

ESTSS2019 Rotterdam Flashtalk Abstract Book

Friday June 14th 2019

Day #1

10:00 11:15 Parallel session #1 – Flashtalk session F1

F1.1

Treating Addiction with Schema Therapy and EMDR in Women with Co-occurring SUD and PTSD: A Pilot Study

Géraldine Tapia

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Track: Intervention Research & Clinical Studies

Background: A large portion (11-60%) of patients seeking substance use treatment also meet diagnostic criteria for posttraumatic stress disorder (PTSD; Brady et al., 2004) which tends to worsen symptoms and particularly among women (Hien et al., 2005). **Objective:** This study (Tapia et al., 2018) aimed to examine whether the combined use of schema therapy (ST) and Eye Movement Desensitization and Reprocessing (EMDR) can improve substance use disorder (SUD) outcomes in a sample of women with co-occurring SUD and posttraumatic stress disorder (PTSD). To our knowledge, no research has examined this question in a SUD-PTSD clinical sample. **Method:** We proposed to 15 women with SUD/PTSD comorbidity a two-phase- protocol therapy: eight ST sessions associated with EMDR focused on reprocessing traumatic memory (phase A) and eight ST sessions associated with EMDR focused on reprocessing addictive memory (phase B). We evaluated addiction severity, alcohol craving, cannabis craving, PTSD symptoms, number of early maladaptive schemas (EMS) and depressive symptoms before and after treatment. We also designed a one-year follow-up. **Results:** Findings indicated that eight sessions of ST combined with EMDR focused on traumatic memories (phase A) reduced PTSD symptoms and the number of EMS. Findings on phase B showed a statistically significant decrease for addiction severity and depressive symptoms. **Conclusions:** Overall, this study supports the importance of providing integrative therapies for improving SUD outcomes. The results suggest that ST and EMDR can safely be used among SUD-PTSD women and advocates the potential of such integrative treatment to reduce both SUD and PTSD symptomatology.

References

Brady, K. T., Back, S. & Coffey, S. F. (2004). Substance abuse and posttraumatic stress disorder. *Current Directions in Psychological Science*, 13, 206-209.

Hien, D., Cohen, L. & Campbell, A. (2005). Is traumatic stress a vulnerability factor for women with substance use disorders? *Clinical Psychology review*, 25, 813-823.

Tapia, G., Perez-Dandieu, B., Lenoir, H., Othily, E., Gray, M., & Delile, J-M. (2018). Treating Addiction with Schema Therapy and EMDR in Women with Co-occurring SUD and PTSD: A Pilot Study. *Journal of Substance Use*, 32(2), 199-205.

F1.2

Stabilization focused group-therapy for childhood-abuse related PTSD – a randomized controlled trial

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Track: Intervention Research & Clinical Studies

Background: Patients with PTSD related to childhood-abuse often experience additional problems, such as emotional-dysregulation and interpersonal difficulties, referred to as Complex PTSD in ICD-11. Stabilization-therapy focused on psychoeducation, emotion-regulation and skills-training has been proposed as treatment for this group. Such treatment delivered in group-format is widely disseminated in mental health services in Norway, in spite of a paucity of empirical support. *Objective:* The aim of this study was to evaluate the effectiveness of such a treatment, delivered conjoint with individual treatment. *Method:* A clinically representative sample of 89 patients with PTSD and histories of childhood abuse were randomly assigned to either 20-week group treatment, conjoint with individual therapy, or individual therapy alone. The primary outcome was Global Assessment of Functioning (GAF), while secondary outcomes were PTSD and dissociative symptoms, general psychopathology, interpersonal difficulties, self-destructive behaviour and quality of life. *Results:* End of treatment GAF-scores indicated moderate effect-size for conjoint therapy and small effect-size for individual therapy alone, but no significant difference between conditions. Other outcome-measures showed small effect-sizes. *Conclusions:* These results indicate that stabilization-focused group-treatment does not improve outcomes, compared to individual-treatment alone. Further analyses will be conducted to investigate possible predictors and moderators. Interpretations are limited by the study context and the treatment-protocol used.

F1.3

Attention Control Training for Acute Stress Disorder

Adva S. Segal, Yair Bar-haim

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Track: Intervention Research & Clinical Studies

Background: 13- 21% out of the people exposed to a potentially traumatic event suffer from Acute Stress disorder (ASD). 50-70% of those diagnosed with ASD go on to develop Post-Traumatic Stress Disorder (PTSD). Studies have shown that attention allocation to threat is perturbed in patients with PTSD and that Attention Control Training (ACT), which normalizes the attention allocation is related to improvement in stress symptoms (Badura-Brack et al., 2015). *Objective:* To examine the efficacy of ACT as a targeted intervention for patients with ASD. *Method:* 119 civilian trauma survivors with ASD were randomly assigned to ACT intervention or treatment as usual (TAU), within 2 weeks of their trauma. The ACT intervention included six training sessions via the internet aiming to balance attention allocation between threat and neutral stimuli. We measured changes in stress symptoms, and attention-bias variability pre- and post-intervention. *Results:* Stress symptoms were decreased similarly between the two groups. Additionally, attention-bias variability was positively related to stress symptoms and predict PTSD diagnosis three months later. Finally, a reduction in attention-bias variability was negatively related to ASD levels. *Conclusions:* Higher attention-bias variability is associated with greater PTSD symptoms severity in patients with ASD. However, the ACT intervention via the internet is not better in reducing stress symptoms relative to treatment as usual.

F1.4

Planned Dream Interventions: A pragmatic Randomised Control Trial to evaluate the effectiveness of a psychological treatment for traumatic nightmares in UK military veterans

Justin Havens

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Track: Intervention Research & Clinical Studies

Background: Nightmares are a hallmark symptom of Post-Traumatic Stress Disorder (PTSD) and can affect as many as 90% of trauma-exposed adults. They tend to be underreported, resistant to traditional psychotherapy and linked to serious mental illnesses and higher risk of suicide. Existing treatments such as exposure and Image Rehearsal Therapy (IRT) have been shown to be efficacious with some populations but require multiple sessions and can only be applied to repetitive nightmares. The focus of this research was an alternative approach for treating traumatic nightmares called Planned Dream Interventions (PDI), conceived and developed by a US Military Psychologist, but which had not been quantitatively tested. *Objective:* To conduct a randomised control trial comparing outcomes from a single 2.5-hour PDI session with a control group who received a standard Sleep Hygiene (SH) intervention of similar duration for UK military veterans. *Method:* 184 participants were recruited from veteran charities and were allocated to either group, although only 129 attended sessions and 35 were lost to follow up. Self-report measures for sleep quality, nightmares and PTSD symptoms were completed pre- and 1-month post-session, which were held across the UK. *Results:* Statistically significant differences were reported across all measures between the PDI and control group with an average between group effect size of $d=1.1$. 29% of the PDI group moved from a clinical to a sub-clinical PTSD score 1-month post-session. *Conclusions:* Overall, initial findings suggest that PDI is a safe, resource efficient and effective intervention, though further validation is required.

F1.5

Interpersonal Psychotherapy adapted for PTSD (IPT-PTSD) versus sertraline for the treatment of sexually assaulted women

Andrea Mello¹, Cecilia Proença¹, Dela Santana Thaina¹, Delfino Ana Teresa¹, John Markowitz²

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Track: Intervention Research & Clinical Studies

Background: Around 45% percent of sexually assaulted women develop PTSD, it is urgent to have effective interventions that can be implemented in the public health system. *Objective:* Describe the preliminary results of a clinical trial comparing treatment of PTSD for sexually assaulted women in Sao Paulo-Brazil, with sertraline (SER) versus IPT-PTSD. *Method:* The sertraline group received 5 clinical evaluations by psychiatrists specialized in treating PTSD, the dose range of sertraline was 50-200mg per day, besides the prescription could include for severe insomnia, zolpidem CR 12.5mg or for psychotic symptoms low doses of antipsychotics-risperidone 1-2mg or quetiapine 25-50mg. The IPT-PTSD group received 14 sessions of IPT and 5 brief clinical evaluations to check the need for prescribing zolpidem or antipsychotics, same doses as the sertraline group. *Results:* Until the present moment 73 women were included. Thirty five were randomized for sertraline and 38 for IPT-PTSD. Forty one women completed the 14 weeks clinical trial, 19 SER and 22 IPT. Both groups showed significant improvement in the following measures, Clinician administered PTSD scale (Caps-5) SER $p<0.0001$ IPT $p<0.001$; Beck depression inventory SER $p<0.001$ IPT $p<0.0001$; Clinical Global Improvement (CGI) SER $p<0.001$ IPT $p<0.004$, although the IPT group had a greater improvement than the sertraline group for anxiety symptoms in the Beck Anxiety Inventory SER $p<0.067$ IPT $p<0.003$. *Conclusions:* Both groups showed improvement, although for anxiety IPT seems better. It is important to offer treatment options for women with PTSD after sexual abuse.

