyond the effects of onset indicators, are associated with higher levels of peer victimization in adolescence. Clinical implications are discussed, notably with respect to psychopathology in adolescence.

12. **Sarah E. Mikulich**, University of Nevada, Las Vegas, **Emily A. Dowgwillo**, Pennsylvania State University, **Karen F. Miller**, Vanderbilt University Medical Center, **Alan B. Storrow**, Vanderbilt University Medical Center, **Stephen D. Benning**, University of Nevada, Las Vegas. *Psychopathy in the Emergency Room: Reasons for Admission, Demographics, Medication, and Comparisons with Incarcerated Samples.*

Previous research of psychopathy in community and incarcerated samples using the PCL family of instruments has found higher levels of psychopathy in incarcerated samples than in community samples. Similar research with dispositional trait measures of psychopathy is less prevalent. This study examined levels of MPQ-estimated fearless dominance (FD) and impulsive antisociality (IA) among incarcerated samples and that of a sample from a department of emergency medicine (ER) with a comparable level of SES. It also examined the relationships between FD, IA, and reasons for presenting in the ER, medication use, psychological problems, demographic information, and family structure. In a sample of 1023 ER participants, FD and IA scores were higher compared to those in the MPQ normative sample and were comparable to scores from federal and state inmates. FD was positively correlated with education level and current employment, whereas IA was negatively correlated with these variables. IA was negatively correlated with being raised by a biological mother, currently being married, and number of marriages; but positively with live-in relationships. FD was negatively correlated with self-reported psychiatric diagnosis and taking psychotropic and beta-blocker medications. IA was not correlated with medication use despite being correlated with self-reported psychiatric diagnosis. IA was selectively correlated with presenting in the ER for psychological problems and physical injury.

13. **Laura C. Thornton**, University of New Orleans, **James V. Ray**, University of New Orleans, **Paul J. Frick**, University of New Orleans, **Rachel E. Kahn**, University of New Orleans, **Elizabeth Cauffman**, University of California – Irvine, **Laurence Steinberg**, Temple University. *The Role of Callous-Unemotional Traits in Processing Decision for First-Time Offenders.*

Callous-unemotional traits have been associated with a particularly severe pattern of antisocial behavior (Frick, Stickle, Dandreaux, Farrell, & Kimonis, 2005). Moreover, research suggests that youth with CU traits are more likely to come into contact with the juvenile justice system (JJS; Sampson & Laub, 1993). Although a considerable amount of research has identified a number of legal (e.g., number of previous offenses, history of violence) and extra-legal factors (e.g., age, ethnicity, family factors) important in how youth are processed (i.e., formal vs. informal) through the JJS, studies have yet to examine if CU traits are influential as well. The current study addresses this gap in the research by examining if CU traits explain variance in whether youth are formally or informally processed beyond the effects of other legal and extra-legal factors. Analyses were conducted on data from an on-going multi-site, longitudinal study of 984 first-time justice-involved youth. After accounting for clustering within site, results from logistic regression suggest that CU traits, offense type (violent vs. non-violent), neighborhood characteristics, age, ethnicity, and IQ were associated with processing decision. Specifically, higher CU traits increase the likelihood of being processed formally beyond these other factors.

14. **Roberta Clanton**, National Institute of Mental Health, **Stuart White**, National Institute of Mental Health, **Sarah J. Brislin**, Florida State University, **Harma Meffert**, National Institute of Mental Health, **Soonjo Hwang**, National Institute of Mental Health, **Stephen Sinclair**, National Institute of Mental Health, **James R. Blair**, National Institute of Mental Health. *Temporal Discounting and Conduct Disorder in Adolescents.*

Temporal discounting (TD; the decrease in subjective reward value as a function of increasing delay) impulsivity is associated with ADHD and substance abuse, but not as clearly with antisocial behavior. The current study examined TD in youth with conduct disorder (CD) and the extent to which this was modulated by level of psychopathic traits. Forty-six youth participated in this study (21 with CD and 25 healthy youth). In a computer-based temporal discounting task, participants were asked to choose between an immediate reward and a delayed reward of greater value. The level of immediate reward necessary for selection over the larger, delayed reward is the measure of temporal discounting. Youth with CD choose significantly smaller amounts of immediate reward over the larger future rewards [ $F(5,38)=7.589, p=.009$ ]. This was the case even in those youth with CD without comorbid ADHD [ $F(5,33)=6.4221, p=.016$ ]. However, level of psychopathic traits did not modulate temporal discounting in this sample [ $F(5,38)=1.419, p=.240$ ]. These results suggest that temporal discounting impulsivity may be related to CD, but not specifically to psychopathic traits. The current findings suggest possible overlap in

neuropathology between CD, ADHD and substance abuse.

15. **Nathaniel E. Anderson, Kent A. Kiehl, Keith A. Harenski**, University of New Mexico. *Attention to Emotion: Functional Activation Differences Associated with Psychopathy.*

Many neurobiological models of psychopathy agree that processing of emotionally salient information is abnormal in psychopaths. It has also been suggested that differences in mechanisms of attention may underlie some of these apparent emotional processing abnormalities. Healthy individuals tend to process emotionally salient information automatically and preferentially; however, recent ERP research has suggested that psychopathic traits are associated with differences in event-related brain activity suggesting impaired implicit processing of emotional content, with relative increases in emotion-related activity when explicitly focused on these features. The present study extended these methods examining event-related fMRI BOLD activity in a sample of incarcerated participants scored on the PCL-R. Participants completed a task that manipulates attention to emotional content in a target-detection task. Brain activity uniquely associated with PCL-R scores in emotion-processing areas differentiated between conditions in which emotional content was an irrelevant feature of the task and conditions in which participants explicitly attended to emotional content. These unique associations add support to notions of abnormal implicit processing of emotional content by psychopaths, and distinct mechanisms for attending to and processing emotional features when explicit attention is required.

16. **W. Roger Mills-Koonce & Nicholas Wagner**, The University of North Carolina at Chapel Hill. *Unique Patterns of Infant Autonomic and HPA Functioning among Children with Conduct Problems and Callous-Unemotional Traits in 1st Grade.*

Research suggests that older children exhibiting elevated conduct problems (CP) and callous unemotional (CU) traits (CP+CU) are at greatest risk for persistent antisocial behaviors and are characterized by a fearless temperamental profile, including low baseline levels of psychophysiological stress response. Whether these patterns represent stable, biologically-mediated differences or developmental adaptations to early atypical environments is unknown. This study examined early baseline levels of autonomic functioning (heart period [HP]) and hypothalamic-pituitary-adrenocortical functioning (cortisol) at 6 and 15 months for children with and without later CP and CU. Data were collected by the Family Life Project, a longitudinal study using a stratified population sampling of 1,292 families. Children were classified as no-CP, CP-only, or CP+CU based on 90% cut-offs for CP and CU measured at 1st grade. No group differences were observed at 6 months. At 15 months children with CP+CU had significantly higher baseline cortisol and lower HP (indicating higher heart rate) than children with CP-only and no-CP. These analyses find that the patterns of low baseline autonomic and cortisol functioning observed in children with CP+CU in adolescence are not evidenced in very early childhood. This suggests that, among individuals with clinical levels of CP+CU, there may be a developmental change in stress psychophysiology that is genetically, environmentally, or epigenetically mediated.

17. **Alice Jones, Holly Judge, Dexter Kunaka**, Goldsmiths, University of London. *Difficulties in Emotional Understanding of Self and Others Associated With Elevated Levels of Sub-Clinical Psychopathy.*

While a wealth of studies have demonstrated poor affective empathy in individuals with elevated levels of psychopathy, very few studies have examined symptoms of alexithymia, and no work has attempted to explore cognitive and affective alexithymia associations with psychopathy. This study aimed to replicate previous work demonstrating poorer affective empathy functioning in individuals with elevated (but non-clinical) psychopathy, but also to explore cognitive and affective facets of alexithymia. Data is reported on 100 adults who completed self-report measures of the Psychopathic Personality Inventory-Revised (PPI-R), Basic Empathy Scale and the Bermond-Vorst Alexithymia Quotient (BVAQ). The sample was split using the median total t-score on the PPI-R. Statistically significant group differences were found for affective empathy and cognitive empathy and for the affective subscale of the BVAQ, where the high psychopathy group scored less well. Lower scores on the affective subscale of the BVAQ indicate less intense emotional experiences, rather than a difficulty in accurately labeling own emotions. Previous work by our group has demonstrated that the affective subscale of the BVAQ predicts affective empathy, while the cognitive subscale does not. We suggest that individuals with elevated levels of psychopathy have less intense emotional experiences, which are likely to lead to them being less empathic towards the emotional experiences of others.

18. **Vaughn R. Steele, Brandi C. Fink, Kent A. Kiehl**, University of New Mexico. *Predicting Substance Abuse Treatment Outcomes with Psychopathy and Event-Related Potentials in a Go/NoGo Task.*

Individuals with high Psychopathy Checklist-Revised (PCL-R) scores commonly use and abuse substances, are impulsive, and have difficulty completing long-term goals. Therefore, PCL-R scores could be predictive of who will or will not complete substance abuse treatment. We test the hypothesis that the PCL-R and neural measures of cognitive control and error processing would predict which individuals would or would not complete a 12-week cognitive behavioral substance abuse treatment program. Adult incarcerated participants (N=89) who volunteered for treatment performed a response inhibition (Go/NoGo) task while event-related potentials were recorded. The error-related negativity (ERN) and the error positivity (Pe)

elicited during false alarms were compared between those who completed (N=68) and discontinued (N=21) treatment. As predicted, both the ERN and Pe, measured with classic windowed time-domain and principal component analysis, differed between groups. The Pe predicted treatment completion above and beyond other measures (i.e., ERN, age, IQ, PCL-R, and self-reported depression, anxiety, and motivation for change). We conclude individuals who discontinue treatment are deficient in both error-monitoring, as indexed by the ERN, and adjusting response strategy post-error, as indexed by the Pe but only the latter is predictive of treatment outcomes. Though commonly related to impulsivity and poor long-term planning, PCL-R did not specifically predict drug treatment outcomes.

