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Poster Abstracts

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THU 101
Psychometric Properties of the Inventory of Altered Self-Capacities in Trauma-Exposed College Students
(Abstract #592)

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The Inventory of Altered Self-Capacities (IASC; Briere & Runtz, 2002) is a 63-item self-report measure of deficits in a range of functional self-capacities, including relatedness, identity, and affect control. Linked to childhood trauma, these deficits lead to significant psychosocial impairments and diminished quality of life. Although the IASC is a promising measure of self-capacities, few psychometric studies are available. The present study examined the psychometric properties of the IASC in trauma-exposed undergraduates. Participants (N=136) completed the IASC, Childhood Trauma Questionnaire (CTQ) and Personality Assessment Inventory (PAI). Internal consistency was uniformly high for all IASC subscales, with alphas ranging from .86 to .95. All IASC subscales were positively associated with almost all CTQ scales, with correlations in the .30-.40 range for emotional, physical, and sexual abuse, and in the .20-.30 range for emotional and physical neglect. IASC subscales were strongly positively associated with related PAI scales and less strongly correlated with less related PAI scales. Results indicate that IASC scores have strong internal consistency and good convergent and discriminant validity. The IASC appears to be a psychometrically sound measure of self-capacities that could be useful in the assessment of disorders related to interpersonal trauma and self-capacities.
THU 102
Self-Blame as a Mediator of Tonic Immobility and Post-Traumatic Stress Severity
(Abstract #46)

Poster #THU 102 (Assess Dx/Diverse Pop) M - Industrialized

Dodson, Tom, BA (Hons) 1, Bovin, Michelle, PhD2, Marx, Brian, PhD3, Joos, Celina, BA4, Gregor, Kristin, PhD5, Pineles, Suzanne, PhD6
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Tonic immobility (TI) is an involuntary response to threat that has been associated with PTSD severity. Past work has shown that individuals who experience TI during a traumatic event are also more vulnerable to post-traumatic self-blame. Because individuals who experience TI are immobile but aware peritraumatically, it is possible that experiencing TI may lead to self-blame for not acting, which might affect PTSD symptom severity. The current study explored this hypothesis by assessing TI, self-blame, and PTSD symptom severity among females who experienced a traumatic event (n = 57, age: 22-52 years). We hypothesized that self-blame would mediate the relationship between TI and PTSD symptom severity. As predicted, TI was associated with increased PTSD symptom severity (β = .386, p = .002). When TI and self-blame were entered into a regression equation simultaneously, self-blame was associated with PTSD symptom severity (β = .350, p = .004), and the association between TI and PTSD symptom severity decreased (β = .340, p = .005) but remained significant. Bootstrapping analyses provided additional evidence that the indirect path was significant (effect = .302; 95% CI = .0233, .6538). Thus, self-blame partially mediates the relationship between TI and PTSD severity. The implications of these findings, and how they relate to post-traumatic growth, will be discussed.
THU 103
Distinct Gene Expression Profiles Characterize Lifetime PTSD and Childhood Maltreatment in the Detroit Neighborhood Health Study
(Abstract #1534)

Poster #THU 103 (Bio Med/Adult/Cmplx) M - Industrialized

_Bustamante, Angela, BS_1, Koenen, Karestan, PhD², Aiello, Allison, PhD³, Galea, Sandro, MD, DrPH⁴, Wildman, Derek, PhD⁵, Uddin, Monica, PhD⁵

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Exposure to childhood maltreatment (CM) significantly increases the risk of post-traumatic stress disorder (PTSD) later in life and has been linked to biological dysregulation. Building upon these observations, we propose to undertake an explicitly systems-biology approach to analyzing microarray gene expression profiles associated with PTSD and CM in the same individuals to identify and describe the dysregulated biologic networks associated with these two distinct yet interrelated phenotypes. Participants (N=94) from the Detroit Neighborhood Health Study, a longitudinal epidemiologic population-based study of adult Detroit residents, were selected for genome wide expression testing via Illumina HT-12 microarray. Selection of participants was based on PTSD history, matching cases and controls. CM data for these participants was also available for analysis. Weighted co-expression network analysis (WGCNA) was used to detect gene co-expression networks associated with PTSD and CM, respectively. WGCNA revealed gene networks for both PTSD and CM enriched in both common and distinct gene sets. Both PTSD and CM networks were enriched for genes involving RNA processing. PTSD, but not CM, was associated with genes involving mitochondrial function, a pathway previously implicated in PTSD. These results suggest a degree of biologic overlap between CM and PTSD gene expression phenotypes.
THU 104
Evaluating the Importance of Illicit Drug Screening in Studies of Post-Traumatic Stress Disorder
(Abstract #21)

Poster #THU 104 (Bio Med/Violence) I - Industrialized

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Trauma exposure and PTSD are highly comorbid with substance use disorders, yet trauma studies do not typically assess or biochemically confirm illicit drug use. In previous literature, self-report and toxicology-detected drug use had concordance rates of 94% and 85% in general and drug-treatment populations (Bharucha-Reid et al., 1995; Neale and Robertson, 2003). The current study examines concordance of self-report and urine toxicology screens of drug use before and after an intervention that disincentivized positive drug tests within a study of trauma-exposed women (N=168; M age=34.7, SD=10.0). Past 30-day drug use was exclusionary. Halfway through recruitment, participants were told that a positive drug screen would result in withholding of payment. Self-reported drug use during a phone screen was confirmed via a urine drug test. Positive urine drug screens in those reporting abstinence dropped from 16% pre to 5% post intervention. No significant change in no-shows (34% to 30%) was found. Drug screen result was not associated with age, race, alcohol use, depression, PTSD, or anxiety. Cigarette smoking was positively related to drug screen fails (chi-squared=7.43, p<.05). For future trauma research in which drug use may influence findings, biochemical confirmation of self-reports is indicated.

THU 105
Longitudinal Epigenetic Variation at DNA Methyltransferase Genes is Associated with Risk for and Resilience to PTSD
(Abstract #1019)

Poster #THU 105 (Bio Med/Violence) A - Industrialized

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DNA methylation (DNAm) differences exist between trauma-exposed individuals with and without post-traumatic stress disorder (PTSD). It is unclear whether these epigenetic differences preexist or arise
following trauma and PTSD development. To explore the biological underpinnings of PTSD risk, we measured DNAm at DNA methyltransferase genes (DNMT1, DNMT3A, DNMT3B, and DNMT3L) pre- and post-trauma in a sample from the Detroit Neighborhood Health Study. We assessed pre-trauma DNAm and changes in DNAm from pre- to post-trauma between and within PTSD cases (n=30) and trauma-exposed controls (paired-sample t-tests) and tested if pre-trauma DNAm is predictive of post-trauma symptom severity (PTSS) change (linear regression). DNMT1 DNAm increased post-trauma in PTSD cases (p<0.01) but not controls (p=0.07). At a DNMT3B site overlapping a transcription factor binding site involved in epigenetic regulation, pre-trauma DNAm was lower in cases vs. controls (p=0.03) and a significant (p=0.02) predictor of post-trauma PTSS change after adjusting for age, gender, and pre-trauma PTSS. DNAm at this site was a marginally significant predictor of change in Intrusion symptoms (p=0.07). In summary, DNAm among trauma-exposed individuals show both longitudinal changes and preexisting epigenetic states that are associated with PTSD.

THU 106
Alterations in Emotional Processing, Size of Amygdala and Nucleus Accumbens in PTSD, non-PTSD Trauma Response and Control Individuals
(Abstract #810)

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Introduction: The search for endophenotypes has a potential to detect biomarkers associated to PTSD. We studied possible correlations between emotional processing; candidate brain areas, and PTSD symptoms. Methods: 103 subjects exposed to traumatic event [54 with PTSD; and 49 without psychiatric diagnostic]; and 10 health controls without trauma were evaluated using the SCID, IAPS, SAM scale, and CAPS. They also underwent to MRI evaluation by FreeSurfer Software. Results: We found a negative correlation for PTSD group between pleasure appraisal of positive figures with CAPS scores, and size of left Nucleus Accumbens (Nac); and a positive correlation between pleasure appraisal of positive figures and size of left Amygdala (AMY). We also found negative correlation of arousal elicited by negative figures; hypervigilance, and size of left Nac. Discussion: Altered emotional processing is linked to the dysfunctional stress response; our findings showed that as more severe was PSTD, more difficult to appraisal a positive experience; the largest Nac and smallest AMY in these individuals, may explain this. Lower alert on aversive figures in patients with higher CAPS arousal scores indicate an avoidance of these arousal feelings, Nac was found to be increased in these patients, it play a key role in the feeling of displeasure and risk assessment (inhibition) in PTSD.
THU 107
The Effects of Aggression Exposure during Adolescence on Internalizing Psychopathology: Moderating Roles of the Parasympathetic Nervous System
(Abstract #688)

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The exposure to aggression during adolescence has been associated with numerous negative, and often enduring, internalizing outcomes. (e.g. Margolin, 1998; Margolin & Vickerman, 2011). However, some individuals may be more affected than others due to parasympathetic nervous system (PNS) activity (e.g. El-Sheikh, Kouros, Erath, Cummings, Keller & Staton, 2009). In the present study, a diverse sample of 147 young adults retrospectively reported their exposure to psychological and physical harsh parenting and interparental aggression during adolescence and reported current symptoms of anxiety and post-traumatic stress. Resting respiratory sinus arrhythmia (RSA), an indicator of PNS activity, was also measured. A three-way interaction among RSA, harsh parenting, and interparental aggression significantly accounted for post-traumatic stress symptoms in females. Additionally, RSA significantly moderated the relationship between harsh parenting and trait anxiety in females, such that at low values of RSA the relation between harsh parenting and anxiety symptoms was significant and positive. At high levels of RSA there was not a significant association between violence exposure and anxiety symptoms. Among males, no significant interactions emerged. Results expand gender-specific knowledge of the risk and protective factors of PNS activity.

THU 108
Substance Use Moderates the Effects of PTSD and Depression on Suicidality among Minority Lesbian, Gay, and Bisexual Adolescents and Young Adults
(Abstract #138)

Smith, Brian, MA PhD Student ¹, Armelie, Aaron, PhD ², Boarts, Jessica, PhD ³, Delahanty, Douglas, PhD ³
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Adolescents and young adults who are lesbian, gay, or bisexual (LGB) are more likely to abuse alcohol and drugs and have post-traumatic stress disorder (PTSD) and/or depression than their heterosexual peers. LGB youths are also 2.5 times more likely to commit suicide. Substance use (SU), PTSD and depression are all risk factors for suicidality. The current study examined the incremental validity of SU, PTSD, and depression to predict suicidality in a sample of 68 primarily African American LGB adolescents and young adults. The extent to which SU moderates the relationships between PTSD/depression and suicidality was also examined. Results of hierarchical logistic regression analyses indicated that that SU,
χ²(1) = 6.894, p = .009, and depression, χ²(1) = 4.760, p = .029, added incremental validity to the prediction of attempted suicide, but PTSD symptoms did not. SU moderated the relationship between PTSD and depression on suicidal ideation, χ²(1) = 5.72, p = .017, and χ²(1) = 3.882, p = .049, respectively. Simple slope analyses revealed that higher SU coupled with PTSD or depression predicted suicide ideation. These findings indicate that substance use is a primary contributor to suicidality when it exists alone or in combination with PTSD or depression, underscoring the importance of integrating substance use treatments with PTSD/depression treatments to reduce suicide risk.

THU 112
Trajectories of Resilience and Psychopathology Following an Earthquake Disaster
(Abstract #1392)

Objective: To delineate the trajectories of resilience and psychopathology (e.g., post-traumatic stress disorder (PTSD), depression and anxiety) following an earthquake disaster. Method: A longitudinal study of 1573 adolescents from the epicenter during the 2008 Wenchuan earthquake was conducted. Resilience, depression, anxiety and PTSD symptoms were accessed at 6, 12, 18 and 24 months after the earthquake, respectively. Each trajectory was delineated by the means of the four observations and repeated-measures analysis of variance was used to examine the significance. Result: Resilience was characterized as a declined curve (M₁₆=114.3, M₁₁₂=112.1, M₁₁₈=110.5, M₁₂₄=110.7, p < .001) while anxiety and PTSD shared a similar unimodal curve (M₆₆=24.4, M₆₁₂=25.9, M₆₁₈=22.1, M₆₂₄=21.7, p < .001; M₆₆=38.9, M₆₁₂=40.5, M₆₁₈=34.4, M₆₂₄=34.7, p < .001). Trajectory of depression could be described as a relapsing curve (M₆₆=11.6, M₆₁₂=13.4, M₆₁₈=11.8, M₆₂₄=12.7, p < .001). Conclusion: Resilience ceased declining at 18 months after the earthquake while the anxiety and PTSD symptoms would be maintaining in a lower level from this time on. This turning point implicated a linkage relating the trajectories of resilience and psychopathology.
Post-Traumatic Stress among Women after Induced Abortion – a Prospective, Longitudinal Multi-Centre Study

(Abstract #642)

**Wallin Lundell, Inger, MS (PhD Student)**

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The aims were to describe the prevalence of post-traumatic stress disorder (PTSD) and post-traumatic stress symptoms (PTSS) before, at three and six months after induced abortion, and to describe the characteristics of the women who developed PTSD or PTSS after the abortion. This was a multi-centre study comprised of six abortion clinics in Sweden. Three questionnaires were administered; at the first visit to the clinic and at three and six months after the abortion. Of 1457 women who requested an induced abortion, 742 women responded at the three-month follow-up, and 641 women at the six-month follow-up. The prevalence of ongoing PTSD and PTSS before the abortion was 4.3% (60) and 23.5% (329), respectively. At three months the corresponding rates were 2.0% (15) and 4.6% (34), and at six months 1.9% (12) and 6.1% (39), respectively. Fifty-one women developed PTSD or PTSS during the observation period. They were younger (15-24 years), less well educated (<12 years), needed counseling before the abortion and had higher levels of anxiety and depressive symptoms than the comparison group. Only a small fraction of women who have an induced abortion develop PTSD. The majority of women who develop PTSD or PTSS within a six-month period of the induced abortion do so because of traumatic experiences unrelated to the induced abortion.

Promoting Parental Resilience in Military Families: Results from a Randomized Clinical Trial

(Abstract #1596)

**Ross, Abigail, Doctoral Student**

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2. Miranda-Julian, Claudia, PhD

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2. Tufts University, Medford, Massachusetts, USA

Deployment separation constitutes a significant stressor for U.S. military service members and their families. Normative stressors associated with reintegration are further compounded when a returning parent suffers from adverse psychological outcomes (e.g., PTSD) or physical injury (Huebner, Mancini, Wilcox, Grass, & Grass, 2007). Although adverse effects of OEF/OIF parental deployment on children are well-documented (Coulthard, 2011; Department of Defense, 2010; Hosek, 2011) and parental resilience is a known protective factor, to date, no clinical trials have explicitly evaluated program effects on parental resilience. In this presentation, findings from a recently completed randomized clinical trial of 115 military families (N=218 parents) with young children will be presented. Participants were
randomly assigned to receive an 8-module home-based reintegration program for military families with very young children or a waitlist control condition. Analyses will examine program effects on parental resilience (Connor-Davidson; Connor & Davidson 2003) and relationships among constructs hypothesized to be associated with parental resilience, including parent mental health, parenting stress, social support, trauma exposure, deployment duration, and demographic variables. Discussion will include recommendations for future research and practice with military families.

THU 115
Shame, Helplessness, and Hopelessness Following Sexual Trauma: Barriers to Resilience and Support/Treatment Seeking
(Abstract #967)

Resilience is defined as the ability to manage one’s emotions and behaviors to help overcome challenges in life and to sustain a degree of emotional well-being (Jackson & Watkin, 2004). Several factors are crucial to a person’s degree of resilience; these include feelings of self-efficacy, optimism, and reaching out behaviors. Victims of sexual trauma, however, frequently experience intense feelings of shame, helplessness, and hopelessness, which are linked to a range of mental health problems including depression, PTSD, suicide, anxiety, and substance dependence (Isac & Schneider, 1992; Van Vliet, 2008), and threaten resilience. The present study seeks to explore the relationship between feelings of shame, helplessness, and hopelessness, with resilience manifested as support/treatment seeking behaviors in individuals with and without sexual trauma histories. We hypothesize that individuals with sexual trauma histories will endorse significantly more shame, helplessness, and hopelessness responses than individuals without such histories. Furthermore, we hypothesize a negative correlation between shame, helplessness, hopelessness, and support/treatment seeking behaviors. This study seeks to support the growing literature on factors that influence resilience following sexual trauma, and the development of community resources and interventions for victims of sexual assault.
**THU 116**
The Role of Sleep in the Relation between Community Violence Exposure and Delinquency among Latino Adolescents
(Abstract #1061)

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Extant research suggests that community violence exposure (CVE) is related to adolescent engagement in delinquent behaviors. Less is known, however, about factors that account for this relation. Sleep is one factor that warrants attention, given the poor sleep habits found among many adolescents, and its association with both CVE and delinquent behaviors. Further, given the growing rate of Latino youth in the US, and their high risk for CVE, examining factors that account for this relation among Latino youth is essential for developing culturally and developmentally sensitive interventions. The current study evaluated whether sleep problems accounted for the link between CVE and delinquency among a sample of 144 Latino adolescents (54% male) ages 14-19 (M = 16.25, SD = 1.46) attending a high school in a large, Midwestern city. As expected, both CVE (B = 1.37, p < .001) and sleep problems (B = 1.43, p = .004) were uniquely related to delinquency. Sleep problems also partially accounted for the relation between CVE and delinquency (16%; p = .04). Findings from this study suggest that interventions targeting sleep problems in Latino adolescents may be an important area to consider in reducing delinquency, particularly for those exposed to community violence.

**THU 118**
Parental Emotional Distress Affects Children’s Stress Reactions after Residential Fire
(Abstract #1282)

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Experiencing a residential fire is a potentially traumatic event for children, and evidence indicates that parental distress is related to childhood post-traumatic stress outcomes. Parents who experience symptoms of depression after trauma may be less capable of assisting children with their own coping efforts following the event, subsequently increasing the risk of negative post-traumatic outcomes like post-traumatic stress disorder (PTSD). This study examines the role of parental depression in child PTSD. Data was obtained as part of an NIMH funded grant assessing the impact of residential fire on children and families. Parents and children were assessed at four months (N = 165), 11 months (N = 96), and 18 months (N = 70) after the fire. Standard regression analyses revealed that parental depression significantly predicted child PTSD at 11 months (R2 = .227, p < .05) and at 18 months (R2 = .297, p < .05). The findings suggest that parental depression may adversely affect child post-traumatic reactions over time. These parents may lack resources to provide children with adequate social support or help
them develop appropriate coping strategies. This study offers more insight into important factors to consider when targeting at-risk families with secondary prevention strategies after residential fires.

**ASSESSMENT DIAGNOSIS**

**THU 119**
Prevalence of PTSD and Self-Reported Risk and Resilience: Results of a Follow-up Study in Children, Adolescents and Parents following Accidents
(Abstract #1475)

Poster #THU 119 (Assess Dx/Acc/Inj) M - Industrialized

van Meijel, Els, MS (PhD Student), Gigengack, Maj, MSc, Boer, Frits, MD MBA, Lindauer, Ramón, MD, PhD
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Studies of long-term consequences of accidental trauma in children are scarce and so far little is known about long-term factors of risk and resilience in these children. A total of 90 children and one of their parents participated in a follow-up 2-4 years after the child’s accident. Children were 8-18 years old at the time of the accident. Telephone assessment of PTSD was performed using the PTSD-section of the ADIS C/P. Self-report measures of PTSD were CRIES and IES. We used open-ended questions to determine participants’ opinions about being at risk or resilient for PTSD. Partial or full PTSD was diagnosed in 10 children, 8 of them were suffering from PTSD as a consequence of the accident. Results and clinical implications of the findings will be presented. Factors of risk and resilience will be discussed in the light of the injury severity and the long-term consequences of the accident.

**THU 120**
The Relation between Attachment, Interpersonal Functioning, and Resilience after Problematic and Abusive Parenting
(Abstract #1648)

Poster #THU 120 (Assess Dx/Adult/Cmplx) I - Industrialized

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From an attachment perspective, abusive parenting is especially harmful because the source of safety (the parent) is also the source of fear. Negative attachment, health, and functioning outcomes have been largely found in the maltreatment literature; however, the relationship between abuse, attachment classification, functioning, and resilience is unclear. The current study uses adult attachment after a history of child abuse experiences to explore the relationship between parental warmth, attachment classification, symptoms, and cognitive distortions. Participants include 188 male and
female undergraduates from a southeastern university who ranged in age from 18 to 33 years old. History of maltreatment experiences, adult attachment classifications, trauma sequelae, and cognitive distortions were assessed. There was a direct effect for attachment classification when abuse and non-abuse groups are considered. Specifically, insecurely attached individuals reported less maternal warmth and more cognitive distortions. Further analyses of individuals who experienced emotional abuse suggest there was a direct effect for attachment classification. Specifically, those who were securely attached reported less trauma symptoms, interpersonal problems, dysphoria, and cognitive distortions. This suggests secure attachment could be an important indicator of resilience after trauma.

THU 121
A National Study of the Psychological Impact of Bank Robbery with a Randomized Control Group
(Abstract #1051)

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Despite, numerous annual bank robberies worldwide, research on the psychological sequelae of bank robberies is limited. We studied the prevalence of Acute Stress Disorder (ASD) (N = 458) and the prevalence of Post-Traumatic Stress Disorder (PTSD) (n = 378) in a Danish national questionnaire survey of bank employees exposed to robbery (response rate: 73.6 %). Several related factors were also investigated including prior traumatic exposure, anxiety, and general traumatic symptoms. The results were compared to a randomized control group of bank employees never exposed to robbery (N= 303). The estimated ASD rate was 11.1 % (n = 41), and the estimated PTSD rate was 6.2 % (n = 23). Both prevalence rates were limited by the avoidance diagnostic criteria. Preliminary results indicated that the control group scored significantly lower than the acute robbery group on general traumatization and anxiety but surprisingly significantly higher than the follow-up robbery group. The results are discussed in relation to existing research and the effect of other factors such as prior traumatic exposure. In conclusion bank robberies are a traumatizing event for the employees, especially when disregarding avoidance symptoms. This seems to be particularly pertinent in relation to the acute phrase following the bank robbery.
THU 122
Past Emotional/Verbal Abuse Predicts Current Depression Symptom Clusters in Post-Abuse Community-Dwelling Women
(Abstract #1623)

Psychological abuse predicts depression, but few studies have addressed abuse type or depression symptom clusters, an approach that could suggest ideas about mechanisms. This study examined associations between past emotional/verbal and dominance/isolation abuse and current depression symptoms: negative affect, somatic symptoms, and low positive affect. Community-dwelling women (N=196) with partner abuse histories completed measures of abuse history, current CESD-10 depression symptom severity, and background characteristics. A hierarchical linear regression analysis predicted 10.51% of the variance in depression symptom severity (p=.007), with control variables (child and adult abuse history, life stress, years since divorce) in the first step and emotional/verbal and dominance/isolation abuse in the second step. Emotional/verbal abuse was a statistically significant predictor (β =.332, p=.006), but dominance/isolation was not (β =-.244, p=.063). Bonferroni-corrected simple linear regressions predicted symptom cluster severity. Emotional/verbal abuse, but not dominance/isolation, predicted more severe negative affect (p =.003) and more severe somatic symptoms (p <.001). Neither abuse type predicted low positive affect. Connections between emotional/verbal abuse, negative affect, and somatic symptoms account for the persistent consequences of psychological abuse in women.

THU 123
Impact of Emotional Memories on Affective Perception Related to Interpersonal Violence. The Burden of Epidemic Violence in Brazil
(Abstract #689)

Objective: Study emotional and affective reactions of individuals facing new and varied stimulus. Method: Submitting International Affective Picture System for appraisal and vigilance related to 30 pictures to 230 individuals divided in who were submitted to a severe interpersonal violence and developed post traumatic stress disorder (PTSD+), and who didn’t (PTSD-), and a healthy control group. Results: No differences were found between groups concerning negative and neutral stimulus. On the other hand, positive pictures were evaluated by those traumatizes as less pleasant compared to healthy
control group. Moreover, on PTSD+ group, the greater the pleasure on seeing positive pictures, less severe PTSD symptoms. Discussion: negative stimulus, including trauma related pictures, didn’t show any difference, however this group can be differentiated in terms of positive stimulus, where those submitted to an interpersonal violence live their routine with less pleasure even if something positive is presented to them. Moreover, it’s possible to conclude that the greater the pleasure, less severe was PTSD. Regarding the epidemic numbers of violence in Brazil, the impact on population perception of quality of life and consequently on their functioning probably is related to significant burden.

THU 124
A Dissociative PTSD Subtype: Can Levels of Depression, Anxiety, Hostility, and Sleeping Difficulties Differentiate Between Dissociative PTSD and PTSD
(Abstract #423)

Poster #THU 124 (Assess Dx/Violence)  M - Industrialized  Franklin A

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A notable proposed revision to the diagnostic criteria for PTSD in the upcoming 5th edition is the inclusion of a dissociative-PTSD subtype. To date, a number of studies have confirmed a dissociative-PTSD subtype in American Veteran and civilian samples. Studies have also begun to assess what factors differentiate between dissociative vs. non-dissociative-PTSD. The current study is the first to assess the presence of a dissociative subtype in European victims of rape (N = 338). Utilizing Latent Profile Analyses, we hypothesized that a discrete group of individuals would represent a dissociative-PTSD subtype. We additionally hypothesized that scores on depression, anger, hostility, and sleeping difficulties would differentiate dissociative-PTSD from non-dissociative-PTSD. Results concluded that there were four discrete classes based on participants responding across items measuring PTSD and dissociation. Classes were termed baseline, moderate PTSD, high PTSD, and dissociative PTSD. The dissociative-PTSD group encompassed 12.8% of the sample. In assessing if dissociative-PTSD could be differentiated from PTSD we found that the dissociative-PTSD group evidenced significantly higher mean scores on measures of depression, anxiety, hostility, and sleeping difficulties. The implications of these results are discussed in relation to both treatment planning and the DSM-5.
THU 125
Attachment Avoidance Moderates the Association between Betrayal Trauma and Post-Traumatic Symptoms
(Abstract #347)

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Betrayal trauma theory proposes that trauma perpetrated within an attachment relationship exerts a pernicious effect on symptoms of post-traumatic stress. However, not everyone who is exposed to betrayal trauma develops psychological symptoms. Some have proposed that adult attachment quality may moderate the effect of the trauma on post-traumatic symptoms. However, this has not yet been tested empirically among survivors of betrayal trauma. In this study, we examine the moderating role of adult attachment dimensions (anxiety and avoidance) on the association between betrayal trauma and post-traumatic symptomatology. Betrayal trauma, post-traumatic symptoms, and adult attachment data were gathered from a sample of college-aged women (N = 495) and analyzed using multiple regression within a Bayesian framework. Results suggest that attachment anxiety exerts a positive main effect on post-traumatic symptoms, incrementing the effect of betrayal trauma. Moreover, attachment avoidance moderates the relation between betrayal trauma and post-traumatic symptomatology such that low attachment avoidance and high levels of betrayal trauma is associated with fewer post-traumatic symptoms than high levels of attachment avoidance and high levels of betrayal trauma. These results indicate that low attachment avoidance may function as a resiliency factor within the context of betrayal trauma.

THU 126
Factor Structure of the PTSD Checklist in an Arab Population
(Abstract #1291)

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There has been much debate over the factor structure of PTSD, including cross-culturally. Arab cultures have become increasingly important in American life because of our ongoing Middle East conflicts and the growing presence of Arab refugees. However, relatively little is known about how PTSD is conceptualized in Arab cultures. We examined the factor structure of the PTSD checklist (PCL) in 272 survivors of Gonu, the strongest cyclone to hit the Arabian Peninsula and the worst natural disaster to ever strike the nation of Oman. The PCL was translated into Arabic, back-translated, and administered 13 months post-trauma to adults from Oman’s hardest hit regions. Confirmatory factor analyses were used to compare four PTSD models: DSM-IV tripartite, four-factor dysphoria, four-factor numbing, and
five-factor dysphoric arousal. In congruence with other studies conducted inside and outside the United States, we found that the DSM-IV tripartite and four-factor dyphoria models were poor fits for the data. Further, the four-factor numbing and five-factor dysphoric arousal models had adequately fit; however they were statistically indistinguishable from each other. These results support the cross-cultural similarity of the PTSD construct in Oman as compared to other nations in the broader traumatic stress literature and suggest the diagnostic utility of PTSD in Arab populations.

THU 127
Secure Attachment Style as a Predictor of Resilience: A Prospective Study of Police Officers
(Abstract #1583)

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The aim of this study is to determine if secure attachment predicts resilience to developing acute and post-traumatic stress symptoms in police officers. PTSD can be defined as an affect regulation disorder resulting from the inability to adequately cope with a critical incident (CI). Secure attachment may act as a protective factor, while certain other attachment styles may increase vulnerability to developing symptoms of PTSD. This study explored the relationship between attachment style (e.g., secure, fearful, preoccupied, and dismissing) (RSQ) and acute stress (ASD) and PTSD (PCL) via self-report responses of New York and Bay Area participants (N=72) during their first 3 years of service. A linear regression model assessed the association between attachment and acute stress and PTSD, while controlling for education and early childhood trauma (ETI). Results: A secure attachment style is not associated with symptoms following 3 years of police service; however, preoccupied attachment significantly predicted acute stress (p=0.049, β= 3.0) and PTSD (p=0.013, β=3.25). These results indicate that when exposed to CIs, police officers with a preoccupied attachment style are vulnerable to develop symptoms of acute stress and PTSD within 12 months. This suggests that secure attachment is a protective factor for building resilience to combat longer term distress and stress reactions.
THU 128
Negative Life Experiences Predict Psychological Distress and Depression: A Prospective Study of Police Officers
(Abstract #1522)

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The aim of this study was to determine whether negative civilian life experiences over the past 6 months and past year predict overall psychological distress and depression symptoms in police officers. New York and Bay Area police officers (n=375), recruited in the police academy and annually assessed for 6 years, reported the negative impact of life events they have experienced over the past 6 months and 1 year (Life Experiences Survey: LES), as well as overall psychological distress (Global Severity Index: GSI) and depression (Beck Depression Index: BDI). Linear mixed effect models evaluated longitudinal effects of negative life experiences in the past 6 months and 1 year. Separate models were fit with GSI and BDI scores as dependent variables, adjusting for covariates of follow-up time, gender, and age at baseline. The results show that negative life experiences were strongly correlated with overall indices of psychological distress (6mo: β=.012, p<.0001; 1yr: β=.01, p<.0001,) and depression (6mo: β=.326, p.<.0001; β=.26, p.<.0001). In conclusion, the longitudinal effects of negative life experiences on overall psychological distress and depression in the past 6 months and 1 year are significant; suggesting that police officers, as a trauma-exposed population, may have increased symptoms of psychological distress and depression following negative civilian life events.

THU 129
The Relationships between Peritraumatic Emotions, Negative Post-Traumatic Cognitions, and PTSD Among Active Duty Military Personnel
(Abstract #1226)

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Results from prior studies investigating the association between peritraumatic emotions and PTSD suggest that peritraumatic fear is only one of various prominent emotions experienced by trauma
victims (Resick & Miller, 2009; Kilpatrick et al., 1998). Some have even found insignificant relationships between fear and PTSD (Roemer, Orsillo, Borkovec, & Litz, 1998). The current study investigated which peritraumatic emotions were associated with PTSD severity and negative post-traumatic cognitions. 167 active duty military personnel with PTSD were evaluated for PTSD severity using the PTSD Symptom Scale, Interview Version (PSS-I). Participants also completed the Post-traumatic Cognitions Inventory (PTCI) and the Peri-Traumatic Emotions Questionnaire (PTEQ). An exploratory factor analysis on the 20-item PTEQ produced five factors of peritraumatic emotions: fear, anger, sadness, embarrassment and detachment. Overall, more peritraumatic emotions was associated with more negative cognitions and more severe PTSD (r = .33, p < .01; r = .16, p = .03). Peritraumatic detachment was also associated with more negative cognitions about self and greater avoidance (r = .31, p < .01; r = .17, p = .03). Fear was not related to negative cognitions or severity. Results and implications will be discussed in the context of changes in diagnostic criteria in the DSM-V.

THU 130
Lifetime Violence Exposure and Alcohol Misuse in OEF/OIF Veterans
(Abstract #241)

Although research indicates that Veterans exposed to combat violence have the highest risk of alcohol abuse, few studies have examined lifetime trajectories of exposure to violence in relation to alcohol misuse in OEF/OIF Veterans. This is disconcerting, as excessive alcohol use is a highly prevalent and deleterious health behavior in this population. This study 1) analyzed the relationship between violence occurring pre-, during, and post-deployment and alcohol misuse and 2) examined PTSD symptoms and clusters as possible mediators of exposure to violence and alcohol use. Lifetime violence exposures for 912 Veterans were measured with the DRRI and alcohol misuse was measured with the AUDIT–C. Linear regressions showed that deployment and post-deployment violence were positive predictors of alcohol misuse (β = 0.13, p < .001 and β = 0.10, p = .001 respectively) in models controlling for age, gender, ethnicity, education, and marital status. There was a significant interaction between pre-deployment and deployment violence, in which minimal violence exposure during those two periods in the lifespan appeared to be protective for alcohol misuse. PTSD avoidance and hyperarousal symptoms mediated the relationship between exposures to violence and alcohol misuse, indicating that OEF/OIF Veterans experiencing these symptom clusters are particularly vulnerable to alcohol misuse.
THU 131

Validation of the PTSD Checklist-Civilian Version in a Sample of Military Veterans and Civilians with Mild Traumatic Brain Injury

(Abstract #433)

Poster #THU 131 (Assess Dx/Mil/Vets) M - Industrialized

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Research indicates a strong association between mild traumatic brain injury (mTBI) and post-traumatic stress disorder (PTSD) among military veterans. As a result, military and veteran health care centers have emphasized the need for accurate screening tools to identify individuals at risk for PTSD. The PTSD Checklist-Civilian version (PCL-C) is a commonly used screening tool for PTSD. However, cutoff scores have varied and limited validation studies have been conducted among post-deployment veterans. The present study examined diagnostic properties of the PCL-C among 22 civilians and 29 veterans with mild-to-moderate TBI. The PCL-C was administered to all participants, and medical records were reviewed to identify individuals with a documented PTSD diagnosis. A receiver operating characteristic (ROC) curve was plotted to determine sensitivity, specificity, and predictive values for all possible cutoff scores, as well as efficiency of previously recommended cutoff scores (44 and 50). ROC analysis yielded an area under the curve of 0.867, with the most efficient cutoff values between 32 and 38. Results suggest that the PCL-C has diagnostic utility when evaluating PTSD symptoms among veterans with mild-to-moderate TBI. Lower cutoff scores on the PCL-C may be preferable when screening for diagnostic referral, given the base-rate of PTSD in this population.