F1.6

The longitudinal association between symptoms of complicated grief and posttraumatic stress

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Track: Assessment & Diagnosis

Background: A positive association between symptoms of complicated grief and posttraumatic stress disorder (PTSD) has been found in numerous cross-sectional studies, but few have explored the temporal course of this relationship (i.e., Djelantik et al., 2018; O’Conner et al., 2015). *Objective:* We aim to investigate the concurrent and prospective association between symptoms of complicated grief and PTSD in a bereaved trauma-exposed sample. *Method:* Of the 490 survivors after the 2011 massacre on Utøya Island, Norway, 355 (M age = 19.3, SD = 4.6; 48% females) participated in the present study. Semi-structured interviews were conducted in-person at three time points (i.e., 4-5, 14-15 and 31-32 months) post-terror. Complicated grief was measured using the Brief Grief Questionnaire, and current post-traumatic stress reactions were measured using the University of California at Los Angeles PTSD Reaction Index. A random-intercept cross-lagged panel model (Hamaker et al., 2015) will be used to explore the association between symptoms of complicated grief and PTSD among the survivors over time. *Results:* The majority of the survivors (n= 275, 77 %) lost someone close in the attack. Participants’ complicated grief and PTSD mean scores decreased somewhat from T1 through T3. Cross-sectionally, symptoms of complicated grief were significantly and positively associated with concurrent PTSD symptoms at all three time points. Preliminary results for the longitudinal association between the two constructs will be presented. *Conclusions:* Findings may have important implications for clinicians working with bereaved trauma survivors, specifically in terms of deciding on which symptoms they should target first.

F1.7

Mechanisms of change for interventions aimed at improving the wellbeing, mental health and resilience of children and adolescents affected by war and armed conflict

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Track: Intervention Research & Clinical Studies

Background: Despite increasing research and clinical interest in delivering psychosocial interventions for children affected by war (Betancourt et al., 2013; Save the Children, 2013), little research has been conducted on the underlying mechanisms of change associated with these interventions (Tol et al., 2011). *Objective:* This review aimed to identify these processes in order to inform existing interventions and improve the science practitioner link in low resource and emergency settings. *Method:* A systematic review of reviews was conducted drawing from academic databases (PubMed, PILOTS, Cochrane Library) and field resources, with extracted data analysed using Thematic Content Analysis. *Results:* Thirteen reviews of psychosocial or psychological interventions for children and adolescents (<25 years old) affected by war, armed conflict or political violence were identified, Qualitative analysis identified 16 mechanisms of change, one of which was an adverse mechanism. Themes included protection from harm, play, community and family capacity building, improved emotional regulation, therapeutic rapport, traumatic processing, and cognitive restructuring; with the adverse mechanism relating to the pathologising of normal reactions. However, only 4 mechanisms were supported by strong empirical evidence. *Conclusions:* The poor quality of supporting evidence limits what can be inferred from this review’s findings, but serves to highlight clinically informed mechanisms of change for existing and widely used non-specialist interventions in the field, which urgently need rigorous scientific testing to inform their continued practice. The findings of this review

were disseminated directly to adolescents affected by conflict, and their families, using a comic book designed for Palestinian and Syrian refugees in Lebanon.

11:30 12:45 Parallel session #2 – Flashtalk session F2

F2.1

The role of trauma and PTSD on negative behaviours among male prisoners: Toward a model of Trauma-Informed Correctional Care in the UK

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Track: Intervention Research & Clinical Studies

Background: The prevalence of trauma and PTSD is higher among prisoners compared to the general population (Baranyi, 2018; Wolff, 2014). However, trauma-informed practices in correctional settings, particularly those dealing with men, remain under-developed (Levenson & Willis, 2018). *Objective:* To examine the prevalence of trauma and trauma-related difficulties among male prisoners and explore their role in predicting outcomes such as self-harm, suicide attempts, and violence. *Method:* An ongoing prospective cohort study conducted in a large prison in London, UK. Randomly sampled prisoners took part in a clinical research interview. Outcomes were measured one and three months later, using healthcare and prison record databases. *Results:* Preliminary results (n=151) indicate high rates of traumatization. 93% reported exposure to at least one traumatic event. Over 50% reported childhood physical abuse; 15% reported childhood sexual abuse. The prevalence of current PTSD was 12% according to DSM-V criteria, and 23% according to ICD-11 – of which 70% met additional criteria for complex PTSD. Prisoners with PTSD were more likely to engage in self-harm and suicidal behaviour (OR=3.30, p=0.046), and be referred to mental health services (OR=3.74, p=0.008), one month following incarceration - despite findings that over 98% of those with PTSD did not receive treatment during this timeframe. *Conclusions:* Findings highlight a need for trauma-informed correctional care in the male prison estate. Associations with negative outcomes support the need for improved identification and management of trauma sequelae in this at-risk population.

F2.2

The dark side of the moon - Secondary Traumatic Stress and empathy in emergency medical services

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Track: Intervention Research & Clinical Studies

Background: Emergency health professionals care for physically and psychologically traumatized patients. Professional stress and overload are reported to contribute to secondary traumatic stress (STS), but regrettably professional training often disregards the psychological burden of caring and the risk of personal suffering. Empathy - the ability to emotionally connect and understand traumatized patients also has been considered to enhance the risk of STS (Crumpei et al, 2012), particularly in the presence of personal distress. *Objective:* We aimed to study the occurrence of STS and burnout in a population of health professionals working in emergency settings and to better understand the relationship between STS, burnout and empathy. *Method:* Health professionals working in emergency medical services (n= 99) participated in the study. To assess secondary traumatic stress and empathic dimensions standardized instruments were used – the Secondary Traumatic Stress Scale (STSS) and

the Interpersonal Reactivity Index (IRI). *Results:* A positive significant correlation was detected between STS, burnout and heavy workload. Secondary Traumatic Stress was also associated with personal distress assessed by the IRI ($p=.002$). Among women, significantly higher scores on empathic concern subscale were reported. A linear regression analysis showed that STS is predicted by MBI emotional exhaustion ($p=.000$) working hours per week ($p=.030$) and the IRI total score ($p=.013$). *Conclusions:* Professional stress and particularly emotional exhaustion in emergency medical professionals, is related with STS symptoms. More empathic professionals particularly those caring for trauma survivors present higher levels of STS.

F2.3

Stillbirth as a dyadic trauma: The role of marital relationship factors in PTSD and depression following late pregnancy loss

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Track: Assessment & Diagnosis

Background: Stillbirth and pregnancy loss (PL) are known as highly traumatic events. Often, PL is regarded as a "feminine" trauma, experienced individually by the woman, thus neglecting the role of the parental dyad in coping with the loss. *Objective:* The study aimed to examine: 1. The prevalence of PTSD and Major Depressive Disorder (MDD) following late PL. 2. The role of spousal relationship measures in vulnerability and resilience following PL. *Method:* Data were collected at Hadassah Ein-Karem Hospital in Jerusalem, Israel. Participants were 99 women, ages 23-47 ($M=33.91$, $SD=5.39$). Participants completed self-report questionnaires assessing PTSD, MDD, Dyadic Adjustment, and Dyadic Self-Disclosure. On average, participants were 19.41 months post-loss, and the mean pregnancy week of loss was 27.7. *Results:* Overall, we have found a relatively heavy burden of both PTSD (33.3%) and MDD (29.3%) among women following late PL. Dyadic consensus and satisfaction were negatively associated with both PTSD and MDD, while dyadic conflict was positively associated with both disorders. Furthermore, women reporting higher emotional self-disclosure when their spouses experienced lower PTSD symptoms, particularly from the "negative alterations in mood and cognition" cluster. *Discussion:* When fetal loss occurs at late stages of pregnancy, mothers must cope with shattered expectations regarding motherhood. The loss very often affects both expecting mother and father, and thus the quality of one's spousal relationship and spousal communication seems to play a role in one's resilience and vulnerability following PL. It is therefore crucial to develop novel mental health interventions for couples therapy following this difficult experience.

F2.4

Traumatic Experiences and ICD-11 PTSD and CPTSD across Different Diagnoses in a Sample of Danish Psychiatric Outpatients

Lise Møller¹, Ask Elklit², Erik Simonsen¹, Ulf Soegaard¹

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Track: Assessment & Diagnosis

Background: Prevalence rates of traumatic experiences and ICD-11 PTSD and CPTSD and their association with psychiatric disorders are still sparse in heterogeneous populations with severe mental illness (SMI). *Objective:* The purpose of the current study is to register the reported endorsement of traumatic experiences and the associations with ICD-11 PTSD & CPTSD symptomatology and other psychiatric diagnoses in a sample of Danish psychiatric outpatients. *Method:* A sample of 197

consecutive patients from three Danish outpatient psychiatric clinics filled out three tablet-administered questionnaires about lifetime traumatic experiences, ICD-11 PTSD and CPTSD symptomatology and subjective well-being. Chart diagnoses for each patient were extracted from hospital records. Summary statistics are used to summarize the proportion of the specific traumatic experiences, the number of experienced lifetime trauma and ICD-11 PTSD and CPTSD diagnoses across the different diagnoses. Multivariate analysis of variance (MANOVA) is used to analyze the difference between diagnoses on reported specific trauma events, and the number of experienced lifetime trauma, with sex as a covariate. *Results:* Results will be presented at the Flashtalk. *Conclusions:* Mapping traumatic experiences and self-reported ICD-11 PTSD and CPTSD in a heterogeneous psychiatric sample and evaluating the association to chart diagnosis will help to uncover the co-occurrences of psychiatric disorders and ICD-11 PTSD and CPTSD and put light on the role of traumatic experiences in psychiatric diagnoses.