19. **Leah M. Efferson**, Hiram College, **Andrea L. Glenn**, University of Alabama, **Ravi Iyer**, University of Southern California. *Me Versus Them: Psychopaths' Views of Their Own and Others Behaviors in Moral Dilemmas.*

Previous research has shown primary psychopathy to be associated with greater endorsement of utilitarian solutions in both personal (direct physical harm) and impersonal (indirect harm) moral dilemmas (Koenigs et al., 2011). In these scenarios, participants rate the appropriateness of their *own* behavior in the situation, but it is unknown how they would judge *someone else's* behavior in the situation. We hypothesized that those scoring higher in psychopathy would say it is more appropriate for themselves to perform the harmful action than it is for others. Participants (N=1161) from [yourmorals.org](http://yourmorals.org) took the Levenson Self Report Psychopathy Scale (Levenson, Kiehl, & Fitzpatrick, 1995) and were divided into two conditions (self/other) in which they either responded to ten moral dilemmas (Green et al., 2001, 2004) presented in second person (“you”) or third person (“John”). We found a significant interaction between psychopathy and self/other condition, such that people scoring higher in primary psychopathy were more likely to endorse utilitarian solutions when others were performing the action, whereas people lower in psychopathy were more likely to endorse utilitarian solutions when they were performing the action themselves ( $\beta=.335$ ,  $p=.011$ ). These findings indicate that psychopaths' judgments vary depending on whether they are judging their own or other people's behaviors and this pattern is different from those scoring low in psychopathy.

20. **Joanna M. Berg**, Emory University, **Lisa Hecht**, Georgia State University, **Robert D. Lutzman**, Georgia State University, **Scott O. Lilienfeld**, Emory University. *Guiltlessness and Lovelessness: Clarifying the Meaning of the Coldheartedness Factor of the Psychopathic Personality Inventory-Revised.*

Classic conceptualizations of psychopathy often refer to a lack of deep-seated social emotion as one of the disorder's key components. However, with notable exceptions (e.g., the Affective facet of the PCL-R four-factor model; Hare, 2003), contemporary psychopathy assessment instruments often neglect this trait, focusing instead on the interpersonal and behavioral facets of psychopathy. The Psychopathic Personality Inventory-Revised (PPI-R; Lilienfeld & Widows, 2005) includes a subscale named Coldheartedness, which bears a strong resemblance to the affective deficits discussed in the classic psychopathy literature. As it is not one of the PPI-R's traditional higher-order factors, though, it is often omitted from analyses. In a sample of 1169 (73% female) college undergraduates, we examined Coldheartedness within a network of relevant etiological, behavioral, and personality correlates. Coldheartedness demonstrated expected negative correlations with measures of self-report cognitive disinhibition and each of the Big Five personality traits, but contrary to prediction, correlated positively with some aspects of trait impulsivity (especially Positive Urgency) and with self-reported childhood trauma. These correlations suggest that there may be more underlying the construct than affective deficits alone. Studies using the PPI-R should continue to explore Coldheartedness's correlates, including the role of impulsivity and the potential for a trauma-based etiological pathway.

21. **Pablo Ribes**, **Rosario Poy**, **Pilar Segarra**, **Àngels Esteller**, **Raúl López**, **Alicia Fonfría**, **Carlos Ventura** & **Javier Moltó**, Universitat Jaume I. *Boldness and Deficient Startle Potentiation During Threat Pictures.*

In order to examine the differential association between components of the triarchic model of psychopathy and emotional reactivity, we explored in 34 undergraduate females the role of boldness, meanness and disinhibition — assessed by the Triarchic Psychopathy Measure (TriPM; Patrick, 2010) — in predicting diminished startle potentiation to noise probes during a passive picture viewing task (intermixed presentation of 12 erotica, 12 neutral, 6 mutilation and 6 threat scenes, 6 s presented). A repeated measures general linear model including TriPM factor scores as continuous between-subjects factors revealed that only Boldness scores moderated the typical startle modulation across picture contents ( $p < .02$ ), being these scores specifically related to a deficient startle potentiation for threat vs. neutral pictures. A subsequent hierarchical regression analysis confirmed that this reduced aversive startle potentiation was uniquely predicted by Boldness scores, after controlling for Meanness and Disinhibition scores (11.6% of variance;  $p = .05$ ). This result seems consistent with dual-process models of psychopathy, in that boldness rather than meanness reflects a weakness in defensive (fear) reactivity, even though both phenotypes share the same underlying dispositional temperament of low fear. Further, our findings support the validity of the triarchic model of psychopathy in disentangling etiological underpinnings of distinctive phenotypic components of this personality disorder.

22. **Alicia Fonfría**, **Àngels Esteller**, **Rosario Poy**, **Pilar Segarra**, **Raúl López**, **Carlos Ventura**, **Pablo Ribes**, & **Javier Moltó**, Universitat Jaume I. *Fearlessness and Cardiac Defense Response: Gender Differences.*

This study examines gender-specific associations between psychopathy traits and the second accelerative component (A2) of Cardiac Defense Response (CDR) —proposed as an index of defensive motivational activation (Ramírez et al., 2005). For this purpose, 164 undergraduates (99 women) assessed by the Psychopathic Personality Inventory-Revised (PPI-R; Lilienfeld & Widows, 2005) participated in a non-cued defense paradigm (Vila et al., 2007). A general linear model (GLM) with gender and PPI-R total scores as between-subjects factors evidenced relevant gender differences in psychopathy-related deficits in A2 (4.5% of variance,  $p < .01$ ). Additional GLMs performed separately for each gender showed differential patterns of A2 associated with PPI-R total for women (5%,  $p < .03$ ), but not for men. Follow-up analyses for women, including PPI-R factors and scales scores, revealed a reduced A2 of CDR related to Fearless Dominance (PPI-R-I factor; 4.3%,  $p < .05$ ), specifically to its Fearlessness scale (8%,  $p < .01$ ). This result suggests that, at least in women, Fearlessness seems to be related to a diminished cardiac defensive reactivity, adding empirical evidence to the association between the low fear tendencies of psychopathy and the deficient activation of the defensive motivational system. Future studies should clarify the relation between CDR and psychopathy in men. This study further supports the use of the second accelerative component of the CDR as an index of defensive motivation.

23. **Yu Gao**, Brooklyn College and the Graduate Center of the City University of New York, **Lihui Xiao**, Hunan Normal University, **Simone Tang**, Duke University. *Utilitarian Moral Judgment and Psychopathic Personality in US and Chinese Students.*

One characteristic of psychopathy is amoral behavior. Recent studies have indicated that psychopaths, particularly those with low anxiety, make more utilitarian moral judgments. However, there is a dearth of research on the link in nonincarcerated populations, and no study has yet examined these associations in non-Western populations. Participants were college students in New York City (N= 302) and in Hunan, China (N= 174). Participants completed a moral judgment test involving personal and impersonal moral dilemmas. Psychopathic personality was assessed using the Psychopathic Personality Inventory-Short Form (PPI-SF) and anxiety was assessed using the State and Trait Anxiety Inventory-Trait version. Proactive and reactive aggression was also assessed using the Reactive-Proactive Aggression Questionnaire (RPQ) In both samples, after controlling for the effect of sex, the number of utilitarian responses to moral dilemmas was positively associated with PPI-SF total score, and in particular the second factor of PPI-SF (PPI-II). PPI-II was also associated with utilitarian response to impersonal moral dilemmas, and it was mediated by aggression. Anxiety did not moderate the associations. Findings provide further evidence that utilitarian moral judgments are associated with psychopathic personality in nonincarcerated populations, and for the first time suggest that this link can be generalized to a non-Western culture.

24. **Elizabeth Krusemark & Joseph Newman**, University of Wisconsin-Madison. *Identifying Selective Attention Processes Among Narcissism Dimensions: An Examination of the Evaluative Distortion Hypothesis.*

Narcissistic personality disorder (NPD) is associated with distinguishing traits including arrogance, and an excessive need for admiration. Clinical perspectives suggest narcissism is a heterogeneous construct, consisting primarily of a grandiose, dominant dimension as well as a vulnerable dimension characterized by hypersensitivity and negative affect. Theoretical accounts suggest self-enhancing and defensive behaviors are the result of a motivated self-regulatory strategy; however, an alternative theory posits evaluative distortions stem from an attention bias. The present study was designed to evaluate whether narcissism and its dimensions are associated with distinct attentional responses to evaluative information. Using a traditional dot probe task consisting of valenced and neutral words, we found NPD symptoms were associated with faster orienting toward negative information, while positive stimuli enhanced task performance. Reflecting unique attentional profiles, grandiose narcissism was associated with performance benefits from positive stimuli, while vulnerable narcissism showed greater performance costs in response to negative words. These results indicate grandiose narcissism may be adaptive, as it relates to gains from positive information, while vulnerable narcissism represents a malignant dimension marked by reactivity. Together, these findings underscore evaluative attentional biases in narcissism, suggesting narcissistic pathology is associated with individual differences in attention allocation that may facilitate goal-relevant behavior.