THU 132

Reasons for Not Killing Yourself: Changes in PTSD Symptoms and Suicidal Ideation in OEF/OIF Veterans

(Abstract #776)

Poster #THU 132 (Assess Dx/Mil/Vets) I – N/A

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PTSD is associated with suicidal thoughts and behaviors. There have also been some concerns that rates of suicide are increasing among military service members and veterans returning from deployment. Protective factors against suicide include having a reason to live and/or reasons for not killing yourself. The current study was conducted to ascertain whether reductions in PTSD severity might be associated with changes in “reasons for not killing yourself” (RFNKY). OEF/OIF veterans (N=72) were administered a suicide screen and PTSD assessment within 5 years of deployment and again 12 months later. Symptoms of PTSD were compared to veterans’ open ended responses to the RFNKY question. A study-specific
categorization was developed based on the sample’s most common responses (i.e. family responsibility, negative view of suicide, fear of suicide, positive view of self, hope for the future, and moral objections). As expected, some demographic variables (e.g., being married, having children) were significantly related to RFNKY, although few variables were found to be independent predictors in logistic regression models. Clinically significant improvement in PTSD (PCL-M Δ ≥10) was associated with change in RFNKY (X2 =7.41, df=2, p=.025), suggesting that clinical improvement may strengthen protective factors in a group that is considered at risk for suicidal thoughts and behaviors.

THU 133
Comparison of DSM-4 and DSM-5 Criteria for PTSD in College Students and Veterans: Relation to Depression and Suicide Risk
(Abstract #1116)

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The DSM-5 includes a revision of the PTSD criteria, including removal of Criterion A-2 (fear, helplessness, horror), the addition of a negative mood and cognitions cluster, and the reorganization of symptoms within existing clusters of reexperiencing, arousal, and avoidance. These changes have been reported by some commentators as likely to have minimal impact on prevalence rates for PTSD. We will report data from surveys of two populations: college students (n = 800) and Veterans (n = 1,100). Both surveys included an assessment of trauma history, the original PTSD Checklist (PCL-4), and additional items reflecting the new DSM-5 criteria (PCL-5). In the college student sample, a higher rate of PTSD was found with the PCL-5 as compared to the PCL-4; the rates were essentially the same under both measures for the Veteran sample. Rates in both samples were unaffected by inclusion or exclusion of Criterion A-2. In the Veteran sample, the PCL-5 was more strongly correlated with depression and suicide risk than was the PCL-4, reflecting the inclusion of negative mood and cognitions in the revised DSM criteria. We will discuss the differential impact of the revised criteria for a civilian sample versus a Veteran sample. Further, we will raise concerns over the inclusion of additional depressive symptoms into the PTSD diagnosis, rather than keeping a more minimal diagnostic overlap.
THU 134
The Development of Social Networks After Trauma Disclosure
(Abstract #1649)

Poster #THU 134 (Assess Dx/N/A) I – N/A
Franklin A

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Positive social reactions have consistently been found to buffer the negative effects of trauma (Brewin et al., 2000; Ozer et al., 2003; Schumm et al., 2006). But between 25-75% of trauma survivors experience negative social reactions from social networks (Filipas & Ullman, 2001). When disclosure is met with social networks that provide negative social reactions, survivors may feel retraumatized by their disclosure (Campbell, 2001). A critical barrier in the trauma disclosure literature is that we have not modeled how disclosure affects the dynamic development of a survivor’s social network. We use social network analysis to examine the effects of disclosure of traumatic events on psychological functioning (PTSD, anxiety, depression, substance use), as well as further disclosure of trauma within a university setting. Survivor perceptions of social reactions from different sources can also play a role in psychological functioning and further disclosure patterns. Using the Social Reactions Questionnaire (SRQ; Ullman, 2000), we examine the how the quality of the relationship, the reasons for disclosure, and the end result of the disclosure affect survivor perception of the reactions of others and resulting psychological functioning and further social network development.

CLINICAL PRACTICE

THU 135
Spotty Therapy Attendance? The Role of PTSD Severity, Daily Stressors, and Sleep Impairment
(Abstract #1299)

Poster #THU 135 (Practice/Violence) I – N/A
Franklin A

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The attrition rates in PTSD treatments are substantial and it has been speculated that the avoidance inherent in the disorder can lead to session cancellations and no-shows. Symptom severity has been identified as a potential predictor of problematic attendance and, ultimately, drop-out (Chard, 2005). Less is known about the role of daily stressors and chronic sleep loss (Chard et al., 2010) although, clinically, patients cite these as reasons for poor attendance and drop-out. The current study aims to assess the relationship between PTSD severity, minor daily stressors, and sleep impairment in predicting...
treatment drop-out and attendance among 131 patients who participated in Cognitive Processing Therapy. Preliminary results showed PTSD severity, frequency of stressors, and sleep impairment (p’s< .05) differed between treatment completers and drop-outs in the expected direction. However, for individuals who completed treatment, it appeared that PTSD severity, daily stress, and sleep impairment was not related to attendance at all. Only frequency of daily stress (p< .05) differed between those with regular and poor attendance, suggesting that frequent daily stressors can prevent regular attendance. It is anticipated that an additional 30 patients will be added to the dataset by November.

THU 136
The Relation between Self-Compassion and Avoidance Symptoms of Post-Traumatic Stress Disorder among a Clinical Sample of Trauma Survivors
(Abstract #88)

Poster #THU 136 (Practice/Diverse Pop) I - Industrialized

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Self-compassion (SC) has been defined as a healthy form of self-acceptance consisting of self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus over-identification with painful experiences (Neff, 2003a). High levels of SC are associated with adaptive functioning, whereas low levels are linked to poor outcomes, such as thought suppression (Neff, 2003a). Since thought suppression and avoidance are features of post-traumatic stress disorder (PTSD; Rosenthal et al., 2006), the current study seeks to examine the relations between SC and PTSD avoidance symptoms among a sample of treatment-seeking trauma survivors. Participants include 20 adults receiving therapy at a local community mental health clinic. Most are female (68.8%), with a mean age of 38.31 years (SD = 12.22). Data collection is ongoing and 50 participants are expected to complete the study. All participants complete the Self-Compassion Scale (Neff, 2003b), the Brief Trauma Questionnaire (Schnurr et al., 1999), and the Post-Traumatic Stress Disorder Scale (Foa et al., 1993). Preliminary analyses indicate that, contrary to expectations and past research (Thompson & Waltz, 2008), greater self-kindness is associated with greater avoidance symptoms (r = .27). Results may suggest that individuals with PTSD might perceive avoidance of painful experiences as a way to be kind to themselves.
THU 137
Impact of Mild Traumatic Brain Injury on PTSD Severity and Alcohol Use
(Abstract #1292)

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3Michael E. DeBakey VA Medical Center, Houston, Texas, USA

Increasing numbers of Veterans are being diagnosed with Post-Traumatic Stress Disorder (PTSD) and mild traumatic brain injury (mTBI). Alcohol use within these populations is common, but little is known about the combined effects of PTSD and mTBI on alcohol consumption. This research examined 1) symptom overlap between mTBI and PTSD, 2) impact of mTBI on PTSD severity, and 3) influence of comorbid PTSD and mTBI on alcohol use. OEF/OIF Veterans (N=1,071) were evaluated and categorized into four groups: Neither PTSD nor mTBI, mTBI, PTSD, or PTSD+mTBI. Overlap was found between PTSD and mTBI, particularly in terms of hyperarousal symptoms. Veterans with comorbid mTBI+PTSD had greater PTSD severity than Veterans with PTSD only, t(319)= -2.13, p = .034. Men and women differed regarding alcohol use. Male Veterans with PTSD consumed more alcohol as compared to the non-PTSD groups irrespective of mTBI status, F [3,946]=13.73, p < .001. Female Veterans, regardless of diagnostic group, consistently reported risky drinking behaviors (defined by AUDIT-C). These findings indicate that PTSD symptoms are compounded in the presence of mTBI and highlight the importance of addressing hyperarousal symptoms early in treatment. Additionally, PTSD is uniquely associated with higher levels of drinking in male Veterans, whereas female Veterans generally constitute a high-risk group for risky drinking.

THU 138
Rates and Predictors of Referral for Individual Psychotherapy, Group Psychotherapy, and Medications Among Iraq and Afghanistan Veterans with PTSD
(Abstract #161)

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Referral for mental health treatment is a critical yet understudied step in the process of engaging patients in post-traumatic stress disorder (PTSD) treatment. This study investigated treatment referral patterns by examining rates and predictors of referral for individual therapy, group therapy, or medication within a large Veterans Affairs (VA) PTSD clinic. Participants were 388 Iraq and Afghanistan Veterans who were referred for PTSD treatment following a mental health evaluation for new VA
enrollees. The majority of the sample was referred for medication (79%), with comparatively fewer referrals for individual (39%) or group (24%) therapy. Forty percent of participants were referred for combined medication and psychotherapy. Separate logistic regression analyses were constructed to examine patient-level predictors of referral type. Female Veterans and those with lower clinician ratings of overall functioning were more likely to be referred for individual therapy. Group therapy referrals were more common in Veterans who were older, unemployed, identified as an ethnic minority, or had a comorbid anxiety disorder. There were no significant predictors of medication referral. Data indicate that psychotherapy has yet to rival medication with respect to rates of referral for PTSD treatment, and that specific patient characteristics appear to influence treatment referral type.

THU 139
Challenges Faced by VA Substance Use Disorder and PTSD (SUD/PTSD) Specialists
(Abstract #1180)

Poster #THU 139 (Practice/Mil/Vets) M - Industrialized
Franklin A

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The Veterans Health Administration funded the addition of a Substance Use Disorder and Post-Traumatic Stress Disorder (SUD/PTSD) specialist positions in PTSD specialty clinics to facilitate integration of SUD/PTSD treatment; however, little is known about what challenges the specialists face in defining and fulfilling these new roles. This study interviewed 10 SUD/PTSD specialists to examine their experiences and challenges they face. Semi-structured telephone interview were audio-taped, transcribed in verbatim, coded with ATLAS.ti, and examined for themes in 4 main areas: primary roles and activities, perceived expertise needed for this position, challenges, and support needed to better fulfill roles. Major themes that emerged included: Unclear role expectations, demands to fulfill other roles that are not intended for the position, heavy workload, system inflexibility, and lack of support from staff and supervisors to provide integrated care. Potential mechanisms at the individual and systemic levels to improve SUD/PTSD integrative care for patients include: programs having clearly articulated and feasible role expectations for SUD/PTSD specialist, recruiting staff with appropriate skills for the position, providing additional training in targeted areas, and providing support at the interpersonal and systemic levels to facilitate integrative care.
THU 140
Analysis of Proactive Coping in Managing Stressful Events
(Abstract #521)

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Coping permits individuals to identify harm, manage stressful situations, and to grow from stressful endeavors. A growing body of literature has identified proactive coping as a positive, protective factor for managing stressful events and emotional distress. Proactive coping can be defined as an effort, undertaken in advance, to build up resources to be used to address challenges and pursue personal growth. Individuals reporting high levels of proactive coping demonstrate a resiliency towards stressful situations and negative and a higher levels of post trauma gratitude and personal growth from negative experiences. The purpose of the present study was to determine the level of impact that different coping strategies have on an individual’s level of negative emotions (i.e., stress, anxiety, and depression). Analyses were performed and results indicated that there were significant differences in level negative emotions based on the different coping strategies ($r=\cdot21to\cdot45$). Overall, the results of this study provide supporting evidence of proactive coping as a positive, effective coping strategy for managing traumatic, stressful events.

CLINICAL/INTERVENTION RESEARCH

THU 141
Preparing Women with Complex Trauma to Engage in Trauma Processing: A Brief Intensive Intervention
(Abstract #1644)

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Many individuals who experience chronic or complex trauma would benefit from trauma-focused therapy, yet are unable to sufficiently regulate the intense emotions involved in processing past trauma. Those who have experienced chronic or complex trauma are more likely to engage in maladaptive attempts to cope with painful emotions related trauma (such as self-harm, suicidal attempts, and substance use) which may contraindicate trauma processing. Coping skills-based interventions have shown to be an effective way preparing these individuals to engage in trauma processing therapy, yet these interventions take months if not more than a year. We have endeavored to develop to develop a curriculum for abriefer, intensive outpatient program that could prepare patients to engage in trauma processing in as little as 4 weeks. The curriculum of this program incorporates evidence-based
interventions from multiple therapies used with individuals who have experienced trauma. We will present data collected as part of a pilot intervention, as well as data from our ongoing program. Outcome measures have shown improvement in several areas, most notably for emotion regulation. Results indicate that this curriculum is targeting intended issues and is likely to be effective in helping patients prepare to engage in trauma processing therapy.

THU 143
Substance Abuse and Trauma in Incarcerated Women: Fostering Resilience through Integrated Treatment
(Abstract #1253)

Poster #THU 143 (Clin Res/Adult/Cmplx) I – N/A

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Studies with incarcerated women have shown high rates of trauma exposure and substance use compared to community populations. The relationship among trauma exposure, post-traumatic stress disorder (PTSD), substance abuse (SA) and incarceration is complex. Prominent theory suggests that a history of trauma increases the likelihood of SA, while PTSD symptoms can increase the risk of relapse following treatment. Helping Women Recover/Beyond Trauma (HWR/BT) is a manualized group treatment which addresses trauma and substance use in an integrated format. The purpose of the present study was to evaluate the effectiveness of this HWR/BT-based treatment program versus a comparison sample, assessing for post-traumatic stress, SA self-efficacy, and other mental health symptoms. Results indicated statistically significant pre-post and between-group differences, favoring the treatment group, for negative post-traumatic cognitions. Pre-post, but not between-group, improvements were also observed for PTSD and substance-related self-efficacy. Results indicate preliminary effectiveness for this treatment program for reducing trauma- and substance-related symptoms in incarcerated women. Addressing the specific needs of these women with successful trauma- and SA-focused treatment can help to reduce relapse and decreased criminal activity. Implications and future directions are discussed.
THU 144
The Indirect Effect of Trauma-Related Guilt on the Relationship Between Social Anxiety and PTSD
(Abstract #1542)

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The co-occurrence of PTSD and social anxiety is common, but not heavily studied. Individuals with this comorbidity report increased psychopathology and impaired functioning (e.g., Zayfert, DeViva, & Hofmann, 2005). Trauma-related guilt help may explain this comorbidity, where negative attributions regarding one’s role in the trauma may increase risk for co-occurring social anxiety (e.g., Collimore et al., 2010). In the present study, two hundred individuals with PTSD completed interview and self-report measures of diagnostic comorbidity, social evaluation, and guilt. Seventy-five percent (74.5%) had lifetime diagnosis of another anxiety disorder, and 12.5% had a lifetime diagnosis of social anxiety disorder. Examining the relationship between social distress and PTSD with guilt as a moderator, the total and direct effects using bootstrap confidence intervals were 0.39, p < .001, and 0.31, p < .001, respectively. Specifically, the total indirect effect through guilt, with a point estimate of .08 and 95% bootstrap CI of 0.40 to 0.14, suggests that higher social distress was associated with more severe PTSD, with guilt having an indirect effect on this relationship. Thus, a perception of wrongdoing about the trauma may help underlie the association between others’ negative social evaluations and PTSD.

THU 145
Links between Adult Intimate Partner Violence and Child Maltreatment: The Impact of Maladaptive Schemas and Emotion Dysregulation on Revictimization
(Abstract #751)

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2University of Nebraska - Lincoln, Lincoln, Nebraska, USA
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Physical and emotional child maltreatment (CM) have been linked to intimate partner violence (IPV) in adulthood, yet more research is needed to identify factors that increase risk for revictimization among victims. Maladaptive cognitions (Crawford & Wright, 2007) and difficulties in emotion regulation (Messman-Moore et al., 2010) may be two factors that increase such vulnerability. The present study investigated whether the impact of physical and emotional CM on physical, psychological, and sexual IPV severity is amplified by the degree of post-traumatic maladaptive beliefs and emotion dysregulation. Data were collected utilizing self-report surveys from a group of 355 racially-diverse community women.
(63% college students) 18-25 years old. Results indicated that physical IPV severity was predicted by physical CM and maladaptive beliefs. Psychological and sexual IPV severity were predicted by an interaction of CM (regardless of type) and maladaptive beliefs; among victims of CM greater endorsement of maladaptive beliefs was associated with increased severity of adult psychological and sexual coercion IPV. Findings suggest that maladaptive beliefs are associated with more severe IPV among victims of physical and emotional CM. As such, schemas about self, others, and the world are an important point of intervention within this population.

THU 146
Emotion Dysregulation, Parenting and Child Outcome in a Sample of Highly Traumatized Mothers
(Abstract #1678)

Poster #THU 146 (Clin Res/Adult/Cmplx) M – N/A

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2 Atlanta VAMC/Emory University, Decatur, Georgia, USA

Previous research suggests that maternal exposure to childhood abuse and trauma throughout their lifetime is associated with increased problems with emotion regulation in adulthood. Further, it has been demonstrated that mothers’ difficulty regulating emotions may negatively impact parenting behavior, their relationship with their child, and healthy child development. The current study consisted of 100 low income mothers and their elementary aged children utilizing a mixed methods approach. All reported results were significant (p< .05). In this sample of highly traumatized parents, maternal emotion dysregulation was associated with various negative parenting behavior patterns including overreactivity, hostility, over-control, and physical abuse potential, less warmth toward their child, increased feelings of distress as a parent and dysfunctional relationships with their child. Moreover, when examining child psychological health, maternal emotion dysregulation was related to increased externalizing behavior and internalizing behaviors including anxiety and depression. This data suggests that maternal emotion dysregulation is a vulnerability factor which may increase negative parenting behavior and risk for child psychological difficulty.
THU 147
Childhood Emotional Abuse as a Predictor of Adult Axis I Pathology: Results from a Meta-Analysis
(Abstract #807)

Poster #THU 147 (Clin Res/Adult/Cmplx) I – N/A

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The recognition that abuse during childhood produces psychological harm is relatively new to the field, first emerging in the 1960’s. Since then, research on the impact of childhood abuse has exploded, with the bulk of the literature focusing primarily on physical and sexual abuse. It was not until recently that emotional abuse, broadly defined as incidents in which an individual is humiliated, criticized, threatened, rejected, and/or controlled, began to emerge in the discourse. Although recent research on emotional abuse reveals that it predicts adverse outcomes, the broader psychological impact of childhood emotional abuse and how it compares to other forms of abuse remains under-researched.

The present study is a meta-analysis of 190 studies on the impact of childhood emotional abuse (CEA) on Axis I pathology. This analysis examines the impact of emotional abuse while statistically controlling for other trauma exposure, such as childhood physical and sexual abuse (CPA and CSA). Preliminary analyses reveal that the effect size of the relationship between CEA and Axis I pathology is equal to the effect sizes of CPA and CSA and psychopathology, and that all Axis I pathologies have relatively equal relationships to abuse. In other words, PTSD is not selectively associated with childhood abuse. Implications for future research, diagnosis, treatment, and policy are discussed.

THU 148
Acupuncture and Mindfulness-Based Stress Reduction among Child Abuse Survivors with PTSD: A Randomized Waitlist-Controlled Pilot Study
(Abstract #1070)

Poster #THU 148 (Clin Res/Adult/Cmplx) M – N/A

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Adult survivors of childhood sexual abuse carry heavy psychological burdens, and are known to be at increased risk of depression, post-traumatic stress disorder (PTSD) and chronic pain conditions. Mindfulness meditation approaches have been shown to be effective in reducing many of these same symptoms. This study examined the efficacy of Mindfulness-Based Stress Reduction (MBSR), and acupuncture treatment (AT) among female child abuse survivors with symptoms of PTSD. Eighty-
three (N = 83) adult survivors were randomized to either MBSR or AT or a Wait-List Control (WLC). PTSD symptomatology was assessed at baseline, 4, 8, and 12 weeks, using the PTSD Checklist (PCL). Preliminary analyses indicate a significant time effect, i.e., in all three groups PTSD symptoms decreased over time. Moreover, the interaction of time and group was significant (F =3.37; p =0052) where the groups changed over time, but in different ways. Statistically significant improvements were observed in PTSD symptoms for all groups with the largest effect size for AT (d =1.38) and for MBSR (d=.99) compared to WLC (d=.32). Of the three PTSD symptom criteria, symptoms of Avoidance (d =1.33) and Hypervigilance (d =1.14) were most greatly reduced by AT. The results warrant further investigation of AT and MBSR for PTSD symptoms.

THU 149
Relationship between Childhood Parentification, Psychological Symptoms and Mindfulness Skills by Caretaker Disability Type
(Abstract #1246)

Researchers committed to studying abuse and neglect often fail to pay enough attention to the familial context in which these traumas occur. The present study examined childhood parentification and its relationship to current psychosocial domains, including mindfulness skills and psychological symptoms. Uniquely, this study explored the relationship between specific familial circumstances which determined the caretaker’s placement of the child in this role (i.e. parental physical or mental illness or substance abuse) and how this leads to differences in later psychosocial functioning. A diverse community sample of participants (N=201) completed self-report measures of adverse childhood experience, filial responsibility, mindfulness, and psychological symptoms. Results indicated that any caregiver disability was associated with higher levels of parentification and later in life psychological symptoms. Individuals of caretakers with mental illnesses also had lower ratings of mindfulness skills. Our results also indicated that mindfulness and psychological symptoms were more accounted for by parentification than by adverse childhood experiences. Due to the dynamics of parentification, there is often little psychological assistance provided to the child. Studies of this nature can further understanding of this underserved population and offer important implications for treatment.
THU 150
Learned Resilience Intervention for Young Adults with Adverse Childhood Experiences
(Abstract #27)

**Poster #THU 150 (Clin Res/Adult/Cmplx) M - Industrialized**

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While one third of adults have been victims of adverse childhood experiences (ACE) with sequela of childhood maladaptation, adolescent health risk behaviors and adult chronic illness, there have been limited interventions. The problem is that following the traditional medical model with a focus on symptoms and referral may not interrupt the trajectory of ACE to illness, only treating current concerns. The purpose of this study was to assess a strength-based educational intervention with young adults who have ACE. Methods are a 3 trial random sample of self-selected college students, n=60, into intervention and control groups. The Empower Strength4 intervention focuses on resilience theory of building strengths rather than repairing disorders. The workshop consists of 1) ACE connection to health and resilience; 2) Identifying strengths 3) Building a positive brain through cognitive flexibility 4) Developing social support. Results: Repeated measures analysis of variance (RM-ANOVA) will be used to test the intervention effect across time (pre-survey, 3 and 6 months post-intervention) on participants’ symptoms, risk behaviors and resilience. Data analysis, including qualitative responses to structured writing and satisfaction survey results will be analyzed summer 2013 and reported at the conference. To date participation has been remarkably positive.

THU 151
Barriers to Thriving: The Role of PTSD Symptoms in Batterers Programs
(Abstract #1664)

**Poster #THU 151 (Clin Res/Adult/Cmplx) I – N/A**

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Studies have found that men who reported more symptoms of post-traumatic stress disorder (PTSD) also reported anger, aggressive behavior, and intimate partner violence (IPV). Some research suggests that increased PTSD symptoms can lead to information processing deficits and problems regulating emotions which could play a role in the relationship between PTSD and aggression. For individuals in batterer intervention programs (BIP), studies have demonstrated a positive relationship between PTSD symptoms and IPV. It is hypothesized that increased PTSD symptoms in male perpetrators could act as a barrier to resilience and learning skills to reduce aggression. The current study analyzes the relationship between PTSD symptoms and attrition and recidivism post treatment in a court-ordered BIP. A logistical regression supported the hypothesis that individuals with higher PTSD symptoms were less likely to complete the program. PTSD symptoms were not shown to be a predictor of new violent charges or
protective orders. Results indicate that increased PTSD symptoms could be a risk factor in preventing completion of BIPs. Unresolved PTSD symptoms prior to starting BIPs may make it harder for the individual to incorporate new information and hinder changes in aggression due to interfering emotional regulation problems. Treatment and policy implications will be discussed for this population.

THU 153
Patients' Profile in the Center of Studies and Research on Trauma and Stress in Southern Brazil
(Abstract #1616)

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Despite the high rates of violence in Brazil, there are few studies describing the Brazilian traumatized population and even fewer centers for treating trauma victims. This study draws a clinical profile of 115 patients treated at the Center of Studies and Research on Trauma and Stress, in Southern Brazil. Data were acquired through a social-demographic questionnaire, SCID-I, SPTSS, BAI and BDI. Patients had a mean age of 41.83 years. 76 were women (66.1%). The most frequent types of trauma were assault/robbery (33%, n=35), sexual violence (10.4%, n=11), witnessing the death of a close person (10.4%, n=11) and motor vehicle accident (8.5%, n=9). Screening revealed high scores on SPTSS (M=5.57, SD=2.29), BDI (M=25.02, SD=13.21) and BAI (M=22.77, SD=14.32). Roughly half of the sample was diagnosed with current Post-Traumatic Stress Disorder (56.9%, n=62) and Major Depressive Episode (47.7%, n=52). Both diagnoses were in comorbidity in 30.27% of patients (n=33). Interpersonal violence was the most common traumatic event, and depressive episodes seem a post-traumatic reaction nearly as prevalent as PTSD.

THU 154
Substance Use, Problems and Sex-Related Alcohol Expectancies: Differential Predictors of Substance-Related and Forcible Rape
(Abstract #216)

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³University of Mississippi, Jackson, Mississippi, USA

Substance use has been linked to rape in general but more research is needed to determine which factors predict specific types of rape. Female community women (65.2% college students) completed
surveys on substance-related (SR) and forcible rape (FR), substance use variables, and sex-related alcohol expectancies (SRAES). Substance use variables included alcohol use and problems (AUDIT) and drug use and problems (DUQ). SR rape victims (n = 85) had significantly higher scores on substance use variables and SRAES subscales (disinhibition, enhancement, risky sexual behavior) than non-victims (n = 311). In logistic regression analyses, disinhibition, alcohol-expectancies, alcohol use, and drug and alcohol problems predicted SR rape. Models that included substance problems accounted for slightly more variance in SR rape (Nagelkerke R² = .27) than models that included substance use (Nagelkerke R² = .24). Models that included substance problems accurately classified 76.2% of non-victims and 70.2% of SR rape victims with an overall classification rate of 74.9%. Drug problems were the only significant predictor of FR (Nagelkerke R² = .02). The pattern of results suggests that beliefs about sexual disinhibition, alcohol and drug problems, and to a lesser extent use, significantly impacts SR risk. Implications for future research and intervention will be discussed.

THU 156
Preliminary Data about the Efficacy of Cognitive Behavior Therapy for Post-Traumatic Stress Disorder in a Brazilian Sample
(Abstract #1561)

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Post-traumatic stress disorder (PTSD) is a maladaptive reaction to a traumatic event, such as interpersonal violence or natural catastrophes. Its core symptoms include flashbacks, avoidance of stimuli associated with the traumatic event and hyperarousal. Cognitive Behavior Therapy (CBT) is considered to be the most effective treatment for PTSD. However, studies about its efficacy for treating Brazilian patients are lacking. This research was conducted in the Centre of Studies and Research in Traumatic Stress (NEPTE) in Southern Brazil. Patients (n=7) were victims of traumatic events such as sexual abuse, robberies, kidnappings and motor vehicle accidents, treated with CBT over eighteen sessions of fifty minutes each. The CBT protocol for PTSD included four sessions of psychoeducation, six sessions of exposure and eight sessions of cognitive restructuring and relapse prevention. The instruments used for symptom assessment were BAI, BDI-II, SPTSS and PTCI. Preliminary data revealed a significant decrease of PTSD and anxiety symptoms with p≤0,05 in all measures. Post-traumatic cognitions also improved. This preliminary data suggests that the CBT protocol for PTSD adapted to Brazilian patients is reliable and should be used in future research.
THU 157
Recovery as the Modal Outcome for Sexual Assault Survivors after a Brief Video Intervention
(Abstract #1254)

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Although studies have examined trajectories of post-traumatic stress disorder (PTSD) symptom severity, overall and by symptom cluster, individual symptom courses have not been investigated. The current study examines this gap utilizing longitudinal data from sexual assault survivors immediately following a sexual assault examination, 2 weeks, 2 months, and 6 months post-assault. Participants were randomized to view a brief video-based intervention at the time of the exam to provide psychoeducation about common post-assault symptoms and useful coping skills. It was hypothesized that: (1) avoidance symptoms would remain elevated over time, while other symptoms decrease; (2) participants who were shown the video would have lower symptom severity at all time-points; and (3) recovery would be the modal outcome (symptom means would return to baseline at 6 months). Participants (n = 36) who completed a self-report measure of PTSD symptoms all time points were included in the analyses. Severity of symptoms was compared between time points for all participants, and by group at each time point. Results supported the first and third hypotheses, although only one significant difference emerged between groups by video viewing. Individuals in the video group reported greater nightmare severity at 2 weeks. Results suggest that recovery is the modal outcome for survivors of sexual assault.

THU 158
Predictors of Ongoing Violence among Intimate Partner Abuse Survivors: Childhood Betrayal Trauma, Symptoms, and Dependence on One’s Perpetrator
(Abstract #325)

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Determining factors that predict women’s exposure to additional violence after an incident of intimate partner abuse (IPA) is essential to informing interventions. The objective of the current study was to assess prospectively whether childhood betrayal trauma (BT), trauma-related symptoms (PTSD, depression, dissociation), and factors promoting women’s dependence on their perpetrators (unemployment status, number of children) increased women’s risk of experiencing further IPA with the same offender. Women (N=190) from a U.S. city were recruited based on an IPA incident reported to the police. Women reported on their childhood BT experiences, employment status, number of children, and trauma-related symptoms initially. Six months later, women reported on ongoing events of IPA (physical, sexual, psychological aggression, injury). Results showed that higher levels of childhood BT
predicted ongoing IPA over the course of six months. Higher levels of depression and lower levels of PTSD symptoms predicted increases in women’s exposure to physical, sexual, and psychological aggression and injury. Women’s unemployment status predicted greater physical and sexual aggression and injuries. Implications will be discussed, such as the need to target women’s betrayal trauma experiences, depression symptoms, and economic opportunities to prevent further victimization.

THU 160
Impact of Verbally-Coerced Sexual Assault on Women’s Present Beliefs about Sex-Life
(Abstract #218)

**Poster #THU 160 (Clin Res/Violence) I – N/A**

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Sexual victimization has been linked to psychological distress as well as repeat victimization (Messman-Moore, Long & Siegfried, 2000). Verbal coercion, or unwanted sexual experiences due to the use of arguments, pressure, authority, or psychological manipulation, is often ignored in sexual victimization research because it is perceived to be less severe than other types (Brown, et al., 2009), even though verbally coerced sexual assault survivors blame themselves more than those who experience forcible rape. The current study examined the effects of verbally coerced sexual assault, in the absence of lifetime physically coerced or substance-facilitated assault, on women’s beliefs about control in sexual situations and satisfaction with their sex life. Data on verbal coercion (modified SES) and beliefs of sexual control and satisfaction with sex life (SSEI-W) were collected utilizing surveys from 546 college women (Mage=18.7, SD=0.84). Results of a MANOVA indicated that women who experienced verbal coercion (34.7%) showed differences in their beliefs about control and satisfaction with their sex life than those who did not [F (2,486) = 14.15, p<.001]. Follow up univariate tests revealed that women who experienced verbal coercion felt less control in and less satisfaction with their sex life. Implications for future research and intervention will be discussed.

THU 161
Mutual Influences between Post-Traumatic Symptom Clusters Throughout Two Treatments of Traumatized Adolescents: Results from a Randomized Controlled Trial
(Abstract #105)

**Poster #THU 161 (Clin Res/Child/Adol) M - Industrialized**

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The symptomatic clusters of PTSD (intrusive memories, effortful avoidance, hyper-arousal and emotional numbing; King, Leskin, King, & Weathers, 1998) begin as common reactions to a traumatic event, but persist in a dysfunctional manner among some trauma survivors. The mutual influences
between these clusters over time have shown to predict recovery from a traumatic event (Schell, Marshall, & Jaycox, 2004), yet the way they interact during treatment has not been explored. In a randomized controlled trial (Gilboa-Schechtman et al., 2010), we sought to study these mutual influences along two types of manualized treatments. Thirty-eight adolescents (24 girls, mean age = 14.05) were randomly assigned to either prolonged exposure or time-limited psychodynamic therapy. Employing an autoregressive cross-lagged modeling strategy, our findings suggest similar patterns in both treatments: A mutual influence between changes in emotional numbing and intrusion, as hypothesized by stress response theory (Horowitz, 1976); Effortful avoidance significantly predicted hyper-arousal, and marginally predicted intrusion, supporting emotional processing theory (Foa & Kozak, 1986). A mutual influence was found between hyper-arousal and intrusion, as occurs in natural recovery (Schell et al., 2004). Implications for clinical interventions and to the understanding of natural recovery are discussed.