F2.5

Are You Anxiously or Avoidantly in Love? The link between childhood trauma, psychopathology, personality, and relationships in adulthood

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Track: Child Trauma

Background: Exposure to childhood maltreatment in all its forms may have a long lasting negative effect on the quality of intimate relationships in adulthood. *Objective:* The current study investigates if psychopathology, personality characteristics and/or insecure attachment styles mediate the relationship between childhood maltreatment and the quality of intimate relationships. *Method:* A sample of 2035 adults ages 18-65 was included in the study. Respondents were assessed at baseline, 2-year, 4-year, 6-year, and 9-year follow-up. Childhood maltreatment was measured using the Childhood Trauma Questionnaire. Depression (Inventory of Depressive Symptomatology), anxiety (Beck Anxiety Index), alcohol use severity (Alcohol Use Disorders Identification Test), neuroticism and extraversion (NEO Five-factor Inventory) were repeatedly assessed. Insecure (anxious and/or avoidant) attachment styles and the quality of intimate relationships were based on the Experience of Close Relationships questionnaire (short) and the Revised Dyadic Adjustment Scale respectively. *Results:* While the regression showed a significant association between childhood maltreatment and quality of relationship, the sequential path model suggested full mediation between the association of childhood maltreatment and quality of intimate relationships by depression severity, anxiety severity, neuroticism, extraversion, and insecure attachment ($\beta=-0.03$, 95%CI=-0.07, 0.02). The two strongest mediation pathways were through depression severity and avoidant attachment ($\beta=-0.04$, 95% CI = -0.07, -0.02), and through extraversion and avoidant attachment ($\beta=-0.04$, 95% CI = -0.07, -0.02). *Conclusions:* Individuals who report more childhood maltreatment have lower quality of intimate relationship, which is enhanced and mediated by depression severity and insecure attachment styles and reduced by extraversion.

F2.6

The factors behind the traumatic stress in firefighters

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Track: Intervention Research & Clinical Studies

Background: Although a previous systematic review, conducted by the authors, pointed out the scarcity of research on traumatic stress and firefighters, the findings indicated that the main predictors of stress-related diseases are pre- and post-trauma factors rather than the intensity and type of event. *Objective:* This study aimed to identify the risk and protection factors for the development of PTSD and stress-related diseases in Portuguese firefighters. *Method:* In order to verify the prevalence of PTSD and stress-related diseases in firefighters, a set of self-report measures including 15-item Patient Health Questionnaire, PTSD Checklist 5, Pittsburgh Sleep Quality Index and Brief Symptom Inventory was completed by 70 firefighters, and by 70 subjects from general population as means of comparison. In addition, interviews were conducted on 40 firefighters, focusing on their representation of PTSD and other stress-related diseases, as well as on the coping strategies they identify for dealing with duty-related traumatic exposure. *Results:* Somatic symptoms, sleep disturbance and PTSD rates are higher in firefighters than general population. Organizational support, working conditions, experience and training are pointed out as protection factors, while sense of belonging and peer relationship are considered the most important means to deal with stress reactions. In addition to these pre- and post-trauma factors, which corroborated the previous findings, the Portuguese firefighters associated the society and media pressure with the development of stress-related symptoms. *Conclusions:* Since the identified factors influence the subjective perception, this may be a starting point for the treatment of stress-related diseases.

F2.7

Towards a better life: Contradictions, Turning points, and Pathways for refugee youth

Elin Sofia Andersson, Tine Jensen, Ane-Marthe Solheim Skar

Nasjonale Kompetansesenter For Vold og Traumatisk Stress, University of Oslo, Norway

Track: Transcultural & Diversity

Background: Worldwide, there are many refugee- and asylum-seeking children and adolescent who are not accompanied by their caregivers, making them extremely vulnerable. To better facilitate good integration for these youth, we need more knowledge about their needs and situation. *Objective:* In this study we used Kuczynski & de Mol's (2015) concept of contradictions as a source of change. According to this theory, development occurs when contradictions create a tension, also called turning point, which potentially provides motivation for changes. By analyzing interviews with unaccompanied refugee minors (URM) with this in mind, our aim was to better understand their pathways to integration. *Method:* Data comes from a longitudinal study of URM arriving to Norway before the age of 16. Face to face interviews were conducted with 48 URM approximately 5 years after their arrival, and analyzed using Interpretative Phenomenological Analysis (Smith, Flowers, & Larkin, 2012). *Results:* The analysis show how the youths struggle with contradictions and turning points (both positive and negative) during resettlement. The most prominent were linked to questions regarding Safety & Care (living conditions, asylum status, safety of family member, being cared for, loneliness, economy), Every day practices (learning the language, understanding the culture, succeeding in school and at work), Social connections (friends, family, leisure time and sports). *Conclusions:* Knowledge regarding the different conflicts and turning point these youth are facing and, more important, how they deal with these situations is important knowledge to promote positive developmental tracks.

Saturday June 15th 2019

Day #2

F3.1

Devaluation of aversive memories does not reduce intrusions

Elze Landkroon, Iris M. Engelhard

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Track: Intervention Research & Clinical Studies

Background: Neutral stimuli associated with traumatic memory can trigger fear and intrusive memories. Contemporary fear conditioning theory posits that not only extinction learning, but also weakening the intensity of traumatic memory attenuates associated fear and intrusive memories. *Objective:* This laboratory experiment tested whether weakening the intensity of aversive memory would reduce conditioned fear and intrusions. Two interventions were compared to a 'no intervention' control condition (C). These were laboratory models of imaginal exposure (IE) and the dual-task (DT) procedure used in EMDR (e.g., recalling the traumatic memory and simultaneously making eye movements). *Method:* A trauma film paradigm (James et al., 2016) was combined with a fear conditioning task in undergraduate students (N = 76). On day 1, fear acquisition took place in context A with an aversive film. Afterwards, participants were randomly assigned to C, DT or IE. Then, extinction took place in context B. Participants kept an intrusion diary for 48-hours. On day 3, they were presented with context A again to trigger fear. *Results:* Fear acquisition and extinction were successful. DT and IE decreased unpleasantness of aversive memory compared to C, $F(2, 73) = 4.18, p = .02, \eta^2 = .10$, but not frequency and quality of intrusions or conditioned fear. *Conclusions:* Unpleasantness of aversive memory decreased similarly after DT and IE, which suggests that eye movements did not contribute over and above mere recall. However, this did not affect conditioned fear or intrusions. Theoretical and practical implications of the findings will be discussed.

F3.2

The Effects of Moral Injury Appraisals on Psychological Outcomes: a novel experimental paradigm

Joel Hoffman, Angela Nickerson

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Track: Intervention Research & Clinical Studies

Background: Cognitive models of post-traumatic stress disorder (PTSD) have proposed that the way a traumatic event is appraised has an important role in PTSD symptoms. There is evidence that negative appraisals about events violating moral expectations (i.e. moral injury) may contribute to reactions that do not always fit traditional post-traumatic profiles. However, the causal relationship between these appraisals and symptoms is not well understood. *Objective:* To investigate the causal relationship between moral injury appraisals and psychological outcomes in an analogue sample. *Method:* Participants were 123 undergraduate students for the University of New South Wales. Participants listened to an audio scenario involving a car crash, and then viewed distressing images related to the scenario. Before the recording, they were randomly assigned into one of three conditions, and primed to focus on aspects of the scenario regarding moral violations by: 1) themselves (MI-Self), 2) others (MI-Others), or 3) no one (No-MI). Emotions, physiological responses (heart rate, blood pressure, skin conductance) and intrusions were recorded as outcome variables. *Results:* Results indicated significant interaction effects (experimental group x anxiety) on outcomes. Specifically, those with lower anxiety in the MI-Self group experienced more guilt, sadness and intrusions compared to the No-MI group. Those with high anxiety in the MI-Self group also had less

intrusions compared to the No-MI group. *Conclusions:* To our knowledge, this is the first study to show the causal relationship between moral injury appraisals and psychological outcomes in an analogue sample. Therefore, these appraisals may provide important targets for treatment.

F3.3

The blind mind's eye and anxiety: Might aphantasia protect against PTSD?

Marcus Wicken, Joel Pearson

University of New South Wales, Australia

Track: Intervention Research & Clinical Studies

Background: One of visual mental imagery's proposed functions is to emotionally amplify thinking by lending a sensory, 'as-if-real' quality to otherwise verbally-based cognitive content. Existing evidence for this relies on self-report data and often assumes good metacognition and control of imagery itself. *Objective:* Here we more objectively probe imagery's emotional significance utilising a special population born without visual mental imagery: Congenital Aphantasia. *Method:* We first assessed self-identified aphantasics' sensory imagery strength using a documented binocular rivalry paradigm, and excluded participants with sensory imagery above a minimal threshold. Next, 22 aphantasic and 24 non-aphantasic (normal imagery) control participants read a series of frightening fictitious scenarios, while we continuously recorded their skin conductance level (SCL), an objective measure of fear response. *Results:* While control participant data monotonically rose (mean increase from baseline: $0.43\mu\text{S}$, SEM 0.11), the aphantasic SCL flatlined ($0.07\mu\text{S}$, SEM 0.12), suggesting significantly less fear response to the frightening stories, $t(44)=2.18$, $p=0.035$. To control for general skin conductance difference, we also exposed subset groups of 12 aphantasic and control participants to emotionally-charged photographs, which induced equivalent SCL increases in both groups (aphantasic mean $1.08\mu\text{S}$, SEM 0.68; control mean $0.96\mu\text{S}$, SEM 0.51; $t(23)=0.141$, $p=0.89$). *Conclusions:* These data suggest the emotional response to reading fictitious scenarios is contingent on visual mental imagery. This is strong and novel evidence for imagery's emotional amplifier role, underpinning imagery's significant in disorders such as PTSD, and their treatment. It is also the basis for ongoing research into whether aphantasics may be naturally resilient to imagery-linked disorders, including PTSD.