25. **Panayiotis Stavrinides**, University of Cyprus. *Psychopathic Traits and Adolescent Aggression.*

In this paper we discuss the results of two empirical studies that aimed at investigating adolescent psychopathy and aggression. In the first study we aimed at investigating the relationship between psychopathic traits and bullying. In the second study we examined whether adolescent psychopathy is correlated with other severe forms of problem behaviour such as reactive and proactive aggression. The participants of the first study were 1205 adolescents (mean age 14.3 years, SD = 2.07 years) that completed a Greek version of the Youth Psychopathic Inventory (YPI) and the Revised-Bullying and Victimization Questionnaire (BVQ-R). The participants of the second study were 605 adolescents with a mean age of 14.2 years and standard deviation 2.16 years that completed the YPI and The Reactive-Proactive Aggression Questionnaire. Results from both studies show that psychopathic traits can significantly predict bullying, proactive aggression, and reactive aggression. More specifically, Grandiose Manipulation and Impulsive Irresponsibility are the most significant predictors of aggressive behaviour. Furthermore, moderation analysis revealed that the link between psychopathy and aggression is

moderated by child's gender. That is, girls with psychopathic traits are more likely than boys to engage in aggressive behaviour. The results of these two studies are discussed regarding clinical and theoretical implications of the potential psychopathology involved in adolescent aggression.

26. **Kasia Uzieblo**, Thomas More University College, **Sarah Gordts**, Vrije Universiteit Brussel, **Craig Neumann**, University of North Texas, **Eva Van den Bussche**, Vrije Universiteit Brussel, **Gina Rossi**, Vrije Universiteit Brussel. *Evaluating the Factor Structure and External Validity of the Self-Report Psychopathy Scale in a Large Community Sample.*

The Hare Self-Report Psychopathy Scale is a promising self-report inventory primarily designed for the assessment of psychopathic traits in non-forensic populations. Since its development, the instrument has undergone several substantial modifications. Factor analytical and validity studies on the two most recent versions, i.e. the 64- (Self-Report Psychopathy Scale III; Paulhus, Neumann, & Hare, in press) and the 28-item version (Self-Report Psychopathy Scale 4 Short Form; Paulhus, Neumann, & Hare, in press), is still limited. The current study aimed to evaluate the factor structure and to elaborate the external validity of both versions in a large community sample (N=1505). Results supported the factor structure of both SRP-versions consisting of the four factors Interpersonal Manipulation, Callous Affect, Erratic Lifestyle, and Criminal Tendencies. Furthermore, both SRP-versions exhibited good external validity in relation to a wide range of theoretically relevant correlates (e.g. avoidant attachment style, bullying behavior, aggression, and extremist, antisocial attitudes). Notwithstanding, differences between the two SRP-versions with regard to their relations with external correlates were found.

27. **Allan Heritage**, Vanderbilt University, **Loran Kelly**, Vanderbilt University, **Stephen Benning**, University of Nevada, Las Vegas. *Preferential Relationships Among Fearless Dominance, Impulsive Antisociality, and Risky Behavior.*

Within the psychopathic personality, the factors of fearless dominance (FD) and impulsive antisociality (IA) show some distinct and some overlapping relationships with other personality and behavioral correlates. For example, both factors are related to increased risky behavior, though not necessarily in the same way. Additionally, differences may exist between risk taking and risk perception. The present study investigated the relationships between fearless dominance, impulsive antisociality, and risky behavior in a comprehensive way. Specifically, we used multiple self-report measures of risky behavior, risk taking and perception, and impulsivity, as well as two behavioral tasks designed to measure different aspects of risky behavior. IA showed preferential relationships with substance use and antisocial behavior as well as general impulsivity. IA was also preferentially related to differences in risk taking and perception for ethical and health risks whereas FD was preferentially related to differences in recreational and social risks. Both factors were associated with sensation seeking, but FD was associated with thrill and adventure seeking, and IA was associated with boredom susceptibility and experience seeking. Despite these expected relationships, neither FD nor IA was related to performance on the Balloon Analog Risk Task or Assessment of Physical Risk Taking task. Theoretical implications and task differences are discussed.

28. **Laura E. Drislane & Christopher J. Patrick**, Florida State University. *Assessing the Latent Structure of the Triarchic Model of Psychopathy in Men and Women.*

Existing psychopathy inventories can be understood in terms of their comparative representation of boldness, meanness, and disinhibition (Drislane et al., 2013). Recent work has shown that scale measures of the Triarchic psychopathy model constructs can be formed using items from inventories that provide effective coverage of each (Hall et al., 2013). Results from a large (N = 567) study are described in which CFA was used to quantify boldness, meanness, and disinhibition as latent variables using indicators consisting of subscales of the Triarchic Psychopathy Measure and item-based scales derived from the Psychopathic Personality Inventory, Youth Psychopathic Traits Inventory, and Multidimensional Personality Questionnaire. A 3-factor Triarchic model fit the data more effectively (RMSEA=.07, CFI=.97) than alternative 2- and 1-factor models ( $\Delta\chi^2 = 302.0; 1031.4$ ). While mean differences in factor scores were found across gender (male>female), the structure of the model did not vary by gender, as evidenced by maintenance of fit when factor loadings and intercepts were constrained to be equal ( $\Delta\chi^2=11.8, p>.05$ ). A CFA in which scores on the Agreeableness factor of the NEO-PI-R were included as an additional indicator of the Meanness factor revealed the content of NEO-A to be largely consistent, but not identical, with the content of the latent Meanness factor ( $\Delta\chi^2=22.4, p<.05$ ; RMSEA=.07, CFI=.97). Implications for conceptualization and assessment of psychopathy will be discussed.

29. **Casey M. Strickland**, Florida State University, **Laura E. Drislane**, Florida State University, **Robert F. Krueger**, University of Minnesota & **Christopher J. Patrick**, Florida State University. *Characterizing Psychopathy Using DSM-5 Personality Traits.*

Despite its importance historically and contemporarily, psychopathy is not currently included in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR). Its closest counterpart, antisocial personality disorder (ASPD), includes strong representation of behavioral deviance symptoms but weak representation of affective-interpersonal features considered central to psychopathy. The current study evaluated the extent to which psychopathy and its distinctive facets, indexed by the Triarchic Psychopathy Measure, can be assessed effectively using traits from a the Personality Inventory for DSM-5 (PID-5;

Krueger et al., 2012), a dimensional model of personality pathology which will be included in Section III of the DSM-5 as an emerging model for use in clinical research. A sample of 188 undergraduate and community adults completed the PID-5 and TriPM. Results indicate that impulsive-externalization features and callous-aggressive features of psychopathy are well-represented by traits from the PID-5 considered relevant to ASPD (Multiple  $R_s = .77, .78$ , respectively) Furthermore, the boldness facet of psychopathy can be effectively captured using additional PID-5 traits (Multiple  $R = .73$ ). These findings provide evidence that the dimensional model of personality pathology embodied in the PID-5 provides effective trait-based coverage of psychopathy and its facets.

30. **Nathan J. Kolla**, Centre for Addiction and Mental Health & University of Toronto, **Sarah Gregory**, University College London, **Stephen Attard**, St Andrew's Healthcare, **Nigel Blackwood**, King's College London, **Sheilagh Hodgins**, King's College London & Université de Montréal. *Could Childhood Physical Abuse Have Led to Alterations in Brain Structures Observed Among Violent Offenders With Psychopathy? A Voxel-Based Morphometric Study.*

Males with antisocial personality disorder and psychopathy (ASPD+P) commit more violent offenses and exhibit emotion-processing deficits not observed in ASPD without psychopathy (ASPD-P). Childhood physical abuse (CPA) is a precursor of both violent offending and grey matter (GM) brain changes in children and adults. We used structural MRI to determine whether GM differences between ASPD+P and ASPD-P violent offenders could be related to CPA. Thirty-seven males participated in this study: nine violent offenders with ASPD+P, 15 violent offenders with ASPD-P, and 13 healthy participants. ASPD+P offenders had PCL-R scores of 25 or greater, while those with ASPD-P had PCL-R scores less than 25. Participants underwent structural MRI scanning and completed a comprehensive interview with a forensic psychiatrist focusing on childhood maltreatment. Violent offenders were matched on age, IQ, and substance misuse histories. ASPD+P offenders reported more CPA than ASPD-P offenders and healthy participants. Compared with ASPD-P offenders, ASPD+P offenders presented smaller right temporal pole volumes after controlling for CPA. ASPD+P violent offenders reported more CPA than ASPD-P offenders. Reduced right temporal pole volumes in ASPD+P offenders tentatively suggest that alteration of this structure may play a role in the profound social impairment characteristic of psychopathy.