THU 163
Empowering Parents to Lead Trauma-Focused Treatment with Young Children: An Open Trial (Abstract #57)

**Poster #THU 163 (Clin Res/Child/Adol) M - Industrialized**

Franklin A

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This pilot study explored the preliminary efficacy, parent acceptability and perceptions, and economic costs of delivery of Step One, a parent-led therapist-assisted first-line treatment within Stepped Care Trauma-Focused Cognitive Behavioral Therapy (SC-TF-CBT). Step One consisted of three 1-hour therapist-led sessions, phone meetings, National Child Traumatic Stress Network website information, and Stepping Together a workbook that parent and child worked on at home. Step Two consisted of 9 therapist-led TF-CBT sessions. Nine children ages 3 to 6 and their parents participated in SC-TF-CBT. Eighty-three percent (5/6) of the children who completed Step One and 55.6% (5/9) of the intent-to-treat sample responded to Step One. One case relapsed at post-assessment. Treatment gains were maintained at 3-month follow-up. Cost per unit improvement for post-traumatic stress symptoms and severity ranged from $27.65 to $131.33 for the responders and from $36.12 to $208.11 for the intent-to-treat sample. Parents found Step One to be acceptable, were satisfied with treatment, and liked using the skill-building activities with their children. Parents needed clarification in the workbook about the parent-child activities, and also suggested that video demonstrations might be helpful. Modifications to Step One were made and a larger trial to develop and further test SC-TF-CBT is underway.
THU 164
Effects of Gender and Group Composition on the Treatment of Adolescent Trauma
(Abstract #39)

Post #THU 164 (Clin Res/Child/Adol) M - Industrialized

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Although there is evidence to support group-based psychotherapy for adolescent trauma, previous research suggests variability in treatment response (Layne et al., 2001). As adolescent females have been found to experience higher rates of post-traumatic stress disorder (PTSD; Nooner et al., 2012), it is important to discern whether gender moderates treatment effects. In line with emotional development and gender norms (Steinberg, Vandell, & Bornstein, 2011), adolescents in therapy groups might feel more or less comfortable, and in turn receive greater or diminished benefits, depending on the group gender composition. This study examined the moderating effects of gender and group gender composition (percent female) on PTSD symptoms in a sample of 44 adolescents (M age 13.43; 71% female) receiving Trauma-Grief Component Therapy for Adolescents in 6 17-week groups at 3 urban middle schools. PTSD was assessed 4 times over 24 weeks using the UCLA-R. Three-level hierarchical linear growth models revealed that PTSD significantly decreased on average each week of treatment, $b = -0.52, p = .005$, with males showing increased rates of symptom reduction compared to females, $b = -0.46, p = .050$. Group composition did not moderate PTSD outcomes. Findings, limitations, and future directions are discussed.

THU 166
Teaching Healing After Trauma
(Abstract #1632)

Post #THU 166 (Clin Res/Child/Adol) I - Industrialized

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Healing After Trauma Skills intervention (HATS; Gurwitch & Messenbaugh, 2001; Gurwitch, 2010) is a cognitive-behavioral group treatment protocol that was developed for use with children in the wake of community-wide traumatic events. HATS is an 11-session manualized treatment that focuses on children ages 5 to 12 and incorporates material on basic safety skills in the face of disasters, psychoeducation, and treatment exercises to address symptoms and behavioral difficulties associated with trauma and loss. The manual includes “lessons” that are used to increase children’s level of social support, identify stressors that resulted from the disaster and that affected children’s everyday lives, and promote positive methods for coping with ongoing stressors. To strengthen support networks and friendship ties in the classroom, children complete activities in groups. Previous research on factors predicting children’s Post-Traumatic Stress Disorder (PTSD) symptoms following hurricanes supported components
of this program (e.g., La Greca et al., 1996; Swenson et al., 1996; Vernberg et al., 1996). The current study examined the effectiveness of HATS training given to teachers in the Sandy Hook area following a local school shooting. Pre- and post-training surveys were administered to the teachers to evaluate their understanding and willingness to incorporate HATS in their classrooms.

THU 167
Risky Relationships: Attachments to Fathers and Post-Traumatic Stress among Gang-Involved Delinquent Girls
(Abstract #461)

Poster #THU 167 (Clin Res/Child/Adol) M - Industrialized

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Post-traumatic stress (PTS) has been linked to delinquency, particularly for girls; however, research is needed to identify risk factors associated with PTS among delinquent youth. Whereas a warm father-child relationship is often protective, research suggests it may be a risk factor for girls with antisocial romantic partners. This may also be true for gang-involved girls in a network of antisocial peers. To clarify how father-child relationships may influence PTS among delinquent youth, the current study used an innovative attachment hierarchy interview to determine whether the association between father-placement in the attachment hierarchy and PTS was moderated by gang involvement and gender. 76 girls and 206 boys detained in a juvenile detention center completed an attachment hierarchy interview and self-reports of gang involvement and PTS. Multiple regressions revealed significantly different results for girls and boys. For girls, higher father placement was associated with lower PTS for non-gang-involved girls, but greater PTS for gang-involved girls. For boys, there was only a main effect of gang-involvement on PTS. These findings are consistent with prior research indicating that the benefits of a positive father-daughter relationship are moderated by the encouragement of antisocial behavior by peers and highlight the unique role that fathers play in girls’ delinquency.
THU 170
A Randomized Controlled Trial of Cognitive Behavioral Social Rhythm Group Therapy for Male Veterans with PTSD and Comorbid Major Depressive Disorder
(Abstract #1526)

Poster #THU 170 (Clin Res/Mil/Vets) M – N/A

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4 Alpert Medical School of Brown University, Providence, Rhode Island, USA
5 University of Arizona, Tucson, Arizona, USA

This study employed a double blind randomized controlled design to compare group Cognitive Behavioral Social Rhythm Therapy (CBSRT) to Present Centered Group Therapy (PCGT) in 43 male Veterans with PTSD, Major Depressive Disorder, and difficulties with sleep. CBSRT is a 12-session integrative group psychotherapy targeting both sleep and psychiatric symptoms via change of daytime and nighttime behavioral patterns. We hypothesized that CBSRT would be superior to PCGT in improving mental health and sleep symptoms. Over the course of the study, 43 participants were randomized and started group therapies across 5 waves. Intent-to-treat analyses indicated that both therapies resulted in clinically significant improvements in PTSD, depression, and sleep, with few statistically significant differences between conditions. Some data indicated that CBSRT may have slight benefit over PCT in improving depression and sleep efficiency. Significant residual symptoms remained in all outcome categories. CBSRT was associated with fewer therapy dropouts (14% CBSRT v. 36% PCGT) demonstrating that it may be a more acceptable therapy than PCT. Overall, these findings are valuable in that they suggest that CBSRT may be an acceptable, present-focused, adjunctive group therapy treatment option for Veterans with comorbid PTSD and MDD. Acknowledgements: Department of Defense (Grant #W81XWH-08-2-0121)

THU 171
Factors Affecting End of Treatment Symptom Severity for Children Receiving Trauma-Informed Evidence-Based Treatment
(Abstract #934)

Poster #THU 171 (Clin Res/Child/Adol) M – N/A

Eslinger, Jessica, Doctoral Student, Sprang, Ginny, PhD
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The purpose of this presentation is to discuss the moderating effects of treatment type on the traumatic stress and behavioral outcomes of children ages 2 -12 receiving trauma-informed evidence -based interventions. Method: Caregivers and children receiving outpatient services (N=134) completed the Child Behavioral Checklist, Trauma Symptom Checklist for Young Children, and the Trauma Symptom
Checklist for Children—Alternate Version at baseline and end of treatment. A series of ANCOVA analyses were conducted to examine the relationships between a child’s gender, guardianship status, type of treatment received, number of different types of traumas, child age, and end of treatment scores on the above mentioned measures. Results: While statistically significant improvements were found between all baseline and termination outcome scores regardless of treatment type, TF-CBT was found to more successfully reduce externalizing and total problem scores at termination compared to PCIT. Despite the relatively young age of this sample, older age was found to be predictive of elevated externalizing and total problem scores on the CBCL. Implications: Trauma recovery is dependent upon successful matching of client characteristics and need to treatment type. The implications of these findings will be discussed with specific recommendations on how clinicians can achieve this goal.

THU 172
Mediating Effect of Adolescents’ Social Support between Parents’ Anxiety Symptoms and Adolescents’ Anxiety Symptoms Following Wenchuan Earthquake
(Abstract #1074)

Previous studies have shown that the anxiety and depression in parents would be harmful to children’s development. The current study investigated the relationship among parents’ anxiety symptoms, anxiety symptoms and social support in adolescents following Wenchuan earthquake. After 18 months of Wenchuan earthquake 1282 Middle School students and their parents in Dujiangyan district were asked to complete the Screen for Child Anxiety Scale (SCARED) and the Self-Rating Anxiety Scale (SAS) respectively. The study showed that total score on SCARED of the adolescents whose parents suffered from anxiety symptoms was higher than that of these whose parents did not. Meanwhile, after controlling the demographic factors, earthquake exposure factors and maternal anxiety symptoms, paternal anxiety symptoms could significantly predict adolescents’ anxiety symptoms (p<.001). Besides, maternal anxiety symptoms moderated the relationship of paternal anxiety symptoms and adolescents’ anxiety symptoms (p<.001). In addition, social support in adolescents could partially mediate the relationship between parents’ anxiety symptoms and adolescents’ anxiety symptoms (p<.001). Focusing on the emotional symptoms in parents and increasing adolescents’ social support may contribute to protecting adolescents from anxiety symptoms following earthquakes.
THU 173
A Study of Multiple Sources of Resilience in Peruvian Fire Survivors
(Abstract #375)

Gargurevich, Rafael, PhD
Universidad Peruana de Ciencias Aplicadas, Lima, Peru

The present study investigated the role of three different variables associated with Grotberg’s conceptualization of resilience (“I have, I am, I can”), in a sample of survivors of the Lomo de Corvina fire in Villa El Salvador, in the city of Lima, Peru. More specifically, two different dimensions of personality (dependency and self-criticism), four kinds of social support (instrumental, emotional, received and perceived) and four ways of “traditional” coping (culture specific ways to cope with distress such as going to a Chaman) were associated with post-traumatic stress disorder symptoms. Relations among variables were studied cross-sectionally (Time 1, four month after the disaster) and longitudinally (Time 2, one year after Time 1). Time 1 participants were 174 survivors, and in Time 2 the survivors were 118. The study gave mixed results. In contradiction to expectations, social support was not found to buffer the effect of distress; however, perceived emotional support at Time 1 mediated the relation between self-criticism (Time 1) and distress (PTSD symptoms at Time 2). Also, traditional ways of coping were not associated with distress after the fire. Results showed the great importance of perceived motional social support after a disaster.

THU 174
Resilience in Aid Workers in High-Conflict Versus More Stable Nations
(Abstract #1558)

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Collective violence has generally been found to engender distress. There are, however, a variety of outcomes following potentially traumatic events, (Bonanno et al. 2012). Individuals’ capacities for flexible coping (Kato, 2012), cognitive reappraisal (e.g., Ehlers & Clark, 2008), and conservation of resources (e.g., Hobfoll, 2012), are likely to interact with genetic, social, and environmental factors (Auxéméry, 2012) to produce adaptive or dysfunctional trauma responses. We assessed potential contributions to resilience in an archival data set gathered from 331 humanitarian aid workers from 69 nations of origin during routine training. The 112 workers from nations with high levels of conflict tended to be somewhat less resilient, according to scores on the Connor Davidson Resilience Scale (2003), than the 219 workers from low conflict nations, t(327) = 3.08, p = .002, and to acknowledge more incidents of vicarious (but not personal) trauma t(327) = 4.20, p <.0005. Interestingly, although these workers also acknowledged more recent symptoms of avoidance, intrusion, and hyperarousal in response to traumatic events than those from low-conflict nations, they indicated less vulnerability to
stress, t(327) = 2.95, p = .002. These findings highlight the importance of coping, adaptation, and growth within situations of chronic stress.

THU 175
Longitudinally Predicting Impairment Following Mass School Violence: The Delayed Effect of Forgiveness for the Perpetrator
(Annex #37)

Poster #THU 175 (Clin Res/Disaster) I - Industrialized

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On April 16, 2007, 33 students, faculty, and staff at Virginia Tech were killed and 17 injured during the deadliest school shooting in U.S. history. These events provide a tragic yet poignant medium to understand functioning among survivors of violent events carried out in educational settings. This study examined the effect that post-traumatic stress symptom severity and forgiveness for the perpetrator measured 3 to 4 months post-shootings have on functional impairment one year later among 134 student survivors who reported injury to or loss of a friend or significant other as a result of the shootings. Cross-sectional regression analyses showed that PTS symptom severity had a significant negative prediction of functional impairment 3 to 4 months post-shootings (B = .290, p < .01). Forgiveness for the perpetrator, however, did not have a significant relationship with functional impairment 3 to 4 months post-shootings (B = .016, p = .946). Longitudinal analyses found that forgiveness 3-4 months post-shootings significantly predicted functional impairment one-year later (B = -.713, p < .01) over and above the effect of proximal PTS symptom severity (B = .139, p < .01). These findings suggest that an earlier capacity to forgive may influence the process of returning to effective everyday functioning. Theoretical and empirical implications are discussed along with limitations.

THU 176
Mindfulness: The Relationship With Post-Traumatic Stress Symptoms And Post-Traumatic Growth
(Annex #45)

Poster #THU 176 (Clin Res/EmergWrkrs) M - Industrialized

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Mindfulness-based treatments have been identified as potentially effective for reducing PTSD symptoms, however, few studies have examined the association between various facets of mindfulness and both post-traumatic distress and post-traumatic growth (PTG). This study investigated the relationship between mindfulness (utilizing the KIMS) and both post-traumatic stress symptoms (utilizing the IES-R) and PTG (utilizing the PTGI) among active-duty police officers (N=183) from a
Midwestern state. Regarding post-traumatic distress, multiple regression analyses showed that greater IES-R avoidance and intrusion subscale scores were significantly predicted by lower KIMS accepting without judgment subscale scores. Greater IES-R hyperarousal subscale scores were significantly predicted by lower KIMS accepting without judgment and describing subscale scores. Regarding PTG, results of multiple regression analyses showed that greater PTGI appreciation for life and personal strength subscale scores were significantly predicted by lower KIMS accepting without judgment subscale scores. Greater PTGI relating to others subscale scores were significantly predicted by lower KIMS accepting without judgment and greater describing subscale scores. The KIMS observing and acting with awareness subscale scores did not significantly predict post-traumatic distress or PTG. Clinical implications are discussed.

**THU 177**

**Prevalence and Predictors of Suicidal Ideation among U.S. Law Enforcement Officers**

(Abstract #77)

**Poster #THU 177 (Clin Res/EmergWrks) M - Industrialized**

**Franklin A**

Chopko, Brian, PhD¹, Palmieri, Patrick, PhD², Facemire, Vanessa, BA²

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²Center for the Treatment and Study of Traumatic Stress, Summa Health System, Akron, Ohio, USA

Police officers have often been reported to experience high rates of suicide compared to the general population as a result of traumatic and other occupational-related stressors, yet other researchers report different findings. Suicidal ideation (SI) is considered a strong predictor of suicidal acts. However, few studies have examined SI in U.S. law enforcement officers. Additionally, these studies utilized participants from large and urban police departments, not representative of the majority of officers in the U.S. This study investigated the prevalence of SI and the association between SI and amount of PTSD symptoms, subjective work-related traumatic stress, personal relationship stress, work-related but non-traumatic stress, age, depression, alcohol use, and post-traumatic growth (utilizing instruments including the GHQ-SI, PCL-S, PHQ, AUDIT, and PTGI) among U.S. law enforcement officers (N = 193) from various size police departments throughout a Midwestern state. Multiple regression analysis demonstrated that only greater depression symptoms (with the SI item removed from the PHQ) uniquely and significantly predicted greater SI among officers. Interestingly, post-traumatic growth was not significantly associated with SI. Clinical implications are discussed.
THU 178
Resilience and Stress Vulnerability in International Versus American Students
(Abstract #1557)

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The prevalence of lifetime traumatic events in college students is estimated between 66% to 67%, with approximately 4% to 9% of those students meeting criteria for post-traumatic stress disorder (PTSD; Read et al., 2011). We collected 1,802 sets of data from Southern California college and university students. According to scores on the Conner Davidson Resilience Scale (Connor & Davidson, 2003), the 218 international students tended to be less resilient than their 1,584 American counterparts, t(1800) = -1.23, p = .01, with more incidents of life-threatening traumatic events, t(1717) = 2.07, p = .017. Interestingly, international students indicated more vulnerability to stress on the Stress Vulnerability Scale (Miller & Smith, 1985) than their American peers, t(1800) = 4.94, p = .002, but reported less participation in psychotherapy or counseling, t(1800) = -3.803, p < .001. Although the number of different types of trauma experiences did not correlate with their vulnerability to stress, r(203) = .07, p = .32, as it did for the American students, r(203) = .20, p <.0005, there was a strong correlation between their degree of emotional instability and their vulnerability to stress, r(216) = .38, p < .0005. These findings highlight the importance of providing appropriate campus counseling services for the increasing number of international students in U.S. college campuses.

THU 179
Emotion Regulation and Self-Silencing: Key Mechanisms Linking Trauma and Depression
(Abstract #1429)

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Well-established associations between trauma and depression exist. However, exact mechanisms for this relationship, especially among African American women, remain unclear. Emotion regulation difficulties and self-silencing (prioritizing others’ needs, adopting external evaluation standards, inhibiting expression to avoid conflict) may help explain why trauma and depression are related. This study examined the mediating role of emotion regulation difficulties and self-silencing in 179 African American female trauma survivors, who completed questionnaires for a study of African American women’s life experiences. Trauma exposure/distress was significantly related to depressive symptoms (path c) and emotion regulation difficulties (path a). Emotion regulation difficulties were significantly associated with depressive symptoms when controlling for trauma (path b), and all indirect paths from trauma to depressive symptoms through emotion regulation difficulties (a*b) were significant. These findings indicate that emotion regulation difficulties accounted for a significant portion of the relationship between trauma exposure/distress and depressive symptoms (percent mediation
estimate=41.74%). Similar results were found for self-silencing, yielding a percent mediation estimate of 30.94%. Implications of these findings, as well as limitations and future directions, will be discussed.

**THU 180**
Interpersonal Problems, and Impaired Assessment of Trust and Fear in a Trauma-Exposed and PTSD Population: An Experimental Study
(Abstract #1027)

Poster #THU 180 (Clin Res/Diverse Pop) I - Industrialized Franklin A

Tsoi, Fai, Undergraduate, Papini, Santiago, MA Student, Bibi, Raquel, PhD Candidate, Hien, Denise, PhD, ABPP, Fertuck, Eric, PhD, Melara, Robert, PhD
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Background: Trauma exposure can cause disruptions to view of self and others leading to impaired emotional awareness and interpersonal relationships. Compared to trauma-exposed populations with no Axis I disorders, PTSD participants have greater attentional bias towards threat related faces. PTSD participants demonstrated decreased sensitivity and lower accuracy towards fear and sadness, requiring more specific expressions for correct identifications. Method: PTSD (n=15), trauma-exposed (n=15), and control (n=15) participants were recruited to examine their ability to evaluate trust and fear in an experimental task (Trust Fear Task). Participants’ diagnoses were identified using SCID-DSM-IV. They also completed the IIP-32 to measure interpersonal styles. Results: Data will be analyzed using bivariate and multivariate statistical analyses. Hypotheses predict the PTSD group to have higher levels of interpersonal problems than other groups. These interpersonal problems will be associated with impaired assessment of trust and fear. Conclusion: Findings will discuss models of understanding interpersonal functioning in individuals exposed to trauma and develop PTSD. Findings will also discuss how trauma exposure and development of PTSD change a person’s assessment of others.

**THU 181**
Lives at Risk: Risk Factors Associated with Fatal Child Maltreatment
(Abstract #1686)

Poster #THU 181 (Clin Res/Child/Adol) M - Global Franklin A

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Awareness of cases of fatal child maltreatment has risen significantly in recent years suggesting the presence of a serious threat to young children despite complex child welfare, clinical and legal responses to the issue. The purpose of this study was to identify differences between high risk child maltreatment and fatal risk cases and associated child protective service efforts. For this study, 50 cases of fatal and near fatal child maltreatment and 50 comparison cases were analyzed using quantitative and qualitative methods to assess risk factors selected according to a transactional model of child maltreatment. Recognition of the combination of having a male perpetrator, in cases of physical abuse,
in families with one to two children living in more rural environments notably improved the odds of predicting fatal risk cases. Descriptions of perpetrators, target children and associated patterns of service provision were also reported on to support early intervention and more proactive child protection measures.

THU 182
Does Temperament and War Era Predict Treatment Dropout Rates in Dual Diagnosis PTSD and Alcohol Dependence Treatment in Military Veterans?
(Abstract #902)

Blount, Tabatha, PhD\textsuperscript{1}, Ford, Haley, PhD\textsuperscript{1}, Raj, Jeslina, PsyD\textsuperscript{1}, Hernandez, Ann Marie, PhD\textsuperscript{2}, Mintz, Jim, PhD\textsuperscript{1}, Roache, John, PhD\textsuperscript{1}
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PTSD and substance abuse are highly comorbid in veterans (Moore & Penk, 2011). Dual diagnosis PTSD and substance abuse cause more impairment and is associated with poorer treatment adherence than either disorder alone (McCueley et al, 2012). Since treatment attendance predicts reductions in substance use (Tate et al, 2011), it is important to identify factors related to dropout in dually diagnosed veterans. Aspects of temperament are related to comorbid PTSD and alcohol dependence (Evren et al, 2010) and predict treatment dropout in other patient populations (Dalle et al, 2008). We extend the current literature by examining whether temperament dimensions from Cloniger’s psychobiological model predict treatment dropout in veterans when war era is considered. Twenty-six combat veterans (21-65 years) with comorbid PTSD and alcohol dependence completed the Temperament and Character Inventory (TCI) prior to starting a 12-week exposure-based, CBT protocol. We hypothesized that lower levels of Persistence and higher levels of Novelty Seeking, Harm-Avoidance and Reward-Dependence predict dropout. Thirteen veterans dropped out of treatment, with ten discontinuing by the 6th session. Survival analyses will be conducted using the Kaplan-Meier method, and hazard ratios will be derived through proportional hazard regression. Clinical and research implications will be discussed.

THU 183
Does Symptom Severity Predict Treatment Dropout Rates in Dual Diagnosis PTSD and Alcohol Dependence Treatment in Military Veterans?
(Abstract #679)

Blount, Tabatha, PhD\textsuperscript{1}, Raj, Jeslina, PsyD\textsuperscript{1}, Ford, Haley, PhD\textsuperscript{1}, Hernandez, Ann Marie, PhD\textsuperscript{2}, Mintz, Jim, PhD\textsuperscript{1}, Roache, John, PhD\textsuperscript{1}
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Exposure treatments for PTSD are perceived to have high dropout rates (Garcia et al., 2011). Efforts to identify predictors of treatment retention versus dropout have implicated baseline PTSD and depression symptom severity (Bryant et al., 2003; Zayfert et al., 2005), although this finding is not universally supported (Justus et al., 2006; Van Minnen et al., 2002). Predictors of dropout for PTSD (Garcia et al.) and comorbid substance abuse and depression (Tate et al., 2011) have been examined, yet little is known about dual diagnosis PTSD and alcohol dependence despite high levels of comorbidity (Moore & Penk, 2011). We address this limitation by examining whether PTSD, depression, anxiety, and drinking severity predict dropout in a larger dual diagnosis PTSD and alcohol dependence treatment study. Twenty-six veterans (21-65 years) with PTSD and alcohol dependence completed symptom measures prior to starting a 12-week exposure-based, CBT protocol. We hypothesized that greater symptom severity predicts higher dropout. Thirteen dropped out of treatment, ten by the 6th session. Results from survival analyses (Kaplan-Meier method) indicate that fewer drinks per drinking day (parameter = 16.21, SE = 7.44, X2 = 4.75, p < .05) and higher anxiety (parameter = -24.92, SE = 12.84, X2 = 3.76, p = .05) predict higher dropout risk. Research and clinical implications will be discussed.

THU 184
Patterns of Functional Impairment among Veterans with Full and Subthreshold Post-Traumatic Stress Disorder
(Abstract #693)

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2National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA
3Auburn University, Auburn, Alabama, USA
4VA National Center for PTSD, Executive Division, White River Junction, Vermont, USA

This study examined differences in functional impairment among veterans meeting full and partial diagnostic criteria for PTSD. To more carefully examine functional impairment among veterans with partial PTSD, we divided veterans in this group into 2 subgroups: those who met criteria for PTSD symptom clusters B (re-experiencing) and C (avoidance and numbing), but not D (hyperarousal) and those who met criteria for PTSD symptom clusters B and D, but not C. Two hundred eighty five male and female veterans received a diagnostic interview for PTSD and completed a battery of self-report measures of psychosocial functioning. Veterans with full PTSD reported the greatest social, occupational and self-care impairments compared with individuals in both partial PTSD groups and without PTSD. Within the partial PTSD group, individuals meeting criteria for symptom clusters B & C only reported greater overall functional impairment as well as greater impairment in Family, Work, Friendship, Parenting, and Self-care domains than those who met criteria for symptom clusters B & D only. These results suggest that different patterns of functional impairment may be related to different types of partial PTSD. Such differences may have important clinical implications.
THU 185
Post-Traumatic Dreams and PTSD
(Abstract #1017)

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²Australian Centre for Post-Traumatic Mental Health, University of Melbourne, East Melbourne, Victoria, Australia

Dreams are common in the aftermath of trauma and may serve an adaptive emotional processing function. But the repetitive dreams of PTSD are a symptom of psychological disorder, with no adaptive purpose. As a first step towards understanding the difference between PTSD and non-PTSD dreams following trauma, this research investigated the features of PTSD dreams associated with PTSD severity. The sample comprised 40 veterans and 20 civilians with PTSD. Dream phenomenology (structured interview), as well as dream related sleep disturbance (Pittsburgh Sleep Quality Index, Buysse et al., 1989 and PSQI-Addendum, Germain et al., 2005), arousal (Beck Anxiety Inventory, Beck et al., 1996) and individual response (Nightmare Distress Questionnaire; Belicki, 1992) were assessed. Using a series of linear multivariate regression analyses, the study found that dreams associated with the most severe PTSD are distinguished by the individual’s response to the experience of the dream. These responses - prior to sleep, on awakening and throughout the day - could maintain post-traumatic dreams in a vicious cycle of fear, arousal and avoidance, and may explain why some post-traumatic dreams persist while others resolve over time. The findings have the potential to enhance the assessment and treatment of this complex condition.

THU 186
Acute Stress and Postconcussive Symptoms Following Blast Injury
(Abstract #1656)

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²Lackland Air Force Base, San Antonio, Texas, USA
³University of New South Wales, Sydney, NSW, Australia
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Mild traumatic brain injury (mTBI), and particularly blast injuries, have received unprecedented attention in recent years as a result of the injuries sustained in the OEF/IEF conflicts. Numerous studies have reported high rates of positive mTBI screenings following military deployment, however these are based on (a) self-report and (b) retrospective reports typically obtained in the post-deployment context. This study describes a novel approach in which psychological and postconcussive symptoms (PCS) were assessed in theater shortly after proximity to a bomb blast in Iraq. U.S. military personnel (N
were assessed at a combat theater hospital on a range of measures, including the Post-Traumatic Stress Disorder Checklist and the Military Acute Concussion Evaluation scale, following blast exposure. Overall, 57% of the sample met criteria for PCS in theater. Hierarchical regression analyses indicated that after controlling for age, gender, prior blast exposure, and presence of traumatic brain injury, the significant predictors of postconcussive syndrome (PCS) were traumatic brain injury and severity of PTSD symptoms. This finding highlights that stress reactions are pivotal in the initial presentation of PCS in the immediate aftermath of bomb blast, and point to the potential utility of early assessment and intervention.

**THU 187**
The Association between Change in PTSD Symptoms and Change in Quality of Life after Treatment for PTSD
(Abstract #1092)

*Poster #THU 187 (Clin Res/Mil/Vets) I - Industrialized* Franklin A

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Post-traumatic stress disorder (PTSD) can have pervasive negative effects on quality of life (QOL). This study examined the relationship between change in PTSD symptoms and change in QOL in 235 female Veterans participating in a clinical trial of PTSD treatment. PTSD symptoms and QOL were measured before and after 10 sessions of either Prolonged Exposure or Present-Centered Therapy. Four domains of QOL were defined based on past confirmatory factor analyses: achievement (health, money, self-esteem, goals, work); self-expression (play, learning, creativity); relationships (helping, love, friends, children, relatives); and surroundings (home, neighborhood, surroundings). We regressed change in each QOL domain on change in the four PTSD symptom clusters simultaneously. Improvement in re-experiencing was uniquely associated with higher satisfaction with surroundings. Improvement in avoidance was uniquely associated with higher satisfaction with self-expression. Improvement in numbing was uniquely associated with higher satisfaction with self-expression, relationships, and surroundings. Improvement in hyperarousal was uniquely associated with higher satisfaction with achievement, relationships, and surroundings. Examining the relationship between change in PTSD symptoms clusters and change in domains of QOL may provide important information for treatment planning and evaluation.
THU 188
Complex Trauma and Criminality in Veterans in Recovery from Substance Abuse
(Abstract #416)

Mok, Caroline, PhD¹, Wooldridge, Thomas, PsyD², Christopher, Sheresa, PhD Candidate¹, Kimerling, Rachel, PhD³, Trafton, Jodie, PhD², Weaver, Christopher, PhD¹
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Previous research has demonstrated a relationship between trauma exposure/PTSD and variables related to interpersonal offending (e.g. aggression). Relatively little attention has been paid to offending by type of trauma exposure or to non-interpersonal offending (e.g. theft). We examine the relationship between trauma (childhood, military, and adult non-military) and criminality (interpersonal and non-interpersonal crimes) in (N = 100) veterans participating in a randomized controlled treatment trial for substance abuse and PTSD. Data was analyzed with linear and multiple regression. Our results showed that trauma type was not related to interpersonal offending. However, the three-way interaction effect of childhood trauma, adulthood non-military trauma, and military trauma on non-interpersonal offending was significant, as non-military adult trauma accounted for significant variance in non-interpersonal offending \([R^2 = 0.05, F (1,97)= 4.05, p = 0.01]\). Implications regarding the nature of trauma exposure and non-interpersonal offending will be discussed, as will the possible effects of selection biases.

THU 189
The Comorbidity of PTSD, Intermittent Explosive Disorder, and Other Axis 1 Disorders
(Abstract #341)

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This study evaluated the prevalence of Intermittent Explosive Disorder (IED) and its comorbidity with Axis I disorders in a population of traumatized veterans and their cohabitating partners (N = 516) with a high PTSD prevalence. Clinician-administered interviews assessed PTSD symptoms, mood, and personality, and IED was assessed using the WMH-Composite International Diagnostic Interview.
(49.1%) participants received a PTSD diagnosis (severity: M = 50.57, SD= 36.14). Internal reliability for the 7-item Lifetime IED scale was α = .919. Lifetime IED mean severity was M = 3.1, SD = 4.23 (range: 0 - 14). 75 participants (14.5%) met IED DSM-IV diagnostic criteria. Chi-square tests revealed a significant relationship between IED and lifetime diagnoses: PTSD (p < .001), MDD (p = .025), alcohol abuse/dependence (p < .001), and substance abuse/dependence (p = .028), indicating that IED diagnosis had a higher prevalence as a function of these diagnoses. IED severity was moderately correlated with PTSD (r = .413, p < .001), MDD (r = .321, p < .001), OCD (r = .130, p = .003), GAD (r = .242, p < .001) alcohol abuse/dependence (r = .428, p < .001), and substance abuse/dependence (r = .265, p < .001). The association between PTSD and IED highlights the importance of evaluating IED in PTSD clinical and research settings.

THU 190
Multifamily Group for Veterans with mTBI: A Mixed Methods Approach
(Abstract #955)

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Objectives: To evaluate the benefits of multifamily group in promoting reintegration and wellbeing among Veterans sustaining a traumatic brain injury (TBI) and their family members. Methods: We adapted Multifamily Group (McFarlane, 2002) to treat OEF/OIF Veterans with a positive DVBIC screen for TBI and mini-mental status ≥ 20 and their families in 3 cohorts (N=14) at two VA medical centers in an open trial. Groups met biweekly for 6 months providing education, support and problem-solving skills training. A mixed methods approach including quantitative assessments at 0, 3, 6, and 9 months and post-treatment focus groups evaluated efficacy and acceptability. Results: Steady decreases in Veteran and caregiver depression on the CES-D, Veteran anger expression (AX scale) and family burden and increases in family empowerment were observed over 9 months with moderate to large effect sizes. Some measures demonstrated maximal benefits by 6 months (Veteran AX, family empowerment) while others (family burden and Veterans and family CES-D continued to improve by as much as 39% (burden) with additional treatment. Thematic analysis of an all-couples focus group data reflected experience of help normalizing relationship problems and helping families understand Veterans’ need for support. Conclusion: This method shows promise but needs further testing in a randomized, controlled trial.
THU 191
Examine the Reciprocal Relationship between PTSD and Parenting: A Mixed Methods Study (Abstract #1588)

Poster #THU 191 (Clin Res/Mil/Vets) M – N/A

**DeVoe, Ellen, PhD MSW**¹, **Ross, Abigail, Doctoral Student**¹, **Kaufman Kantor, Glenda, PhD**²
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²University of New Hampshire, Durham, New Hampshire, USA

Post-traumatic stress disorder (PTSD) is a debilitating condition that may affect as many as 31% of veterans returning from Afghanistan and Iraq (Office of the Deputy Under Secretary of Defense, 2010). Military family members, including children, are significantly affected by the returning service member’s mental health functioning and related impairments (Committee on the Initial Assessment of Readjustment Needs of Military Personnel, 2010; Gorman, Fitzgerald, & Blow, 2010). Although parents represent a sizable (42%) group within the US military (Weins & Boss, 2006), few studies have examined the relationship between PTSS and parenting in military populations with very young children. In this presentation, the authors present findings from a mixed-methods study designed to elucidate the reciprocal relationship between PTSS and parenting. The current study employed an explanatory sequential design. In the first phase, self-report measures of PTSS, parenting stress, and child behavior were completed by 281 military parents. In the second phase, N=10 in-depth qualitative interviews were conducted with PTSD-affected parents to deepen understanding of the manifestation of PTSS of parenting and family routines and relationships. Findings from both qualitative and quantitative phases will be presented. Implications for intervention with PTSD-affected parents will be discussed.