F3.4

Maternal posttraumatic stress disorder negatively impacts on child sleep at 2 years

Antje Horsch^{1,2}, Susan Garthus-Niegel³, Myriam Bickle Graz⁴, Julia Martini³, Tilmann von Soest⁵, Kerstin Weidner³, Malin Eberhard-Gran⁵

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Track: Intervention Research & Clinical Studies

Background: Maternal postpartum posttraumatic stress disorder (PTSD) may negatively impact child development (see Cook et al., 2017 for a systematic review) but more evidence for this intergenerational transmission of trauma is needed. *Objective:* This study investigated the prospective impact of maternal postpartum PTSD on several standardized child sleep variables two years postpartum in a large, population-based cohort of mothers, when accounting for important maternal and child confounders. Furthermore, potential reverse temporal associations between child sleep at eight weeks postpartum and maternal PTSD symptoms at two years postpartum were tested. *Method:* Questionnaire and hospital record data from 1480 mothers participating in the Norwegian Akershus

Birth Cohort collected at 17 weeks gestation, eight weeks and two years postpartum was used. *Results:* Maternal postpartum PTSD symptoms were related to all child sleep variables, except daytime sleep duration. When all significant confounding factors were included into multivariate regression analyses, maternal postpartum PTSD symptoms remained a significant predictor for number and duration of the child's night wakings, duration of settling time, and maternal rating of their child's sleep problems. Child sleep at eight weeks postpartum was not significantly related to maternal sleep two years postpartum when controlling for postpartum PTSD at eight weeks. *Conclusions:* Our results showed for the first time that maternal postpartum PTSD symptoms were prospectively associated with less favorable child sleep, thus increasing the risk of developmental or behavioral problems through an indirect, but treatable pathway. This adds to a growing body of evidence on the intergenerational transmission of trauma.

F3.5

PTSD preserves memory control abilities for trauma-related information

Andrei-Cristian Tudorache¹, David Clarys¹, Wissam El-Hage²

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Track: Assessment & Diagnosis

Background: Intrusive traumatic recollections suggest an inability in Posttraumatic Stress Disorder (PTSD) to control and notably to inhibit trauma memories. While experimental settings reported inhibitory deficits in PTSD, their impact on memory functioning remains unclear. *Objective:* The two experimental studies presented here were designed for investigating inhibitory deficits accounts of memory biases for trauma-related information in PTSD. *Method:* The first study compared 34 patients diagnosed with PTSD to 37 un-traumatized controls. The second study compared 32 participants presenting high levels of Posttraumatic Stress Symptoms (PTSS) at the PCL-5 (i.e. > 40) to 32 participants presenting low levels of PTSS (i.e. < 20). Through directed forgetting and negative priming procedures, the two studies investigated respectively controlled and automatic abilities to inhibit memorization of Positive, Neutral, Negative and Trauma-related words. *Results:* While PTSD and high PTSS participants were expected to be unable to inhibit their memory functioning for trauma-related stimuli, contrary to expectations, both studies revealed that they benefited from preserved memory inhibitory abilities for trauma-related words specifically. *Conclusions:* Consequently, rather than the expected inhibitory deficits, our results suggest that PTSS are associated with a preserved cognitive functioning and notably preserved memory inhibition abilities for trauma-related material at the expenses of other information. In line with a recent study (Hulbert & Anderson, 2018), these results otherwise appeared quite counterintuitive regarding inability to inhibit intrusive memories in PTSD. Questioning links between clinical views and experimental data in PTSD, these findings additionally shed some new lights on theories of resources reallocation in PTSD.

F3.6

Indirect Exposure to Traumatic Events and Posttraumatic Stress Symptoms: a Longitudinal Analysis of the Mediating Role of Posttraumatic Cognitions and Coping Self-Efficacy

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Track: Assessment & Diagnosis

Objective: The aim of this study was to test the mediation hypotheses derived originally from two theoretical models of direct traumatization: Cognitive Model (Foa & Rothbaum, 1998) and Social Cognitive Model (Benight & Bandura, 2004), in the context of indirect traumatization. We examined

the effects of indirect trauma exposure (DSM-5 criterion A3, A4 for PTSD) on posttraumatic stress symptoms (PTSS) via two mediators: negative posttraumatic cognitions and coping self-efficacy, operating separately, parallelly, and sequentially. We analyzed an overall effect of four exposure characteristics: diversity, volume, frequency, and impact. *Method:* Four-wave data from a national sample of Polish adults (N = 678) were collected using Multi-Index Trauma Exposure Scale, PTSD Checklist for DSM-5, Posttraumatic Cognitions Inventory, and Secondary Trauma Self-Efficacy Scale. Autoregressive mediation models on longitudinal data were evaluated and compared by applying structural equation modeling using AMOS software. *Results:* The results revealed a significant effect of indirect trauma exposure on PTSS via coping self-efficacy: higher exposure at T1 led to higher self-efficacy in T3 which in turn led to lower PTSS at T4 ($\beta = -.02, p < .05$); results remained significant after controlling for direct trauma exposure. No evidence was found for the mediating role of posttraumatic cognitions, and the parallel or sequential mediation effects. *Conclusions:* The study verifies a direct traumatization mechanism in the context of indirect traumatization and clarifies a protective role of coping self-efficacy after indirect trauma exposure. Additionally the need for multidimensional evaluation of trauma exposure has been highlighted, as no single exposure indicator was associated with PTSS.

F3.7

Long-term sleep problems in survivors of the Utøya terrorist attack

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Track: Assessment & Diagnosis

Objective: Sleep deprivation fuels pathology (Krause et al., 2017). In survivors of traumatic events early somatic and posttraumatic stress symptoms, complicated grief and guilt cognitions (Dedert et al., 2018) could pose potent, malleable predictors of long-term insomnia. *Method:* In 2011 a terrorist killed 69 and severely wounded 33 people at the Utøya island summer camp. Of the 490 survivors 355 (72%) participated in the longitudinal Utøya Study at 4-5 (T1), 14-15 (T2) and/or 31-32 months (T3) post trauma. Participants' mean age was 19.3 (13-57). Face-to-face interviews included questions on loss, medication use, validated scale-measures of somatic and posttraumatic stress symptoms, grief, guilt and insomnia (the Bergen insomnia scale, (Pallesen et al., 2008)). *Results:* The majority (77%) lost close friends and 5% lost family or partner. At T3 mean insomnia sumscore (range 0-42) was 16.1 (SD 9.5) for female and 12.5 (8.4 SD) for male survivors, as compared to norms for females of 11.6 (8.2 SD) and males of 9.6 (7.8 SD). Almost three years after the terror 62% of female and 49% of male survivors reported insomnia symptoms of clinical significance, and a substantial minority (n= 30 (12%)) used anxiolytics or sedative medication. In multivariable regression models of the full cohort early somatic symptoms (T1) and concurrent guilt predicted insomnia at T3. Among the bereaved, concurrent complicated grief predicted insomnia at T3. *Conclusions:* The study indicates that early somatic symptoms may predict long-term sleep problems following traumatic events. Co-occurring complicated grief, and particularly guilt cognitions, may fuel insomnia in survivors.

F3.8

The Influence of Flood Exposure and Subsequent Stressors on Youth Social-Emotional Health

Erika D. Felix, Karen Nylund-Gibson, Maryam Kia-Keating, Sabrina Liu, Cecile Binmoeller, Antoniya Terzieva

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Track: Assessment & Diagnosis

Background: Most disaster mental health research focuses on the relationship between disaster exposure and distress (Rubens, Felix, & Hambrick, 2018), often neglecting its influence on social-emotional health, despite implications for resilience and well-being post-disaster. *Objective:* To examine the influence of disaster exposure group and life stressors since the disaster on social-emotional health among youth. *Method:* Following multiple floods in Texas, a sample of 486 youth aged 10-19 years old ($M = 13.74$ years, $SD = 2.57$; 52.9% male) completed measures of disaster exposure, life stressors since the disaster, and social-emotional health. Using mixture regression modeling, we examined differences in the relationship between life stressors and social-emotional health across latent classes of disaster exposure (High, Moderate, Community, and Low Exposure; Felix et al., 2019). *Results:* After accounting for mean levels of life stressors, the mean levels of social-emotional health did not differ across exposure classes; however, the strength of the relationship between life stressors and social-emotional health did. Youth in the High Exposure group had the highest mean level of life stressors since the disaster. Thus, each additional life stressor did not result in changes in social-emotional health, suggesting saturated stress levels. For youth in the Moderate and Community Exposure classes, increases in life stressors did lower social-emotional health. For the Low Exposure group, life stressors did not have an influence. *Conclusions:* This has implications for post-disaster mental health screening and support, tailored by levels of exposure and attuned to ongoing stressors that may impact long-term social-emotional health.