31. **Roberto C. Guerra, Bradley A. White, & Kelsey A. Shaffer**. Virginia Polytechnic Institute and State University. *Validation of the Inventory of Callous-Unemotional Traits in a Mixed Gender College Sample.*

Callous-Unemotional (CU) traits (e.g., lack of empathy or guilt, emotional detachment) are core features of psychopathy, and a key risk factor for antisocial behavior in youth and adults (Cooke & Michie, 1997). The Inventory of Callous-Unemotional Traits (Frick, 2004) is a 24-item self-report questionnaire designed to comprehensively assess CU traits in youth. The current study used confirmatory factor analysis (CFA) to evaluate the factor structure of the ICU in a mixed-gender undergraduate student sample ( $N = 1896$ ; 73% female, ages 18-24). We estimated and compared three models, based on prior studies of ICU factor structure in adolescent forensic and community (Essau et al., 2006; Kimonis et al., 2008) and adult male community (Byrd et al., 2012) samples. Model fit was assessed using global fit indices including CFI (Bentler, 1990), TLI (Tucker & Lewis, 1973), and RMSEA (Steiger, 1990). The three-factor bifactor model exhibited best fit ( $df = 219, \chi^2 = 1288.06, p < .001, \chi^2/df = 5.88, CFI = .925, TLI = .906, RMSEA = .051$ ), consistent with prior research. Results from both maximum likelihood and tests robust to ordinal and non-normal data are considered, and a specification search was conducted to determine model fit improvement. We also report on internal consistency of ICU factors and their incremental predictive validity for antisocial behavior. These findings add to the growing literature on the ICU, and support its use as a self-report measure of CU traits in adults.

32. **Alesia Allen, Emily MacDougall, Jackie Tippey & Randy Salekin**. University of Alabama. *Treatment of Conduct Problem Youth with Interpersonal Callous Traits Using Mental Models: Measurement of Risk and Change.*

Youth with conduct problems (CP) and interpersonal callous (IC) traits pose a significant problem to society. The costs associated with CP youth include damage to property, theft within the community and aggressive and sometimes violent acts. Youth with this condition also engage in behavior that puts them at risk for early substance use and at a disadvantage for academic and vocational success, and a host of other negative outcomes. As such, researchers have attempted to reduce these problems by developing prevention and intervention programs for the condition. This study tested a positive psychology intervention's ability to reduce symptoms of IC/CP. It was hypothesized that the intervention would increase positive emotion, decrease psychopathic traits (APSD scores) and increase treatment amenability (awareness of problems, motivation for treatment, and consideration/tolerance). Participants were 30 males (age = 14.67) housed at a secure facility. Findings indicated a reduction in APSD scores across treatment (T1 – T2) and the effect was maintained from T2 to T3. The facets of the APSD also evidenced a reduction in symptom scores. Positive emotion (CDS) and amenability improved across the intervention. Post-treatment interviews and progress notes showed that participants enjoyed and benefitted from treatment. The authors discuss the implications of the findings.

33. **Sarah J. Brislin, Laura E. Drislane, Christopher J. Patrick**. Florida State University. *Clarifying the Nomological Network*

*of the Meanness Facet of Psychopathy.*

This study sought to clarify the nomological network of the meanness facet of psychopathy in large college sample (N=810; 31.7% male). Based on CFA work delineating constructs of the Triarchic psychopathy model as latent factors (Drislane & Patrick, this meeting), Meanness factor scores were computed by combining 3 scale indicators: TriPM Meanness, PPI-Tri Meanness, & NEO Agreeableness-rev. Scores on this factor showed stronger rs than individual scale indicators with criteria including IPIP Cooperation (-.59), Nurturance (-.60), Sympathy (-.62), and Warmth scales (-.64), and ICU and MACH-IV scores (.74, .68). When included in a regression model along with TriPM Boldness and Disinhibition scores, Meanness factor scores uniquely predicted IPIP Nurturance, Sympathy, and Interpersonal Pleasantness scores (rs = -.62, -.58, -.59), along with ICU, MACH-IV, and MPQ Aggression scores (rs = .67, .65, .63). Scores on Meanness also showed a strong positive r (.72) with EPQ Psychoticism (P) scores. Results confirm expected positive relations between scores on a factor reflecting the Meanness construct of the Triarchic model and measures of callous-unemotionality (ICU) and interpersonal exploitativeness (MACH-IV), and expected negative relations with measures of sympathy and empathic concern. Our also results extend knowledge of the network around the Meanness construct by demonstrating positive rs with competitiveness and Eysenck's P factor, and negative rs with nurturance and warmth.

## POSTER SESSION C

SATURDAY, JUNE 8: 12:00P – 1:30P (SOLARIUM)

1. **Rosario Poy, Pilar Segarra, Raúl López, Àngels Esteller, Carlos Ventura, Pablo Ribes, Alicia Fonfría & Javier Moltó**, Universitat Jaume I. *FFM Description of the Triarchic Model of Psychopathy in Men and Women.*

The role of gender in the relationships between constructs of the triarchic model of psychopathy (Patrick et al., 2009) and the Five Factor Model (FFM) dimensions of normal personality was examined in 349 undergraduates (96 men) assessed by the TriPM and the NEO-PI-R. For Boldness, both men and women's scores were positively related to Extraversion (E) and Openness (O), and negatively related to Neuroticism (N) and the Straightforwardness and Modesty facets of Agreeableness (A). For Meanness, both men and women's scores were negatively related to A and Conscientiousness (C). For Disinhibition, both men and women's scores were negatively related to C and A and positively related to N. Though relations between Meanness and A were stronger for men than women, with the opposite being true for relations between Disinhibition and C, patterns of correlations for psychopathy constructs did not differ significantly across gender. Our findings are largely consistent with the conceptualization of psychopathy in terms of FFM constructs, irrespective of gender, and provide discriminant evidence in support of the three distinctive phenotypic constructs of the triarchic model of psychopathy. Thus, meanness is marked by low A and some degree of low C, whereas disinhibition is characterized both by low C and low A (along with high N). Notably, the constellation of low N, high E and high O, with aspects of low A, supports the idea that boldness is a benign expression of genotypic fearlessness.

2. **Àngels Esteller, Rosario Poy, Pilar Segarra, Raúl López, Alicia Fonfría, Pablo Ribes, Carlos Ventura, & Javier Moltó**. Universitat Jaume I. *The Triarchic Model of Psychopathy and Electrodermal Reactivity to Affective Pictures.*

The triarchic model of psychopathy (Patrick et al., 2009) encompasses three distinct phenotypic constructs: disinhibition, meanness, and boldness. Here we examine the contribution of these 3 constructs in electrodermal reactivity to affective pictures. Participants were 102 undergraduate females assessed by the Triarchic Psychopathy Measure (TriPM; Patrick, 2010). Electrodermal changes were obtained during a passive viewing task (pleasant, neutral and unpleasant IAPS pictures, 6 s presented). A repeated measures general linear model including TriPM scale scores as continuous between-subjects factors revealed that only Boldness scores modulated the electrodermal reactivity across picture categories ( $p < .02$ ). After controlling for Meanness and Disinhibition scores, hierarchical regression analyses showed that only Boldness scores predicted significantly a reduced electrodermal difference between unpleasant and neutral pictures (7.6% of variance,  $\beta = -.28$ ,  $p < .01$ ), but not between pleasant and neutral ones. These data seem consistent with a conceptualization of boldness (e.g., low anxiousness and emotional resiliency) as a phenotypic expression of dispositional low fear. Moreover, these data add to the increasing evidence about the differential association between psychopathy components and affective deficits, giving empirical support to the validity of the triarchic model of psychopathy in disentangling the etiology of this personality disorder.

3. **Jens Foell, Noah C. Venables, James R. Yancey, Christopher J. Patrick**, Florida State University. *Validity of the TriPM Disinhibition Scale: Predictive Relations with Externalizing Disorder Symptoms and P300 Brain Response Amplitude.*

The Triarchic model of psychopathy (Patrick et al., 2009) defines the condition in terms of 3 distinct but related phenotypic facets: disinhibition, boldness, and meanness. The current study focuses on trait disinhibition--a strongly heritable tendency toward a range of impulse control (externalizing) problems. Reduced P300 amplitude is the best known biomarker for externalizing disorders, and is expected to relate to valid measures of trait disinhibition. We sought to extend existing work by pre-selecting participants for scores on the 20-item Disinhibition scale of the Triarchic Psychopathy Measure (TriPM), and evaluating the validity of scores on this scale for predicting externalizing disorder symptoms and reduced P300 amplitude. Consistent with prediction, higher TriPM Disinhibition scores were associated strongly and positively with symptoms of externalizing disorders (including child/adult ASPD and substance use disorders), and to a lesser but significant negative degree with amplitude of P300 brain potential response in an oddball task procedure. These results indicate that the Disinhibition subscale of the TriPM provides an efficient means for assessing clinically relevant disinhibitory tendencies and affiliated brain reactivity differences. Results will be discussed in terms of future directions for better elucidating the specific cognitive mechanisms underlying P300 amplitude reductions in highly disinhibited individuals, and clarifying their role in psychopathy.