THU 192
Proof-of-Concept Study of Moderate Intensity Exercise for PTSD in Women Veterans of Childbearing Age (Abstract #1607)

Poster #THU 192 (Clin Res/Mil/Vets) I - Industrialized

**Shivakumar, Geetha, MD, MS**, **Anderson, Elizabeth, MS**, **Suris, Alina, PhD**, **ABPP, North, Carol, MD, MPH**
Veterans Affairs North Texas Health Care System, Dallas, Texas, USA

Non-pharmacological strategies such as exercise might be attractive for women veterans of childbearing age during reproductive events such as pregnancy and postpartum. Epidemiological studies have shown exercise improves anxiety, but controlled studies are lacking in PTSD. Preliminary results of a proof-of-concept exercise study in women with PTSD will be presented. Participants with symptomatic PTSD completed 12 weeks of brisk walking. Data were collected on duration, intensity, and side effects. The Clinician Administered PTSD Scale (CAPS) was given at baseline and at the end of 12-weeks. Weekly assessments included measures of PTSD, depression, pain, and quality of life. Of the 17 eligible subjects, 10 completed the study, 3 are currently active, and 4 dropped out of the study. None reported adverse events while all experienced transient muscle soreness and stiffness. The total CAPS score decreased significantly from pre-to post-study [Δ 22 (95% CI 8.9, 35), t 3.8 (df 9) p = 0.004]. Similar significant
improvements were seen in the secondary measures. These results support the hypothesis that moderate intensity exercise is safe and may offer non-pharmacological alternative for PTSD in women of childbearing potential. A larger randomized controlled study is warranted to determine efficacy of exercise as an intervention for PTSD.

THU 193
Clinical and Demographic Characteristics of U.S. Military Psychiatric Aeromedical Evacuations from Iraq
(Abstract #1626)

Poster #THU 193 (Clin Res/Mil/Vets) I – N/A
Franklin A

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This study examined the descriptive characteristics of U.S. military psychiatric patients aeromedically evacuated from Iraq. Patient characteristics included diagnosis, rank, and mental health history. The psychiatric aeromedical evacuation (AE) cases were also evaluated based on branch of military, battle-related classification (e.g., combat or non-combat), and patient classification (e.g., ambulatory, litter). The analysis included 299 psychiatric AE cases derived from an archival database at a Contingency Aeromedical Staging Facility in Iraq. Additionally, the characteristics of this sample were compared to those of psychiatric AEs examined by Rundell (2006) at Landstuhl Regional Medical Center, Germany in 2001-2004. Results indicate that evacuated service members were most likely to be in the Army (84%), male (89%), enlisted (91%), and in the age range of 21-30 (65%). The most common AE diagnostic category was depressive disorders (23%). The characteristics of this sample were similar to the characteristics in Rundell’s sample. Nearly three-fourths of the sample of evacuees (74%) in the current study had no prior mental health history. Over half of the cases (56%) were classified as moderately severe psychiatric patients who were transported on a litter. The results for battle-related AE cases were most intriguing, as 96% were classified as non-combat related.
THU 194
Alcohol Consumption during Exposure Therapy in Veterans with Post-Traumatic Stress Disorder (PTSD) and Alcohol Use Disorder
(Abstract #196)

Poster #THU 194 (Clin Res/Mil/Vets) M - Industrialized

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Introduction. This study systematically investigates whether Prolonged Exposure (PE) produces arousal and increased drinking in Veterans with PTSD and alcohol use disorder. Methods. Fourteen treatment seeking combat veterans (ages 21-65) with a dual diagnosis of PTSD and Alcohol Use Disorder received manualized therapy as a standard of care for 12 weeks. The first 3 sessions of Concurrent treatment with Prolonged Exposure (COPE) focus on CBT techniques to address alcohol consumption and sessions 4 through 11 focus on PE techniques to address PTSD symptoms. Results. Among the total sample, we did not observe any significant increases in PTSD related arousal or alcohol consumption. We further examined the visit by visit outcomes and observed two groups defined by response to CBT treatment for Alcohol Use Disorder. The Responder Group showed substantial decreases in alcohol consumption and PTSD symptoms while the Non-Responder group failed to show the same extent of improvement resulting in significant group differences for alcohol (p<0.0001) and PTSD (p<0.05). Conclusions. It is possible that the treatment of alcohol use disorder first may have successfully prevented the increase in alcohol consumption for the Responder group in both Alcohol and PTSD symptoms suggesting that patients showing early improvements in alcohol use may be more likely to improve in PTSD symptoms.

THU 195
Resilience and Vulnerability among Portuguese War Veterans with and without PTSD
(Abstract #506)

Poster #THU 195 (Clin Res/Mil/Vets) M - Industrialized

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Background The aim of the study was to explore resilience and vulnerability among Portuguese war veterans with and without Post-Traumatic Stress Disorder (PTSD). Methods The study comprised 100 veterans, divided into two groups: one of 50 veterans with PTSD, the other of 50 veterans without PTSD, both assessed through the Clinician Administered PTSD Scale (CAPS; Blake et al., 1995). Resilience and Vulnerability were assessed respectively through the Portuguese version of the Connor-Davidson Resilience Scale (CD-RISC) (Connor, 2006) and through 23QVS (Vaz-Serra, 2000), a Portuguese developed instrument that scores “Global Vulnerability” and each of its 7 factors. Results Veterans without PTSD showed more favourable scores on resilience with respect to being able to adapt to change, and tending to bounce back after illness or hardship. Veterans in the PTSD group scored significantly higher on
factors of vulnerability such as “Global Vulnerability”, “Perfectionism and intolerance to frustration” and “Dramatization of Existence”. Conclusion Both vulnerability and resilience mediate the relationship between war and PTSD, and their interaction and correlations are hypothesized. Investigation is needed to explore further possible effects of these factors. The findings of this study are useful to design treatment in a holistic perspective both of veterans and families.

THU 196
Does Competence Count? Examining the Relationship between Therapist Competence and Client Skill and Engagement in Prolonged Exposure
(Abstract #373)

Poster #THU 196 (Clin Res/N/A) I – N/A

Franklin A

Gamarra, Jennifer, BA ¹, Stigen, Ciara, Doctoral Student², Lazarus, Sophie, Doctoral Student², Goldstein, Lizabeth, Doctoral Student², Dick, Alexandra, MA³, Wiltsey Stirman, Shannon, PhD¹
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Previous research has found relationships between therapist competence and treatment outcomes. However, it is unclear what role therapist competence plays in relation to client skill and engagement. It is plausible that the degree to which a client understands and effectively employs learned strategies from treatment, may have some impact on treatment outcomes and symptom severity. To examine this, we rated previously recorded Prolonged Exposure (PE) cases for over 100 patients in VA settings. We measured therapist competence using a modified version of the PE fidelity scale that has previously been used in clinical trials. Client-specific items were added to that scale and a new client skill and engagement scale was also developed for the purposes of the study. We will examine the relationship between therapist competence and client skill and engagement, and will assess whether client skill and engagement predicts any subsequent treatment outcomes. If relationships between client skill and engagement and improved treatment outcomes are found, it can have important implications for client resiliency and recovery after trauma. Key words: Therapist competence, client skill and engagement, Prolonged Exposure
THU 197
The Relationship between Broad Factors of the Multidimensional Personality Questionnaire – Brief Form and DSM-5 PTSD Symptoms
(Abstract #359)

Poster #THU 197 (Clin Res/N/A) M - Industrialized

**Domino, Jessica, MS (PhD Student), Feiszli, Kevin, BS, BA, Davis, Margaret, BA, Weathers, Frank, PhD**
Auburn University, Auburn University, Alabama, USA

The internalizing/externalizing model of psychopathology used to explain patterns of comorbidity in children and adults has recently been applied to explain heterogeneity in post-traumatic symptomatology. Most studies have involved clustering PTSD-positive individuals and inferring subtypes. However, a few studies have used the MPQ-BF, which assesses three factors underlying internalizing and externalizing: positive emotionality (PEM), negative emotionality (NEM), and constraint (CON). The present study examined relationships between PEM, NEM, and CON and measures of PTSD and internalizing and externalizing symptoms. Participants were trauma-exposed students (N = 72) who completed the MPQ-BF, DAPS, PCL-5, BDI, BAI, Buss-Perry Aggression Questionnaire (BPAQ), and Barrett Impulsiveness Scale (BIS-11). Regarding internalizing, the BDI was positively related to NEM and negatively related to PEM, whereas the BAI was only positively related to NEM. Regarding externalizing, the BIS-11 was only positively related to CON, and the BPAQ and DAPS Substance Abuse scale were only positively related to NEM. Importantly, PCL-5 items were only positively related to NEM, and were not related to PEM or CON. These results support the use of the MPQ-BF to assess aspects of internalizing/externalizing and suggest that NEM is uniquely related to PTSD.

THU 198
Pilot Evaluation of the Trauma Intervention Protocol for Patients with Implantable Cardioverter Defibrillators (ICD-TIPs)
(Abstract #130)

Poster #THU 198 (Clin Res/N/A) M – N/A

**Ford, Jessica , PhD Candidate, Littleton, Heather, PhD, Sears, Samuel, PhD**
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Background: A substantial number (20%) of patients with implantable cardioverter-defibrillators (ICDs) have clinically significant post-traumatic stress disorder (PTSD). The present study involved pilot evaluation of a brief (4 module), cognitive-behavioral, web-based, trauma intervention program tailored to patients with ICDs (ICD-TIPs). ICD-TIPs is a multi-media program that contains psycho-education, cognitive restructuring, exposure, and relaxation training components. Methods: Participants were recruited and consented at device-check appointments. Initial and post-treatment surveys were sent via e-mail and contained items assessing demographics, trauma, anxiety, depression, quality of life, and medication adherence; including the Post-Traumatic Stress Check-List (PCL-S). Participants were eligible to participate in the ICD-TIPs program if they scored above the PCL-S cutoff (> 30) or endorsed PTSD symptoms plus distress or impairment. Results: To date, 10 participants have been enrolled in the ICD-
TIPS intervention (PCL-S M = 43.6) and three have completed final assessment. Two of these participants had clinically significant (> 10 PCL-S points) and reliable (reliable change index > 1.96) symptom reduction after completing the intervention. Conclusions: Preliminary data provides support for continued evaluation of the ICD-TIPs program via the pilot trial.

**THU 199**
An Investigation into the Effect of Resilience on Peri-traumatic Responses to a Spouses’ Life-threatening Illness  
(Abstract #1244)

**Poster #THU 199 (Clin Res/N/A) I - Industrialized**  
Franklin A

**Nutting, Kym, Doctoral Student, Haines, Janet, PhD**  
University of Tasmania, Hobart, Tasmania, Australia

Post-traumatic consequences of a threat to life of a loved one and the post-traumatic effects of the experience of a life-threatening illness are well established. Further, resilience has been determined to have an influence on post-traumatic outcomes. Less is known about peri-traumatic processes. This study examined the influence of resilience (high n=22, low n=16) on peri-traumatic reactions to indirect traumatic experience of a spouse’s life-threatening illness. A personalized, staged guided imagery methodology was used to elicit psychophysiological and psychological responses to three events: diagnosis, treatment, and a control neutral event. Events were divided into stages (scene, approach, incident, consequence) representing a continuous sequence of events. Results indicated a significant main effect for heart rate with both illness scripts eliciting a higher rate than the neutral event. For psychological response to imagery, there were no group effects. However, event x stage interactions were evident for a range of psychological responses to imagery events. In general, the illness scripts elicited stronger negative ratings than the neutral event. The incident and consequences stages of the diagnosis script elicited more negative responses than earlier stages despite expected anticipatory anxiety. The results will be discussed with reference to trauma and resilience models.

**THU 200**
Avoidance, Motivation, and Alcohol Involvement: Common and Unique Pathways to Alcohol-Related Consequences across Trauma Classes
(Abstract #1266)

**Poster #THU 200 (Clin Res/N/A) A – N/A**

*Franklin A*

Dvorak, Robert, PhD\(^1\), Arens, Ashley, PhD\(^2\), Kuvaas, Nicholas, MPH\(^1\), Williams, Thomas, BS\(^1\), Kilwein, Tess, Undergraduate\(^1\)

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Approximately 52% of men and 28% of women with PTSD also meet lifetime criteria for a comorbid alcohol use disorder (AUD). Hallmark symptoms of PTSD (i.e., avoidance) are also associated with alcohol motives and use. Identifying unique paths to alcohol problems in PTSD populations may allow for targeted treatment. This study examined pathways from multidimensional avoidance to alcohol-related problems via use motives. Young adults (n = 459; 59.91% female) completed online assessments of trauma symptoms (i.e., PCL-C+), multidimensional avoidance (i.e., behavioral avoidance, distress aversion, distress endurance, procrastination, distraction/suppression, and repression/denial), alcohol use motives, and alcohol use and problems (i.e., AUDIT). Based on trauma symptom scores and diagnostic criteria, four trauma classes were formed: no trauma, low trauma, high trauma, and PTSD. A multigroup path model examined associations between indices of multidimensional avoidance and alcohol-related problems via drinking motives, \(\chi^2(183) = 204.96, p = .13, \text{CFI = .99, RMSEA = 0.03}\). The PTSD class had an indirect effect from distress endurance to alcohol problems that was unique to this class. No other paths varied across classes. The results suggest that treatments targeting distress endurance may be effective at reducing alcohol-related problems, but only among those who meet criteria for PTSD.

**THU 201**

PTSD Treatment Preference: Pharmacotherapy, Prolonged Exposure, or Cognitive Processing Therapy
(Abstract #803)

**Poster #THU 201 (Clin Res/N/A) M - Global**

*Franklin A*

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While several efficacious treatments—both pharmacological and psychosocial—are available for the treatment of PTSD, we currently know little about the factors that would moderate the effectiveness of these treatments. Individual preference for treatment modality is one such factor worthy of
consideration, particularly if individuals differ sharply in their preferences. Of the available psychosocial therapies for PTSD, Cognitive-Behavioural therapies, particularly Prolonged Exposure (PE) and Cognitive Processing Therapy (CPT), are the most widely investigated treatments, with the strongest research support. To investigate individuals’ preferences for treatment, participants were asked to: (1) rate their symptoms of depression, anxiety, and PTSD, (2) choose between pharmacotherapy, PE, CPT, or no therapy, (3) rate the perceived credibility of and their personal reactions to each choice, and (4) state the reasons for their choice. This study aimed to: (1) assess the likelihood of individuals’ choices for either pharmacotherapy, PE or CPT, (2) examine whether ratings of treatment credibility and personal reactions to modalities affected treatment choice, and (3) to investigate the qualitative factors that affected treatment choice. Treatment preferences will be discussed with respect to implications for individual treatment outcome and tailoring.

THU 202
A Systematic Meta-Analytic Review of Recovery Outcomes for Varying Trauma Types (Abstract #1592)

**Poster #THU 202 (Clin Res/N/A) M - Industrialized**

*F Franklin A Messer, Stephen, PhD, Straud, Casey, MS (PhD Student)*

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PTSD confers a significant burden of illness on individuals and society due to its prevalence, symptomatic severity and functional impairment, morbidity and mortality risks, and health care utilization and economic costs. During the past year, PTSD prevalence rates estimate 3.5% of the general population will be diagnosed with PTSD. Researchers have responded to PTSD epidemiologic findings, developing and evaluating psychological interventions targeting PTSD symptoms, impairments, and comorbidities. The majority of these trials focused on PTSD related to the traumas of assault, motor vehicle and/or other accidents, or natural disasters. A number of rigorous controlled trials have accrued substantial evidence supporting the efficacy of trauma focused cognitive behavioral therapies (TFCBT). Strikingly, there is paucity of rigorous psychological recovery outcomes from different trauma types. In our recent preliminary analyses comparing the efficacy of TFCBT between combat and non-combat trauma types analyses have confirmed that there are moderate differences in varying traumas. We conducted an exhaustive systematic review of acute CBT treatment outcomes in recovery trials for different PTSD trauma types. Random effects modeling will be used to compute the combined effect size, mixed effects analysis and meta-regression examined potential moderators.
Resilience in Pastoral Care Providers: The Mediational Role of Social Support and Secondary Trauma Self-Efficacy between Job Stress and Secondary Traumatic Stress
(Abstract #802)

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Resilience for pastoral care workers providing support to trauma survivors was tested based on social support and self-efficacy beliefs. This study specifically evaluated the mediational role of social support and secondary trauma self-efficacy between job stress and secondary traumatic stress. Utilizing social cognitive theory, researchers tested two types of social support (general social support or religious social support) in two mediation models using the enabling hypothesis (social support enhances self-efficacy) or the cultivation hypothesis (self-efficacy leading to greater social support). Eighty-eight pastoral care providers completed an online survey. Indirect effects analyses showed support for the cultivation hypothesis when religious social support was included (BootLLCI = .001, BootULCI = .031), and the enabling hypothesis when general social support was used (BootLLCI = .015, BootULCI = .108). Thus, pastors’ religious social support is related to enhanced self-efficacy beliefs mediating between job stress and secondary trauma. However, pastors’ secondary trauma self-efficacy is related to higher general social support perceptions mediating between job stress and secondary trauma. These results provide important information on social and individual mediating mechanisms in understanding pastoral care workers’ resilience in managing secondary traumatic stress.

THU 204
Trauma Exposure and Post-Traumatic Stress among Family Members of Individuals with Borderline Personality Disorder
(Abstract #242)

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Research has found elevated rates of depression and anxiety among family members of BPD individuals (Goodman et al., 2010; Scheirs & Bok, 2007). It is also likely that family members may repeatedly experience, witness, or learn about their BPD relative engaging in distressing behaviors that may increase a family member’s risk of developing PTSD. Data will be presented from an anonymous online survey of family members of individuals with BPD assessing the prevalence and impact of potentially traumatic events involving their BPD relative. To date, 156 respondents have completed the survey and nearly all (99%) reported experiencing at least one distressing event involving their BPD relative and most had experienced multiple types (M=4.9, SD=2.1). The most common types included their BPD...
family member threatening to commit suicide (75%), engaging in non-suicidal self-injury (70%), running away (62%), attempting suicide (51%), and physically assaulting them (51%). The types of events that were most likely to meet Criterion A of the PTSD diagnosis were suicide attempts (82%), stalking (82%), threats of violence (81%), and suicide threats (80%). Overall, 50% of the sample met diagnostic criteria for PTSD on the PTSD Checklist and severity was correlated with exposure to multiple trauma types ($r=.32, p < .001$). Implications for family and client focused interventions will be discussed.

THU 205
Trauma Support Service (TSS): Building Resilience for Healthcare Providers
(Abstract #669)

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Methods to reduce stress and build resilience are on the mind of all healthcare professionals today. The Ohio State University Medical Center’s Stress, Trauma and Resilience (STAR) program has developed clinical support specifically designed to address exposure to "unexpected events" that lead practitioners to a cascade of negative thoughts, feeling they have failed the patient, and second guessing their clinical skills and even career choice. Secondary traumatization/second victim syndrome often result in increased levels of stress and burnout, absenteeism, physical and emotional exhaustion, compassion fatigue. Yet the question remains how can institutions effectively combat the challenges of stress and work-related trauma among their personnel? The STAR program has initiated efforts to support healthcare professionals by developing a Trauma Support Service (TSS) model. TSS is a multi-level approach that includes individual support and group support sessions in response to specific traumatic events, as well as facilitation of peer support and supportive interactions between care providers and family members. The program was first designed and implemented with direct care staff of intensive care units but is available to all personnel. Gaining institutional and individual care provider buy-in was critical to develop a culture of support that builds resilience.
RESEARCH METHODOLOGY

THU 206
The Role of Dissociation in PTSD onset for Childhood Abuse Survivors
(Abstract #1614)

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Childhood abuse has been linked to dissociation; however, less is understood about the experience of multiple types of childhood trauma in developing dissociative symptoms (Stein et al., 2013). This study seeks to understand the relationship of specific type of childhood abuse to dissociation in adulthood in a sample of 211 interpersonal trauma survivors with PTSD. Results revealed that child abuse is linked to dissociative experiences, such that those that have experienced both physical and sexual abuse ($x=30.27, \sigma=19.00$) report the highest levels of dissociation compared to those that have experienced sexual abuse only ($x=19.42, \sigma=12.86$), physical abuse only ($x=23.13, \sigma=14.89$) and no child abuse ($x=20.74, \sigma=15.25$), $F(3, 207)=6.202, p<.001$. This indicates the cumulative effect of a combination of childhood physical and sexual abuse may be a specific risk factor for the development of chronic dissociation. Further, of these four groups, the combined trauma group was the only one that met the clinical cutoff for dissociation experiences in a PTSD sample, as measured by the DES (Bernstein & Putnam, 1986). Current dissociation mediated the relation between the combined CPA/CSA and PTSD severity. The observed relationships between chronic childhood abuse, dissociation, and PTSD severity will be discussed.

THU 207
Reciprocal Relationship of PTSD and Poor Health in a Clinical Sample
(Abstract #266)

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Sanislow, Charles, PhD
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2Alpert Medical School of Brown University, Providence, Rhode Island, USA
3University of Arizona, College of Medicine, Tucson, Arizona, USA
4Decision Sciences Institute, Pawtucket, Rhode Island, USA

PTSD is related to various health outcomes (e.g., physical functioning, pain, and general health). Research examining the relation of PTSD has been limited by cross-sectional designs or prospective studies of limited duration, focused on veterans, and the prediction of health outcomes based on PTSD but not the reverse. The objective of this study was to test the relationship between PTSD and health outcomes in a clinical sample of varying trauma exposure. A subset of participants with a history of PTSD...
(n=145) was identified from the Collaborative Longitudinal Study of Personality Disorders, a 10-year prospective follow-along study. PTSD diagnosis and health outcomes were compared at two sets of time points. The first interval (Year 1 and 4) tested the prediction of health reports by PTSD diagnosis, and the second (Year 5 and 7) tested the prediction of PTSD by adverse health reports. After controlling for age and sex, PTSD at Year 1 predicted worse physical functioning and general health at the 4-year follow-up (β = -.24, p = .004, β = -.22, p = .007, respectively). Conversely, worse physical functioning and general health at Year 5 increased the likelihood of PTSD symptoms at the 7-year follow-up (OR = .98, p = .003, OR = .97, p = .001, respectively). Findings suggest the long-term reciprocal relation between PTSD and poor health where each may perpetuate the other.

**THU 208**

**Second Order Growth Mixture Model of PTSD: Predictors of Risk and Resilience**

(Abstract #906)

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**Poster #THU 208 (Res Meth/Mil/Vets) M – N/A**

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The challenges of war deployments are transformative for those who serve in battle. Until recently, psychological adaptation to combat and operational stress has been conceptualized in a binary fashion, either as resilience or chronic PTSD. This framework fails to capture heterogeneity in post-deployment outcomes. We will present growth mixture modeling (GMM) analyses from the Marine Resiliency Study (MRS), a prospective longitudinal study of Marines deployed to Iraq or Afghanistan. Analyses will describe courses of PTSD symptoms in response to deployment stressors. Because social support is typically the best predictor of resilience, we will evaluate the relative contribution of perceived social support in determining a given course of adaptation. In the MRS, Marines were assessed once prior to deployment and at three time-points post-deployment. A second-order (multiple-indicator) GMM will determine the number, structure, and prevalence of PTSD symptom trajectories, using the Clinician Administered PTSD Scale and the PTSD Checklist. Next, social support, measured by the Interpersonal Support Evaluation Scale, will be tested as a predictor of trajectory membership. Preliminary analyses reveal that at least three distinct trajectories best fit the data: chronic PTSD, recovery, and inoculation (high pre-deployment, enduring moderate symptom severity post-deployment).
THU 209
Test-Retest Reliability of a Frequently Used Measure of Childhood Adversity
(Abstract #1646)

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The Adverse Childhood Experiences (ACE) Study is an influential longitudinal study that examines the impact of childhood adversity on life-long health problems. This work, conducted by the Centers for Disease Control and Prevention and partners has indexed adversity using the ACE Study Questionnaire. Although substantive literature examining the relationship of ACES to health has developed since the ACE Study Questionnaire was first published, little is known about the psychometric properties of the measure. To date, one study has analyzed test-retest reliability (TRT) of the ACE Study Questionnaire. The researchers found moderate to high TRT; however the generalizability of this study is limited given that participants (N = 658) were a mean age of 64. In the present study, we examined the TRT of the ACE Study Questionnaire in a sample of healthy collegiate athletes (N = 140, M_age = 19.6). The mean time between administrations was 347 days. A kappa coefficient revealed moderate stability (κ = .5). We then examined response patterns at the individual item level to reveal which items demonstrated more stability across administrations. Implications of these findings relative to inferences made on a retrospective reporting instrument are discussed.

BIOLOGICAL/MEDICAL

THU 211
Brain Structure Volume Abnormalities in Female Interpersonal Trauma Survivors
(Abstract #1262)

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2Washington University in Saint Louis School of Medicine, Saint Louis, Missouri, USA

Neuroimaging studies within traumatized populations have generally concluded that individuals with PTSD have smaller hippocampal and amygdalar volumes than individuals without PTSD. However, other studies have found no differences, and a few have even concluded that PTSD may be related to a larger hippocampus and amygdala. The present study sought to add to the literature by examining differences in hippocampal and amygdalar volumes within a sample of female survivors of interpersonal trauma (IPT). Forty-six women who met DSM-IV criteria for PTSD following IPT underwent MRI scans. Twenty-one healthy controls who had never experienced trauma were also scanned. One-way ANOVA analyses
concluded that the PTSD group evidenced a trend toward a larger hippocampus ($F[65] = 3.65, p = .07$) than the control group. The PTSD group also showed larger left and right hemispheric amygdalar volumes ($F[65] = 4.76, p = .03$). Such findings suggest that the connection between brain structure atrophy and PTSD may not be as clear-cut as previously thought. Additionally, characteristics of IPT may engender structural brain abnormalities distinct from that of other types of trauma. The inclusion of a trauma-exposed PTSD-negative group is expected in coming months, and additional analyses will be conducted.

**THU 213**

**Comorbid Depressive Symptoms in Treatment-Seeking PTSD Outpatients Affect Multiple Domains of Quality of Life**

(Abstract #577)

**Poster #THU 213 (Bio Med/Violence) M - Latin Amer & Carib**

**Mendlowicz, Mauro, MD, PhD**¹, **Coutinho, Evandro, MD, PhD**², **Marques-Portella, Carla, MD, PhD**³, **Volchan, Eliane, MD, PhD**³, **Berger, William, MD, PhD**¹, **Figueira, Ivan, MDiv, PhD**³

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**Purpose:** Our goal was to investigate the influence of comorbid Axis I disorders on the quality of life (QoL) of 54 treatment-seeking outpatients with a primary diagnosis of PTSD. Methods: The diagnoses of PTSD and of the comorbid disorders were established using the SCID-I. Volunteers also completed the PCL-C, the BDI, the BAI, the THQ, and a socio-demographic questionnaire. The WHOQOL-BREF, a 26-item self-administered scale, was used to assess four domains of QoL: psychological, physical, social, and environmental. Multiple linear regression models were fitted to investigate the relationship between the severity of post-traumatic, mood, and anxiety symptoms; the presence of specific current comorbid disorders and of psychotic symptoms, the number of current comorbid conditions, and a history of child abuse for each domain of QoL, after adjusting for the effects of socio-demographic characteristics. Results: The severity of PTSD symptoms impacted negatively on the psychological and physical domains. The severity of depressive symptoms correlated negatively with QoL in all domains. Psychotic symptoms impacted negatively on the environmental domain. A history of child abuse was negatively associated with the psychological and the social domains. Conclusions: The severity of comorbid depressive symptoms is an important determinant of the QoL in PTSD outpatients.
**GxE Interaction in PTSD: Preliminary Data**  
(Abstract #654)

**Poster #THU 214 (Bio Med/Disaster) M - Industrialized**  
Franklin A

**Di Giacinto, Alessandra, PhD(c) 1, Martinotti, Giovanni, MD, PhD 2, Di Iorio, Giuseppe, MD 1, Sepede, Gianna, MD 2, Stuppa, Liborio, MD PhD 2, di Giannantonio, Massimo, MD, PhD 1**  
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2G. d'Annunzio University, Chieti Scalo, Chieti, Italy

This study has tested the association between the development of PTSD and genetic variant within SCL6A4 and a possible correlation with alexithymia in survivors to 6 April 2009 L'Aquila Earthquake. Methods The sample examined so far consists of 35 subjects (22 females and 12 males, mean age ± 36.47). Cells of the buccal mucous were collected to obtain DNA and Clinician-Administered PTSD Scale (CAPS) and Toronto Alexithymia Scale (TAS-20) tests were administered. Results The incidence of PTSD is found to be 50%, 66.7% women and 33.3% men. PTSD subjects (56% of them) showed the presence of the S allele of SLC6A4, 50% of subjects showed high levels of alexithymia. Discussion In line with the literature, we assume that the S allele of SLC6A4 is involved in the regulation of physiological response to stress, showing as a risk factor for the development of PTSD. We report a positive correlation related to deficit of emotional expression characteristic of alexithymia with PTSD. These data help to shed light on the role of genetic factors in the formation or modulation of the stress response, the sex-specific differences in the diagnosis of PTSD and the possible causal relationship between alexithymia and PTSD. When examined in a homogenous sample with shared trauma the 5-HTTLPR genotype may serve as a useful predictor of risk for PTSD.

**THU 216**  
The Contributions of Post-Traumatic Stress and Depressive Symptoms to Sleep State Misperception in Females with PTSD  
(Abstract #847)

**Poster #THU 216 (Bio Med/Diverse Pop) M - Industrialized**  
Franklin A

**Werner, Kimberly, MA PhD Student, Griffin, Michael, PhD, Galovski, Tara, PhD**  
University of Missouri St. Louis, St. Louis, Missouri, USA

Subjective overestimation of sleep disturbance has been attributed to increased arousal and depressive symptoms in non-traumatized populations, but has yet to be directly investigated in post-traumatic stress disorder (PTSD). Investigations of subjective and objective sleep across the same nights of monitoring have supported a theory of sleep state misperception in trauma survivors with PTSD. The current study investigates the distinct contribution of PTSD symptoms (hyperarousal, re-experiencing, and avoidance) and depressive symptoms to sleep state misperception in a PTSD-positive female cohort (N = 51). Measures include the Clinician Administered PTSD Scale and the Beck Depression Inventory II as well as locally constructed daily sleep diaries and actigraphy which provide as a non-invasive ambulatory monitor of general sleep parameters. Results indicate reexperiencing symptoms (F(1, 48) = 7.33, p = .009) and depressive symptoms (F(1, 45) = 5.2, p = .027) predict sleep state misperception.
while hyperarousal symptoms (minus sleep item) do not contribute to the overall model. Reexperiencing symptoms account for 13% of variance and depressive symptoms contribute an additional 9% of variance above and beyond PTSD symptoms. Results have implications for the role of depression in PTSD related sleep disturbance and reexperiencing symptoms impact on sleep perception in PTSD.

THU 217
The Clinical Remission of PTSD with Stimulant Medication offers Insights into Risk and Resilience
(Associate #1511)

Capehart, Bruce, MD
Department of Veterans Affairs, Department of Psychiatry and Behavioral Sciences, Duke University Medical Center, Durham, North Carolina, USA

A group of recently returned combat veterans diagnosed with PTSD (n=25) have been treated with stimulant medications for up to five years with excellent clinical results. Analysis of the individual patient histories points to a novel biomarker for determining clinical response of PTSD symptoms to stimulant medication. In addition to creating a novel treatment approach in carefully selected individuals, the response to stimulant medication may reveal important insights into the neuroscience of risk and resilience. These results carry implications for clinicians treating PTSD -- particularly with respect to starting and continuing medication in combination with trauma-focused psychotherapy -- and for research into the basic neuroscience of PTSD.

THU 218
Examining the Interference of Benzodiazepines on Veterans in Traumatic Brain Injury / PTSD Residential Programming
(Associate #1432)

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2Cincinnati VA Medical Center, Cincinnati, Ohio, USA
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The Cincinnati VA Medical Center instituted the first VA TBI/PTSD residential treatment program in 2008. The program used group and individual Cognitive Processing Therapy-Cognitive (CPT-C) as the main trauma intervention, augmented with group programming including CogSmart, a cognitive behavioral retraining program. We had concern that benzodiazepine use could reduce effectiveness of the program. Practice guidelines used in the Veterans Health Administration (VHA) caution against benzodiazepine use by Veterans with PTSD because of inefficacy and safety concerns. Despite this, the prescription rate for those with PTSD has been ≥30% nationally, similar to rate for patients entering our
program (Bernardy & Friedman, 2013). While we tried to reduce use during the program, at discharge 15 out of the first 47 patients remained on benzodiazepines. Pre and post data on these patients showed overall strong clinical improvements at discharge when measured with CAPS. However, when separated into two groups, those taking benzodiazepines trended toward not experiencing the same decline in symptoms. They did not differ on age, education, ethnicity, service era, marital status, employment status, or index trauma. This trend may be further evidence that benzodiazepines can be harmful to those in the midst of PTSD treatment, and supports following evidence based prescription guidelines.

**THU 220**
**Improved Novelty P300 in Healthy Veterans: Evidence for Efficacy of Military Training or Resilience?**
(Abstract #903)

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<th>Poster #THU 220 (Bio Med/Mil/Vets)</th>
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<th>Franklin A</th>
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*Fleming, Kevin, PhD, Bandy, Carole, PhD*  
*Norwich University, Northfield, Vermont, USA*

Military veterans and cadets attending Norwich University were assessed on a series of measures including a novelty P300 task. Veterans showed a larger P300 peak for novel auditory stimuli relative to cadets. Similarly, veterans showed a larger P300 peak for infrequent attended tones. These enhanced P300 waveforms suggest that military veterans have a more healthy attentional response to potentially threatening stimuli. In contrast, veterans and cadets with lower amplitude P300’s were found to demonstrate higher levels of PTSD, depression, and dissociation. We discuss these results in light of recent findings that military training can offset the harmful effects of combat trauma and build upon native resilience.
CULTURE/DIVERSITY

THU 221
Potentially Traumatic Events and Post-Traumatic Stress Disorder among Adults in Puerto Rico
(Abstract #1539)

Overstreet, Cassie, Doctoral Student 1, Berenz, Erin, PhD2, Amstadter, Ananda, PhD1, Canino, Gloria, PhD3, Silberg, Judy, PhD1
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2Virginia Institute for Psychiatric and Behavioral Genetics, Richmond, Virginia, USA
3University of Puerto Rico, San Juan, Puerto Rico, USA

Increased attention has been focused on understanding risk and resilience factors for post-traumatic stress disorder (PTSD) in low- and middle-income countries (Lund et al., 2010); however, a paucity of research exists concerning the prevalence and correlates of potentially traumatic events (PTEs) and PTSD in Puerto Rico. The aim of the current study was to examine prevalence of PTE types and PTSD symptoms in a Puerto Rican sample of 462 adult caretakers (68% women) of twins participating in the Puerto Rican Infant Twin Study. Significantly more men than women were exposed to trauma; 77% of men and 44% of women endorsed at least one PTE ($\chi^2$=64.44, p<.001), with accidental (68% and 33%, respectively; $\chi^2$=71.42, p<.001), interpersonal (42% and 17%; $\chi^2$=43.53, p<.001), and other PTE (29% and 18%; $\chi^2$=10.29, p=.001) being the most frequently endorsed trauma categories. Additionally, men in the current study were more likely to endorse PTE exposure compared to men in the US (77% and 60.7%, respectively; Kessler et al., 1995); however, rates of PTSD among those with PTE were comparable (6.5% and 4.1%, respectively; Pietrzak et al., 2011). Moreover, consistent with US samples, the rate of PTSD among men was highest for interpersonal trauma. These findings highlight the need for identification of putative risk and resilience factors among individuals in Puerto Rico.