10:00 11:15 Parallel session #4 – Flashtalk session F4

F4.1

Typologies of PTSD Clusters and Reckless/Self-Destructive Behaviors: A Latent Profile Analysis

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Track: Assessment & Diagnosis

Background: Posttraumatic stress disorder (PTSD) is comorbid with diverse reckless and self-destructive behaviors (RSDBs). *Objective:* We examined the nature and construct validity (covariates of age, gender, depression severity, number of trauma types, functional impairment) of the optimal class solution categorizing participants based on PTSD and RSDB responses. *Method:* The sample included 417 trauma-exposed individuals recruited through Amazon's MTurk platform who completed the Life Events Checklist for DSM-5, PTSD Checklist for DSM-5, the Posttrauma Risky Behaviors Questionnaire, and Patient Health Questionnaire-9. *Results:* Latent profile analyses indicated an optimal three-class solution: the Low PTSD-RSDB, High PTSD-Low RSDB, and High PTSD-RSDB classes. Multinomial logistic regression indicated that impairment and depression predicted the High PTSD-Low RSDB vs. the Low PTSD-RSDB classes. Impairment, age, being female, and depression predicted the High vs. Low PTSD-RSDB classes. Number of trauma types, age, being female, and depression predicted the High PTSD-RSDB vs. High PTSD-Low RSDB classes. *Conclusions:* Results support the presence of a reckless behaviors subtype of PTSD (characterized by greater depression, greater impairment, greater number of trauma types, being male, and being younger), conducting comprehensive assessments of RSDBs for individuals reporting PTSD symptoms and of PTSD for individuals reporting RSDBs, and the need to tailor interventions to treat PTSD and RSDBs concurrently.

F4.2

A bi-factor approach to modelling the symptoms of PTSD, Complex PTSD and Borderline Personality Disorder

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Ulster University, UK

Track: Assessment & Diagnosis

Background: It has been debated whether Complex PTSD is distinguishable from PTSD comorbid with Borderline Personality Disorder (BPD). Early findings suggest that PTSD, Complex PTSD and BPD may be separable to a certain degree, but these constructs are likely to emerge comorbidly among individuals with a history of interpersonal violence. Based on dimensional models of psychopathology, the symptoms of both disorders would be expected to share considerable covariation. *Objective:* This study investigated if the covariation across PTSD, Complex PTSD and BPD symptoms could be explained by an underlying latent construct. *Method:* Participants were part of a predominantly Israeli general population sample (N = 618) that presented with varying levels of trauma exposure. Confirmatory bifactor modelling was employed, this technique allows for a general underlying factor to be modelled simultaneously with PTSD, Complex PTSD and BPD latent constructs. Using this technique, the disorder-specific dimensions compete with the general factor to explain item variance. *Results:* A bifactor model which recognised PTSD, Complex PTSD and BPD latent constructs, as well as a general factor, was a good fit of the data suggesting that the symptoms of these disorders can be represented by an underlying latent construct. *Conclusions:* Although there may be diagnostic features which distinguish Complex PTSD from BPD this study provides evidence that the symptoms of both disorders can be accounted for by an underlying construct and therefore may lie on a shared spectrum of psychopathology, thus shedding light on the conceptualisation of disorders likely to emerge a context of interpersonal violence.

F4.3

Network structure of posttraumatic stress symptoms among 2,792 severely traumatized refugees in Kenya

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¹Tampere University, Finland; ²University of Helsinki, Finland

Track: Assessment & Diagnosis

Background: The network approach to psychopathology may improve our understanding of the dynamics of PTSD symptoms. Fried et al. (2018) reported substantial similarities in network structure and most central symptoms with diverse clinical samples in Europe and called for follow-up work in other contexts. We used state-of-the-art tools to analyze the network structure of PTSD symptoms in two large samples of severely traumatized African refugees. *Objective:* We explored how the network structure and centrality of PTSD symptoms differed, first, between two samples of refugees in Kenya, and second, as compared with clinical samples in Europe. *Method:* Adult refugees entering a Center for Victims of Torture rehabilitation program in Nairobi (n = 1,767; majority Congolese, Christian) and Dabaab (n = 1,025; majority Somali, Muslim) answered questions on the 16 DSM-IV PTSD symptoms. We estimated Gaussian graphical models of these symptoms employing fused graphical lasso. *Results:* Edge weights (r = .68) and node centrality estimates (r = .64) correlated strongly between the two samples. Reactivity and emotional numbing were the most central symptoms in Nairobi and concentration problems and avoidance of thoughts in Dabaab. Edge weights correlated moderately with those reported by Fried et al. (2018) in Europe (r = .53), but there was no correlation in centrality estimates. *Conclusions:* Symptoms most central to PTSD network structure among severely traumatized African refugees appear to differ from European clinical samples. Emotional numbing,

reactivity, and, among refugee camp inhabitants, concentration difficulties were highly central symptoms. Such differences hold relevance for interventions targeting particular symptoms.

F4.4

Reliability and Validity of the Swedish International Trauma Interview for Posttraumatic Stress Disorders in the ICD-11

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Track: Assessment & Diagnosis

Background: The recently proposed ICD-11 includes substantial changes to the diagnosis of posttraumatic stress disorder (PTSD) and introduces the diagnosis of Complex PTSD (CPTSD). The International Trauma Interview (ITI) has been developed for clinicians to assess the diagnostic criteria of this new diagnosis but has not yet been evaluated. *Objective:* The objective was to evaluate the interrater agreement, reliability and the convergent, discriminant and structural validity of the Swedish ITI. *Method:* In a prospective study, 186 self-recruited adults who had experienced a potentially traumatic event were assessed with the ITI and answered questionnaires for symptoms of posttraumatic stress, other psychiatric disorders, functional disability, and quality of life (QoL). *Results:* The Diagnostic rate was 16% for PTSD and 6% for CPTSD. Interrater agreement was (DD.76), calculated with 12% of the sample. The ICD-11 model proved excellent fit to data and analysis of composite reliability indicated acceptable internal reliability. Associations with measures of other psychiatric disorder were low to moderate. Both PTSD and CPTSD scores were associated with higher functional disability and lower QoL. *Conclusions:* The Swedish ITI shows promise as an instrument to assess ICD-11 PTSD and CPTSD and results render support for the ICD-11 model of PTSD.

F4.5

Survivors of early childhood trauma and emotional neglect: who are they and what's their diagnosis?

Marleen Wildschut, Sanne Swart

GGZ Friesland, the Netherlands

Track: Assessment & Diagnosis

Background: In the profile of survivors of childhood trauma and emotional neglect, trauma-related disorders (TRD), dissociative disorders (DD), and personality disorders (PD) might be more intertwined than assumed in DSM-5, since exposure to trauma in childhood might affect the development of personality (Wildschut, Langeland, Smit, & Draijer, 2014). *Objective:* We attempt to validate a two-dimensional trauma-neglect model (Draijer, 2003) which might be useful for treatment planning. *Method:* A sample of 150 patients referred to a TRD program or a PD program was extensively assessed. To discriminate patients in terms of 'psychiatric disease burden', based on symptom severity scores, type of disorder, and level of maladaptive personality functioning, cluster analysis was used. Clusters were mapped in the trauma-neglect space. *Results:* After controlling for other variables, both treatment groups did not differ significantly in rates of TRD, DD and PD, except for borderline PD. Considering the sample as a whole, we found three clusters, labelled 'mildly impaired', 'moderately impaired', and 'severely impaired'. The mean scores on trauma and neglect for the mild and severe groups differed significantly. *Conclusions:* Findings indicate that further investigation of the validity of the model is useful. Patients suffering from a wide range of TRD, DD, and PD, combined with a high level of psychiatric symptoms and a maladaptive style of personality functioning, report a range of

traumatic experiences in combination with a lack of maternal care, and can be profiled as ‘severely impaired’ (Wildschut, Swart, Langeland, Hoogendoorn, Smit, & Draijer, in press).

F4.6

The implications of different PTSD models on the prevalence of PTSD in traumatized adolescents

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Track: Assessment & Diagnosis

Background: Trauma exposure is highly prevalent in children and adolescents, which increases the odds of developing Posttraumatic Stress Disorder (PTSD). Thus, this is a high-risk group for whom the assessment of PTSD is essential. However, there is still a lack of consensus regarding the best structure factor for PTSD. Latest research presents evidence supporting the recently proposed seven-factor Hybrid model. Nonetheless, few studies have assessed the implications of these proposed models on “diagnostic” criteria and PTSD prevalence. *Objective:* This study examined the prevalence rates for seven PTSD factor structure models using a symptom-based diagnostic algorithm and assessed whether substance abuse, depression and anxiety symptoms and daily functioning were differentially associated with PTSD depending on the model used to derive the “diagnosis.” *Method:* Participants were 317 adolescents between 13 and 17 years old ($M = 15.93$; $SD = 1.23$) who had experienced a DSM-5 Criterion A trauma and/or childhood adversity. Seven alternative DSM-5 PTSD models were tested within a confirmatory factor analysis (CFA) using the Child PTSD Symptom Scale – Self-Report - DSM-5 (CPSS-5; (Foa et al., 2017)). *Results:* The four-factor DSM-5 model presented the highest rate (30.6%), and the seven-factor “Hybrid” model presented the lowest rate (17.4%), with the latest presenting the best association with substance abuse, depression and anxiety symptoms, and daily functioning. *Conclusions:* These results suggest that the diagnostic rates vary considerably according to different models, which draws attention to both clinical and forensic implications regarding the assessment of psychological damage.