4. **Kathryn Rich**, George Mason University, **Elizabeth Malouf**, George Mason University, **Leah Adams**, George Mason University, **Edward Witt**, Michigan State University, **Jeffrey Stuewig**, George Mason University, **June Tangney**, George Mason University. *Exploring the Relationship Between Psychopathy and Behavioral Measures of Cognitive, Executive, and Emotional Functioning.*

Inconsistencies in the theoretical and empirical literatures on psychopathy's relationship with cognitive, executive, and

emotional functioning may be due to the different conceptualizations of the structure of psychopathy. Using the four factor model of psychopathy (Hare & Neumann, 2006), the current study examines psychopathy's (PCL:SV, Hart et al., 1995) relationship with intellectual ability (KBIT-2; Kaufman & Kaufman, 2004), as well as multiple behavioral measures of executive and emotional dysfunction, including: inattention and impulsivity (Immediate Memory Task/Delayed Memory Task, Dougherty et al., 1998), risk taking (Balloon Analog Risk Task, Lejuez et al., 2002) and distress intolerance (Mirror Tracing Task, Strong et al., 2003). A sample of 234 male jail inmates completed the KBIT-2 and PCL: SV; a subset of 109 completed behavioral measures of dysfunction. No relationships were found between psychopathy and intelligence, risk-taking, or distress. Inattention, however, had a marginally significant positive relationship with Factor 4 Antisocial Behavior ( $r=.19$ ,  $p=.06$ ) and impulsivity had a significant positive relationship with Factor 3 Impulsive Behavior ( $r=.27$ ,  $p=.01$ ). These results suggest that psychopathy's relationship with intelligence and executive functioning depends on both the factor of psychopathy and the domain of higher level functioning. Results clarify the deficits associated with different dimensions of psychopathy.

5. **Franklyn J. Graham & Raymond A. Knight**, Brandeis University. *The Role of Psychopathy and Intelligence in Mediating the Relation Between Early Abuse and Subsequent Violence in Adolescence.*

The relation between child abuse and later violent behavior has been well established (Maxfield & Widom, 1996). Although both psychopathy and IQ have also been found important in predicting violence, their meditational role between abuse and violence has rarely been examined. The components of psychopathy, especially the Impulsivity/Antisocial factor, have consistently been tied to violent behavior (Porter & Woodworth, 2006). Also, verbal IQ has been found to correlate negatively with violent behavior (Nagin & Tremblay, 2001) and may play a meditational role between abuse and violent behavior. The relation of psychopathy to IQ appears to be complex, with psychopathy's four facets differentially covarying with IQ (Vitacco, Neumann, & Wodushek, 2008). The present study examined the role of both the four facets of psychopathy and verbal IQ in mediating the relation between early abuse and violent behavior. The archival records of juveniles convicted of sexual misconduct ( $n = 215$ ) were assessed to rate the Interpersonal, Affective, Lifestyle, and Antisocial facets of psychopathy on the Psychopathy Checklist: Youth Version (Forth, Kosson, & Hare, 2003). IQ scores were also obtained from these records. Physical, sexual, and emotional abuse and measures of sexual and non-sexual violence were gathered using a contingency-based, computerized inventory. Meditational hypotheses were tested using structural equation modeling and multiple regression analysis.

6. **Katherine A. Gottlieb**, University of New Orleans, **Farrah N. Golmaryami**, University of New Orleans, **Rachel E. Kahn**, University of New Orleans, **James V. Ray**, University of New Orleans, **Kristina Childs**, University of Central Florida, **Paul J. Frick**, University of New Orleans. *Risk Assessment in Juvenile Offenders: Using Latent Class Analysis to Profile High-Risk Youth.*

Research supports the utility of grouping adolescents who show serious antisocial behavior based on distinct profiles of individual characteristics which could suggest different etiological factors and distinct targets for treatment. This study tested whether different profiles could be identified in a delinquent sample and whether youth across these profiles differed on offense severity and historical risk and protective factors. Latent Class Analysis was used in a sample of adjudicated youth using the following items from the clinician-rated Structured Assessment of Violence Risk in Youth (SAVRY): Risk Taking/Impulsivity, Anger Management Problems, Low Empathy/Remorse (CU traits), and ADHD. Three distinct profiles emerged: 1) low on all risk factors (Low Risk), 2) moderate on all risk factors except CU traits (Angry/Impulsive), and 3) moderate to high on all risk factors including CU traits (CU group). There was a trend for the CU group to have more charges, but the groups did not differ on their history of violent offenses. However, the CU group scored higher on several historical risk factors, including history of violence, early initiation of violence, and poor school achievement. Additionally, CU youth were less likely than other participants to have protective factors including prosocial involvement, strong attachments/bonds, and commitment to school.

7. **Angel Mackenzie & John Logan**, Carleton University. *Perception of Emotional Words in Individuals Varying in Subclinical Psychopathy.*

Psychopaths have an impaired ability to perceive visually-presented emotional stimuli such as words, images, and faces. They also have an impaired ability to perceive emotion in spoken language. The goal of the present investigation was 1) to identify whether psychopathy-related differences in perception of emotional spoken words could be found in a sample of nonpsychopathic undergraduates varying in subclinical psychopathic characteristics and 2), whether attentional mechanisms might be implicated in any effects observed. An auditory emotional Stroop task was used to present spoken words with varying prosodic and semantic emotional content. Predictions were made based on the response modulation hypothesis of attention. Findings were somewhat consistent with this theory: individuals scoring higher on psychopathy were less affected by congruency in semantic/prosodic emotion in word stimuli.

8. **Mehmet Kibris Mahmut**, Macquarie University. *On the Relationship Between Psychopathy, Empathy and Olfactory Abilities.*

The neural substrates are associated with dysfunction in psychopaths, such as the orbitofrontal cortex (OFC) and amygdale, are the same neural substrates involved in many olfactory abilities, including odour identification and odour discrimination. The results from two studies investigating the relationship between psychopathy and olfactory abilities have shown that higher levels of psychopathy are associated with poorer odour identification and/or discrimination. Preliminary data from our studies comparing empathy levels in experts that heavily use their olfactory abilities (such as perfumers and wine tasters) and those that do not, will also be presented. Finally, we will also present preliminary findings from our studies investigating whether increasing one's olfactory abilities will result in subsequent increases in empathy. It is hoped that the results of our studies on the relationship between psychopathy, olfactory abilities and empathy may provide insights into novel ways of treating persons with poverty of emotion deficits, including psychopaths.

9. **Vanessa Pera Guardiola**, Sant Joan de Déu, **Iolanda Batalla Llordes**, Hospital Santa Maria, **Carles Soriano Mas**, Bellvitge University Hospital, **Javier Bosque Gracia**, Medical Department of Ponent Prison, **Rosa Hernandez Ribas**, Bellvitge University Hospital, **Jose Manuel Menchón**, Bellvitge University Hospital, **Joep Pifarré Paredero**, Medicine Department, IRB Lleida, **Narcis Cardone**, Bellvitge University Hospital. *Exploring Executive Functions in Spanish Psychopaths.*

Frontal lobe impairment and executive dysfunction have been long related to impulsivity and antisocial behavior. Despite methodological differences between studies, it has been suggested that psychopathy may be associated with impaired executive functions. This study aimed to investigate the relationship between psychopathy and performance in the WSCT (Wisconsin Card Sorting Test) in a group of male offenders with ASPD (Antisocial personality disorder) compared to healthy controls. It was hypothesized that antisocial subjects would have different results in WSCT performance depending on the presence of varying degrees of psychopathy. A total of 91 adult male offenders were recruited from the high security department of the Prison of Lleida (Spain). The sample was made up of 31 psychopaths, 47 mixed and 13 nonpsychopaths (PCL-R, Hare, 2003) and 24 healthy controls. WSCT, Structured Clinical Interview for DSM Axis-II disorders (SCID-II) Vocabulary subscale of WAIS-R. After controlling for age, estimated IQ, educational level, substance abuse, viral disease and medication, we obtained: The nonpsychopaths made significantly more total and perseverative errors than control group. Psychopaths demonstrated significantly better executive function than nonpsychopaths. Correlation analysis, suggested a negative correlation between total PCL-R, factor and facet 1 and perseverative errors and responses.

10. **Cynthia Mathieu**, Université du Québec a Trois-Rivières, **Robert D. Hare**, University of British Columbia, **Paul Babiak**, Anubis-Research, **Craig S. Neumann**, University of North Texas. *Corporate Psychopathy and Turnover Intentions: The Mediating Role of Job Satisfaction.*

As with corporate narcissism, the first interest of scholars studying corporate psychopathy is examination of its relationship with leadership behaviour (Babiak et al., 2010; Westerlaken & Woods, 2012). However, while some psychopathic leaders may do damage, there are other ways they can have a negative impact on their organization with less immediately visible manifestations. Dissatisfied employees are less productive (Judge et al., 2001) but also more likely to leave their jobs (Hellman, 1997), than are other employees. Turnover is harmful to organizational performance (Glebbeck & Bax, 2004) and replacement costs are often very high (Hinkin & Tracey, 2000). This study tests the relationships among corporate psychopathy, job satisfaction and turnover intentions. We hypothesized that the relationship between corporate psychopathy and turnover is mediated by job satisfaction. 609 employees from different types of organizations completed self-report measures of job satisfaction (MSQ; Weiss et al., 1967), turnover intentions and corporate psychopathy (B-Scan Self, Babiak & Hare, 2013). B-Scan Self ratings were negatively related to job satisfaction and positively related to turnover intentions. Furthermore, job satisfaction fully mediated the relationship between B-Scan Self ratings and turnover intentions. These results indicate the need to further explore the relationship between corporate psychopathy and employee attitudes and behaviors.