THU 224
Traumatic Stress, Social Support and Coping Behavior among Firefighters in Korea and Japan
(Abstract #825)

Hatanaka, Miho, PhD 1, Yoo, Seanyoung, MA, PhD Student2, Ahn, Hyunnie, PhD3, Joo, Hye-sun, PhD3, Takamoto, Masahiro, MA, PhD Student2, Matsui, Yutaka, PhD3
1Meijo University, Nagoya, Aichi, Japan
2University of Tsukuba, Tsukuba, Ibaraki, Japan
3Ewha Womans University, Seoul, Gyeonggi, Korea, South

The association between work related traumatic stress, social support and coping behavior among professional firefighters in Korea and Japan was investigated. Participants were Japanese (Study 1: N = 1516, 79.2% valid response rate) and Korean firefighters (Study 2: N = 533, 35.4% valid response rate).
They responded to questionnaires assessing the Acute Stress Reaction (ASR) while on duty, stress coping behaviors, the Impact of Events Scale-Revised (IES-R) related to their most severe traumatic experience while on duty during the previous ten-years, and the General Health Questionnaire 12 items (GHQ-12). The results indicated that 85.2% of Korean firefighters and 58.1% of Japanese firefighters had experienced at least one traumatic event. Among Japanese firefighters, both IES-R and GHQ-12 were associated with ASR, social support from colleagues and family, and drinking/smoking coping. On the other hand, among Korean firefighters, IES-R was associated with ASR and conversation with colleagues for coping, but there was no significant relationship with GHQ-12. These results suggest that there might be a different etiology of traumatic stress between Korean and Japanese firefighters. However, in both countries, early assessment of ASR and communication with colleagues after traumatic experiences while on duty might be important for preventing post-traumatic stress symptoms.

**BIOLOGICAL/MEDICAL**

**THU 227**

**Amygdala Deep Brain Stimulation for Treatment-Refractory Combat PTSD**

(Abstract #355)

The spectrum of resilience includes not only those who do not develop PTSD after trauma, but also those who do, including some who do not recover despite the best available treatment interventions. Better understanding of this “converse of resilience” may also provide insight into fundamental mechanisms. Koenigs et al (1998) found that Vietnam Veterans with amygdala damage failed to develop PTSD even though those with injuries in other brain regions, including elsewhere in the temporal lobe, did. Langevin et al (2010) found that Deep Brain Stimulation of the amygdala was effective in a rat model of PTSD. This presentation will describe the plan for a first ever clinical trial: deep brain stimulation of the amygdala for combat veterans with severe, treatment-refractory PTSD. The IRB-approved, federally funded pilot study will involve a multidisciplinary team following 6 subjects for 2 years. The presentation will describe inclusion and exclusion criteria, planned intervention, outcome measures, neuroimaging aspects, and neuropsychological assessments. The study is on the cusp of initiation. It is anticipated that by the November 2013 annual meeting, at least one patient will have been implanted, and clinical data can be shared with attendees.
THU 228
The Impact of Hypervigilance: Evidence for a Forward Feedback Loop?
(Abstract #1381)

Poster #THU 228 (Bio Med/N/A) M – N/A

Franklin A

Kimble, Matt, PhD, Boxwala, Mariam, Undergraduate, Bean, Whitney, BA, Maletsky, Kristin, BA, Halper, Jessica, BA, Spollen, Kaleigh, Undergraduate
Middlebury College, Middlebury, Vermont, USA

A number of prominent theories suggest that hypervigilance and attentional bias play a central role in anxiety disorders and PTSD. It is argued that hypervigilance may focus attention on potential threats and precipitate or maintain a forward feedback loop in which anxiety is increased. While there is considerable data to suggest that attentional bias exists, there is little evidence to suggest that it plays this proposed critical role. This study investigated how manipulating hypervigilance would impact the forward feedback loop via self-reported anxiety, visual scanning, and pupil size. Seventy-one students were assigned to either hypervigilant, pleasant, or a control condition while looking at a series of neutral pictures. Those in the hypervigilant condition did not differ in their self-reported anxiety, but did have significantly more fixations over a broader area than those in the other two groups. Pupil size was also significantly higher in the hypervigilant condition relative to the control condition. Thus the study provided mixed support for the role of hypervigilance in a forward feedback loop. The lack of self report findings, however, does not preclude the possibility that the increased scanning and autonomic arousal potentiate other symptoms and worsen anxiety in situations where threat is present or suspected.

THU 230
The Moderating Role of Post-Traumatic Stress in the Relationship Between Childhood Exposure to Family Violence and Emotional Reactivity
(Abstract #129)

Poster #THU 230 (Bio Med/N/A) M - Industrialized

Franklin A

Huz, Ilana, BA¹, Barry, Samantha, BA¹, Rivers, Alison, BA¹, Rabkin, Ari, MA¹, Olezeski, Christy, PhD², Gordis, Elana, PhD¹
¹SUNY-Albany, Albany, New York, USA
²Westchester Jewish Community Services, Central Yonkers Clinic, White Plains, New York, USA

Past research has shown that family violence, including direct victimization and exposure to interparental aggression during childhood is linked to negative psychological outcomes, including post-traumatic stress. (e.g., Margolin & Gordis, 2000). Additionally, exposure to trauma may affect emotional reactivity (e.g., McTeague, et al., 2010). In the present study, 161 young adults retrospectively reported on their exposure to physical violence during childhood and current symptoms of post-traumatic stress. Emotional reactivity was measured by electromyographic startle response to an audio probe presented while participants were shown neutral and negative conflicntual images from the International Affective Picture System (IAPS; Lang, Bradley, & Cuthbert, 1997). Significant two-way interactions
emerged between PTSD symptoms and violence exposure (harsh parenting and exposure to interparental aggression) in accounting for emotional reactivity as measured by increase in startle during negative versus neutral stimuli. At high levels of post-traumatic stress symptoms, there is a negative relationship between violence exposure and negative emotional reactivity in males. In the face of violence exposure, high PTSD symptoms may reflect a tendency to avoid emotional reactivity and at the same time a subjective sensitivity to the experience of emotional reactions.

PREVENTION/EARLY INTERVENTION

THU 231
PTSD in Relatives of Burn Survivors: When the Supporter Needs to be Supported
(Abstract #1064)

Poster #THU 231 (Prevent/Acc/Inj) M - Industrialized

Bond, Suzie, PhD, Boucher, Marie-Eve, BSc Hons Psychology
Centre hospitalier de l'Université de Montréal, Montreal, Quebec, Canada

Social support is an important protective factor in burn survivor recovery. Witnessing or being told about a close relative’s burn can be very distressful, which may compromise the support offered to the patient. This study describes psychological distress in relatives of burn survivors (RBS) and explores the variables that influence it. Sixty-two RBS completed the Modified PTSD Symptom Scale (MPSS) and the Hospital Anxiety and Depression Scale (HADS) within 72 hours following admission and once again at discharge. At time 1, 24.2% of RBS reported PTSD symptoms in the clinical range. More specifically, 75.8% reported feeling very upset when something reminded them of the burn, 64.5% reported having repeated and disturbing memories of the event, and 54.8% reported that they avoided thinking or talking about the event. Even though all RBS psychopathology scores significantly dropped between Time 1 and Time 2, many remained in the clinical range (MPSS: 13.6%; HADS: 45.5%). There was no significant relationship between psychological distress and % of total body surface burned. Compared to other relatives, spouses displayed a significantly higher level of distress. Providing better support to relatives would be an important way of improving burn survivor recovery. Simple interventions, such as providing information about burns and normalizing trauma reactions are discussed.
THU 232
Does Psychoeducation Decrease the Fear Associated with Recalling Trauma and Increase the Probability of Coping with Recalling? : The Pilot Study among Japanese General College Students.
(Abstract #1030)

Osawa, Kaori, PhD
Konan University, Kobe, Hyogo, Japan

The purpose of current study was to examine the effect of psychoeducation on the fear to recalling traumatic memories and the probability of coping with recalling. The participants of this study were thirty-eight Japanese undergraduates (Male=7, Female=29, Undentifed sex=2; mean ages=23.06, SD=7.94). The psychoeducation was designed to help the public learn about recalling trauma and how to cope with responses after recalling. As results of dependent t-test, the degree of fear to recalling trauma (0-100) decreased significantly (t(37)= 2.15, p<.05). The effect size (ES) was medium (r=.33). The degree of probability of coping with recalling traumatic memories (0-100) increased at post-session than at pre-session (t(37)=3.10, p<.01). The ES was medium (r=.46). The degree of probability of dealing with other people who have traumatic events also increased significantly (t(37)=8.00, p<.001). The ES was large (r=.80). The results suggested that the psychoeducation of this study may be effective in decreasing the fear associated with recalling trauma. The results also indicated that the psychoeducation may be effective in increasing the probability of coping with recalling trauma that may be experienced in the future and that of dealing with traumatized people. Implications of this study for the prevention of traumatic stress were discussed.

THU 233
Adverse Childhood Experiences and Health Among Collegiate Students: Is Participating in Sport Protective?
(Abstract #108)

Kaier, Emily, Doctoral Student, Cromer, Lisa, PhD, Davis, Joanne, PhD, Strunk, Kathleen, APRN
University of Tulsa, Tulsa, Oklahoma, USA

Individuals who experience adverse childhood experiences (ACEs) are at increased risk for variety of health concerns including some of the leading causes of death in the United States. Moreover, researchers have found that multiple types of adversity lead to worse health outcomes. Allostatic load is a possible mediator between adversity and poor health. Allostatic load occurs when the body’s physiological stress system is over-activated. Allostatic load can potentially be reduced through exercise and promote resilience to adversity. Elite athletes may be a population of resilient individuals because they engage in frequent exercise. The present study examined associations between ACEs and health among athletes (N = 304) and non-athletes (N = 101) at the same university. Results showed a stronger
association between the number of reported ACEs and physical health symptoms among non-athletes compared to athletes ($r = .4$, $r = .2$ respectfully). Interestingly, a 2 (athlete versus non-athlete) by 2 (multiple ACEs versus single/no ACEs) ANOVA yielded a significant main effect for multiple ACEs only, whereby students with multiple ACEs reported significantly more physical health symptoms. These results indicate that multiple ACEs have health implications for even extremely healthy samples. Additional clinical implications for resilience will be discussed.

THU 234
Sleep Disturbance, Resilience, and the Sequelae of Trauma
(Abstract #181)

Poster #THU 234 (Prevent/Adult/Cmplx) M – N/A

Cranston, Christopher, MA, PhD Student, Miller, Katherine, MA, PhD Student, Davis, Joanne, PhD, Scholl, James, BA, Luke, Laura, BA
University of Tulsa, Tulsa, Oklahoma, USA

Sleep disturbance (SD) has long been characterized as the hallmark of post-traumatic stress disorder (PTSD). Individuals who experience SD following traumatic events have been shown to be at higher risk of developing PTSD. Additionally, SD is associated with numerous negative outcomes including increased PTSD symptom severity, reduced perceived mental health, and poorer overall health. For these reasons SD may be a significant factor in compromised psychological resilience. A major factor contributing to resilience in the aftermath of stressors is coping. Those experiencing sleep disturbances report reduced adaptive and increased maladaptive coping compared to those without SD, and report a significant perceived lack of control over stressors and poorer adaptive coping strategies compared to healthy sleepers. Furthermore, sleep disturbance has been shown to predict increased maladaptive coping strategies even controlling for depression and PTSD symptoms. Our study examined the relationships between SD, resilience (through coping), and PTSD symptom severity. Hypotheses: SD among trauma victims is associated with 1) reduced adaptive coping, 2) greater maladaptive coping, 3) greater PTSD symptoms, and 4) predicts greater PTSD symptoms over and above maladaptive coping. Results supported all hypotheses accept H1. Implications and limitations are discussed.
THU 235
Morphine Administration Following Exposure to Level-1 Trauma Attenuates PTSD and Depression in a Sex-Dependent Manner
(Abstract #783)

Poster #THU 235 (Prevent/Adult/Cmplx) M - Industrialized

Michopoulos, Vasiliiki, PhD, MSc, Rothbaum, Alex, BS, Stevens, Jennifer, PhD, Houry, Debra, MD, MPH, Ressler, Kerry, MD, PhD, Rothbaum, Barbara, PhD, ABPP
Emory University School of Medicine, Atlanta, Georgia, USA

Morphine treatment after trauma has been shown to attenuate the development of Post-Traumatic Stress Disorder (PTSD). We investigated whether morphine treatment post-trauma exposure would decrease the development of PTSD in a sex-dependent manner. Participants (N=38) were recruited from a trauma center after having experienced a life-threatening event. Participants were assessed at baseline, 1-month and 3-month post-trauma. The association between morphine treatment, PTSD, and depression was quantified with chi-square tests, odds ratio and 95% confidence intervals [OR(95%CI)]. Data indicate that morphine after trauma was associated with attenuated PTSD in males (n=18) at 1-month (p=0.02) but not in females (n=20). This sex difference persisted at 3-months with males receiving morphine [OR(95%CI)=0.08(0.005, 1.29); p=0.076] having lower odds of developing PTSD than females [OR(95%CI)=0.21(0.05, 3.12); p=0.38]. The use of morphine was associated with decreased depression at 3-months post-trauma in females (p=0.03), but not in males. These preliminary data indicate morphine decreases the odds of developing PTSD and depression in sex-dependent manner at 1- and 3-months post-trauma. As participants continue to report for 1-month and 3-month post-trauma assessments, we will expand our analysis and include a similar analysis for 6-months following trauma exposure.

THU 236
The Impact of Single versus Multiple Traumas on College Students’ Psychological Functioning and College Adjustment
(Abstract #1508)

Poster #THU 236 (Prevent/Violence) I - Industrialized

Freedle, Agata, BSc Hons Psychology, Zelechoski, Amanda, PhD, ABPP, Ringenberg, Matthew, PhD, MSW, Yogan, Lissa, PhD, Simpson, David, PhD
Valparaiso University, Valparaiso, Indiana, USA

The relationship trauma exposure and the development of psychological disorders is well-established. Although most extant research focuses on single traumatic events, there is growing evidence that experiencing multiple events can increase one’s susceptibility and symptom severity (Suliman et al., 2009). However, few studies investigating this link focus on college populations, which have an increasingly high prevalence of traumatic exposure and subsequent negative outcomes (Read et al., 2012). This poster will present the results of a study aimed at investigating whether college students (N=344) who experienced single versus multiple traumatic events demonstrated higher Axis I
symptomatology and college adjustment and satisfaction. Results indicated that students who experienced multiple traumatic events were more depressed (t=−2.072, df=67, p=0.42) and more avoidant (PTSD criterion C) (t=−2.438, df=66, p=0.017), but did not have higher overall rates of PTSD symptoms. Moreover, gender differences emerged, indicating that female students who experienced one or more traumatic events experienced more anxiety symptoms (t=2.483, df=68, p=0.016) and PTSD symptoms (t=2.664, df=66, p=0.010). These findings suggest the differential impact of single versus multiple trauma exposures on college students’ functioning. Additional findings and implications will be presented.

**THU 237**

The Association between Childhood Loss and Violent Events with Adult Antisocial Personality and Depression

(Abstract #1376)

**Poster #THU 237 (Prevent/Child/Adol) I - Industrialized**

_Franklin A Carliner, Hannah, MPH, Winning, Ashley, MPH, Gilman, Stephen, ScD_

_Harvard School of Public Health, Boston, Massachusetts, USA_

The association between childhood adversity (CA) and mental illness is well-documented. However, the specificity of association between different types of CAs (e.g. loss vs. violence) with Antisocial Personality (ASPD) and Major Depressive Disorders (MDD) into adulthood has been less thoroughly examined. U.S. participants between the ages of 21-28 (N=334) reported CAs occurring prior to the age of 18 and were administered structured diagnostic interviews for ASPD and MDD. Forty-one percent (N=133) of respondents reported any violent event in childhood and 51% (N=167) reported any loss event. Only 7% (N=22) of the sample met diagnostic criteria for ASPD and 12% (N=40) had a lifetime MDD episode. Participants who experienced any violent event had 3.68 times the odds of ASPD than those who did not (95% CI: 1.12-12.16), even after adjusting for adverse loss events and demographic covariates. The association between loss events and ASPD was not statistically significant after controlling for any violent CAs. The same pattern was found between violent CAs and lifetime MDD (OR=4.08, 95% CI: 1.54-10.79). We conclude that violent CAs are more toxic for adult mental illness than loss events. Further research should strive to identify the pathways by which these experiences are associated with increased risk for psychopathology.
THU 238
The Role of Attachment among Salvadorian Adolescents Exposed to Community Violence
(Abstract #1590)

Muro, Karina, MA, PhD Student, Choi, David, MA, PhD Student, Nunes, Marissa, MA, PhD Student, Reyes, Jenny, MA, PhD Student, Rojas-Flores, Lisseth, PhD
Fuller Graduate School of Psychology, Pasadena, California, USA

The relation between community violence (CV) and post-traumatic stress disorder (PTSD) has been well established in the literature (Ozer, Best, Lipsey, & Weiss, 2008). Limited studies, however, have explored parental attachment as a protective factor for adolescents exposed to violence, especially in countries with high levels of CV such as El Salvador. This study examined the moderating effect of parental attachment on the relation between CV and PTSD. The Los Angeles Symptom Checklist- Adolescent Version, the Community Violence Exposure Measure, and the Attachment to Parents measure were used to assess 902 Salvadorian adolescents in grades 7 through 12 with mean age of 15.5 years (SD = 1.6). The results from a hierarchical multiple regression demonstrated that (1) CV exposure was positively associated with PTSD, (2) parental attachment was negatively associated with PTSD, and (3) the interaction effect between parental attachment and CV was significant, ΔR² = .01, p = .02. These findings suggest that positive parental attachment moderates the effect of CV on PTSD symptomatology. This study highlights the importance of healthy parent-adolescent relationships in helping adolescents thrive and be resilient in the midst of trauma and violence.

THU 239
Maternal Dissociation and Child Outcomes: The Role of Emotion
(Abstract #404)

Gagnon, Kerry, BA, DePrince, Anne, PhD, Chu, Ann, PhD
University of Denver, Denver, Colorado, USA

Previous research demonstrates that maternal history of trauma and dissociation symptoms have an effect on children’s psychological development, including symptomatology. Research also shows that the development of emotion skills, such as naming and talking about emotions, is central to children’s psychological development. Maternal-child interactions offer children important opportunities to acquire emotion skills, though mothers’ own trauma histories and/or symptoms may disrupt these interactions. The present study examined the relationship between maternal dissociation, emotion richness in mother-child dyadic interactions (coded as amount of emotional language used and level of emotional understanding of both mother and child), and child outcomes in a sample of 72 ethnically diverse female guardians (Mean age = 37.21) and their children (Mean age = 8.73). Participants were recruited to participate in a larger project on Parenting and Stress through local community agencies and community centers. Mother-child dyads completed self-report questionnaires as well as participated in a behavioral facial affect perception task. Mother-child dyadic interactions were coded
for emotion richness. The implications of tests of emotion richness in mother-child dyadic interactions as mediators of links between maternal dissociation and child adverse outcomes will be discussed.

THU 241
The Influence of Exposure to Injured Victims on the PTSD Symptoms among the Young Volunteers Working in Ambulance Teams
(Abstract #1402)

Poster #THU 241 (Prevent/EmergWrkrs) M - Industrialized
Franklin A

Yaffe, Eli, PhD 1, Goldberg, Avi, ACSW 2
1 Ben Gurion University, Tel Aviv, Israel
2 Bar-Ilan University, Tel Aviv, Israel

Exposure to traumatic events can leave its mark and lead the exposed person to experience symptoms of Post-Traumatic Stress Disorder (PTSD). In the past few years, research has documented that emergency and medical personnel who treat the injured are not immune from secondary exposure, which can also trigger symptoms of PTSD. The goal of this study is to evaluate the influence of exposure to injured victims on the young volunteers. This study examined 620 volunteers from all around the country, ages 16-17, who have completed both a basic and more advanced course in first aid and have actively volunteered for a year. The study found that the number of symptoms among volunteers is generally low, and the event that has the greatest influence on the appearance of PTSD symptoms is participation at a resuscitation. The significant symptoms related to resuscitation were intrusive, and no evidence was found for psychotic disorders among volunteers exposed to all types of exposures. It is possible to assume that the willingness to volunteer combined with the professional training that the volunteers receive prior to their work, contribute to their strength and ability to cope with the painful sights they come across during their volunteering.

THU 242
A Qualitative Study of Service Member and Young Child Attachment Promoting Behaviors Preceding and During Military Deployment
(Abstract #677)

Poster #THU 242 (Prevent/Mil/Vets) I - Industrialized
Franklin A

Louie, Ashley, MA PhD Student, Cromer, Lisa, PhD
University of Tulsa, Tulsa, Oklahoma, USA

Military children with a deployed parent are at increased risk for internalizing and externalizing behaviors and disrupted attachment. Military families with young children are particularly vulnerable to attachment disturbances due to the challenge of maintaining attachment relationships during physical separations. Attachment during deployment is an important area of study given that 41% of military children are under 6 years old. Methods of promoting attachment during deployment have not yet been examined in the literature. This is a qualitative investigation of attachment strategies before and
during deployment. We present data from (N=30) fathers who were deployed within two years of the study, and whose child was under 6 years old (M_{age}=2.71, SD=1.55 years) during the deployment. Child-focused deployment preparation techniques and communication strategies aimed at maintaining the attachment relationship will be presented. The modal preparation technique (50%) was talking about the impending deployment. Families with infants were least likely to prepare the child for deployment (25%). All participants reportedly communicated with their child during deployment, although communication method varied with children’s ages. Developmentally appropriate strategies for building attachment as a means of promoting resilience during deployment are identified and discussed.

THU 244
Sex Differences in Coping Strategies in Military Survival School
(Abstract #1108)

Poster #THU 244 (Prevent/Mil/Vets) M – N/A Franklin A

Schmied, Emily, MPH, Taylor, Marcus, PhD, Padilla, Genieleah, BS, Highfill-McRoy, Robyn, MPH, MA, Harris, Erica, PhD, Thomsen, Cynthia, PhD
Naval Health Research Center, San Diego, California, USA

New policies now allow female service members to fill combat positions characterized by high risk of trauma exposure. This highlights the need for research examining sex differences in response to trauma, such as coping strategies. This study assessed coping strategies used by service members completing a mock-captivity exercise, compared strategies by sex, and assessed the relationship between coping and psychological impact. Two-hundred service members (78% men) completed self-report surveys before and after mock-captivity. Surveys assessed demographics, service characteristics, a measure of psychological impact corresponding to PTSD symptom clusters (intrusion, hyperarousal, avoidance), and a modified Brief COPE Scale. Participants used 7 coping strategies: denial, self-blame, religion, self-distraction, behavioral disengagement, positive reframing, and planning. Analysis of covariance revealed females used denial (p≤.01), self-blame (p≤.05) and positive reframing (p≤.05) more frequently than males. Linear regression models assessing the relationship between coping strategies and each PTSD symptom cluster showed self-blame and denial related to each cluster 24 hours after the exercise (p<.05). This study found females used coping strategies associated with poorer psychological outcomes more often than males. Future efforts should target improving coping during trauma.
THU 245
Assessing the Needs of Support Professionals and Unit Leaders in Reserve Components: The Suicide Prevention and Resiliency Resource Inventory Project (SPRRI)
(Abstract #114)

Garrick, Jackie, MSW, LCSW¹, Axelrad, Stephen, PhD²
¹Department of Defense, Arlington, Virginia, USA
²Booz Allen Hamilton, McLean, Virginia, USA

In the last ten years of conflict, suicide prevention and resiliency (SPR) programs have empowered military Service members and families to seek help when needed. These initiatives have included new policies and instructions, suicide awareness and prevention training, and added suicide prevention and resiliency collateral-duty positions. National Guard and Reserve (NG/R) units have adopted many of these practices for their own needs, implementing elements of suicide prevention and resiliency at the command level. However, the NG/R components have unique needs and difficulties not covered in Service-wide initiatives. Suicide prevention and resiliency resources are not specifically defined in most references, and the difference between suicide prevention and resiliency resources is not often articulated. In the SPRRI project, we developed a needs assessment that defines asesses and measures suicide prevention and resilience resources aimed specifically for NG/R members at risk of harming themselves. SPRRI utilizes a mixed-methods approach of a web-based survey and focus groups. Results indicate utilization and satisfaction levels that support professionals and unit leaders have with current SPR programs as well as gaps that DoD must address to reduce risk and build resilience among NG/R service members.

THU 246
Military Service and Suicidality among College Students
(Abstract #1620)

Pease, James, PhD, Monteith, Lindsey, PhD, Bahraini, Nazanin, PhD
VA Eastern Colorado Health Care System- VISN 19 Denver VA MIRECC, Denver, Colorado, USA

Suicide among active duty military members and Veterans has increased in the wake of the two international conflicts. This has led to a growing body of research on suicidality among Veterans within the Veterans Health Administration (VHA); however, less is known regarding suicidality among Veterans in other settings, such as universities. One recent study found high rates of suicidality among college student Veterans (Rudd et al., 2011), and another found that Veterans were more likely to engage in risky behaviors (Widome et al., 2011). This research suggests college students with a history of military service may experience an elevated risk for suicidality. The objective of the present study was to examine whether military service related to suicidality (specifically, ideation, plans, and attempts) in the
past year among a national sample of college students. Specifically, we examined three hypotheses: that college students with a history of military service would report higher rates of past year suicidal ideation, suicidal plans, and past year suicide attempt, compared to college students without a history of military service. Logistic regression was used to test all three hypotheses. A discussion of the strengths and limitations of the present study, directions for future research, and the implications for clinicians working with these populations are discussed.

THU 247
Demographics of Deceased Service Members: Understanding those who Served and their Families
(Abstract #1471)

Poster #THU 247 (Prevent/Mil/Vets) I - Industrialized

Fisher, Joscelyn, PhD, Ortiz, Claudio, PhD, Harrington-Lamorie, Jill, DSW, Niemeyer, Marissa, BA, Cozza, Stephen, MD
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In the ten years after 9/11/2001, approximately 16,000 uniformed service members died on active-duty status. Few studies have investigated the impact that service member death has had on military families (Cozza, Chun, & Polo, 2005). To better serve these families, we need to understand the characteristics of the population and how these service members died, especially since violent deaths have been related to PTSD and the persistence of depression symptoms (Kaltman & Bonanno, 2003). Causes of death (e.g., illnesses, accidents, combat-related deaths) and the characteristics of the population of service members who died within ten years after 911 (n=15,941) and their families (e.g., family composition, location, military component and rank) were examined. Most deceased service members were males who were 21 years-old (mean 29 years). More than half the deaths occurred in the United States (a combination of illnesses, accidents, gunshots, etc.), and about one-third occurred in either Iraq or Afghanistan (mostly combat-related). Roughly one-third of the 16,000 service members had two children. Thus, more than 10,000 children had a parent service member die during this period. Additional demographics of these service members and their families are discussed in the context of providing services that target these survivors.
SOCIAL ISSUES – PUBLIC POLICY

THU 249
Acquaintance Hookups are Riskiest for Campus Sexual Assault Victimization
(Abstract #1199)

Poster #THU 249 (Social/Violence) I - Industrialized

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Kurtz, Brittany, BA
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Some research on sexual assault among college students has revealed an association between assault and hooking up (sexual encounters with or without future relational commitment; e.g., Flack, Daubman, et. al., 2007). In the present study, we tested this association more directly by asking victims of sexual assault to indicate the type of hook-up relationship, if any, in which their assaults occurred. Participants in this study were 364 female undergraduate students (sophomore through senior; response rate = 41%) who completed an online survey that included measures of sexual assault (Revised Sexual Experiences Survey; Koss et al., 2007), alcohol intoxication, and hooking-up. The overall prevalence rate for any type of sexual assault in this sample was 49.1%. Specific prevalence rates for fondling, completed rape, and attempted rape were 40.9%, 22.2%, and 23.6%, respectively. Results indicated that all types of sexual assault were most likely to occur during a hookup, and that among the different types of hooking up, acquaintance hookups were the most risky. This is the first demonstration of a direct relationship between sexual assault and hooking up.

THU 250
Psychosocial Well-Being, Cognitive Development and Educational Advancement among Orphans and Abandoned Children in Five Low Income Countries
(Abstract #1152)

Poster #THU 250 (Social/Child/Adol) M - Global

Escueta, Maya, MA
Whetten, Kathryn, PhD
Whetten, Rachel, MPH
Duke University, Durham, North Carolina, USA

Global policymakers and child service providers are committed to improving the educational opportunities of the 153 million orphans worldwide. Nevertheless, the relationship between orphanhood and education outcomes is not well understood. Varying factors explaining educational attainment in different contexts leave policymakers uncertain where to intervene. Using cross-sectional and child-level fixed effects regression analyses on the 1480 children in the community based sample of the Positive Outcomes for Orphans (POFO) longitudinal study, this presentation examines associations between emotional difficulties, cognitive development, grade for age, and a host of correlates including trauma. Results show that orphanhood is correlated with higher emotional difficulties relative to non-orphans, and that increases in emotional difficulties are associated with lags in cognitive development.
In contrast, wealth and caregiver literacy rates are stronger predictors of a child’s grade for age than his/her level of emotional difficulties. These findings suggest that interventions targeting the emotional development of the child and the socioeconomic status and education of the caregiver may help both to reduce barriers to a child’s educational attainment and to overcome psychosocial challenges that otherwise would present as barriers to the child’s educational advancement.

COMMUNITY-BASED PROGRAMS

THU 251
Bullying: Associations with Initial Adjustment to College
(Abstract #1138)

**Poster #THU 251 (Commun/Violence) I - Industrialized**

*Green, Jennifer, PhD*1, *Holt, Melissa, PhD*1, *Felix, Erika, PhD*1, *Reid, Gerald, PhD*1

1*Boston University, Boston, Massachusetts, USA*

2*University of California, Santa Barbara, California, USA*

Although studies document the long-term effects of bullying in adulthood (Copeland et al., 2013; Hawker & Boulton, 2000), the impact of bullying victimization specifically on college adjustment has not been addressed. College entry is a demanding transition point (Zivin et al., 2009), often requiring the formation of new social support structures, which can be a particularly challenging task for those experiencing prior peer victimization. Using a sample of 413 first-year college students, we assessed prior victimization and early indicators of college adjustment. When controlling for other forms of childhood victimization, bully victimization was significantly associated with increased psychological distress (B = 0.24-0.28, p < .01), poor physical health (B = 0.18, p < .01), and lower grades (OR = 1.8, CI = 1.0-3.0). The independent association of bullying with these outcomes suggests the need for increased attention to the transition from high school to college for students with histories of bullying. Clinicians working with college students to address other adversities may additionally benefit from evaluating the specific impact of bullying on adjustment.
THU 252
Improving Mental Healthcare for Victims of Child Abuse and Neglect: Project CANMANAGE - a Multi-System Endeavor
(Abstract #1350)

Goldbeck, Lutz, PhD1, Ganser, Helene, MS (PhD Student)2, Münzer, Annika, MS (PhD Student)2, Witt, Andreas, MS (PhD Student)2, Seitz, Diana, PhD2
1University Ulm, Ulm, Baden-Wuerttemberg, Germany
2University Ulm, Department of Child and Adolescent Psychiatry/Psychotherapy, Ulm, Baden-Württemberg, Germany

Exposure to child abuse or neglect (CAN) may have detrimental effects for the victims’ mental health. Beyond PTSD, many mental disorders are associated with a history of CAN. However, many victims remain without appropriate mental healthcare due to limited access to treatment or lack of evidence-based interventions. The project CANMANAGE is an intervention study aiming to provide early mental healthcare for victims of CAN by inter-system collaboration on a community level. At five German sites around hospitals for child and adolescent psychiatry and psychotherapy, community networks comprising child welfare agencies, office-based physicians and therapists, police, child guidance clinics, schools, and social services are built. Children aged 4-14 years with a known history of CAN are referred to the project by the collaborating institutions for a comprehensive mental health assessment. Children with a recommendation for treatment are randomly assigned to either case management intervention or usual care. Structured case management comprises Psychoeducation and problem solving techniques to overcome barriers to treatment. Primary outcome is the rate of successful referrals to evidence-based treatments, such as trauma-focused cognitive behavioral therapy. First results regarding the feasibility of the intervention and the characteristics of the participants will be reported.

THU 253
Use of Memorials to Promote Community Resilience: A Comparison of Memorials Dedicated to the Victims of Aurora and Sandy Hook
(Abstract #705)

Shull, Lisa, MS, Pecora-Sanefski, Bethany, MS, Berasi, Kateri, MEd, Demaria, Thomas, PhD
LIU CW Post, Brookville, New York, USA

The act of spontaneous memorialization is often driven by a desire to publicly express both individual and collective grief in the aftermath of mass tragedy (Haney, Leimer, & Lowery, 1997). The artifacts of this mourning ritual may provide insight into the processes by which individuals demonstrate support for those affected by the event and contribute to community resilience. This study examined the themes of spontaneous memorials erected in memory of victims of mass shootings that took place in Aurora, CO and Sandy Hook, CT, and the impact these memorials had on individual and community resilience. An online search was conducted for images of memorials from both Aurora and Sandy Hook. The images
were then coded using an established mural coding scheme and assessed for content, including the 
presence of religious references, explicit feelings elicited by the event, and assumptions about the world 
prompted by the event. The results were analyzed and will be discussed in the context of how public 
memorialization contributes to the strengthening of community resilience.