F4.7

The longitudinal relationships between PTSD symptom clusters: final results of a meta-analysis

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¹University of Social Sciences and Humanities, Poland; ²Vilnius University, Lithuania

Track: Intervention Research & Clinical Studies

Background: The longitudinal relationships between symptom clusters of posttraumatic stress disorder (PTSD) are rarely investigated. The information about these relationships is crucial to understand the causative process of PTSD. *Objective:* This meta-analysis aimed to explore the longitudinal relationships between four PTSD symptom clusters indicated in the DSM-5 diagnostic criteria (APA, 2013): intrusion (cluster B), avoidance (cluster C), negative alterations in cognition and mood (cluster D) and marked alterations in arousal and reactivity (cluster E). *Method:* The meta-analysis was registered with PROSPERO (no. CRD42017072622). To minimize bias two independent investigators were involved in study search, data extraction and study quality assessment. Literature search was conducted in 8 databases including grey literature search of conference abstracts. *Results:* The selection process yielded 9 studies (total $N = 887$). The overall effect sizes were computed using random effects models. Only data from two first measurement points of longitudinal studies were included in analyses. The meta-analysis indicated moderate relationships between PTSD symptom clusters: B-B ($r = .538$), B-C ($r = .572$), B-D ($r = .515$), B-E ($r = .566$), C-B ($r = .474$), C-C ($r = .506$), C-D ($r = .507$), C-E ($r = .506$), D-B ($r = .507$), D-C ($r = .533$), D-D ($r = .617$), D-E ($r = .562$), E-B ($r = .537$), B-B ($r = .507$), B-C ($r = .572$), B-D ($r = .515$), B-E ($r = .566$), C-B ($r = .474$), C-C ($r = .506$), C-D ($r = .507$), C-E ($r = .506$), D-B ($r = .507$), D-C ($r = .533$), D-D ($r = .617$), D-E ($r = .562$), E-B ($r = .537$), B-B ($r = .507$), B-C ($r = .572$), B-D ($r = .515$), B-E ($r = .566$), C-B ($r = .474$), C-C ($r = .506$), C-D ($r = .507$), C-E ($r = .506$), D-B ($r = .507$), D-C ($r = .533$), D-D ($r = .617$), D-E ($r = .562$), E-B ($r = .537$), B-B ($r = .507$), B-C ($r = .572$), B-D ($r = .515$), B-E ($r = .566$), C-B ($r = .474$), C-C ($r = .506$), C-D ($r = .507$), C-E ($r = .506$), D-B ($r = .507$), D-C ($r = .533$), D-D ($r = .617$), D-E ($r = .562$), 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= .537), B-B ($r = .538$) and B-B ($r = .644$). *Conclusions:* Only few longitudinal studies incorporated PTSD DSM-5 diagnostic criteria and none of them aimed to explore relationships between PTSD symptom clusters.

F4.8

Shame after a terrorist attack: Associations with event characteristics and interpersonal violence in young survivors three years after the Utøya Island attacks

Helene Aakvaag, Synne Stensland, Grete Dyb

Norwegian Centre for Violence and Traumatic Stress Studies (NKVTS), Norway

Track: Assessment & Diagnosis

Background: Trauma-related shame is often studied after family violence and sexual abuse, though it may also be relevant after other traumatic events, including terrorist attacks. We know little about how different traumatic events together relate to shame after a terrorist attack. *Objective:* To investigate if event characteristics and violence pre- and post-terror is associated with attack-related shame in a sample of young survivors of a terrorist attack, three years after the event. *Method:* Our sample consisted of 355 young survivors (response rate 72%) after the terrorist attack on Utøya Island in Norway the 22nd of July 2011. Respondents were interviewed in three waves, from 4 months after the attack to 31-32 months after the attack. We employed linear regressions, performed in SPSS version 25. *Results:* Three years after the attacks, 20.8% of survivors reported having felt shame the previous month for something that happened on the island. Since the event, many had worried about what others might think of them after what happened (64.0%). Experiences with interpersonal violence both before and after the terrorist attack were associated with attack-related shame. Loss and injury from the event were not significantly associated with shame. *Conclusions:* Our results indicate that previous and subsequent violence may influence shame after a terrorist attack in a long-term perspective. Multi-victimized survivors can be particularly vulnerable to trauma-related shame. Systematic assessment of violence exposure may be useful in identifying those at risk for trauma-related shame.

11:30 12:45 Parallel session #5 – Flashtalk session F5

F5.1

Representation of Low and Middle Income Countries in Traumatic Stress Journals from 2006-2015

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Track: Transcultural & Diversity

Background: Although the majority of trauma survivors reside in low and middle income countries (LMICs), these regions have historically been poorly represented in traumatic stress research. However, a recent review of geographic representation within traumatic stress journals is lacking. *Objective:* This study aimed to establish the representivity of LMIC-based research in the articles published between 2006 and 2015 in six leading traumatic stress journals. *Method:* All articles published in the six selected journals from 2006- 2015 ($n = 2530$) were categorized as either LMIC-based or non LMIC-based, according to the origin of the sample or (where no sample was used) the origin of the authors. All LMIC-based articles were then coded for the regional and country representations of samples, author affiliations, and funding sources, and for type of research methodology. *Results:* Less than one-tenth (9.76%; $n=247$) of the articles were representative of LMICs. Further, the majority of primary author teams (56.28%) and funding sources (55.87%) for

articles based in LMICs were located in high income countries (HICs). The majority of LMIC articles (71.66%) used structured symptom questionnaires of which more than two thirds (70.6%) assessed symptoms of posttraumatic stress disorder (PTSD). *Conclusions:* These findings indicate that knowledge production about traumatic stress in domain-specific journals reflects a state of ongoing geographic inequality. In addition, research published from LMICs reflects predominantly etic methodologies centred on measuring PTSD. Recommendations are offered for developing a research base in domain-specific journals that better represents the experiences and needs of trauma survivors in LMICs.

F5.2

E-mental health and online help-seeking in the Australian Defence Force

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Track: Public Health

Background: It is commonly assumed that the delivery of mental health services online will improve access to care due to the potential to overcome stigma and other barriers to face-to-face help-seeking, such as accessibility and desire for autonomy. Although there is increasing evidence of the efficacy and acceptability of online interventions, public health studies examining broad utilisation of online mental health resources are uncommon. *Objective:* This paper examines use of online mental health resources and factors associated with online help-seeking behaviour in the Australian military. *Method:* Data were drawn from a cross-sectional study investigating the mental and physical health of current and recently transitioned Australian Defence Force (ADF) members. A total of 11,587 Permanent, Reserve and ex-serving ADF members participated in an online survey which examined mental health, face-to-face and online help-seeking behavior, predisposing, need and enabling factors. *Results:* Preliminary results showed that utilisation of online and mobile health resources was low. Rates of usage were higher for those with a current disorder, however overall it seems that face-to-face services were preferred over both online and telephone options. Privacy and confidentiality were still a concern for those seeking help. *Conclusions:* Despite effort to develop online and mobile mental health resources across Australia, there have been low uptake rates in the Australian military. There is much promise in e-mental health technologies but further implementation research is required to engage users and promote uptake of such services.

F5.3

The mental health of differing military family members: Findings from the Family Wellbeing Study

Galina Daraganova

Australian Institute of Family Studies, Australia

Track: Public Health

Background: The Family Wellbeing Study (FWS) component of the Transition and Wellbeing Research Programme was commissioned to address the lack of information about the welfare of differing types of Australian military family members. There has been some Australian and international research on the wellbeing of spouses/partners and young children in military families, but almost none on other types of family members. Accordingly, the FWS investigates the psychosocial wellbeing of spouses/partners, children aged 2-17 years, adult children aged 18 years and older, and the parents of current and ex-serving Australian personnel. *Objective:* The study aims to investigate rates of mental health problems among differing types of military family members. *Method:* The sample

comprised 962 spouses/partners, 102 adult children, and 275 parents of servicemen. Additionally, spouses/partners reported on the wellbeing of 655 children aged 2-17 years. The data was collected in 2015 via on-line surveys. *Results:* Overall, 16.8% of spouses/partners, 14.4% of parents and 29.0% of adult children were classified as showing high or very high levels of psychological distress. Rates of Post-Traumatic Stress Disorder were similar across these three types of family members. Suicidal ideation in the past 12 months was reported by 13.4% of spouses/partners, 10.6% of parents and 18.0% of adult children. Rates of peer problems, emotional symptoms, and hyperactivity in dependent children were higher than in community populations. *Conclusions:* The FWS study provides valuable new information on the mental health of differing military family members and highlights greater than expected difficulties among some dependent and adult children.