11. **Patrick J. Kennealy**, **Eva R. Kimonis**, **Jason R. Hall**, University of South Florida. *Generalizability of the Response Modulation Hypothesis to Adolescent Offenders.*

The response modulation (RM) hypothesis posits that psychopaths encounter difficulty processing peripheral cues when engaged in goal-directed behavior (Patterson & Newman, 1993). In support of this theory, Newman and colleagues (1997) found that low anxious psychopathic adults demonstrate less interference in their performance on the Picture-Word task than nonpsychopathic offenders, suggesting reduced attention to peripheral information. To date, however, RM has been relatively unexplored in adolescents. We addressed this by investigating the generalizability of the RM hypothesis in a sample of 238 male juvenile offenders. Specifically, we examined whether two potential precursors to adult psychopathy "callous-unemotional (CU) traits and proactive aggression" predict reduced attention to peripheral information during the Picture-Word task, as measured by reaction time interference scores. Based on the work of Newman and colleagues, we hypothesized that CU traits and proactive aggression would be negatively associated with task interference indices. Consistent with hypotheses, we found evidence of reduced word interference for those higher in CU traits and proactive aggression. This offers tentative support for the generalizability of the RM hypothesis to adolescent male offenders. Findings were not moderated by age or

ethnicity. The role of anxiety in the relation between CU traits and task interference will also be investigated.

12. **Grace West, Jane Mackey, Alice Jones**, Goldsmiths, University of London. *Callous-Unemotional Traits and Narcissism Differentially Predict Direct and Indirect Bullying Behaviours in Middle-Childhood.*

Bullying behaviour is a common experience for a significant minority of children and adolescents. Although much has been published on the association between conduct problems and bullying, less attention has been paid to potential co-occurring traits. Viding, Simmons, Petrides, & Frederickson (2009) investigated peer-reports of bullying in relation to callous-unemotional traits and reported an association between these traits and direct (or physical) bullying in boys and girls aged between 11-13 years old. However, to date, no work has examined the relative contributions of callous-unemotional traits, narcissism and impulsivity to bullying behaviours. This study aimed to examine whether self-reported scores on subscales of the Antisocial Process Screening Device (Frick & Hare, 2003) would differentially predict peer-nominations of bullying behaviours in children aged 10-12 years of age. Data collection is on-going, but preliminary analyses on 192 children suggests that while peer nominations of direct bullying behaviours are predicted by narcissism scores; peer nominations of indirect bullying are predicted by callous-unemotional traits. Gender and self-reported levels of conduct problems are also statistically significant predictors for both types of bullying behaviours. We argue that considering differential antecedents of bullying behaviours is important for recognizing risk, and developing efficient interventions.

13. **Michael T. Willoughby & W. Roger Mills-Koonce**, University of North Carolina at Chapel Hill. *The Structure and Stability of Parent-Reported Callous-Unemotional, Oppositional Defiant/Conduct, and Attention Deficit/Hyperactivity Behaviors From age 4 to 1st Grade.*

Many antisocial adults had problems that emerged early in life. A key challenge is to distinguish children whose early disruptive behaviors are transient versus stable. The early assessment of callous unemotional (CU) behaviors may assist with this effort. This study made use of data from the Family Life Project (a representative cohort of N = 1292 children residing in rural counties in NC and PA) to evaluate the factor structure and stability of disruptive and CU behaviors from age 4 years (Strengths and Difficulties Questionnaire, CU items from the Antisocial Process Screening Device) to 1<sup>st</sup> grade (Disruptive Behavior Disorders Questionnaire, Inventory of Callous Unemotional Traits). Parents distinguished CU from ODD/CD and ADHD behaviors at age 4 and 1<sup>st</sup> grade. Although CU was stable across time ( $r_s = .31 - .48$ ,  $p_s < .001$ , depending on the specific items that were used to index CU), it was less so than ODD/CD and ADHD ( $r_s = .59$  and  $.61$ , respectively). Clinically elevated levels of CP or CU at age 4 years predicted increased risk for clinically elevated levels of CP, CU, and CP+CU in 1<sup>st</sup> grade. CU should be included in assessments of disruptive behavior in early childhood.

14. **James R. Yancey, Noah C. Venables, Jason R. Hall, Christopher J. Patrick**. Florida State University. *Antisocial & Interpersonal Facets of Psychopathy: Dissociable Neural Responses in a Simulated Gambling Task.*

Psychopathy is characterized by distinct interpersonal-affective and impulsive-antisocial features, as reflected by Factor 1 and Factor 2, respectively, of Hare's (2003) Psychopathy Checklist-Revised (PCL-R). To further elaborate on the neurobiological processes underlying these distinctive features, we examined associations amongst brain ERP responses elicited during a simulated gambling-feedback task and PCL-R factors (and their constituent facets) in a sample of adult male offenders (N=316). Time-frequency decomposition was used to parse out distinct delta (< 3Hz) and theta (4-7 Hz) components of the ERP response to feedback cues. Consistent with previous findings for non-incarcerated (community) participants, impulsive-antisocial tendencies predicted reduced delta activity to both gain and loss feedback at frontal sites. Follow-up tests identified the Antisocial rather than the Impulsive-Behavioral facet as the main source of reduced anterior delta deficits in response to feedback. Further, PCL-R Factor 1, and in particular the Interpersonal facet, uniquely predicted reduced frontal theta activity in response to loss feedback. These findings provide further evidence that distinct neurobiological processes underlie the separable affective-interpersonal and impulsive-antisocial features of psychopathy. Implications for considering psychopathy as a heterogeneous construct will be discussed.

15. **Charlotte A. M. Cecil**, University College London, **Eamon McCrory**, University College London, **Edward Barker**, Birkbeck College, University of London, **Essi Viding**, University College London. *An Examination of Primary and Secondary Psychopathy in High-Risk Youth: Associations With Trauma History and Markers of Individual Functioning.*

Primary and secondary variants of psychopathy have been associated with separate etiological pathways and distinct profiles of individual functioning. At present, it is unclear whether these findings extend to youths with high callous-unemotional (CU) traits, the core affective-interpersonal features that characterise psychopathy, and whether the differentiation of primary vs. secondary variants may be of clinical importance. The aim of the present study was to investigate whether individuals with high levels of CU traits with/without anxiety (CU/Anx vs. CU) differ in their profiles of childhood maltreatment and individual functioning. Participants from a high-risk community sample of youths aged 16-24 years (n = 155) were classified as 'Low CU/Anx', 'CU', 'Anx', or 'CU/Anx' and compared on measures of childhood maltreatment and individual functioning making use of generalized linear models. CU/Anx vs. CU differed in history of maltreatment, levels of

psychopathology, attachment style, affective dysregulation and behavioural risk-taking, but not in externalizing difficulties. Findings point to trauma history as a key factor in the discrimination of CU/Anx vs. CU that should be addressed when treating youth with CU/Anx. Attachment-based interventions may also be more appropriate for CU/Anx youth. Finally, higher levels of psychopathology and increased suicide risk seen in individuals with CU/Anx should alert clinicians to the combination of CU/Anx, as it indexes a particularly vulnerable group of youth.

16. **Lindsey B. Shelton, Sarah Guarraci, James R. Yancey, Noah C. Venables, Christopher J. Patrick**, Florida State University. *Trait Disinhibition and Heart Rate Reactivity During Affective Picture-Viewing*.

The Triarchic Model of Psychopathy (Patrick et al., 2009) conceptualizes psychopathic personality as entailing three distinct yet related phenotypic traits: Boldness, Meanness, & Disinhibition. Disinhibition reflects a general propensity towards problems of impulse control and is strongly associated with various externalizing problems (e.g. substance use disorders, child and adult antisocial deviance). Previous research points to underarousal as an important dispositional factor related to disinhibitory traits and behaviors, including delinquent and aggressive behavior (Raine, 1996). The current study examined associations between trait disinhibition and phasic heart rate reactivity in an affective picture-viewing paradigm in a community sample of adult twins (N = 458). Disinhibition was operationalized as scores on the general factor of the Externalizing Spectrum Inventory (ESI). High disinhibition was associated with reduced heart rate deceleration for pictures of all valence types, and unrelated to subsequent acceleration. Implications for understanding the role of underarousal in the impulsive-aggressive behavior of high disinhibited individuals will be discussed.

17. **Carrie A. Robertson & Raymond A. Knight**, Brandeis University. *The Similar Sequelae of Psychopathy and Sexual Sadism: From Developmental Perturbations to Disorders*.

Psychopathy and sadism, although related, are not co-extensive and capture both shared and unique aspects of aggression (Robertson & Knight, 2012). Satisfactory, comprehensive etiological theories for these two disorders have not been developed and the developmental antecedents of both disorders remain largely unexplored. Although no specific experiential antecedents have been consistently linked with psychopathy, childhood maltreatment, in particular physical/sexual abuse, has been found to predict its development. There is evidence for the stability of psychopathic traits and antisocial behaviors from childhood and adolescence into adulthood, but its early course is just beginning to be explored. Even less is understood about the development of sadism, although adolescent behavioral indicators for sadism have been identified (e.g., chronic lying, destroying property, stealing, cruelty, and assault), and various formative experiences in childhood have been linked to sadism among adults (e.g., parental infidelity/divorce; vicarious violence; and physical, emotional, and sexual abuse). Using a computerized, contingency-based developmental inventory and archival ratings of 397 sex offenders, the current study has empirically evaluated the pathways from childhood experiences to adolescent deviance and adult pathology, both psychopathic and sadistic. Using correlation, regression, and structural equation modeling, we identified unique and shared developmental pathways to each.

18. **Lucy Foulkes**, University College London, **Ana Seara-Cardoso**, University College London, **Craig S. Neumann**, University of North Texas, **John S. C. Rogers**, University College London, **Essi Viding**, University College London. *Looking After Number One: Associations Between Psychopathic Traits and Measures of Social Reward and Functioning in a Community Sample of Males*.