GLOBAL ISSUES

THU 254
General and Domain-Specific Determinants of Children’s Post-Traumatic Growth
(Abstract #969)

Poster #THU 254 (Global/Child/Adol) M - Industrialized  Franklin A

Laceulle, Odilia, MSc1, Kleber, Rolf, PhD2, Alisic, Eva, PhD3
1University Medical Center Groningen, Groningen, Netherlands
2Utrecht University, Utrecht, Netherlands
3Monash University, Melbourne, Australia

This study aimed to examine environmental, demographic and social characteristics associated with 
post-traumatic growth in children, hereby distinguishing effects on growth in general versus domain-
specific effects on five domains of post-traumatic growth. Data was used from 1290 children (aged 8-12) 
who were exposed to upsetting or traumatic events. Using multivariate analyses of variance, 
associations were examined for five domains of post-traumatic growth as measured with the PTGI-C-R: 
new possibilities, relating to others, personal strength, spiritual change and appreciation of life. Results 
showed that all variables under study were significantly related to post-traumatic growth. However, 
when further specifying the effects, analyses revealed that associations varied across domains of post-
traumatic growth. Peer support, stress reaction and child sex were related to most domains of growth. 
Religiosity, age and time lag were only related to some, but not all domains. For example, whereas 
stress reaction was (positively) related to all domains, religiosity was only (positively) related to spiritual 
growth. These findings suggest the presence of (i) general determinants and (ii) domain-specific 
determinants of post-traumatic growth, and consequently, stress the importance of distinguishing 
between different domains of post-traumatic growth in children.
THU 255
Predictors of Post-Traumatic Stress Disorder, Anxiety, and Depression Symptoms in Survivors of Torture Living in the United States
(Abstract #498)

Tran, Ann, PhD, Samuelson, Kristin, PhD, Harris, Matthew, PhD, Livingston, James, PhD
Alliant International University, San Francisco, California, USA

The present study sampled 122 culturally heterogeneous torture survivors residing in the United States and examined rates and predictors of PTSD, depression, and anxiety. Predictor variables included demographic variables (gender, education, marital status, and religious affiliation), torture variables generated by a factor analysis, and post-torture variables (employment status, immigration status, and current physical pain). Using the PTSD Checklist – Civilian Version as a measure of PTSD and the Hopkins Symptom Checklist as a measure of depression and anxiety, 62% of the sample met or exceeded cut-off points for probable PTSD, 86.1% for depression, and 77.9% for anxiety. Female gender significantly predicted PTSD, depression, and anxiety severity and agnostic/unaffiliated religion significantly predicted depression symptom severity. Of the torture factors, only family/witnessing torture type predicted anxiety symptom severity. Lastly, illegal immigration status and current physical pain predicted severity in all mental health outcomes. The results on predictors of mental health outcomes offer insight on potential risk and protective factors for clinical consideration.

THU 256
Wildfires, Solastalgia, and the Impacts of Environmental Loss on Mental Health
(Abstract #1496)

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USDA Forest Service, Evanston, Illinois, USA
RAND, Santa Monica, California, USA

Wildfires are increasing globally as the climate changes and the human-wilderness interface grows. Fire affected communities find themselves confronted with a dramatically different landscape after a wildfire. “Solastalgia” is the psychic distress caused by environmental change such as from climate change or open-pit mining (Albrecht et al 2007). We studied relationships between mental health and solastalgia, the sense of environmental loss after a wildfire, and other environmental consequences of the fire. A random sample of 1109 residents surrounding Arizona’s 2011 Wallow Fire were surveyed one year later and 416 participated (37.5%). The mean Kessler 10 score was 15.3 (range 10-48) indicating low risk for mental health disorder but 22.6% scored as moderate risk or above. Higher (worse) K10 score was associated with greater solastalgia (rho= 0.36, p<0.001) measured by a six item scale (alpha =0.85). Higher K10 scores were associated with inability to fish or hunt for food in the forest ($X^2=36, df=3, p<0.001$), enjoy the forest for leisure ($X^2=49, df=3, p<0.001$), see the forest as beautiful ($X^2=38,$...
df=3, p<0.001), view natural scenes that promote positive feelings ($X^2=44, df=3, p<0.001$), and gain income from the forest ($X^2=29, df=3, p<0.001$). As global environmental change mounts these findings suggest adverse effects, even among resilient communities.

**THU 257**

*Trauma Signature Analysis of Superstorm Sandy*

(Abstract #1657)

*Shultz, James, PhD*, Espinel, Zelde, MD, MA, MPH, Mack, Amy, PsyD, Neria, Yuval, PhD

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*2SAMHSA DTAC, Fairfax, Virginia, USA*
*3Columbia University and New York State Psychiatric Institute, New York, New York, USA*

Introduction: In 2012, Superstorm Sandy formed as a Caribbean hurricane, moved northward, and fused with a winter storm complex while impacting 8 nations and 24 U.S. states. Methods: We used trauma signature (TSIG) analysis, an evidence-based method that examines population exposure to disaster hazards in relation to psychological consequences to provide guidance for disaster behavioral health support focusing on the unique features of the event. We created a hazard profile, a matrix of psychological stressors, and a TSIG summary. Results: Sandy was a “meteorological chimera,” transforming into multiple presentations throughout its path: hurricane, post-tropical cyclone, coastal surge event, and blizzard. Sandy was the largest-diameter cyclonic system to impact the U.S. Almost 70 million persons were affected by this storm system. Salient psychological risk factors included stressful warnings, severe impacts, damage to frail infrastructure, widespread power outages, disruption of mass transit, and destruction of homes. The TSIG summary will be discussed in relation to the disaster behavioral health response. Conclusions: TSIG analysis has characterized the pervasive psychological effects that varied in relation to geographically-specific exposures to the physical forces of harm associated with this exceptional weather system.
SOCIAL ISSUES – PUBLIC POLICY

THU 258
Comparison of Adverse Childhood Experience Prevalence in US Veterans and Civilians Using a Population-based Sample
(Abstract #1218)

Schussler-Fiorenza, C. Miryam, MD PhD
Academic Medical Center, USA, Pennsylvania, USA

Methods: Analysis of Behavioral Risk Factor Surveillance System (2009-2010) data (n=81,119), a population-based telephone survey. Statistical analyses accounted for the complex survey design. Analyses were stratified by sex, and logistic regression analyses controlled for age, income, education, race, and marital status. The Adverse Childhood Experience (ACE) Module asks about abuse (physical, sexual, emotional) and family dysfunction (exposure to domestic violence, living with mentally ill, substance abusing, or incarcerated family member). Results: Women veterans had the highest prevalence of any ACE (68%) compared to women civilians (58%), male veterans (55%), and male civilians (56%). After adjusting for demographic factors the adjusted odds of reporting any ACE was 1.6 (1.3-2.1) for female veterans and 1.3 (1.2-1.5) for male veterans compared to female and male civilians respectively. Women veterans also had the highest prevalence of each of the individual ACE categories and had a higher adjusted odds of experiencing most ACES than women civilians. Although male veterans had a lower prevalence of the individual ACE categories compared to women veterans, their adjusted odds of experiencing each ACE category was elevated compared to male civilians. Conclusion: Veterans, particularly women veterans report a higher ACE burden than civilian survey participants.

THU 259
The Veteran Student Experience: A Qualitative Study
(Abstract #713)

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⁴Veterans Affairs San Diego Healthcare System; California School of Professional Psychology, Alliant International University, San Diego, San Diego, California, USA

According to recent estimates, over 300,000 OEF/OIF/OND Veterans are utilizing the post-9/11 GI Bill to pursue higher education. Data collected by the DoD suggests that greater than 17% of returning
Veterans may suffer from a mental health disorder such as post-traumatic stress disorder (PTSD) or depression, which can negatively impact school performance. Additionally, Veterans may feel that they do not fit in at a school where most students are younger and have not served in the military. The current study explored Veterans’ perceived successes and challenges returning to school. We conducted focus groups and individual interviews with 31 student Veterans to learn about their experiences with post-secondary education. The Veterans’ responses were coded and three overarching themes emerged that captured barriers and facilitators to educational achievement: person level features (i.e., discipline and determination, as well as symptoms and stressors that affect school), institutional structure (what schools and the VA do to help student Veterans succeed), and policy level concerns (how the structure of the GI Bill affects student Veteran achievement). Results from this research indicate the need for future research and program development efforts aimed at enhancing academic outcomes for Veterans.

COMMUNITY-BASED PROGRAMS

THU 261
Offender Coping and Experiences with Interpersonal Trauma
(Abstract #1598)

Guion, David, MS, Shivy, Victoria, PhD, Green, Brooke, BS
Virginia Commonwealth University, Richmond, Virginia, USA

This study aimed to relate childhood maltreatment experienced by offenders to their coping self-efficacy, as well as to preferred coping methods and the ability to regulate emotions. We hypothesized that childhood maltreatment and coping self-efficacy would be significantly related to difficulties in emotion regulation and coping styles and that coping self-efficacy would mediate the relationship between childhood maltreatment and the criterion variables. Participants included 183 male and female ex-offenders, convicted of non-violent felony offenses, residing in 5 community corrections residential facilities in Virginia. The participants ranged in age from 19 to 55 (M = 31.66, SD = 8.20). As for race/ethnicity, 60.7% of the participants self-reported as Caucasian, 33.3% as African American, 3.3% as Other, 1.1% as Latino/a, and 0.5% as Asian American (1.1% did not list their race/ethnicity). The mediated regression model did not hold. Greater reported childhood maltreatment was, however, significantly related to difficulties in emotion regulation. Lower reported levels of coping self-efficacy significantly predicted greater avoidant coping, less active coping, and difficulties in emotion regulation. The construct of coping self-efficacy could be an important target for reentry preparation efforts in the correctional system.
THU 263
Co-occurrence of PTSD and Personality Disorders in a Large Community Sample: Prevalence and Associations with Health-Related Functioning
(Abstract #1507)

Scheiderer, Emily, MA, Tomko, Rachel, MA, Trull, Timothy, PhD
University of Missouri - Columbia, Columbia, Missouri, USA

Personality pathology is associated with exposure to trauma and PTSD. Empirical evidence suggests that co-occurrence of personality disorders (PDs) impacts the course, severity, and prognosis of PTSD. Little information exists regarding co-occurrence of the full array of DSM-IV PDs with PTSD in the general population. Utilizing data from Wave 2 of the National Epidemiological Survey on Alcohol and Related Conditions (NESARC; N = 34,653), the present study examines co-occurrence of DSM-IV PDs with PTSD and associations of these co-occurrences with health-related functioning and healthcare treatment usage in a large, representative community sample. To make population-based inferences, data analyses incorporated stratification and weighting systems that were part of the NESARC’s complex survey design. To more accurately assess co-occurrence prevalence rates and characterize associations, re-analysis of the NESARC PD diagnoses—requiring clinically significant distress or impairment on each criterion in order for it to count toward diagnosis—was employed. Preliminary results suggest a pattern of co-occurrence that supports the relative emphasis on borderline-PTSD and antisocial-PTSD co-occurrence in the literature and differs from co-occurrence patterns based on original NESARC PD analyses. Further results and implications for treatment and research are discussed.

GLOBAL ISSUES

THU 264
Stress and Coping among Humanitarian Aid Workers
(Abstract #267)

Welton-Mitchell, Courtney, PhD
University of Denver, Denver, Colorado, USA

Humanitarians work in increasingly challenging environments, including insecure settings in which they may become targets of violence. This, along with exposure to the suffering of refugees, disaster victims, and other recipients of humanitarian assistance can result in high rates of distress among aid workers. Common stressors and preferred coping strategies were examined in a sample of over 1,500 humanitarians working for a large international aid organization. Data was collected through a multi-country online survey, and focus groups and individual interviews in Bangladesh and Pakistan. Results indicate high rates of both direct and secondary exposure to traumatic stress. A majority of online survey respondents endorsed some symptoms associated with depression and PTSD. Preferred coping
mechanisms included optimism, benefit-finding, and other forms of adaptive coping, suggesting high rates of resilience, although a subgroup of participants endorsed substance use, self-blame, and other potentially maladaptive strategies. Participant recommendations for interventions designed to mitigate distress and enhance resilience are highlighted, including various means of enhancing informal social support and improving organizational response to critical incidents.

THU 265
Appraisals of Centrality and Intrusive Thoughts: Ongoing Events in a College Sample
(Abstract #623)

Riley, Kristen, MA, Park, Crystal, PhD
University of Connecticut, Storrs, Connecticut, USA

The appraisal of a stressful event as central to one’s identity or wellbeing has been consistently associated with psychological distress, including intrusive thoughts (Berntsen & Rubin, 2006, 2007). However, most of the studies examining appraisals of centrality and intrusive thoughts have been correlational in nature, thus leaving the direction of the relationship unexamined (Newby & Moulds, 2011). Change in appraisals of centrality may cause a change in intrusive thoughts, conceptualized as an index of distress or adjustment; alternately, change in intrusions may cause a decrease in appraisals of centrality, as intrusions can also be conceptualized as a cognitive processing strategy. Therefore, the current study examined this relationship in a 3 time point longitudinal study 191 college students coping with ongoing stressors. Growth curve modeling demonstrated significant links between decreases in appraisals of centrality and decreases in intrusive thoughts, as suggested by previous literature. Cross-lagged panel analysis suggested that intrusions were impacted change in appraisals of centrality, rather than the reverse. Although correlational in nature, these results suggest that intrusive thoughts function as cognitive processing to change appraisals. Future research should consider how intrusive thoughts may help improve cognitive appraisals of stressors.
TRAINING/EDUCATION/DISSEMINATION

THU 267
The Predictive Relationship between Negative Appraisal of Self and Others, Post-Traumatic Stress Disorder, and Somatization
(Abstract #1512)

Poster #THU 267 (Train/Ed/Dis/N/A) I - Industrialized            Franklin A

Paige, Lauren, BA, Pérez Benitez, Carlos, PhD
University of Miami, Coral Gables, Florida, USA

There is increasing research investigating the vulnerability of Latinos to PTSD and somatization. Research by Pole, Best, Metzler, and Marmar (2005) indicates higher rates of PTSD and somatic symptoms in Latinos, compared to other cultural groups. Although Latinos are now the largest, fastest-growing minority population in the United States, there is little research in this population concerning specific factors that influence the severity of PTSD and somatization, including negative appraisals of self and others after a traumatic experience. The present study examines the predictive relationship between post-traumatic cognitions and the severity of both PTSD and somatization symptoms. Participants of the present study were patients for a clinical trial for PTSD and somatization in Latinos. Researchers administered the Clinician-Administered PTSD Scale, Severity of Somatic Symptoms Scale, and Post-Traumatic Cognitions Inventory to measure PTSD, somatic symptoms, and cognitions, respectively. A multiple regression analysis will be conducted to determine the predictive ability of post-traumatic cognitions for PTSD and somatic symptom severity, controlling for gender, number of traumas, and comorbid depression. While final results for this study are not yet available, researchers expect further clarification of factors contributing to elevated PTSD and somatic complaints in Latinos.

THU 268
Developing a Trauma-Informed Care Curriculum for First- and Second-Year Medical Students
(Abstract #322)

Poster #THU 268 (Train/Ed/Dis/N/A) I - Industrialized            Franklin A

Kimball Franck, Leslie, PhD, Al-Mateen, Cheryl, MD
Virginia Commonwealth University, Richmond, Virginia, USA

Estimates vary, but it is commonly agreed that a sizeable proportion of the population will be exposed to at least one traumatic event in their lifetime. In addition, a traumatized individual's first discussion about the event(s) is likely to be with a non-mental health professional, such as a primary care physician or other medical professional. Therefore, it is important that medical students receive adequate training in trauma-informed care. Most medical schools do not include this information in their curricula, and if they do, it is taught on a limited basis only to those medical students who express an interest in behavioral sciences such as psychiatry. The purpose of this presentation is to share the process of developing a comprehensive trauma-informed care curriculum for first- and second-year medical
students, by utilizing the Core Curriculum for Childhood Trauma developed by the National Child Traumatic Stress Network as a foundation, and adapting it for applicability in working with traumatized adults as well as children. This curriculum will comprise approximately 10 hours of instruction, and will be integrated into the Physician, Patient, & Society portion of the Applied Medical Sciences section of Years One and Two at a medical school in the mid-Atlantic region of the United States. It will be taught by a psychiatrist and a clinical psychologist.

VICARIOUS TRAUMATIZATION AND THERAPIST SELF-CARE

THU 269
Risk and Resilience Factors Associated with Secondary Traumatic Stress among Social Workers in Military Settings
(Abstract #215)

Poster #THU 269 (Self-Care/Caregvs) M - Industrialized

Owens, Allessia, Doctoral Student
Howard University, Washington, District of Columbia, USA

The consequences of secondary exposure to emotional trauma are relatively under researched in comparison to the symptoms on direct exposure to emotional trauma. A small but growing number of scholars believe that behavioral health providers are susceptible to secondary trauma reactions as a result of their work duties. The presentation will review the relationship between work with traumatized military service members and secondary trauma among behavioral health professionals. The study will use a cross-sectional sample of providers to assess rate of secondary traumatic stress. Standardized measures will be used evaluate the role of factors such as social support and use of self-care strategies on rate of secondary traumatic stress. The discussion will highlight the association between clinical practice and secondary traumatic stress so to increase awareness of the issue. In addition, the discussion may inform workforce development initiatives aimed at improving clinician resilience and effectiveness.
Aging, Trauma and the Life Course SIG

WR 101
Vietnam-Era Women Veterans: Use and Satisfaction with VA healthcare
(Abstract #156)

Poster #WR 101 (Clin Res/Mil/Vets) I – N/A  Grand Ballroom E/F

Pless Kaiser, Anica, PhD1, Spiro III, Avron, PhD2, Davison, Eve, PhD3, Stellman, Jeanne, PhD4
1VA Boston Healthcare System, National Center for PTSD; Boston University School of Medicine, Boston, Massachusetts, USA
2Boston University School of Public Health, Boston, Massachusetts, USA
3VA Boston Health Care System/Boston University, Boston, Massachusetts, USA
4Columbia University, New York, New York, USA

Specialized services for women began in the 1990s at the Veterans Administration (VA) but have been underutilized. We undertook an examination of factors that may influence underutilization by describing patterns of VA use and satisfaction among a large sample (N = 2082) of Vietnam-era women Veterans, both deployed to Vietnam or serving elsewhere in the world, who responded to a mailed survey approximately 25 years after the Vietnam era ended. We used multiple regressions to examine associations between demographics, deployment status, stressor and sexual harassment exposure, physical and mental health and whether the Veteran served as a nurse and outcomes. Lower income level, being uninsured, experiencing work stress, PTSD symptoms and worse physical function were associated with greater use of VA services. Older, more educated, higher income non-nurses were more knowledgeable about and felt more secure using VA. Having experienced sexual harassment was associated with poorer attitudes about quality of VA services and helpfulness of staff. Prior trauma, sexual harassment, work stress, and PTSD increased mental health treatment seeking at VA, which was negatively related to quality of life. Understanding Vietnam-era women Veterans’ needs and responses to VA services provides a historical perspective and valuable information regarding the views of this understudied population.
WR 102
Holocaust Survivors and Their Post-war Relationships: Women’s Coping, Healing, and Interpersonal Bonds
(Abstract #1238)

Mapel, Geraldine, PhD Candidate
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Traumatologists remain unclear as to whether interpersonal relationships, sometimes collectively referred to as “social support,” constitute an untapped forum for fostering resilience following trauma, and aiding healing throughout the lifespan. Studies of PTG and resilience suggest that social support aids recovery from trauma. However, studies on survivors of complex trauma in general, and the Holocaust in particular, report that many survivors manifest long-lasting difficulties in establishing and maintaining helpful, healthful relationships over time. This discrepancy in the research literature reflects a post-traumatic paradox: trauma survivors need social support to heal; yet, due to their exposure to trauma, may be left relationally challenged. For the current study, camp survivors were interviewed about their relational experiences from WWII to the present time. Using the Listening Guide Method, the lifespan narratives of female Holocaust survivors were qualitatively analyzed in order to gain a nuanced and multi-layered perspective on the interplay among trauma, interpersonal bonds, coping, and resilience. Goals are to elucidate this paradox toward developing more efficacious treatment support networks for individuals following experiences of extreme trauma.

WR 103
Predictors of Low and High Psychotherapy Utilization in Veterans with PTSD
(Abstract #170)

Hundt, Natalie, PhD 1, Mott, Juliette, PhD2, Cully, Jeffrey, PhD1, Grady, Rebecca, BA1, Teng, Ellen, PhD1
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2Michael E. DeBakey VA Medical Center; Baylor College of Medicine, Houston, Texas, USA

Both low and high utilization of psychotherapy may be problematic. Low utilization may translate into patients receiving insufficient services to effect clinical change, whereas very high utilization in a managed care or VA setting with finite resources may lead to resource depletion as a disproportionate amount of available resources are focused on a small number of patients. This study examined rates and predictors of low and high psychotherapy utilization in a sample of 157 patients enrolled in an outpatient Veterans Affairs (VA) post-traumatic stress disorder (PTSD) clinic. Approximately 25% of the sample were low utilizers, receiving fewer than 4 sessions per year, whereas 16% were categorized as high utilizers, receiving 52 or more therapy sessions per year on average during their course of their treatment. Indicators of severity, including comorbidity, GAF score, and number of inpatient admissions, were not associated with low versus high utilization. Age was the only clinical or demographic variable that independently predicted utilization, with older Veterans using more services. Qualitative data
indicated that social and relational factors, such as lack of social support, may contribute to utilization rates in Veterans with PTSD.

Child Trauma SIG

WR 104
(Abstract #911)

Nylocks, Karin, BS\textsuperscript{1}, Gamwell, Kaitlyn, BS\textsuperscript{1}, Smith, Ami, PhD\textsuperscript{1}, Ressler, Kerry, MD, PhD\textsuperscript{1}, Bradley, Bekh, PhD\textsuperscript{2}, Jovanovic, Tanja, PhD\textsuperscript{1}.
\textsuperscript{1}Emory University School of Medicine, Atlanta, Georgia, USA
\textsuperscript{2}Atlanta VAMC/Emory University, Decatur, Georgia, USA

Post-traumatic stress disorder (PTSD) can begin early in life in highly traumatizing environments; however, studies show discrepancies between parental and child reports of PTSD symptoms. The objective of this study was to investigate the predictive value of children’s physiological fear responses on their PTSD symptoms. We assessed skin conductance responses (SCR) using a differential fear conditioning paradigm in a sample (N=50) of 8-12 year-old children recruited from a highly traumatized civilian population in Atlanta, GA. In addition, we interviewed the children and their mothers to assess PTSD symptoms using the UCLA Child PTSD Index. Trauma exposure in the child was assessed using the VEX-R. Linear regression analysis of parental report of child PTSD symptoms showed that they were predicted by level of child trauma exposure (F(1,45)=4.09,p=.05) and maternal PTSD symptoms (F(1,45)=10.92,p=.002), but not SCR (p>.59). On the other hand, child reported PTSD symptoms were predicted by trauma level (F(1,45)=4.59,p=.04) and SCR (F(1,45)=4.49,p=.04), but not maternal PTSD symptoms (p>.10). This study suggests that fear conditioned responses are associated with child report of PTSD symptoms in children from highly traumatizing environments, but not maternal report. SCR may provide an objective measure of child arousal and PTSD when parental and child report do not correlate.
WR 105
Heart Rate and Post-Traumatic Stress Symptoms in Injured Children
(Abstract #1206)

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A relationship has been observed between elevated acute heart rate (HR) and post-traumatic stress disorder (PTSD) in adults and children. Less is understood about the potential for lower acute HR to serve as a marker of adaptive early responses. Further understanding of physiological responses may help identify children at risk of developing partial or full PTSD. We examined heart rate in relation to later post-traumatic stress symptoms in injured children ages 8 to 17 (N=142) admitted to the hospital. Mean ED triage HR was 88.5 BPM. 34 (24%) children had an elevated HR, defined as triage HR >= 2 SDs above normal resting heart rate for child age and sex. Children with elevated HR were more likely to have significant PTSD symptoms at 6 weeks post-injury, but elevated HR was not associated with 6-month PTSD symptom outcomes. Lower HR, defined as HR < 1 SD below the age/sex-adjusted mean, was not found to be associated with lower risk of PTSD symptoms at 6 weeks or 6 months. The findings highlight the potential for triage HR to aid in predicting psychological sequelae of injury.

WR 106
PTSD Symptomatology and Diagnostic Comorbidity in Sexually Abused Children
(Abstract #1120)

Brosbe, Micah, MS, Faust, Jan, PhD, Hoefling, Katie, MS, Gold, Steven, PhD
Nova Southeastern University, Ft. Lauderdale, Florida, USA

Research on child traumatic stress has indicated that many youth who experience prolonged interpersonal trauma demonstrate a broad range of behavioral symptoms beyond PTSD, often leading to meeting criteria for multiple diagnoses. Clinical research has focused on investigating a potential relationship between PTSD and other disorders. The aim of this study is to extend this research by testing associations between specific PTSD symptoms and comorbid disorders in a sample of sexually abused children. The sample included 75 clinically referred youth (56 females, ages 6-17 years) with sexual abuse histories. Diagnoses and PTSD symptoms were determined using a semi-structured diagnostic interview. Analyses revealed that MDD, but not other anxiety disorders, ADHD, or oppositional-defiant disorder, was associated with higher rates of PTSD symptoms in cluster B (F=10.79, p<.01), cluster C (F=11.18, p<.01), and total symptoms (F=14.56, p<.01). Analyses further revealed that participants who endorsed symptoms B3 (flashbacks; F=4.67, p=.03), C4 (diminished interest; F=5.46, p=.02), and C7 (sense of foreshortened future; F=10.78, p<.01) met criteria for more comorbid diagnoses than those who denied these symptoms. This study builds on previous work by
demonstrating associations between specific PTSD symptoms and comorbid diagnoses. Clinical and research implications are discussed.

Family Systems SIG

WR 107
Interacting Effects of Family Violence Exposure in Youth and Physical Symptoms in Adulthood: The Impact of the Parasympathetic Nervous System (Abstract #1306)

Poster #WR 107 (Clin Res/Adult/Cmplx) M - Industrialized

Grand Ballroom E/F

Rivers, Alison, BA 1, Barry, Samantha, BA 1, Lehrbach, Melissa, BA 1, Rabkin, Ari, MA 1, Huz, Ilana, BA 1, Olezeski, Christy, PhD 2
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Exposure to family violence during youth can affect later psychological (e.g., Margolin & Gordis, 2004) and physical health (e.g., Norman, Means-Christensen, Craske, Sherbourne, Roy-Byrne, & Stein, 2006). However, some individuals are affected more than others, leading researchers to examine possible moderators of the impact of violence. Activity in the parasympathetic nervous system (PNS) has received attention because of its links with emotion regulation and adaptive functioning (e.g., Beauchaine, 2001). PNS activity appears to moderate the link between early adversity and later outcomes (e.g., El-Sheikh, Kouros, Erath, Cummings, Keller, & Staton, 2009). In the present study, 87 young adults reported retrospectively on their experiences of harsh parenting and exposure to interparental aggression during childhood, and on their current physical complaints. Resting respiratory sinus arrhythmia (RSA), a PNS indicator, was also measured. Regression analyses indicate that RSA moderates the relation between family violence and physical complaints. In females, higher RSA, indicating higher PNS activity, appears to be protective against the effects of family violence, whereas in males, the opposite finding emerged. Results suggest PNS moderation of the effects of early adversity on later health functioning, though the role of PNS may be different in males versus females.
WR 109

Effect of Parenting and Social Support on PTSD Symptoms in Children in Rwanda Who Have Experienced Traumatic Events
(Abstract #126)

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2Harvard School of Public Health/ FXB Center for Health and Human Rights, Boston, Massachusetts, USA
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Families and communities often provide primary support to children who have experienced traumatic events. This may be particularly true in Rwanda where families face multiple stressors and mental health services are limited. This study analyzes the relationship between parenting and social support on post-traumatic stress disorder (PTSD) symptoms in children who experienced potentially traumatic events in Rwanda. 681 HIV+, HIV-affected, and non-HIV-affected children aged 10-18, were interviewed (51.5% female, mean age 13.6). Children verbally completed the UCLA PTSD-RI assessing PTSD symptoms and traumatic events. Multiple linear regressions were run in which reporting a traumatic event and locally-adapted measures of parenting and social support predicted PTSD symptoms, after controlling for sex, age, and stratifying by HIV status. 64.1% of children reported an event that continues to upset them. PTSD symptoms ranged from 0 to 22 (mean 7.23); only 17.7% reported no symptoms. Parenting and social support negatively predicted PTSD symptoms while age and reporting a traumatic event positively predicted symptoms (all p<.01). Good parenting and social support may reduce PTSD symptoms in children who have experienced traumatic events. Interventions that strengthen parents, families, and communities may help children cope with multiple adversities.

WR 110

Strengthening Family Coping Resources (SFCR): Results from the Field
(Abstract #1078)

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Strengthening Family Coping Resources (SFCR) is a manualized multi-family group intervention that delivers a trauma-focused, skills-based treatment to families living in traumatic contexts. This poster presents findings on SFCR’s effectiveness related to change in trauma symptoms and behavior problems for identified children and adolescents and in family functioning and coping. Since publication of the feasibility trial (Kiser, et al, 2010), two SFCR models are being implemented nationally with pre-post data submitted to the developer. This sample includes 151 families (including the original sample) who participated in SFCR between 2006-2012. Results of linear mixed model analyses demonstrate that PTSD
symptoms are significantly reduced post SFCR by both parent- and child-report. Parents report significant reductions in their child’s behavior problems across multiple CBCL subscales, the Dyregulation Profile scale, and on Internalizing and Externalizing summary scales. Caregivers report significant improvements in overall family functioning as measured by the FAD-12, in family coping on the F-COPES, and in parenting stress on the PSI-SF. Results of gender and age effects on pre-post differences and of differences between the a trauma treatment and a high-risk models will also be reported. SFCR seems to meet its primary intervention goals when delivered in multiple sites.

**Intergenerational Transmission of Trauma & Resilience SIG**

**WR 112**

Maternal Trauma Symptoms and Parenting Mediate the Effect of Pre and Postnatal Intimate Partner Violence on Infant Trauma Symptoms

(Abstract #518)

<table>
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<th>Poster #WR 112 (Clin Res/Child/Adol) M - Industrialized</th>
<th>Grand Ballroom E/F</th>
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</table>

**Garcia , Antonia , MA PhD Student**, Yalch, Matthew, MA, PhD Student, Smagur, Kathryn , MA, PhD Student, Lannert, Brittany, MA, PhD Student, Levendosky, Alytia, PhD, Lonstein, Joseph , PhD Michigan State University, East Lansing, Michigan, USA

Exposure to intimate partner violence (IPV) in infancy is associated with trauma symptoms (e.g., arousal, avoidance and re-experiencing) in children as young as 12 months, but not all IPV-exposed infants are affected. Recent research indicates that prenatal maternal stress is associated with biobehavioral dysregulation in offspring, which may increase the infant’s vulnerability to develop trauma symptoms when exposed to a postnatal traumatic event, such as IPV. Additionally, the relational model of PTSD suggests that maternal trauma symptoms likely exacerbate trauma symptoms in the infant, as the mother may exhibit less nurturant parenting. Hence, maternal trauma symptoms and poor parenting may mediate the potential relationship between IPV and child trauma symptoms. Although these meditational effects have been demonstrated with respect to postnatal exposure to IPV, they have not been tested with IPV exposure during the prenatal period. The sample was 182 women and their one-year old children. Structural equation modeling indicated that prenatal IPV was associated with infant trauma symptoms, but that postnatal IPV was not. As hypothesized, this effect was partially mediated by maternal trauma symptoms and nurturant parenting. These results highlight the importance of maternal factors in influencing children’s resiliency to IPV exposure.
WR 113
Growing From Adversity and Psychological Adjustment over Time in Abused Foster Youth
(Abstract #354)

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Northern Illinois University, DeKalb, Illinois, USA

The majority of foster youth experience maltreatment in their family-of-origin and foster families (Salazar et al., 2011). Thus, it is not surprising that twice the rate of depression in foster youth than the general population has been documented (White et al., 2009), and peaks during ages 17 to 19 (Courtney et al., 2004). However, no known studies have reported on whether foster youth experience post-traumatic growth (PTG), and whether PTG facilitates psychological adjustment over time. Components of PTG (i.e., compassion for others and enhanced self-efficacy) and their relation with depression severity over a year, from age 17 to 18, were examined. Participants were 373 (55% female) foster youth from Voyages (McMillen, 2010) who endorsed child maltreatment. PTG (Perceived Benefits Scale; McMillen & Fisher, 1998) was measured initially and depression (Depression-Arkansas Scale; Smith et al., 2002) every three months. A linear growth model examined the course of depression as a function of initial levels of PTG. Results revealed depression decreased in a quadratic fashion. Self-efficacy and compassion for others were positively and negatively associated with initial depression, respectively. Greater self-efficacy predicted decreases in depression, whereas compassion for others was not associated with depression over time. Implications for theory and research will be discussed.

WR 114
Caregiver Avoidance Coping and Acute Post-Traumatic Stress Symptoms in Children Following Pediatric Injury
(Abstract #944)

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2Akron Children’s Hospital & Northeast Ohio Medical University, Akron, Ohio, USA
3Kent State University & Northeast Ohio Medical University, Kent, Ohio, USA

Traumatized individuals who engage in avoidance coping strategies have been found to report increased PTSD symptoms (PTSS) and other functional impairments. In children, maladaptive caregiver coping styles may negatively impact a traumatized child’s adjustment. However, little is known about the impact of caregiver avoidance coping on the development of child PTSS. The present study examined the impact of caregiver avoidance coping on acute child PTSS following pediatric injury. 118 children admitted to the Emergency Department for non-abuse related injuries and their primary caregivers were recruited. At 2- and 6-weeks post-trauma, children and caregivers were administered the CAPS-CA/CAPS and caregivers completed the Brief-COPE to assess avoidance coping. After controlling for family income, child age, gender, hierarchical linear regression analyses revealed that 2-week caregiver
avoidance coping predicted 6-week child PTSS (p < .05). Significant results remained after controlling for caregiver PTSD avoidance symptoms (p < .05). Findings highlight the need for the assessment of caregiver coping style. Increasing our understanding of maladaptive coping mechanisms following a trauma is crucial for our understanding of the development and prevention of PTSS and can help aid in the identification and treatment of traumatized children in greatest need of services.