F5.4

Emotional reactivity during war: An experience sampling study of exposure and prior psychiatric diagnosis

Liron Lapid Pickman^{1,2}, Talya Greene¹, Marc Gelkopf¹

¹Department of Community Mental Health, University of Haifa, Israel; ²NATAL Israel Trauma and Resiliency Center, Israel

Track: Public Health

Background: Current literature does not distinguish between overall emotional reactions to an ongoing traumatic situation, and emotional reactions to specific stressors - within such a context. Additionally, there is inconclusive evidence as to whether emotional reactivity is different in people with a psychiatric disorder, and studies on the impact of non-daily stressors on emotions are scarce. *Objective:* To assess negative emotional reactivity to rocket warning sirens during the 2014 Israel-Gaza conflict in Israeli civilians living in communities exposed to rocket fire, both with and without prior psychiatric diagnosis, using experience sampling methodology. *Method:* Israeli civilians reported on their exposure to rocket warning sirens and 10 negative emotions, twice a day for 30 days, via their smartphones. The final sample comprised 86 participants with prior psychiatric diagnosis and 96 participants with no diagnosis. Multilevel random intercept models were used to examine specific emotions and their associations with siren exposure and psychiatric diagnosis. *Results:* Siren exposure was associated with an increase in all negative emotions except guilt and shame (in both groups). Participants with psychiatric diagnosis reported more helplessness, loneliness, shame, and guilt overall, and more sadness when exposed to sirens, compared with people without diagnosis. *Conclusions:* Current findings demonstrate that people are emotionally reactive to specific repetitive stressors in the context of an ongoing war. Furthermore, contrary to most previous studies, findings indicate similar patterns of emotional reactivity to specific war stressors in people with psychiatric diagnosis compared to those without.

F5.5

Psychiatric screening and interventions for minor refugees in Europe: an overview

Irma Hein

De Bascule, AMC, the Netherlands

Track: Public Health

Background: Hundreds of thousands of minor refugees entered Europe. They have been exposed to traumatic events and are at increased risk of developing psychiatric disorders. It is assumed that there is an underrepresentation of minor refugees with PTSD in mental health care practices. This emphasizes the need for early screening and a timely intervention to prevent a cascade of

developmental disruptions. *Objective:* We searched for recommendations to improve clinical practice. *Method:* We performed a literature search on screening and interventions for PTSD in minor refugees. *Results:* Development of mental health problems and in particular PTSD in minor refugees is a major problem. We estimate that more than 25% of the minor refugees develop PTSD. To enhance the number of minor refugees recognized with PTSD, we recommend the use of a brief screening instrument in the health care assessment at the host country. Interventions should start with a public health approach, focusing on basic security, environmental and supportive factors, and participation and integration of parents. *Conclusions:* Mental health care professionals need to be culturally sensitive and competent and have a role in emphasizing and advising on the importance of the above mentioned factors to policy makers.

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F5.6

Latent Class Analysis of Trauma, PTSD, Addictive Behaviours and Mental Health Concerns

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¹University of Queensland, Australia; ²Lives Lived Well, Australia

Track: Public Health

Background: Experiences of trauma are often associated with mental health problems and addictive behaviours, which commonly co-occur and result in poor treatment outcomes. Yet, we have little understanding of how these comorbid symptoms are likely to present for treatment. *Objective:* To better understand addiction, trauma and mental health profiles. *Method:* Latent class analyses were conducted with 149 (60% female, M age = 39.83, SD = 10.40) individuals who had sought alcohol and other drug treatment. Key measures included a Trauma and PTSD screen (PC-PTSD-5), the WHO Alcohol, Smoking and Substance Involvement Screening Test, Problem Gambling Severity Index, Gaming Addictions Scale, Problematic Pornography Use Scale. *Results:* Of the total sample, 72.5% had experienced a trauma and 51.4% met the screening cut-off for PTSD. The LCA indicated a 3-class solution. Class one (n = 65) comprised of individuals with moderate-high alcohol and tobacco use and a trauma history; class two (n = 69) comprised of individuals with moderate-high alcohol, tobacco, and cannabis use, with likely PTSD, and moderate-high anxiety and depression; Class 3 (n = 15) comprised of individuals with moderate-high alcohol, tobacco, cannabis, amphetamines, and sedative use, and moderate-high problem gambling. *Conclusions:* A history of trauma or current PTSD was present in two of the three classes. People with positive PTSD screens had multiple substance use and mental health concerns, highlighting the need for a trauma focus in substance use settings. Traumas experienced within this population will be explored and implications of the latent classes will be discussed.

F5.7

Elder abuse - a neglected public health topic?

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⁴University of Porto, Portugal

Track: Public Health

Background: Violence, abuse and neglect of older persons (VAO) is an increasing public health problem in cities. Despite growing evidence of the increasing size of the problem, cities specific data on prevalence of past 12-month VAO are still scarce in Europe, and conceptual and methodological differences limit the extent to which comparisons can be made between national studies. We aimed to 1) estimate the scope of VAO among older persons in 7 countries, 2) assess correlated late life factors of VAO. *Method:* Logistic regression analyses with respective 95% confidence intervals (CI). *Results:* N=4467 older individuals completed interviews with about N=650 interviews per city. Mean response rate was 48.8%. Mean age of participants was 70 years; 42.7% (N=1908) of the sample were male. The overall prevalence rate varied from 12.7% (95%CI: 10.2- 15.6) to 30.8% (95% CI: 27.2- 34.6). The reported most common single form of VAO was psychological violence which varied from 10.4% (95% CI: 8.1- 13.0) to 29.7% (95%CI: 26.2- 33.5) followed by physical violence which varied from 1.0% (95%CI: 0.4- 2.1) to 4.0% (95%CI: 2.6- 5.8). The prevalence rate of physical violence with injuries varied from 0.0% to 1.5% (95%CI: 0.7- 2.8). The prevalence rate of financial violence varied from 1.8% (95%CI: 0.9- 3.2) to 7.8% (95%CI: 5.8- 10.1) in Porto. The proportion of sexual violence varied from 0.3% (95%CI: 0.0- 1.1) to 1.5% (95%CI: 0.7- 2.8). Abuse was related to anxiety, but not to depression. *Discussion:* Older women are disproportionately affected by violence in old age and research is needed.

F5.8

Supporting healthcare professionals at the workplace after critical incidents: Development and evaluation of the e-learning Peer Support

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Track: Public Health

Background: Organized support at the workplace delivered by trained colleagues early after critical incidents, so-called peer support, has the potential to strengthen coping with critical incidents and prevent mental health problems (De Boer et al., 2011). Blended learning methods are recommended to achieve optimal training results but have not yet been implemented in the peer support training curriculum. *Objective:* To develop and evaluate an innovative online training program to educate peer supporters. *Method:* A multidisciplinary team developed an interactive web-based training program on the theory of peer support. The e-learning Peer Support precedes the face-to-face peer support training and consists of six chapters, multiple interactive questions, and an online exam. User experiences were determined with a 22-item online survey and technical user data. *Results:* In total, 44 HCPs (88% response rate; 82% female, mean age=45.2, SD=11.5) completed the e-learning and online survey. The e-learning was positively evaluated on user interface, comprehensibility, navigation and duration; 90.9%, 97.7%, 88.6% and 90.9% were (very) satisfied about these aspects, respectively). The majority (86%) completed all chapters of the e-learning and 94% passed the online exam. All participants rated the e-learning as easy to use (100%) and would recommend it to future trainees (100%). *Conclusions:* The e-learning is an innovative and valuable addition to the peer support training curriculum. Developments such as this e-learning, may contribute to more awareness about the impact of critical incidents for HCPs and the implementation of peer support programs.

Sunday June 16th 2019

Day #3

10:00 11:15 Parallel session #7 – Flashtalk session F7

F7.1

Risk factors for the Development of Post-Traumatic Medical Stress following Pediatric Hospitalization for Surgery

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Track: Child Trauma

Background: Hospitalization for surgery is a source of traumatic stress and can lead to long-term symptoms, affecting the child's functioning and physical recovery. Published data in this field is scarce. *Objective:* The aim of this study was to discover the risk factors for the development of medical posttraumatic stress in children aged 1-12 after hospitalization for surgery. *Method:* The study included 230 children, aged 1-12, who were hospitalized in the Pediatric Surgery Department. Due to the young age of the children, the study was based on parents' reports. The study included a baseline assessment at the time of the hospitalization and an outcome evaluation at 3-5 months after discharge. The study used the CBCL, PAT, and TESI-PR questionnaires to assess the risk factors and the UCLA-PTSD and PTSDSSI questionnaires to assess the level of child distress. Pearson tests and hierarchical regression were used to identify the risk factors for PMTS among children. *Results:* Hierarchical regression indicates that among the risk factors for post-traumatic stress among children after surgery are various characteristics of the surgical hospitalization and treatment, the extent of the parent's distress and his/her tendency to hide from the child medical information about his medical condition. *Conclusions:* We will discuss the implications of these results on the prevention or the early detection of Post-Traumatic Medical Stress following hospitalization in pediatric surgery.