Individuals with high levels of psychopathic traits do not typically form enduring bonds with others. However, few studies have documented the associations between psychopathic traits and social functioning. Using a community sample of males, this study systematically explored associations between psychopathic traits (SRP-4-SF; Paulhus, Neumann, & Hare, in press) and measures characterising social/material goals, friendship, social comparison and the need for belonging, providing a comprehensive assessment of aspects of social motivation associated with psychopathic personality traits. Additionally, a novel experimental vignettes task assessed the extent to which participants identified dominance in themselves and admired this trait in others. Partial correlations between each variable and each dimension of psychopathy were analysed. Males with high levels of affective/interpersonal psychopathic traits appeared not to be motivated by affiliative relationships, instead reporting goals relating to their own image and financial success. Additionally, these individuals admired dominance in others, but did not clearly identify this trait in themselves. Thus, this study is one of the first to document the relationship between multiple areas of social motivation and functioning and psychopathic traits. The findings provide empirical evidence that individuals with high levels of psychopathic traits seem motivated to look after themselves, but not others.

19. **Joseph H. R. Maes & Inti A. Brazil**, Radboud University. *Is the Interpersonal-Affective Dimension of Psychopathy Positively Associated With Executive Functioning? A Literature Search for Available Data*.

Common psychopathy rating instruments distinguish between an interpersonal-affective and an antisocial dimension. The suggestion that the interpersonal-affective dimension is positively associated with executive functioning is occasionally made in the literature, without reporting objective empirical data. Here we searched for empirical studies reporting data on the

relationship between the interpersonal-affective dimension and four aspects of executive functioning: inhibition, attentional shifting, working memory, and planning. Eleven published articles were identified, reporting data of 721 individuals from incarcerated and non-incarcerated, male and female, and adult and non-adult samples. Using a heterogeneous set of tests and dependent measures across studies, the inhibition and attentional shifting components were assessed in eight and five studies, respectively; the working memory and planning components each in two studies. A small majority of the studies found a positive association between the interpersonal-affective dimension and the different executive functions, although the associations were mostly non-significant. Given the scarcity of studies and the use of heterogeneous populations, tests and statistical analyses, no robust conclusions can be drawn at this stage. We conclude that caution is needed when claiming executive functioning superiority in psychopathy and that more research is needed to further validate and specify the suggested positive association.

20. **Johanna Glimmerveen**, Radboud University, **Inti A. Brazil**, Radboud University, **Ellen de Bruijn**, Leiden University, **Erik Bulten**, Pompestichting. *Interpersonal Distance in Antisocial and Psychopathic Forensic Offenders.*

Interpersonal distance, which is the distance kept between two persons during social encounters, can be considered a measure of sensitivity for social norms. The amygdala plays a key role in the regulation of personal space and this structure has been shown to function abnormally in antisocial populations. More specifically, antisociality has been related to hyperactivity of the amygdala, which could be reflected by a larger preferred interpersonal distance. On the other hand, psychopathy (PP) has been linked to reduced activity in the amygdala, suggesting a tendency to prefer shorter distances. However, the relationship between preferred distance during interactions, personality traits and clinical characteristics in offender samples has never been examined. Therefore, we conducted an explorative study to assess preferences for interpersonal distance and their relationship with personality traits in forensic patients with and without PP. Preliminary analyses in the group with PP have revealed that Factor 1 scores of the PCL-R and scores on empathic perspective taking are positively related to different measures of interpersonal distance. This suggests that psychopathic individuals use higher-order social cognition to infer others' preferences in maintaining personal space rather than following their own preferences. Importantly, these experimental approaches may offer new avenues for understanding social functioning in individuals showing aberrant social behavior.

21. **Travis D. Flower**, Saint Elizabeths Hospital, Washington. *Establishing Local Normative Data for the Psychopathy Checklist, Revised in a Male Forensic Inpatient Population.*

The Psychopathy Checklist Revised (PCL-R) is a commonly used instrument at Saint Elizabeths Hospital (SEH), a public psychiatric hospital located in Washington, D.C. The PCL-R is typically used in the context of violence risk assessments of forensic inpatients, which are used to inform decisions about conditional release of patients and other risk management questions. Clinical observations have suggested that average PCL-R scores among this population might be somewhat lower than expected, given the PCL-R norms for male forensic patients published in the PCL-R manual. The goal of the present study is to review archival PCL-R data in SEH patient files and construct local norms. Differences between the norms of the SEH population, which is an urban, primarily African-American, United States population, and the published PCL-R norms, will be examined. Potential threats to the validity of the local norms, such as variations in the level of training of the examiners, will be considered. In addition, the potential for demographic and clinical factors to influence results will be examined. The authors will address the utility of using a set of local norms to inform risk management planning in psychiatric settings, including making comparative statements about an individual's level of psychopathic traits relative to other individuals currently being treated at those facilities. Finally, potential directions for future research will be discussed.

22. **Ashley M. Hosker-Field**, Brock University, **Amber Knuff**, Queen's University, **Angela S. Book**, Brock University. *Psychopathy and Impulsivity: An Examination of the Relationship between Two Multifaceted Constructs.*

Poythress and Hall (2011) challenged the idea that psychopaths are impulsive, suggesting that the relationship is quite complex. Psychopathy can be viewed as a 2-factor construct consisting of emotional/interpersonal traits (F1) and social deviance characteristics (F2). Whiteside and Lynam (2001) demonstrated that impulsivity has four domains including urgency, (lack of) premeditation, (lack of) perseverance, and sensation seeking. Research shows that impulsivity is primarily associated with F2 (Morgan, Gray & Snowden, 2011) but there have been conflicting results concerning the relationship between impulsivity and F1. This study sought to clarify the association between psychopathy and impulsivity in a sample of 137 male undergraduates. Participants completed the Self-Report Psychopathy Scale III (SRP) and the UPPS Impulsive Behavior Scale (Whiteside & Lynam, 2001). We found that after accounting for F2, F1 was negatively correlated with premeditation (higher scores indicated lower premeditation) and unrelated to the other three impulsivity domains. Conversely, after accounting for F1, F2 was positively correlated with premeditation, urgency, and sensation seeking. These relationships held even after removing impulsivity items from the SRP. It seems that individuals who exhibit F2 traits are indeed impulsive, while those who display F1 traits are not only unlikely to be impulsive, but seem more inclined to consider the potential consequences of their behavior.

23. **Boris Schiffer**, University Hospital Bochum, **Christina Pawliczek**, University Hospital RWTH Aachen, **Sheilagh Hodgins**,

Psychopathy has been associated with a lack of emotional responsiveness and deficient affective empathy. Interestingly, cognitive empathy or mentalizing ability seems relatively intact in the majority of criminals, especially those with psychopathic traits. By using a modified version of the Reading the mind in the eyes test in combination with fMRI, we aimed at determining differences in the neural mechanisms underlying mentalizing ability between non-offenders and (violent) offenders with antisocial personality disorder (ASPD) exhibiting various levels of psychopathic traits. Though offenders and non-offenders were similar with respect to overall mentalizing performance, there was a significant group-by-stimulus type interaction, suggesting that offenders relative to non-offenders had greater problems recognizing emotions from male than female eyes. Administration of eyes stimuli, particularly those of men, led to reduced activation of the amygdala in offenders as compared to non-offenders. Both neural and behavioral differences could be partly explained by personality features of psychopathy. This study confirmed previous work suggesting that mentalizing ability among people suffering from antisociality, are relatively intact. However, we found evidence for subtle deficiencies in the ability to recognize emotions from men, which are associated with deficient activation of the limbic system that may result in a propensity for aggressive behavior.

24. **Lauren R. Few, Jessica L. Maples, Joshua D. Miller**, University of Georgia. *Psychopathy and the Proposed DSM-5 Pathological Trait Model.*

The current study sought to examine the relations between psychopathy, as measured by the Self-Reported Psychopathy scale-III (SRP-III) and the DSM-5 Personality and Personality Disorder (PD) Work Group's recently proposed dimensional model of pathological personality traits. This model includes 5 broad domains and 25 more specific traits identified by the Work Group as relevant to personality pathology. An outpatient clinical sample (N=106) provided self-reported data from the SRP-III and the Personality Inventory for DSM-5 (PID-5), which assesses the 25 facet level pathological personality traits. In addition, clinicians provided single-item ratings for each of the 25 personality traits following a semi-structured PD interview. Correlations were computed between the SRP-III subscales and both clinician-rated (CR) and self-reported DSM-5 traits. In addition, hierarchical regression analyses were conducted to examine the amount of variance in psychopathy subscales accounted for by the five pathological trait domains. As expected, traits from the Antagonism and Disinhibition domains were most consistently related to psychopathy subscales. Additionally, both CR and self-reported PID-5 traits accounted for substantial variance in the subscales of the SRP-III (CR: 26% - 46%; PID-5: 46% - 69%). Results provide preliminary support for the use of the proposed pathological trait model in the assessment of psychopathy.