Lesbian, Gay, Bisexual & Transgendered Issues SIG

WR 115
Self-Criticism as a Mediator between Verbal Victimization and PTSD Symptoms among Lesbian, Gay, and Bisexual Youth
(Abstract #560)

Poster #WR 115 (Clin Res/Child/Adol) M – N/A Grand Ballroom E/F

Smith, Brian, MA PhD Student¹, Boarts, Jessica, PhD¹, Armelie, Aaron, PhD², Delahanty, Douglas, PhD³
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Lesbian, gay, and bisexual (LGB) youths experience higher levels of victimization than their heterosexual peers. A common type of victimization experienced among LGB youths is verbal victimization, which has been linked to post-traumatic stress disorder (PTSD) symptoms. However, the mechanism(s) through which verbal victimization predicts PTSD symptoms remains unclear. Prior research has found that experiential avoidance, self-criticism, and internalized homophobia are related to victimization and PTSD. The current study examined whether these three factors mediated the relationship between verbal victimization and PTSD symptom severity in a sample of 68 primarily African American LGB adolescents and young adults. Results of a hierarchical linear regression multiple mediator model with 10,000 bootstrapping resamples indicated that the overall model was significant, F(4, 63) = 8.226, p < .001, R² = .343. However, only self-criticism mediated the relationship between verbal victimization and PTSD symptom severity, b = -1.22, t(67) = -3.22, p = .002 (BCI 95%: -.62--.649). Experiential avoidance and internalized homophobia did not help to explain the relationship between verbal victimization and PTSD symptoms. These findings suggest that PTSD therapies that incorporate a focus on self-criticism may be effective in reducing PTSD symptoms among verbally victimized LGB youth.
Gender and Trauma SIG

WR 116
Impaired Fear Inhibition Predicts Higher PTSD Symptom Severity in Women in a Fear-Potentiated Startle Paradigm
(Abstract #250)

Kaye, Joanna, BA, Jovanovic, Tanja, PhD, Rothbaum, Barbara, PhD, ABPP, Dunlop, Boadie, MD, MS
Emory University School of Medicine, Atlanta, Georgia, USA

A cardinal feature of post-traumatic stress disorder (PTSD) is a decreased ability to control fear responses under safe conditions. In the present study, fear-potentiated startle was examined in 24 women with PTSD caused primarily by civilian trauma. We used a conditional discrimination procedure (AX+/BX-) that allows for an assessment of fear-potentiated startle during threat conditions (reinforced conditioned stimulus, AX+) and inhibition of fear-potentiated startle during safety conditions (nonreinforced conditioned stimulus, BX-). This paradigm also includes a test of fear inhibition (AB). PTSD symptom severity was assessed using PTSD Symptom Scale self-report (PSS-SR). At the end of the session, the participants showed significant fear-potentiated startle to AX+, F(1,23)=19.24, p<.001, and significant discrimination between AX+ and BX-, F(1,23)=10.67, p=.003. The inhibition of fear on the AB trials relative to AX+ was positively correlated with PTSD symptoms, r=.46, p=.02. A linear regression predicting PSS-SR examined the effects of age, childhood trauma, and fear inhibition. The overall model was significant, F(3,20)=5.32, p=.007, with fear inhibition alone accounting for 20% of the variance in PTSD symptoms, Fchange(1,20)=7.10, p=.02. This suggests that fear inhibition is decreased in patients with higher PTSD symptoms, even after controlling for level of childhood trauma.

WR 117
Positive Emotionality Moderates the Effect of Dating Violence on PTSD Symptoms
(Abstract #882)

Bernard, Nicola, MA Student, Yalch, Matthew, MA, PhD Student, Levendosky, Alytia, PhD, Bogat, G. Anne, PhD
Michigan State University, East Lansing, Michigan, USA

Dating violence is associated with a number of adverse psychological conditions, including symptoms of post-traumatic stress disorder (PTSD). However, not all women who experience dating violence exhibit PTSD symptoms. One factor that may influence whether or not women develop PTSD symptoms following exposure to dating violence is temperament, which functions as a predisposition for stress reactivity. However, this has not yet been tested. In this study, we measured dating violence, PTSD symptoms, and temperament traits (constraint, negative emotionality, and positive emotionality) in young adult women. Results from a preliminary data analysis of 150 women indicated that all three
temperament traits exert main effects on PTSD symptoms over and above the main effect of dating violence. Moreover, positive emotionality moderated the effect of dating violence on PTSD symptoms such that high positive emotionality was associated with fewer PTSD symptoms than low positive emotionality given high dating violence. These results suggest that high positive emotionality may make women more resilient to symptoms of post-traumatic stress within the context of dating violence.

WR 118
Sex Differences in Fear Extinction Learning and Memory in Trauma Exposed Individuals
(Abstract #893)

**Poster #WR 118 (Bio Med/Violence) M – N/A**

**Grand Ballroom E/F**

**Inslicht, Sabra, PhD** 1, Rucker, Evelyn, MA 2, Milad, Mohammed, PhD 3, Orr, Scott, PhD 4, Marmar, Charles, MD 5, Neylan, Thomas, MD 6

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2San Francisco VA Medical Center (VAMC-SF), San Francisco, California, USA
3Massachusetts General Hospital, Harvard Medical School, Charlestown, Massachusetts, USA
4Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA
5New York University School of Medicine, New York, New York, USA
6University of California, San Francisco and San Francisco VAMC, San Francisco, California, USA

**BACKGROUND:** Reduced extinction learning and retention has been associated with post-traumatic stress disorder (PTSD) symptomatology. While some studies of healthy humans suggest that women are either no different or have greater extinction learning and retention than men, sex differences in the extinction of conditioned fear between men and women who have been exposed to trauma have not been examined. **METHODS:** Fifty trauma-exposed participants (35 men; 15 women) underwent a 10-day conditioning paradigm. During conditioning, participants were shown colored circles that were paired (CS+) or unpaired (CS-) with an aversive electrical stimulus. During extinction (72 hours later), participants were presented with the previously conditioned stimuli in the absence of aversive stimuli. Extinction retention was tested one week later. **RESULTS:** Repeated measures ANOVAs resulted in greater differential skin conductance responses in women during extinction, F (1, 489) = 4.66, p <.05, and extinction retention, F (1, 97) = 4.87, p <.05, compared to men. **CONCLUSION:** These findings suggest that trauma exposed women may have reduced extinction learning and retention compared to men. Understanding sex differences in fear learning and memory may clarify sex-related differences in responses to trauma exposure and to exposure-based treatments.
Diversity and Cultural Competence SIG

WR 119
A Protective Model against PTSD and Depression for At-Risk African American Women
(Abstract #1611)

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¹Emory University School of Medicine, Atlanta, Georgia, USA
²Atlanta VAMC/Emory University, Decatur, Georgia, USA

The majority of low-income African American (AfA) women exposed to traumatic events do not develop chronic trauma and depressive symptomatology. The Broaden and Build Model (Fredrickson, 1998) posits that positive emotions account for this resilience. However, this model has received little empirical attention as an explanation for resilience among traumatized AfA women. As part of a larger NIMH-funded study, data were analyzed from 814 highly trauma-exposed, primarily AfA female participants (94.1%), recruited from an urban, public hospital in Atlanta, GA. PTSD symptoms were assessed using the Modified PTSD Symptoms Scale (mPSS). Depressive symptoms were evaluated using Beck Depression Inventory (BDI). Positive affect (PA) was measured using the Positive Affect Negative Affect Scale (PANAS). Social/emotional support (S/ES) was rated on a 4-pt. Likert scale. Hierarchical regression analyses indicated that PA and S/ES were linked to lower levels of PTSD and depressive symptoms (all p values < 0.001). These factors demonstrate an additive effect of PA and S/ES in reducing symptomatology. Findings extend prior research on the Broaden and Build Model through application to an AfA, female, trauma-exposed population. These data support a model in which PA and S/ES both serve as important protective factors against PTSD and Depression in traumatized civilians.

WR 120
The Association between Discrimination and PTSD Symptoms in Arab Immigrants
(Abstract #1631)

Pole, Nnamdi, PhD ¹, Arnetz, Bengt, MD PhD², Broadbridge, Carissa, MA³, Arnetz, Judith, PhD, MPH³, Jamil, Hikmet, MD, PhD³
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²Wayne State University, School of Medicine, Detroit, Michigan, USA
³Wayne State University, Detroit, Michigan, USA

Ever since the September 11, 2001 attacks on the United States, Arabs in America have been treated with increasing suspicion and sometimes overt hostile discrimination. Other research has documented an association between ethnic discrimination and PTSD. However, it is usually unclear in cross-sectional data whether discrimination causes PTSD or whether PTSD hypervigilance symptoms increase the
perception of discrimination. We surveyed recent Iraqi refugees (n = 240) and a comparison group of non-Iraqi, non-refugee Arab immigrants (n = 313) on a variety of factors pertaining to their pre-migration and post-migration stressors. Mainstream standardized surveys were translated into Arabic, back-translated, and administered in face-to-face interviews by respected members of the Arab community. Results revealed that post-migration discrimination was associated with elevated PTSD symptoms for both the immigrants (r = .26, p < .001) and the refugees (r = .25, p < .001). These relationships were diminished but still significant after adjusting for PTSD hypervigilance symptoms: immigrants (r = .14, p = .02) and refugees (r = .15, p = .02). The results are consistent with the notion that discrimination contributes to PTSD symptoms beyond merely reflecting hypervigilance. However, longitudinal research will be needed to further clarify the temporal sequence of these variables.

WR 121

The Role of Peers in the Relation between Hurricane Exposure and Ataques de Nervios among Puerto Rican Adolescents
(Abstract #206)

Little is known about the relation between hurricane exposure (HE) and ataques de nervios (ataques) among youth. This study examined the role of the peer context in the relation between HE and experiencing past year and lifetime ataques among a representative community sample of 905 youth (N = 476 boys; ages 11-18) residing in Puerto Rico. Data were gathered 12-27 months following Hurricane Georges. Findings from logistic regressions indicated that peer violence significantly predicted experiencing an ataque in the past year (OR = 1.40, 95% CI = 1.04-1.89). HE (OR = 1.08, 95% CI = 1.01-1.15) and peer violence (OR = 1.33, 95% CI = 1.04-1.68) significantly predicted a lifetime experience of an ataque. An interaction was found between HE and peer violence (OR = .92, 95% CI = .84-.99), indicating that HE was significantly related to a lifetime experience of an ataque among adolescents who do not report associating with violent peers. For participants reporting high levels of peer violence, HE did not add additional risk for a lifetime experience of an ataque. Findings suggest that professionals should assess for culturally-influenced expressions of distress and peer contextual factors to improve the developmentally and culturally sensitive nature of post-disaster interventions.
WR 122
Trajectories of Post-Traumatic Stress in a Predominantly Non-Hispanic Black Sample of Urban-Dwelling Adults
(Abstract #933)

Poster #WR 122 (Assess Dx/Diverse Pop) M - Industrialized Grand Ballroom E/F

Lowe, Sarah, PhD 1, Uddin, Monica, PhD 2, Aiello, Allison, PhD 3, Wildman, Derek, PhD 2, Galea, Sandro, MD, DrPH 4, Koenen, Karestan, PhD 5
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2 Wayne State University, Detroit, Michigan, USA
3 University of Michigan, Ann Arbor, Michigan, USA
4 Mailman School of Public Health, New York, New York, USA
5 Columbia University School of Public Health, New York, New York, USA

Residents of urban environments are exposed to a range of traumatic events and are at higher risk of experiencing assaultive trauma (e.g., sexual assault, being held up or mugged), compared to non-urban residents. Assaultive trauma exposure is strongly associated with subsequent post-traumatic stress (PTS). Previous research has used Latent Class Growth Analysis (LCGA) to document patterns of PTS after specific traumatic events, including natural disasters and military deployment, but this technique has not been applied to urban samples that face a range of assaultive and non-assaultive traumatic event exposures. The primary purpose of this study was to fill this gap by conducting LCGA with a three-wave study of trauma survivors living in Detroit (N = 981). Although the majority had consistently few PTS symptoms (Low PTS: 67.6%), 9.1% were in trajectories indicative of chronic post-traumatic stress disorder (PTSD) (Chronic PTSD: 6.9%; Chronic Severe PTSD: 2.1%). The remainder had elevated, but subclinical, levels of PTS over time (Subthreshold PTS: 23.3%). More extensive trauma exposure, socioeconomic disadvantage, and social isolation were associated with membership in trajectories with higher PTS. Based on the results, we recommend that interventions attend to survivors’ trauma history, risk for further trauma exposure, and social and economic functioning.

Human Rights & Social Policy SIG

WR 124
Influence of Resilience and Post-Traumatic Growth on Burnout in Healthcare Physicians
(Abstract #1407)

Poster #WR 124 (Self-Care/EmergWrks) M - Industrialized Grand Ballroom E/F

Taku, Kanako, PhD 1, Elam, Sharell, MA 2, Sawa, Melissa, Undergraduate 1
1 Oakland University, Rochester, Michigan, USA
2 Wayne State University, Detroit, Michigan, USA

The purpose of this study is to examine the influence of resilience, post-traumatic growth (i.e., psychological positive changes that may occur as a result of highly stressful experiences) on burnout in
physicians. It was hypothesized that physicians that are resilient and have experienced growth as a result of their professional work are less likely to experience burnout. Participants of this study (N = 206, 91 female, 111 males, 4 not reported) consisted of physicians of various specialties. Results from a hierarchical regression analysis revealed that in addition to the significant role of gender (beta = .24) and hours worked (beta = .19), resilience, that is, acceptance of self and life (beta = -.27), post-traumatic growth (beta = -.30), and the interaction between post-traumatic growth and resilience (beta = .26) were all significant predictors of Emotional Exhaustion, one domain of burnout, R squared = .31, F(7, 180) = 11.19, p < .001, suggesting that the hypothesis was supported. These results suggest that experiencing personal growth resulting from the professional work may be a protective factor for burnout (i.e., emotional exhaustion) only when physicians report lower resilience. Clinical applications and future directions are discussed.

Dissemination and Implementation SIG

WR 125
Utilization of Evidence-Based Treatments for PTSD by Rural and Urban Veterans
(Abstract #123)

Poster #WR 125 (Practice/Mil/Vets) M - Industrialized Grand Ballroom E/F

Baker, Aisha, PhD¹, Mott, Juliette, PhD¹, Mondragon, Sasha, PhD¹, Hundt, Natalie, PhD², Grady, Rebecca, BA², Teng, Ellen, PhD³
¹Michael E. DeBakey VA Medical Center, Baylor College of Medicine, Houston, Texas, USA
²MEDVAMC, Houston, Texas, USA
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Rural Veterans constitute approximately 28% of the Veteran population, and one-third of returning Veterans will return to rural areas. Research indicates that rural Veterans have more severe PTSD symptoms, lower health-related quality of life, and receive less psychotherapy than urban Veterans. However, little research has focused on service utilization patterns of rural Veterans who do initiate psychotherapy. The present study offers a preliminary examination of rural and urban Veterans’ utilization of psychotherapy services within a trauma and anxiety clinic at a large, metropolitan VA Medical Center. Data extracted from Veterans’ medical records were used to examine rates of initiation and completion of evidence-based treatments (EBTs) for PTSD among rural (n = 27) and urban Veterans (n = 131). Although rural and urban Veterans did not differ on rates of EBP initiation or completion (p > .05), rural Veterans were significantly more likely to receive prolonged exposure therapy, whereas urban Veterans were more likely to receive cognitive processing therapy, chi-square (2, N = 93) = 10.59, p < .02. Although rural Veterans tend to underutilize psychotherapy services, these data suggest that rural Veterans who do receive psychotherapy are successfully accessing EBTs for PTSD, and appear to demonstrate a preference for exposure-based techniques.
WR 126
Evaluating the Cognitive Processing Therapy Implementation Program in the VA Healthcare System
(Abstract #140)

Cogan, Chelsea, MA1, Healy, Ellen, PhD1, Chard, Kathleen, PhD2, Ashton, Scot, Assistant3
1VA Boston Healthcare System, National Center for PTSD, Boston, Massachusetts, USA
2Cincinnati VA Medical Center & University of Cincinnati, Cincinnati, Ohio, USA
3Cincinnati VA Medical Center, Cincinnati, Ohio, USA

Cognitive Processing Therapy (CPT) is a manualized 12-session therapy for post-traumatic stress disorder (PTSD) that has been part of a VA-wide Evidence-Based Psychotherapy (EBP) dissemination initiative since 2007. This initiative is a nationwide program designed to train VA mental health clinicians in empirically-supported treatments through in-person workshops and case consultation. To date, 4606 VA clinicians have been trained in CPT and 1348 VA clinicians have completed the consultation process and are approved VA CPT providers. Information about the CPT trainees, the therapy administered, and the patients seen by trainees as well as the patients’ treatment outcomes have been collected in efforts to evaluate our program. Multiple repeated measures ANOVAs were conducted to compare treatment outcomes as measured by the PTSD Checklist- Specific trauma version (PCL-S) across therapist, treatment, and patient variables. Specifically, we report on the impact of therapist discipline, therapy setting, therapy modality, and patient demographic variables on PTSD outcomes. This data illustrates the patient improvement in PTSD symptoms from pre-post treatment for those seen by clinicians who are in the process of learning CPT and explores how therapist, treatment, and patient variables may impact outcome.

WR 128
PE or CPT?: Veteran Characteristics That May Influence Treatment Choice
(Abstract #1278)

Voss Horrell, Sarah, PhD1, Duma, Susan, PsyD1, Holohan, Dana, PhD2
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The goal of the study is to elucidate veteran characteristics that would predict success in an evidence based trauma treatment. Cognitive Processing Therapy (CPT) and Prolonged Exposure Therapy (PE) are widely used in the VA system; however, there is little information about factors associated with differential effectiveness of these treatments. This study utilizes data collected from patients who received either PE or CPT at a PTSD clinic in a VA Medical Center in the Southern United States. Pilot data collected by the authors suggested that OEF/OIF/OND veterans who completed PE showed a greater decrease in PCL scores compared to those who completed CPT. For this study, data from
approximately 50 subjects will be analyzed. The authors hypothesize that OEF/OIF /OND veterans who complete PE will show a greater decrease in PCL-C scores compared to those completing CPT. We will also examine the role of time between the index trauma and treatment seeking as a possible moderating variable, as well as the role of pre-treatment shame and guilt. We hypothesize that amount of time between index trauma and treatment seeking will be negatively correlated with treatment success. We hypothesize that pre-treatment shame and guilt will not have a significant effect on treatment outcomes. Multiple linear regression analysis will be conducted to evaluate the hypotheses.

Genomics and Trauma SIG

WR 129
Blast-Related Traumatic Brain Injury Shows a Greater Association with Stroop Color-Word Interference Performance than does Apolipoprotein E4 status.
(Abstract #262)

Graham, David, MD, Harding, Mark, BS, Nielsen, David, PhD
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Apolipoprotein E (APOE) ε4 allele has been associated with poor outcome following brain injury. In the context of the executive-function Stroop test requiring both response inhibition and cognitive switching, persons with APOE-ε4 committed more errors compared to non-ε4 persons, suggesting a vulnerability to errors in response inhibition and cognitive flexibility in the ε4 carriers. The objective of this study was to evaluate the influence of mild TBI on the association between APOE-ε4 and Stroop performance. We evaluated 71 OEF/OIF Veterans (26 No-TBI No-ε4, 23 +TBI No-ε4, 14 No-TBI +ε4, and 8 TBI +ε4) regarding their performance on the Stroop Color-Word Interference Effect (CWIE, time to complete condition 4 minus time to complete condition 3). Primary analysis was an ANCOVA, dependent variable CWIE; fixed factors: TBI status, ε4 carrier status, and TBI by ε4 status interaction; covariates: gender, and severity ratings for depression, PTSD, combat exposure, and TBI symptoms. Our results show an overall significant corrected model (p = .005, eta = .54), for whom TBI status (p = .017, eta = .30) was more contributory than ε4 status (p = .514, eta = .08). TBI status and ε4 status did not interact (p = .495). In conclusion, we did not replicate the association of APOE-ε4 and Stroop performance, rather finding a more significant association of Stroop performance with TBI.
Early Interventions SIG

WR 131
Identification of Patients at Risk for Chronic PTSD Using the Predicting PTSD Questionnaire
(Abstract #1404)

Rothbaum, Alex, BS, Michopoulos, Vasiliki, PhD, MSc, Odenat, Lydia, PhD, MPH, Houry, Debra, MD, MPH, Ressler, Kerry, MD, PhD, Rothbaum, Barbara, PhD, ABPP
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Most people will experience a traumatic event in their lifetime, but only 10% will develop Post-Traumatic Stress Disorder (PTSD). While retrospective research has identified risk factors for developing PTSD, the current study investigates the accuracy of a five-question measure administered immediately following trauma exposure for prospectively predicting which individuals will develop chronic PTSD. Emergency Department patients being treated in a level-1 trauma center (13 men and 17 women) were assessed bedside within hours of trauma and at 3 months post-trauma using the predicting PTSD Questionnaire (PPQ) and the PTSD Symptom Scale (PSS). Cutoffs of 3 ($\chi^2=9.035, p=0.003$) and 4 ($\chi^2=6.17, p=0.013$) on the PPQ significantly predicted chronic PTSD. Analyzed by gender, a cutoff of 4 for men ($\chi^2=6.67, p=0.010$) and a cutoff of 3 for women ($\chi^2=4.018, p=0.045$) significantly predicted chronic PTSD. Specificity at 3-month is $\geq 50\%$ and sensitivity is $\geq 90\%$ for all groups using a PPQ cutoff of 3. The PPQ shows promise in identifying patients of both genders at risk for developing chronic PTSD (i.e., sensitivity). The PPQ may be a beneficial tool in identifying patients who would benefit from psychological intervention post-trauma. As patients continue to be enrolled and are evaluated at one and 3-month follow-ups, we will expand our sample size.

WR 132
Prevention of PTSD by Early Treatment - Three Years Follow-Up in the JTOPs Study
(Abstract #310)

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We previously reported (Shalev et al., 2012) that early and delayed cognitive behavioral therapy (prolonged exposure [PE] or cognitive therapy [CT]), but not the SSRI escitalopram, significantly reduced the nine months prevalence of PTSD among adult civilian trauma survivors with Acute PTSD. We presently report a three-year follow-up of that cohort, looking at maintenance of the nine months outcome. Survivors who received CBT remained a-symptomatic, with no significant difference separating PE from CT. However, survivors without early responses (including those on an SSRI or
placebo and those who declined early treatment) tended to similarly recovery with time. This observation re-opens the debate concerning the effect of early interventions on survivors of single, isolated traumatic event: preventing PTSD or accelerating the recovery of those who are bound to recover (Kessler and Sonnega, 1995). Although "accelerating" a recovery by two to three years is highly significant for patients and families, this, and emerging evidence from other studies (Galatzer Levi and Shalev, Submitted) suggest the presence, among initially symptomatic survivors, of a sub-category of non-remitting and treatment refractory individuals. We will discuss the hypothesis that members of this category are those who ultimately develop chronic PTSD and its clinical and service-planning implications.

**WR 133**

**Prospective Comparison of PTSD and Depression Symptoms among Victims who Sought Mental Health Treatment after Sexual Assault**

(Abstract #119)

**Poster #WR 133 (Commun/Violence) I – N/A**

**Grand Ballroom E/F**

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Several studies have reported on the benefits of immediate and early interventions for PTSD and depression after a sexual assault, but there are few naturalistic observations as to the benefits of engaging in care. The present study examined the effect of engaging in mental healthcare on PTSD and depression over the course of 6 months after a rape in a sample of 100 victims. Participants who reported scores above the clinical cutoff on the PSS ($>21$) or BDI ($>12$) 6 weeks after their rape were included in the present study. Treatment engagement (yes/no) was assessed at 1 and 6 months. Multilevel modeling suggested that overall PTSD ($b = -7.59, p < 0.01$) and depression ($b = -4.14, p < 0.01$) decreased. Engagement in treatment at both 1 month and 6 months was associated with a more rapid rate of decline in PTSD ($b = -4.50, p = 0.04$), but not depression ($b = -2.63, p = 0.32$). Engagement in care at 6 months but not 1 month was associated with a slower rate of recovery for PTSD symptoms ($b = 4.60, p = 0.01$) and depression symptoms ($b = 6.47, p = 0.01$). These findings suggest that rapid engagement in care is associated with faster recovery in both PTSD and depression for those who met probable diagnostic criteria 6 weeks post assault. High-risk victims should be encouraged to seek evidence based care shortly after their trauma to improve their recovery.
Effects of a Cardiopulmonary Exercise Stress (CPX) Test on Neurobiological and Psychological Factors of Chronic Pain and PTSD

(Abstract #714)

Poster #WR 134 (Bio Med/Mil/Vets) M - Industrialized

Grand Ballroom E/F

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Chronic pain and post-traumatic stress disorder (PTSD) are highly comorbid, disabling conditions that place a significant strain on the healthcare system. Research indicates that the stress buffering and antinociceptive hormone, neuropeptide-Y (NPY), is low in chronic pain and PTSD. This may contribute to the maintenance of these conditions. Evidence suggests that exercise may enhance NPY and confer improved stress and pain outcomes. This pilot study investigated the use of a maximum load cardiopulmonary exercise stress (CPX) test to explore the relationship of NPY to VO2 peak in relation to pain variables among 12 participants with chronic pain +/- PTSD. The Pain/PTSD group demonstrated a significantly greater change than the trauma control subjects on pain tolerance and pain intensity (t(10)=-1.04 p<.05; t(9)=.58, p<.01 respectively). A significant correlation was found between change in NPY (baseline to 5’ post-exercise) and VO2 peak (r=.81, p<.01). Also, the change in NPY correlated with the change in pain tolerance and pain threshold after exercise (r=.64, p<.05 and r=.81, p<.01 respectively). The change in NPY in relation to VO2 peak suggests that fitness may relate to pain threshold and tolerance, perhaps via induction of NPY. Further investigation of the effects of regular exercise training on NPY and antinociception is warranted.
A Brief Educational Intervention to Improve TBI Screening Outcomes
(Abstract #907)

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Traumatic Brain Injury is considered the signature injury of the current wars in Iraq and Afghanistan. The VA responded by implementing national TBI screening. Although the goals of screening for TBI are laudable, the process may have unintended negative consequences, particularly if Veterans do not understand the meaning of a positive TBI screen. We developed an educational handout on mild TBI and evaluated whether this brief, educational intervention could improve knowledge and understanding of TBI and the TBI screening results. We compared 2 groups of Veterans (N = 1236), half of whom were screened as usual and half of who received the educational intervention. Overall, veterans had poor understanding of TBI at baseline. Veterans who received the educational intervention had significantly improved knowledge of mild TBI and the meaning of a positive TBI screen compared to Veterans screened as usual (t(1154) = 13.04, p < .0001). There were no differences between the groups on illness perception or on self-reported intention to follow up with a comprehensive evaluation after a positive screen. Findings suggest that education at the time of screening may be promote expectations for a positive recovery in Veterans with mild TBI.

Trauma Inpatients with Prior Sexual Victimization in Need of Prevention Efforts
(Abstract #443)

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Background: Acute care medical inpatients are at higher risk than the general public of experiencing traumatic life events. Little is known about how prior experiences of sexual victimization might impact the needs of this population, or which subgroups may be at increased risk of sexual victimization.

Method: This investigation assessed rape trauma, molestation, and other non-sexual assault traumas in a sample of 878 randomly approached hospitalized physically injured trauma survivors. The National Comorbidity Survey Trauma History Screen was administered to all participants. Regression was used to assess differences between inpatients with and without a history of sexual victimization. Results: Of the
878 patients, 225 (25%) indicated a history of rape trauma (n = 43), molestation (n = 101), or both (n = 81). The investigation observed higher rates of PTSD symptoms among individuals with any history of sexual victimization. Injury survivors with a history of sexual victimization were also more likely to have higher cumulative trauma burden, be female, use cocaine or amphetamines, and be of American Indian ethnocultural descent. Discussion: These findings indicate that early prevention efforts throughout US trauma care systems could productively focus on screening for histories of sexual victimization and associated risk factors.

Theory and Traumatic Stress Studies SIG

WR 137
Attachment Styles and Resilience
(Abstract #284)

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Attachment theory suggests that early life experiences become responsible for the formation of internal, working models that guide one’s self-perception as well as expectations of others. From these working models emerge four organized patterns of attachment styles — secure, dismissive, ambivalent, and fearful — that persist throughout adulthood. To investigate relationships between attachment styles and resilience, we used data from 1361 college students with a history of trauma. The set of instruments included Bartholomew and Horowitz’ (1991) attachment survey. As students indicated that their relationships more strongly matched descriptions of secure or dismissive attachments while more weakly matching descriptions of ambivalent or fearful attachments, there was a strong correlation with resilience, as measured by the CD-RISC (Connor & Davidson, 2003), r(1359) = 39, p < .0005. When secure or ambivalent attachment styles were more strongly endorsed along with weaker ratings of fearful and dismissive descriptions, the correlation with resilience was somewhat weaker, r(1359) = .11, p < .0005. In contrast, students who self-identified most closely with a fearful style of relationship attachment were less likely to be resilient, r(1359) = -.25, p < .0005. These findings suggest that either a positive view of others or a positive view of one’s self may be adequate for resilience.
WR 138
Does Adding Exposure Therapy for PTSD to DBT Impact Emotion Regulation Outcomes among Borderline Personality Disorder Outpatients?
(Abbreviation #1654)

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Emotion regulation difficulties (ERD) are often cited as central to borderline personality disorder (BPD; Cheavens, Strunk, & Chriki, 2012) and may also relate to PTSD symptoms (Stevens et al., 2013). With co-occurrence rates as high as 50% (Harned et al., 2009) this suggests that ERD may be a latent mechanism in both disorders. Recent data suggests that integrating an exposure-based protocol into Dialectical Behavior Therapy (DBT) is a viable avenue for treating PTSD among high-risk BPD patients (Harned et al., 2012), but it is unclear how ERD outcomes will be affected. The present study uses data from two treatment studies for women with BPD, PTSD, and recent suicidal and/or non-suicidal self-injury (n=39) who received one year of DBT with or without the added exposure protocol. Preliminary analyses indicate that women who completed the DBT PE protocol had very large pre-post changes (d’s=1.2-3.8) on all 6 subscales and the total score of the Difficulties in Emotion Regulation Scale (Gratz & Roemer, 2003). In contrast, women who completed only DBT exhibited only moderate pre-post changes (d’s=0.4-0.6) except on the Limited Access to Emotion Regulation Strategies subscale (d=2.1) and the total score (d=1.7). These results suggest that adding exposure to DBT not only improves PTSD, but also enhances BPD patients’ ability to accept, label, and tolerate emotions more broadly.

WR 139
Modeling a Unified Conceptual Framework for Resilience in Trauma Exposed Women
(Abbreviation #1077)

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The field of resilience research suffers from a lack of a unifying conceptual framework. The common approaches to assessing and understanding resilience focus either on protective factors, processes of adaptation, or positive outcomes, but not all three simultaneously. Prior research indicates that protective factors following trauma include older age and greater income, while adaptive processes include better emotion regulation skills, coping skills, and emotional awareness. Positive outcomes are typically defined as the absence of psychopathology such as Post-Traumatic Stress Disorder. This investigation sought to combine these approaches into a single framework and test a model for understanding resilience. Data were collected from 254 community women with varied histories of trauma exposure. Structural equation modeling was used to predict a higher order latent resilience variable estimated by demographic scores (age, income), emotional processing scores (emotion regulation, coping skills, alexithymia), mental health scores (post-traumatic stress symptoms, depressive...
symptoms, somatic symptoms), and an observed trauma history score. The full model provided an adequate fit to the data (CFI = .95; RMSEA= .09), though subsequent iterations produced a better fit. Implications of these results for assessing and fostering resilience will be discussed.