F7.2

Mothers' emotions after pediatric burn injury: Longitudinal associations with posttraumatic stress- and depressive symptoms

Marthe R. Egberts^{1,2}, Iris Engelhard², Rens van de Schoot², Anne Bakker³, Rinie Geenen², Peter van der Heijden², Nancy van Loey¹

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Track: Child Trauma

Background: A child's burn injury is an emotional experience that places parents at risk of developing posttraumatic stress disorder (PTSD) symptoms. Although the wide range of emotions implicated in PTSD is acknowledged, longitudinal research examining changes in emotions and PTSD over time is scarce (McLean & Foa, 2017). *Objective:* To examine the longitudinal relationships of mothers' trauma-related emotions with symptoms of posttraumatic stress and depression 18 months after their child's burn injury. *Method:* Mothers (n =296) reported intensity of burn-related emotions within the first month (T1) and at 12 months postburn (T2). The Impact of Event Scale (IES) and the depression subscale of the Hospital and Anxiety Depression Scale (HADS-D) were administered at T1 and 18 months postburn (T3). *Results:* Based on two Exploratory Factor Analyses (EFA), emotion variables

were merged into two factors: basic emotions (fear, sadness, horror, and anger) and self-conscious emotions (guilt and shame). Path analyses indicated that persistence of basic emotions (from T1 to T2) was related to persistence of posttraumatic stress- and depressive symptoms. Self-conscious emotions showed concurrent associations with posttraumatic stress- and depressive symptoms at T1 and were longitudinally related to depressive, but not posttraumatic stress, symptoms. *Conclusions:* Initial high levels of basic emotions that persist appear to increase the risk of chronic posttraumatic stress and of co-occurring depressive symptoms. Over and above these relationships, self-conscious emotions are indicated to contribute to long-term depressive symptoms.

F7.3

Profiles of positive adaptation: resilience in children and adolescents in foster care

Katharina Sölva

University of Vienna, Austria

Track: Child Trauma

Background: In 2017, 8306 children and adolescents were accommodated in foster care facilities in Austria. Many of those children have experienced maltreatment in their family of origin and therefore, they are at high risk for poor developmental outcomes (Oswald et al., 2010). However, there is much variability in the aftermath of trauma and different profiles of adaptation are observable (Gallitto et al. 2017). Some individuals show resilient functioning despite traumatic events (Masten, 2015). Up to date, it is not clear which personal resources are associated with resilient outcomes. *Objective:* The present study aims to examine different profiles of adaptation. Moreover, personal resources associated with resilience should be detected. *Method:* Data were collected in six different foster care facilities in Lower Austria. A sample of N = 200 children and adolescents (10 - 18 years) completed self-assessment questionnaires, reporting their trauma history (CTQ), psychopathological symptoms (ITQ, A-DES, PHQ-9, GAD-7, and CBCL) and personal resources (FRKJ 8-16). Data will be analyzed with latent profile analysis using the Mplus software to detect profiles of adaptation and related personal resources. *Results:* Results are expected until March 2019. *Conclusions:* The results of this study will provide important insights into personal resources associated to specific symptom profiles. Findings from this study will deepen the understanding of the unique relationship between risk and protective factors. Furthermore, implications for well-founded intervention strategies suited for the vulnerable population of children and adolescents in foster care can be drawn.

F7.4

Cumulative childhood trauma, emotion regulation, and mental health problems in foster youth: Does perspective matter?

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Track: Child Trauma

Background: The majority of children and adolescents in foster care experience multiple types of traumatic events (cumulative childhood trauma) and exhibit elevated rates of mental health problems (Greeson et al., 2011). Cumulative childhood trauma has been associated with internalizing and externalizing symptomatology and emotion regulation (ER) was identified as a mediating factor in this association (Hébert et al., 2018). As low agreement of self- and other-reports is common when assessing trauma history and mental health problems in youth (Achenbach, 2006), it's still unclear to which extent the perspective of assessment (self, others) has an influence on these variables. *Objective:* Examining whether associations between cumulative childhood trauma, ER, and mental

health problems in youth vary with perspective of assessment (self, others, combined). *Method:* A sample of N = 200 children and adolescents (10- 18 years) in foster care will be assessed using self- and other-reports of trauma history (CTQ, ACE), ER (FEEL-KJ), and mental health problems (CBCL, YSR). Using M-Plus, path analysis will be calculated and fit of mediation models will be compared separately for self-reports, caregiver-reports, and a combination of both. *Results:* Results are expected until March 2019. *Conclusions:* This study will provide a deeper insight into the important issue of perspective dependency in child trauma research and a first indication to which extent perspective matters. We will contribute to our understanding of how to best use data from multiple perspectives.

F7.5

Psychosocial symptomatology and risk factors for posttraumatic stress symptoms in hospitalized children: the role of trauma type

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Erasmus MC – Sophia, the Netherlands

Track: Child Trauma

Background: Heightened prevalence rates of psychosocial symptomatology have been found after hospitalization in children. Research shows that cumulative trauma is associated with more psychosocial difficulties, but the question remains whether this is also true after medically related trauma. *Objective:* To describe the prevalence of posttraumatic stress, depression, and anxiety symptomatology and investigate risk factors for posttraumatic stress symptoms (PTSS) in children and adolescents after single (trauma type I) versus recurrent (trauma type II) hospitalization for illness and injury. *Method:* Data used were part of the baseline assessment of a randomized controlled trial. Analyses were done on 399 children aged 4 to 15 who had been hospitalized for illness or injury in Dutch hospitals. *Results:* Psychosocial symptomatology was more frequent after trauma type II compared to trauma type I, but only a few significant differences were found. The strongest risk factor of child PTSS was parental stress. Trauma type II and low parental education were significant risk factors only for parent report of child PTSS (not for child report). Child and medical factors were not found to be risk factors. The analyzed risk factors did not differ for trauma type I versus II. *Conclusions:* Both medically related trauma type I and II are associated with child PTSS, anxiety and depressive symptoms. Therefore, standardized screening for mental health should be implemented in the standard health care of children. Furthermore, pediatricians should monitor stress signs of parents, especially in parents with a low educational level and parents of children who are hospitalized repeatedly.

F7.6

The relationship between traumatic experiences and adverse adult functional outcomes of children and adolescents in residential care– preliminary results from a Swiss-wide longitudinal prospective study

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¹Psychiatric Hospital of the University of Basel, Switzerland; ²University Hospital Ulm, Germany

Track: Child Trauma

Background: Children and adolescents in residential care represent a highly vulnerable population, with high levels of traumatic experiences. Although previous research indicated that negative consequences of these experiences may persist throughout life, longitudinal, prospective studies are sparse. *Objective:* The purpose of the current presentation is to examine the association of traumatic experiences and its long-term functional outcomes in young adulthood of children and adolescents in

residential care. *Method:* Preliminary data from the Swiss-wide JAEI project (<http://www.jael-portal.org>) will be presented. Participants were examined approximately ten years ago (t1), while being in residential care, and last year (2018; t2). At the end of 2018, 110 participants had already been included in the study. The Essener Trauma-Inventory for children and adolescents (ETI-KJ) was used to examine traumatic experiences at t1. Additionally, participants completed the Childhood Trauma Questionnaire (CTQ), the Maltreatment and Abuse Chronology of Exposure (MACE) and a screening tool for complex posttraumatic stress disorder (SkPTBS) at t2. Adult functional outcomes will be determined based on the domains of functional outcomes described by Copeland et al. (2015). It is hypothesized that participants with interpersonal trauma, in particular, those with multiple interpersonal trauma, have higher odds of adversity on all adult functional outcome domains compared to those without interpersonal trauma. *Results & Conclusions:* Preliminary results and conclusions will be presented at the conference. In anticipation of the results, we would like to emphasize the importance of treating children and adolescents who experienced interpersonal trauma effectively in order to reduce adverse adult functional outcomes.

F7.7

Childhood Adversity and Traumatic Disorders: A Danish Linkage Study Using Self-report and Administrative Data

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Track: Child Trauma

Background: Accurate assessment of childhood adversity (CA) is fundamental in understanding risk factors that can inform appropriate intervention and prevention strategies. Different methodological approaches (e.g., prospective, self-reported data) have been used to assess pathways and outcomes associated with CA, however, each is limited in a number of ways. *Objective:* The current study seeks to assess the effect of CA on a diagnosis of traumatic disorder (TD). *Method:* Data were collected from a Danish national study. A sample of 4,718 young adults were randomly selected from the birth cohort of children born in 1984. Structured interviews were conducted on 2,980 participants. This data was then linked with parental data (including 4 years prior to birth of child) and an ICD 10 diagnosis of a TD using information from the Danish registries. *Results:* Hierarchical regression analysis was used to examine parental risk factors, self-reported CA, experiencing violence in young adulthood and risk of a TD diagnosis at age 28. Findings indicated the dominant factor associated with TD was self-reported PTSD symptoms at age 24 followed by a parental mental health diagnosis. Being of female gender and experiencing violence in young adulthood also increased risk of a TD diagnosis. *Conclusions:* This study highlights the benefits of incorporating administrative data with self-report data to provide a more nuanced understanding of CA across different developmental stages. These findings have important methodological implications that are useful in informing future trauma studies.