25. **Elgiz Bal**, Children's National Medical Center, **Benjamin E. Yerys**, Children's National Medical Center, **Caroline Luong-Tran**, Children's National Medical Center, **Ian Eisenberg**, National Institute of Mental Health, **Lauren Kenworthy**, Children's National Medical Center, **Gregory L. Wallace**, National Institute of Mental Health. *Do ADHD Symptoms and Callous-Unemotional Traits Predict Internalizing and Externalizing Symptoms in Youth with Autism Spectrum Disorders?*

This study assesses how well ADHD symptomatology and callous-unemotional (C-U) traits predict co-occurring internalizing (anxiety, depression) and externalizing (Oppositional Defiant Disorder [ODD], Conduct Disorder [CD]) symptoms in youth with Autism Spectrum Disorders (ASD). Ninety-four individuals with ASD (7-28 years old) participated in the study. ADHD, internalizing, and externalizing symptomatology were assessed using the Child and Adolescent Symptom Inventory-4R or the Adult Inventory-4. C-U trait ratings were assessed using the Inventory of Callous-Unemotional traits. Hierarchical linear regression analyses showed that C-U traits uniquely predicted CD symptoms, explaining 23% of the variance ( $p < .01$ ). Both C-U traits and ADHD predicted ODD symptoms; C-U traits explained 15% of the variance, and ADHD explained 11% of the variance ( $ps < .01$ ). ADHD symptoms and age predicted GAD and dysthymia symptoms. ADHD explained 26% of the variance in GAD and 8% of the variance in dysthymia ( $ps < .01$ ). Age explained 2% of the variance in GAD and 11% of the variance in dysthymia ( $ps < .01$ ). The results indicate that ADHD symptoms and C-U traits in ASD impact the severity of internalizing and externalizing symptoms. These findings highlight the importance of assessing comorbid psychopathology in ASD to identify potential risk factors and to develop more effective treatment plans.

26. **Melanie Chinchilla**, Rosalind Franklin University of Medicine and Science, **David Kosson**, Rosalind Franklin University of Medicine and Science, **Robert Hare**, University of British Columbia, **Craig Neumann**, University of North Texas, **Peter Johansson**, Örebro University. *Psychopathy Accounts for the Variance Shared Between Prominent Public Health Problems.*

Substance abuse and violence are two inter-related and widely recognized public health problems. Although research suggests that substance abuse is a significant risk factor for violence, the nature of the relationship between substance abuse and violence is not well understood. Psychopathy is correlated with substance abuse and predictive of violent criminal recidivism within criminal justice populations, yet, to our knowledge, prior studies have not examined whether psychopathy impacts the relationship between substance abuse and violence. The purpose of this study was to examine psychopathy, as assessed using the Revised Psychopathy Checklist, as a potential statistical mediator of the relationship between substance abuse and non-sexual violent crime. The current analysis utilized information obtained from a large sample of male violent offenders within

the Swedish prison system. Utilizing an established framework for testing mediation, regression results demonstrated that psychopathy partially mediated the relationship between substance abuse and violent offenses. Although these analyses were cross-sectional, when considered in concert with previous findings, current findings suggest that psychopathy warrants further investigation as a possible contributor to these two well-established public health problems. Such findings bolster the assertion that psychopathy should be considered a public health problem.

27. **Christopher Gillen**, Carleton University, **Emily MacDougall**, University of Alabama, **Randall Salekin**, University of Alabama, **Adelle Forth**, Carleton University, **Heather Merriman**, University of Alabama, **Marissa Abrams**, University of Alabama. *The Reliability and Validity of the RSTI-Abbreviated*.

Research has found that the Risk-Sophistication-Treatment Inventory (RSTI; Salekin, 2004) is a valid and reliable measure of the risk for offending, maturity, and treatment amenability of juvenile offenders. However, the length of the interview restricts the number of offenders who can be assessed. The RSTI-Abbreviated (RSTI-A) was developed to address this. This study is the first to investigate its inter-rater reliability and convergent validity, with particular interest investigating if psychopathy can be accurately rated with limited interview information. The RSTI-A, RSTI Self-Report (RSTI-SR) and APSD were administered to 70 juvenile offenders. A comparable inter-rater reliability was obtained for the risk, maturity, and treatment scales (ICCs = .82-.90). Preliminary results were based on 24 RSTI-A interviews. The RSTI-SR correlated with the RSTI-A violence ( $r=.45$ ,  $p=.026$ ) and criminality ( $r=.59$ ,  $p=.002$ ) clusters, while the psychopathy cluster correlated with the APSD ( $r=.40$ ,  $p=.05$ ). The autonomy cluster of the maturity scale was related to the RSTI-SR ( $r=.49$ ,  $p=.015$ ). These results suggest that the RSTI-A is a reliable and valid measure and it allows for the assessment of psychological constructs important to understanding juvenile psychopathy. While these results are promising, additional research is needed to determine the measures validity. The authors are in the process of coding 70 interviews to provide a complete assessment of the efficacy of the RSTI-A.

28. **Emily MacDougall**, **Randall T. Salekin**, **Abby Clark**, **Gabrielle Woodard**, University of Alabama. *The Impact of Psychopathy: A Survey of Victims and Their Experiences*.

Although research typically focuses on the etiology of the individual with psychopathy, there is a lack of knowledge about the victims of psychopathic behavior in the community. This study intends to explore the experiences of these individuals, in order to generate greater understanding and recognition of the impact of psychopathy. Respondents are young adults recruited from the Psychology participant pool at the University of Alabama ( $n = 300$ ). Data collection is ongoing and 600 respondents are expected by June, 2013. Of those identified as psychopathic individuals who had committed violence ( $n = 131$ ; 52.3%), 13% ( $n = 39$ ) committed the offense against the respondent. Only 16% of psychopathic individuals reportedly received treatment ( $n = 48$ ). Using direct logistic regression, Psychopathy Checklist: Youth Version (PCL:YV; Forth, Kosson, & Hare, 2003) total scores were a statistically significant predictor of whether the respondent sought treatment for the individual, recording an odds ratio of 1.091 ( $p = .007$ ). The full model containing all predictors was statistically significant,  $X^2(4, N = 289) = 14.64$ ,  $p = .006$ . Although results indicate that treatment is being sought out for those with high psychopathic traits, the low treatment rate is concerning, particularly since many respondents report experiencing violent victimization. With greater understanding provided by these results comes the opportunity to develop and improve upon resources for victims of psychopathy.

29. **Henriette Bergström & Adelle Forth**, Carleton University. *Once a Psychopath, Always a Psychopath? A Meta-Analysis of the Stability of Psychopathic Traits Across Childhood and Adolescence*.

Change can and does occur throughout human development, but the largest change in physical, behavioural, emotional, and cognitive occurs during childhood and adolescence. Over the past two decades there has been increasing interest in childhood and adolescent psychopathy but concerns have been raised about the stability of psychopathic traits across these developmental periods. Based on personality psychology theory and research it is expected that adolescence will be the period of greatest instability due to rapid maturity and environmental changes. While individual studies do provide support that psychopathic traits exhibits higher levels of stability in childhood than adolescence, this study examined this using a meta-analytic approach analyzing 7 childhood ( $n= 3326$ ) and 7 adolescence ( $n=3052$ ) studies. The preliminary analyses of effect sizes indicate that psychopathic traits display high stability across childhood and adolescence ( $r = .54$ , 95 % CI: .47 -.61). When separating the developmental periods of childhood and adolescence, stability was found to be strong in childhood ( $r = .72$ , 95% CI: .69-.74) and only moderate in adolescence ( $r = .30$ , 95 % CI: .22 -.38). Implications regarding the utility of psychopathy youth measures for enhancing intervention provisions in youth are discussed.

30. **Donna Andersen**, Lovefraud Education and Recovery. *In Love With an Exploiter: Sexual Deception Correlates with Increased Harm to Romantic Partners*.

Romantic partners of putative antisocial individuals completed an anonymous online survey. Respondents rated partners according to the criteria proposed in the first draft of the DSM-5 and answered questions about their experience, including

harm suffered. Of all survey respondents, 81.5% said the individual was truthful about sexual orientation, and 18.5% reported that they lied. Analyzing these two groups separately—data about putative sociopathic individuals who told the truth about their sexual orientation vs. those who lied—showed that sexual deception correlated with increased harm suffered by the romantic partner. On almost every measure, individuals who were sexually deceptive displayed more antisocial traits, more antisocial behavior, and caused more harm to their romantic partners, than those who were not sexually deceptive. The results were particularly striking when comparing sexually deceptive vs. not sexually deceptive in regards to physical violence and sexual demands: Victims reported more physical abuse or injury (46% vs. 33%). They reported having their lives threatened more often (49% vs. 30%). They reported more pets injured or killed (23% vs. 12%). They reported more cheating (87% vs. 72%). And they reported uncomfortable sexual demands (53% vs. 37%).

31. **Donna Andersen**, Lovefraud Education and Recovery. *In Love With an Exploiter: How Age Affects the Harm Experienced by Romantic Partners*.

Romantic partners of putative antisocial individuals completed an anonymous online survey. Respondents rated partners according to the criteria proposed in the first draft of the DSM-5 and answered questions about their experience, including harm suffered. In another analysis of the survey data, respondents were divided into two groups—those who were involved in youthful relationships, where both parties were between the ages of 14 and 30, and those relationships where both parties were age 31 or older. Respondents of both age groups reported two of the top characteristics, manipulateness and callousness, at similar rates. However, all other traits—deceitfulness, narcissism, irresponsibility, impulsivity, aggression, hostility and recklessness—were reported at higher rates among the younger individuals. Comparing the youthful vs. mature involvements: Victims reported more physical abuse or injury (54% vs. 29%). They reported having their lives threatened more often (42% vs. 28%). There were more reports of the putative antisocial individual threatening suicide (31% vs. 17%). And the victims themselves more often considered suicide (46% vs. 34%). In regards to financial harm, the youthful victims more often lost their homes (36% vs. 23%), lost their jobs (31% vs. 24%) and incurred debt (69% vs. 56%).