**Trauma Assessment and Diagnosis SIG**

**WR 140**
**Amygdala Reactivity Towards Emotional Faces in PTSD Patients is Dampened by Intranasal Oxytocin Administration**
(Abstract #1038)

Post-traumatic stress disorder (PTSD) is characterized by an exaggerated fear response, which is neurobiologically associated with amygdala hyperresponsivity. In healthy participants, the neuropeptide oxytocin (OT) has been shown to dampen amygdala reactivity to emotional faces. Therefore, in a randomized double-blinded placebo-controlled fMRI study, we investigated whether intranasal OT administration (40 IU) in PTSD patients dampened amygdala reactivity towards salient biological stimuli. After OT/placebo administration, participants performed an emotional face matching task, in which emotional faces (angry/fearful faces and happy/neutral faces) and visuomotor control blocks (scrambled faces) were shown. Preliminary results on data of 12 PTSD patients showed that the emotional face matching task (emotional faces versus control blocks) reliably activated the bilateral amygdala in both experimental conditions. Moreover, we found reduced right amygdala activation after OT compared to placebo administration during fearful and angry face matching (PFWE for ROI amygdala = 0.029). Although our sample size is still small, our preliminary results indicate that intranasal OT reduces amygdala reactivity towards fearful and angry faces in PTSD patients, suggesting that intranasal OT administration may reduce the exaggerated fear response consistently observed in PTSD.
Effects of Concurrent Medication Use on Outcome in Trials of Psychotherapy for PTSD
(Abstract #180)

Most studies of psychotherapy for PTSD and other mental disorders allow participants who are on medication to continue on medication during study treatment, usually after a stabilization period of 1-3 months. Thus, much of the evidence on the effectiveness of psychotherapy is based to some extent on individuals who have had an inadequate response to medication. The effect of medication on outcome is unknown. To address this question, we used data from 3 randomized clinical trials of Prolonged Exposure and/or Cognitive Processing Therapy. Baseline medication use did not modify the treatment effect in any study. Individuals not using medication at study entry improved as much as (or nonsignificantly more than) individuals using medication, regardless of treatment condition. There was statistically significant pre-post change in groups that received psychotherapy, but not in waitlist controls—even those who received medication. In addition, we were able to examine the effects associated with medication change in one trial. Participants whose medications were changed had smaller improvements in CAPS scores than those whose medications were not changed. Taken together, findings suggest that medication change does not account for the positive effects of psychotherapy in trials that allow medication use.
WR 142
Examining Physiological Non-Response by Way of Avoidance and Peritraumatic Dissociation in a Trauma Exposed Sample
(Abstract #466)

Poster #WR 142 (Bio Med/Diverse Pop) I - Industrialized  Grand Ballroom E/F

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Individuals with PTSD tend to have increased physiological reactivity. However, it is unclear why approximately 40% of individuals with PTSD do not. Dissociation and avoidance have been suggested to assist in this phenomena (Orr, McNally, Rosen, & Shalev, 2004). The goal of the present study was to examine the relationship between these constructs and physiological non-response when examining startle reflex in 49 participants who have experienced a traumatic event. The Clinician Administered PTSD Scale was used to examine symptom clusters and the Peritraumatic Dissociative Experiences Questionnaire was used to examine dissociation. A series of Pearson correlation coefficients were computed examining these relationships. There were significant negative associations between mean startle response and peritraumatic dissociation and PTSD avoidance symptoms (ps<.05). However, the associations with the other PTSD symptom clusters were not significant. The PTSD symptom clusters and peritraumatic dissociation were then regressed on mean startle response. The model was significant (F(5,48)=3.042, p<.05); avoidance was associated with reduced startle response (p<.01) and there was a trend for a similar negative association for peritraumatic dissociation (p = .064). These results may shed insight on why some individuals with PTSD do not show increased startle response.
The Impact of Traumatic Brain Injury and Combat Experience on Acute PTSD Symptoms Following Blast Injury
(Abstract #1652)

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Baker, Monty, PhD
Bryant, Richard, PhD
Mintz, Jim, PhD
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This study reports on the impact of factors that predict acute PTSD symptoms in the aftermath of blast injury by assessing military personnel in theater shortly after the blast. An intriguing pattern identified in recent studies is the interrelationship between traumatic brain injury (TBI) and PTSD as evidenced by elevated rates of PTSD diagnosed in those also diagnosed with TBI. A problem with much of the available data is that it is collected post-deployment and is therefore subject to potential retrospective recall biases. This study evaluated U.S. military personnel in Iraq who were referred to a theater hospital (N = 691), where they were assessed for TBI with a battery of measures including the Post-Traumatic Stress Disorder Checklist and the Military Acute Concussion Evaluation scale. In the total sample, 573 participants sustained a TBI and 118 personnel did not. Although participants who sustained a TBI were more likely to display acute PTSD symptoms (33%) than those who did not (16%), after controlling for combat experience TBI was no longer a predictor of PTSD symptoms. This finding is discussed in terms of the primacy of combat experiences on acute PTSD reactions and possible interactions between TBIs and the traumatic experiences in which these injuries are incurred.
WR 144
Deployment-Related Risk and Resilience Mechanisms for Interpersonal Reintegration Difficulties in Female and Male Veterans
(Abstract #445)

Poster #WR 144 (Assess Dx/Mil/Vets) M - Industrialized Grand Ballroom E/F

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Vogt, Dawne, PhD
Wang, Joyce, BA
Vaughn, Rachel, BA
Di Leone, Brooke, PhD

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Prior research has suggested that military deployment may be associated with post-deployment interpersonal difficulties for some veterans. Helping veterans adjust to life at home and in the community, including returning to social roles, represents an important priority area. As part of a study of deployment-related psychosocial factors, a scale was developed to assess perceived social challenges upon return from deployment. In particular, the scale assesses the degree of comfort in relationships, belongingness, and fitting in with others, particularly family, friends, and coworkers. Using structural equation modeling (SEM), interpersonal reintegration difficulty was examined as a function of risk and resilience factors (i.e., concerns about relationship disruptions, general and sexual harassment, deployment social support, warfare exposure, and post-deployment social support) and PTSD symptom severity in a sample of 469 male and female OEF/OIF veterans. The hypothesized model, which included multiple direct and indirect mechanisms involving deployment and post-deployment factors, showed good model fit. For men and women, interpersonal stressors during deployment predicted later difficulties, and exposure to warfare stressors was associated with interpersonal challenges through multiple mechanisms. Multi-group SEM revealed gender similarities and differences in risk pathways.

WR 145
Not All Uniform: Examining Risk and Resilience Factors and Post-Deployment Mental Health across Military Branches
(Abstract #33)

Poster #WR 145 (Clin Res/Mil/Vets) M - Industrialized Grand Ballroom E/F

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Research demonstrates that rates for Post-Traumatic Stress Disorder (PTSD) differ across the military branches. Less is known about how specific risk and resilience factors, and their associated implications
for post-deployment mental health differ across military branches. The present research examined military branch differences in risk and resilience factors assessed in the revised Deployment Risk and Resilience Inventory (DRRI-2) and mental health symptom severity, in a national sample of 1,046 OEF/OIF Veterans. One-way between subjects ANOVAs revealed significant differences on 12 of 17 risk and resilience factors (Prior Stressors, Difficult Living and Work Environment, Combat Experiences, Aftermath of Battle, NBC Exposures, Perceived Threat, Preparedness, Unit Social Support, General Harassment, Concerns about Life and Family Disruptions, Family Stressors, Post-deployment Stressors) and PTSD, depression, and anxiety symptom severity. Post Hoc tests revealed that Army and Marine Veterans experienced greater stressor exposure, and Air Force Veterans had lower levels of mental health symptoms than members of other branches. Findings may be used to better target clinical care to those most in need and inform preventative efforts aimed at reducing the negative consequences of exposure to deployment stress on the health and well-being of returning military personnel.

WR 146
The Relationships among Traumatic Brain Injury, Post-Traumatic Stress Disorder, Post-Deployment Social Support, and Suicidal Behaviors in Male and Female Iraq and Afghanistan Veterans
(Abstract #690)

Poster #WR 146 (Prevent/Mil/Vets) I - Industrialized

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Suicide is a prevalent problem among veterans of the wars in Iraq and Afghanistan, and identifying correlates of suicide risk is critically important to suicide prevention efforts. Prior research suggests that post-traumatic stress disorder (PTSD), traumatic brain injury (TBI), and low levels of post-deployment social support are potentially important risk factors for suicide among veterans. However, most studies are limited by the use of medical record or self-report of PTSD, which may not accurately reflect diagnostic status. Furthermore, prior research includes predominantly male samples, making it unclear whether results extend to female veterans who are serving in the military at unprecedented rates. This study examined correlates of suicidal ideation and attempts among 824 male and 825 female Veterans of the wars in Iraq and Afghanistan enrolled in a national registry study (Project VALOR). PTSD, TBI, and suicidality were assessed through structured interviews and post-deployment social support was assessed through a well-validated questionnaire. Logistic regression analyses indicated that PTSD, TBI, and low levels of social support were significantly associated with suicidal ideation and attempts among both male and female veterans. Our findings suggest assessing PTSD, TBI, and social support may increase predictive power of suicide screening tools among recent veterans.
Traumatic Loss and Grief SIG

WR 147
Complicated Grief Trajectories in Spouses Bereaved by Sudden Death
(Abstract #609)

Poster #WR 147 (Assess Dx/Acc/Inj) M - Global  Grand Ballroom E/F

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138 subjects were followed up 62 months following bereavement with a detailed assessment of grief reactions, psychiatric disorders, functional impairment, circumstances of exposure to death, self-reported symptomatology, physical health, and psychosocial characteristics. Using Latent Class Growth Analysis, we identified three grief trajectories: 54% had initial grief reactions in the 28th percentile that significantly decreased over time, 33% showed grief initial scores in the 70th percentile that started to decrease two years following bereavement, and 13% had high ICG scores in the 93rd percentile that persisted over time consistent with CG. We found an ICG cut-off of 25 to identify the persistent heightened trajectory with high sensitivity (70.9–100%) for different follow-up time points, and high specificity (81.0 and 96.5%). New-onset PTSD, self-reported depression, functional impairment, low self-esteem, and blaming self and others for the death, 7 months following death, were significant predictors of the longitudinal grief trajectories. We described the longitudinal course of grief in bereaved adults, validated the ICG cut-off with longitudinal data, and identified early predictors of a prolonged CG reaction. These results help clinicians in identifying individuals at risk early on following bereavement in need for treatment and preventative approaches.

WR 148
Communication and Behavioral Health Outcomes in Parentally Bereaved Preschoolers: Enhancing Adaptive Grief through Discussions About the Death
(Abstract #526)

Poster #WR 148 (Clin Res/Child/Adol) M – N/A  Grand Ballroom E/F

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Research on the manifestations of grief in youth is in its infancy, and the literature is especially scant for very young children. In response to loss, young children may show distress in various ways including internalizing symptoms (e.g., separation distress), externalizing symptoms (e.g., aggression, defiance),
and dysregulation (e.g., irritability, sleep disturbance). Using developmentally appropriate communication about the deceased person appears to facilitate adaptive grief processes in older children and teens. However, these relations have not been examined in preschool-aged youth. The current study evaluated relations between communication factors (e.g., frequency of discussions about the death with the surviving parent, comfort in talking with others about the death) and functioning in a sample of 23 recently parentally bereaved preschoolers, ages 3-6. Findings suggest that frequent communication between the surviving parent and child about the death relates to less externalizing symptoms in preschoolers. Moreover, children who express more comfort communicating with others about the death exhibit fewer externalizing symptoms. These findings, if replicated in a larger longitudinal sample, have important implications for intervention, highlighting the critical role of verbal communication about the death in facilitating adaptive grieving in bereaved preschoolers.

Terrorism and Bioterrorism Related Trauma SIG

WR 149
The Efficacy of Cognitive Behavioral Therapy on Post-Traumatic Stress Disorder Symptoms in a Community Sample of Disaster Workers
(Abstract #1466)

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Researchers have suggested that findings from randomized controlled trials lack generalizability to community samples (Westen, Novotny, & Thompson-Brenner, 2004). The present study examined the efficacy of an evidence-based treatment program employing Cognitive Behavioral Therapy (CBT) on Post-Traumatic Stress Disorder (PTSD) symptoms in a community sample of disaster relief workers deployed to the World Trade Center (WTC) site following the September 11, 2001 terrorist attacks. PTSD symptoms were assessed using the Clinician-Administered PTSD Scale (CAPS-DSM-IV; Blake, Weathers, Nagy, Kaloupek, Charney, & Keane, 1995) and the PTSD Checklist-Civilian Version (PCL-C; Weathers, Litz, Huska, & Keane, 1994) at pre- and post-treatment. Of 64 disaster relief workers who received individual therapy for WTC related problems, 26 met full DSM-IV PTSD criteria pre-treatment, while 11 met criteria for subthreshold PTSD pre-treatment. There was a significant improvement in PTSD symptoms from pre- to post-treatment as measured by both the CAPS, t(23) =3.215, p=.004, and PCL, t(18) =3.301, p=.004. In addition, there was a significant reduction in sleep disturbances from pre- to post-treatment, t(12) =2.830, p=.015. Findings support the efficacy of CBT for PTSD symptoms in community samples.
Criminal Justice SIG

WR 150
Commercial Sexual Exploitation of Children (CSEC): Experiences of Professionals Who Work With Youth
(Abstract #897)

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This study examines professional awareness, knowledge, and experiences working with victims exploited in commercial sex as minors. Professionals (n = 249) that worked with at-risk youth and/or crime victims including behavioral health providers, law enforcement, prosecutors, juvenile justice, child protective services, and non-profit agencies, were recruited from all counties in Kentucky to complete a telephone survey. The survey was a combination of closed-ended and open-ended questions, which were coded independently by two coders for themes. Findings show that 51.8% of respondents had experience working with individuals who were exploited in commercial sex as minors. The most commonly reported victim-perpetrator relationships were familial (62.8%) and intimate partner (27.9%). Findings about professionals’ perspectives on vulnerability factors of youth, mental health needs and service utilization, ways in which traffickers exploited minors in commercial sex, and the types of communities in which youth were exploited will be discussed. Implications for behavioral health providers include the need for greater awareness of CSEC as a distinct form of sexual exploitation to inform screening, identification, coordination with other systems, and treatment.

WR 151
The Importance of the Child Welfare Worker-Youth Relationship for Mental Health Functioning
(Abstract #1538)

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2McMaster University, Hamilton, Ontario, Canada

Youth in care often struggle with mental health functioning. However, the presence of a close relationship with a caring adult has been shown to promote resiliency in maltreated children (Ketchum, 2000). Specifically, qualitative studies have identified the relationship with the child welfare worker as a protective factor for later functioning (Finlay, 2003; Munro, 2001). The objectives of the current study are twofold: 1) to quantitatively examine how youth in care perceive their relationship with the worker and 2) to quantitatively examine how the worker-youth relationship predicts mental health functioning 6 months and 18 months later. The sample included 561 youth in care aged 14-17 years (M=15.8,
SD=1.04). The majority of youth (61%) were Crown Wards. Youth answered questions about their child welfare experiences, including maltreatment experiences, the length of time spent in child welfare, the number of workers they have had in that time, and their satisfaction with their current worker. Of the original sample, 410 youth rated their mental health functioning 6 months later and 271 youth rated their functioning 18 months later. Hierarchical linear regressions will be used to examine predictors of mental health functioning at 6 months and 18 months. Findings may inform child welfare practices, such as increasing the amount of one-on-one contact with youth.

Trauma and Substance Use Disorders SIG

WR 152
Predictors of Substance Use Lapses among Veterans with PTSD
(Abstract #477)

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Objectives: Self-medication of symptoms is assumed to contribute to substance misuse among people with PTSD. However, few studies have longitudinally examined how substance use varies with fluctuation in PTSD patients’ symptoms. Methods: 411 veterans enrolled in a telephone care trial were abstinent from substances when they entered residential PTSD treatment. PTSD symptoms and substance use problems prior to residential treatment were assessed with the PTSD Checklist and the Addiction Severity Index. After completing and discharging from residential treatment, participants received up to 6 biweekly phone calls. During each call, participants rated severity of their PTSD, anger and depression symptoms on 1-10 Likert scale and reported recent substance use. Logistic regression was used to determine whether increases in symptoms predicted veterans’ reports of substance misuse (5+ drinks in a day or illicit drug use). Results: Veterans reported heavy drinking or drug use in 128 out of 1,131 telephone calls (11%). Current substance misuse was associated with recent increases in symptoms (OR = 1.79), after controlling for substance misuse in the preceding phone call (OR = 18.5), alcohol problems at study intake (OR = 29.3) and PTSD severity (OR = .94) at study intake. Implications: Spikes in symptoms contribute to veterans' risk for lapses to substance use.
Family History of Alcohol Use Disorder Moderates the Relationship between Post-Deployment Social Support and Average Drinking Quantity in OEF/OIF Combat Veterans (Abstract #1411)

Keuper, Leah, Undergraduate, Hawn, Sage, BS, Overstreet, Cassie, BA, Berenz, Erin, PhD, Brown, Ruth, PhD, Amstadter, Ananda, PhD

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Virginia Commonwealth University, Richmond, Virginia, USA

Combat-exposed military personnel evidence greater rates of problem drinking (e.g., binge frequency) and alcohol use disorders (AUD) compared to non-exposed individuals. Furthermore, the majority of OEF/OIF veterans are “emerging adults,” a group at particularly high risk for developing AUD. A greater understanding of protective factors for veterans at risk for AUD (e.g., those with a family history of AUD) is needed. Social support is important for understanding resilience in veterans, yet little is known about how it affects at-risk veterans' drinking. The current study examined the interaction of a family history of AUD and post-deployment social support in relation to average quantity of drinks consumed in the past 30 days. Participants were 41 OEF/OIF combat veterans (age range=21-30 years) participating in an ongoing NIAAA-funded study of stress-related drinking. Results of a hierarchical linear regression indicated that beyond the main effects, the interaction of family history and social support significantly predicted average alcohol intake (ΔR²=.13, t=-2.12, p<.05), such that greater social support predicted decreased drinking among those with a positive history of AUD only. Individuals with a positive family history and low social support endorsed the greatest alcohol use. Post-deployment social support may buffer veterans from familial risk for problem drinking.

Anxiety Sensitivity and Substance Use Behavior: Do They Predict Adherence and Outcome for Individuals in a PTSD Treatment Trial? (Abstract #1556)

Garcia, Natalia, BS, Bedard-Gilligan, Michele, PhD, Zoellner, Lori, PhD, Feeny, Norah, PhD

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Case Western Reserve University, Cleveland, Ohio, USA

PTSD is associated with higher anxiety sensitivity and substance abuse (Naifeh, 2012), and both predict treatment drop out (e.g., Masaki, 2010). It remains unknown how these factors interact in predicting treatment adherence and outcome. Two hundred men and women with PTSD received prolonged exposure (PE) or sertraline for ten weeks. Preliminary analyses suggest that higher baseline drug use, defined by the Addiction Severity Index Composite Score, predicted fewer completed treatment sessions (β = -.34, t(191) = -4.39, p < .001), less in vivo (β = -.37, t(111) = -3.28, p = .001) and imaginal (β...
= -.33, t(111) = -2.94, p = .004) PE homework adherence, and worse medication adherence (β = -.29, t(67) = -2.44, p = .017). There were no effects for alcohol or anxiety sensitivity and there were no interactions of alcohol or drug use with anxiety sensitivity on adherence or drop out from active treatment. Only anxiety sensitivity predicted worse PTSD at six months post-treatment (β = 0.25, t(116) = 2.84, p = .005). Findings, suggesting that higher baseline anxiety sensitivity and substance use do not interact but predict adherence and outcome independently, are important to consider to better identify those at risk for poorer engagement and outcome in PTSD treatment.

WR 155
Post-Deployment Factors are Associated with PTSD Severity in OIF/OEF Veterans
(Abstract #1435)

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2Department of Veteran Affairs, Syracuse, New York, USA
3University of Memphis, Memphis, Tennessee, USA

Combat traumas are known to precipitate PTSD. However, a number of other deployment and post-deployment factors may contribute to the severity of PTSD symptoms and other mental health outcomes. Alcohol misuse and alcohol-related problems are positively associated with trauma exposure and PTSD as well. The current study identifies pre-deployment, deployment-related and post-deployment factors independently predictive of PTSD severity when controlling for combat experiences. A total of 150 veterans with significant PTSD symptoms and alcohol misuse (AUDIT score ≥ 8) completed the Clinician-Administered PTSD Scale (CAPS; Blake et al., 1995), the Deployment Risk and Resilience Inventory (DRRI; King et al., 2006), and the Alcohol Use Disorders Identification Test (AUDIT; Saunders, 1999) as part of 2 longitudinal studies conducted among Veterans’ Affairs Medical Center (VMAC) clinics. Controlling for relevant socio-demographic variables and combat experiences a hierarchical regression revealed post deployment social support (β=-.328, p=.000), post deployment life events (β = .150, p = .040), and post deployment alcohol use (β = .358, p = .000) as significant predictors of PTSD severity. These findings suggest that modifiable post-deployment factors uniquely influence PTSD severity.
Complex Trauma SIG

WR 156
Intergenerational Transmission of Complex PTSD: Impact of Maternal Symptoms on the Quality of the Mother-Child Relationship
(Abstract #1305)

Poster #WR 156 (Prevent/Adult/Cmplx) I - Industrialized
Grand Ballroom E/F

Liebman, Rachel, MA PhD Student, Burnette, Mandi, PhD
University of Rochester, Rochester, New York, USA

Complex trauma has a profound impact on the development and maintenance of close relationships (Van Der Kolk, 2005; Ford & Courtois, 2009). The strongest predictor of resilience in the face of early trauma is a positive relationship with at least one caregiver (Masten, Best & Garmezy, 1990; Masten, 2001). Yet there is a paucity of research linking maternal complex PTSD to the quality of the mother-child relationship. The current study aimed to understand the impact of maternal complex PTSD on this relationship. A community sample of 75 mother-daughter dyads provided self-report data on complex PTSD symptoms and mother-child relationship quality (MCQ). MCQ was operationalized as: 1) daughters’ exposure to maltreatment, 2) child’s perception of maternal supportiveness, 3) harsh parenting attitudes and practices, and 4) mother’s empathy. Structural equation modeling (SEM) was used to examine the association of MCQ with maternal complex PTSD symptoms. We hypothesized that in families with maternal complex PTSD, mothers would have less empathy and report harsher parenting practices, and daughters would report lower relationship quality, and have higher rates of maltreatment, as compared to families without maternal complex PTSD. Implications regarding potential risk factors of and early intervention for complex PTSD will be discussed.

WR 157
Indicators of Risk in Attachment Representations: Relations between Childhood Trauma and Post-Traumatic Stress Symptoms in Motherhood
(Abstract #1638)

Poster #WR 157 (Prevent/Adult/Cmplx) M - Industrialized
Grand Ballroom E/F

Scott, Syreeta, MS PhD Student1, Huth-Bocks, Alissa, PhD1, George, Carol, PhD2
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2Mills College, Oakland, California, USA

Attachment trauma contributes to poorly integrated representations and results in a compromised capacity for regulation (George & West, 2012). This investigation explores whether indicators of dysregulation (trauma markers), found in adult attachment representations are associated with childhood trauma and symptoms of post-traumatic stress in a community sample of 74 at-risk women across the pre and post-natal period. A repeated measures ANOVA for attachment groups on post-traumatic stress at pregnancy, 1-year, 2-year, and 3-years after birth revealed a significant main effect.
for group \( F(7, 60) = 2.60, p < .05 \). No significant effect for time \( F(3, 60) = 1.19, \text{ns} \), or for interaction between group and time \( F(7, 60) = 1.65, \text{ns} \) was found. Follow-up comparisons revealed that post-traumatic stress symptoms were higher in the Preoccupied-trauma marker group \( M = 41.75, SD = 17.97 \) than all other groups. In addition, individuals with elevated trauma markers (in organized attachment patterns) and those with unresolved representations, in comparison to all other groups, endorsed greater childhood trauma severity \( t = 2.00, p < .05, d = .46 \). These findings suggest that increased risk for psychopathology is not limited to unresolved representations; rather, complex associations exist between attachment trauma, attachment representations, and adult dysregulation.

**Research Methodology SIG**

**WR 158**
A Potential Biomarker for PTSD: Visual Exploration and Involuntary Physiological Response to Risk
(Abstract #86)

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**Cascardi, Michele, PhD**\(^1\), Armstrong, Davine, MBBS, MRCPCH\(^2\), Chung, Leeyup, PhD\(^3\), Pare, Denis, PhD\(^2\)

\(^1\)Montclair State University, Montclair, New Jersey, USA
\(^2\)Rutgers University, Newark, New Jersey, USA
\(^3\)Duke University Medical Center, Durham, North Carolina, USA

Animal models of PTSD and anxiety use a behavioral assay called the Open Field Test (OFT). This test is used to examine locomotor activity and willingness to explore in rodents. Rodents classified as anxious show decreased locomotor activity and less exploratory behavior. In this translational study, we developed a human analogue of the OFT to identify physiological and behavioral risk markers for PTSD. Participants \( n = 22: 8 \) controls and 14 trauma-exposed, 7 of whom met diagnostic criteria for PTSD) were presented with a complex visual image and instructed to search for a clue for two minutes as the risk of electric shock to their wrist increased. Correct detection of the clue resulted in a reward. Participants could exit the search at any time. Eye tracking software captured gaze behavior and involuntary physiological responses to the increasing risk of shock across time. Individuals in both trauma-exposed groups had shorter search duration compared to controls. However, those with PTSD showed larger increases in pupil size throughout the visual search, rated themselves as more anxious during the search, and had significantly fewer but longer fixations compared to the other two groups. Implications for developing biomarkers of susceptibility and resilience to PTSD will be presented.
WR 159
Coordinating Research after the 2011 Norway Terrorist Attacks
(Abstract #360)

Poster #WR 159 (Ethics/N/A) I - Industrialized

Refsdal, Nils Olav, MA
Norwegian Research Ethics Committees, Oslo, Norway, Norway

How can we learn about the causes and effects of disasters without adding to the trauma of survivors, the bereaved and personnel involved? This poster will present the coordinating function that has been set up after the terrorist attacks in Norway in 2011 with this explicit ambition in mind. The terrorist attacks in Oslo and Utøya left 77 mostly young people dead, several hundreds wounded, and an entire nation in shock and grief. A small, peaceful country marked by openness and trust saw its government district in smoke and ruins, and some of its most idealistic and politically engaged young people callously massacred. A number of projects in disciplines ranging from trauma medicine via psychology and the social sciences to the humanities has raised a broad array of research questions regarding causes, effects, and the response of institutions and the public at large. It quickly became evident that it was necessary to shield those directly affected by the attacks from the possibility of further research-induced traumatization. The Norwegian Research Ethics Committees were given the task of coordinating research where those directly affected participate. The purpose of the presentation is to share the experiences made so far, and to invite the conference participants into a discussion about the concept of such a coordinating effort.
A large percentage of veterans with post-traumatic stress (PTS) symptoms are not receiving adequate care due to numerous barriers (e.g., stigma, logistical constraints). The current pilot study evaluated the feasibility of an online self-help workshop, Adjusting to War Memories (AWM), in a sample of OEF/OIF veterans referred to specialty VA PTSD treatment, who were not currently willing or able to engage in typical PTSD treatment. To foster treatment adherence and effectiveness, the online workshop was supplemented with brief, weekly monitoring calls. Of 20 participants who enrolled in the study, 9 (45%) completed all 8 sessions of the intervention. The mean number of calls made to treatment completers was 7.6 across the intervention, with calls typically lasting between 2-10 minutes. Completers experienced a mean decrease of 6 points on the PTSD Checklist (PCL). All completers indicated they would recommend AWM to a colleague. All completers reported that it was helpful to receive the calls and indicated that the most helpful aspect of the calls were "encouraging me to complete sessions". This online/telephone PTS treatment is a feasible, safe, and acceptable intervention for veterans with PTS symptoms who might not otherwise receive care, and adds only minimal work burden to care providers. Efforts to more rigorously evaluate this innovative treatment approach are warranted.
Poster Viewing Session 2  
Friday, November 8  
10:30 a.m. to 6:00 p.m.  

Author Attended Presentations 6:00 – 7:00 p.m.  

ASSESSMENT DIAGNOSIS  

FRI 101  
Psychomteric Validation of the Health of Nation Outcome Scales (HoNOS) in Traumatized Refugees  
(Abstract #1362)  

Palic, Sabina, MA PhD Student^1, Makransky, Guido, MS, PhD^1, Lind Kappel, Michelle, MSc^2, Stougaard Nielsen, Monica, PhD, Cpsych^2, Elklit, Ask, MSc^3  
^1University of Southern Denmark, Institute of Psychology, Odense, Fyn, Denmark  
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^3University of Southern Denmark, Odense, , Denmark  

Treatment seeking traumatized refugees in the west have diverse traumatic symptomatology. Some of their complaints include social isolation, cognitive impairment, psychosis-like symptoms, and impairment in family and occupational roles. There are no validated symptom or function measures for refugees other than those for PTSD, anxiety, and depression. This creates extensive problems in treatment monitoring and identification of appropriate treatment goals for this population with complex trauma. The psychometric properties of the HoNOS were evaluated by applying Rasch analysis to pre and post-treatment data from 448 consecutive patients at three Danish psychiatric clinics for refugees. A10-item HoNOS version (physical problems and daily function items excluded) of pre-treatment data fit the Rasch model well. A cross validation showed excellent fit of the post-treatment data to the 10-item model, indicating excellent psychometric properties for treatment monitoring. Furthermore, no serious differential item functioning was found for the effects of gender, culture, and need for translation. Notably, the 10-item HoNOS was uni-dimensional in the refugee group which is contrary to findings using non-traumatized psychiatric populations. Assessment of general functioning is a prerequisite for better service utilization and better thriving of this patient group.
FRI 102
How Do We Assess Dissociation in Treatment Seeking Refugees in the West?
(Abstract #1577)

Not enough attention is paid to dissociation in treatment of traumatized refugees in western countries. Knowledge about the assessment, the extent, and the content of dissociation in this group is lacking. An evaluation of measures and description of dissociative symptoms was carried out in 86 Bosnian treatment seeking refugees with the dissociation subscale of the Structured Interview for Disorders of Extreme Stress (SIDES-D), the self-report version of the SIDES-D (SIDES-D-SR), the Dissociative Experiences Scale (DES), and the DES-Taxon. The DES correlated strongly with the SIDES-D but they showed only moderate classification agreement. The DES was found to be the preferred measure since the SIDES-D seemed to partly tap correlates of lasting psychiatric illness. The DES-Taxon functioned well as an abbreviated version of the DES. Thirty percent of the group was estimated to have pathological dissociation. The most common dissociative symptoms in treatment seeking refugees are discussed, and characteristics of the presumably “dissociated” pre- and post-war personality, which was spontaneously observed during the clinical interviews.

FRI 103
Initial Development and Validation of the Injured Trauma Survivor Screen
(Abstract #303)

Annually 2.5 million injured trauma survivors in the US are admitted as inpatients to level 1 trauma centers (Bonnie, Fulco, & Liverman, 1999). Serious injury and physical impairment have been identified as PTSD risk factors in those who have experienced a traumatic event (Verger et al., 2004). In spite of the large numbers of injured trauma survivors that pass through level 1 trauma centers in the US, few centers routinely screen for PTSD and trauma associated psychological distress. Most extant measures focus on current symptoms rather than future risk of developing PTSD and are designed to measure PTSD exclusively (Brewin, 2005). The only trauma screen designed to assess PTSD and depression risk factors for injured trauma survivors was created using risk factors and outcome data for Australian hospital patients (O’Donnell, 2008). The purpose of the present study is to create a predictive Injured
Trauma Survivor Screen (ITSS) based on risk factors and outcome data for a US sample of level 1 trauma survivors. Factors assessed in the screen will include risk for PTSD, depression, anxiety, current and past substance abuse, and psychological wellbeing. Data will be collected in a metropolitan level 1 trauma center in the spring and analysis will include measures of reliability, sensitivity/specificity, and exploratory factor analysis.

**FRI 104**

**Trauma Exposure and Conditional Risk for Post-Traumatic Stress Disorder (PTSD) in Brazil: an Epidemiological Study of the General Population**

(Abstract #727)

**Poster #FRI 104 (Assess Dx/Violence) M - Latin Amer & Carib**

Franklin A

**Luz, Mariana, PhD Candidate**

1, Marques-Portella, Carla, MD, PhD1; Berger, William, MD, PhD2; Ventura, Paula, PhD1; Coutinho, Evandro, MD, PhD3; Figueira, Ivan, MDiv, PhD1

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**Background:** The conditional risk for PTSD – the risk of developing PTSD after exposure to a traumatic event - varies widely among studies. Despite increasing internationalization of PTSD literature, developing countries remain underrepresented. Brazil has grown politically and economically in the past years, but many aspects of Brazilian mental health remain understudied. Our objective is to perform an epidemiological study of Brazil’s general population regarding trauma exposure and conditional risk for PTSD.

**Method:** A multistage sampling scheme considering population size and violence levels was performed in São Paulo and Rio de Janeiro, Brazil’s largest cities (n= 3,744 participants). Assessments included prevalence of traumatic events, PTSD diagnosis and conditional risk for PTSD according to each TE. Results: The prevalence of traumatic events was 86%. Urban violence was the most frequent trauma (direct:60%; indirect:54,2%). The conditional risk for PTSD was 14,8% (women:19%; men:8,3%). Sexual trauma had the highest conditional risk (childhood:47%; adulthood:45%). Conclusion: Brazil has a high prevalence of urban violence and moderate-to-high conditional risk when compared to other countries. The present study determines characteristics of trauma exposure and PTSD in Brazil, helps to identify risk factors as well to elaborate public policies and prevention strategies.
FRI 105
Conditional Risk for Post-Traumatic Stress Disorder (PTSD) in the General Population: a Systematic Review
(Abstract #694)

Poster #FRI 105 (Assess Dx/Violence) I - Global

Berger, William, MD, PhD1, Figueira, Ivan, MDiv, PhD2, Mendlowicz, Mauro, MD, PhD1, Ventura, Paula, PhD2, Luz, Mariana, PhD Candidate2
1Universidade Federal Fluminense, Niteroi, Rio de Janeiro, Brazil
2Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil

Background: The conditional risk for PTSD - the risk of developing PTSD after a traumatic event - is influenced by factors such as socioeconomic and cultural aspects, type of event and resilience. Our objective is to perform a systematic review of the literature about conditional risk in the general population. Method: Study selection included searches in ISI, MEDLINE, PsycINFO and PILOTS databases; review of reference lists of selected articles; cross- and cited-reference searches; and contact with experts. Inclusion criteria were: to consist of epidemiological studies of adult general populations; to assess trauma and PTSD through valid instruments; and to inform conditional risk for PTSD. Results: From 158 articles, 17 studies were included. Only 4 were from developing countries. Trauma exposure (21,4%-91,9%) was higher in men. Conditional risk varied from 0-21%, being higher in women in most types of events. Sexual violence had the highest conditional risk in most studies (up to 45%). Interpersonal violence has higher conditional risk than accidental/natural events. Conclusion: The study of the conditional risk for PTSD in the general population may identify individuals at risk, help enlighten the physiopathological pathway of PTSD, and guide the planning of public policies and prevention strategies. Studies from countries with different economies and cultures are needed.

FRI 106
The Meditational Role of Anger in the Relationship between Impulsivity and PTSD
(Abstract #89)

Poster #FRI 106 (Assess Dx/Violence) M - Industrialized

Contractor, Ateka, MA1, Elhai, Jon, PhD1, Forbes, David, PhD2
1University of Toledo, Toledo, Ohio, USA
2Australian Centre for Post-Traumatic Mental Health, University of Melbourne, East Melbourne, VIC, Australia

Post-traumatic stress disorder (PTSD) and anger are significantly related (Olatunji, Ciesielski, & Tolin, 2010). Individuals may seek urgent coping mechanisms to deal with the distress of anger (Novaco & Chemtob, 2002) possibly in impulsive actions (Whiteside & Lynam, 2001). This could explain the relation between PTSD and impulsivity (Ledgerwood & Petry, 2006). We assessed the meditational role of anger between PTSD and impulsivity in 244 undergraduate students with a trauma history. Gender was used as a covariate, given its significant relationship with impulsivity (Cross, Copping, & Campbell, 2011). Results from 1000 bootstrapped samples indicated that direct effects of PTSD on anger (B = .11, SE = .01,
β = .44, p < .001), anger on impulsivity (B = 1.69, SE = .25, β = .17, p = .02), and PTSD on impulsivity (B = .16, SE = .07, β = .19, p = .02) were statistically significant. Further, anger mediated the relationship between PTSD and impulsivity (β = .08, SE = .03, p = .02). However, gender did not have a significant effect on impulsivity (B = -3.86, SE = 2.03, β = -0.11, p = .057). The functional role of impulsivity could involve coping with distressing anger, explaining presence of substance usage, or other such impulsive behaviors in people with PTSD. We discuss clinical and theoretical implications of findings.

FRI 107
Do Gender and Age Moderate the Symptom Structure of PTSD?
(Abstract #83)

 Evidence documents that the frequency/intensity of post-traumatic stress disorder (PTSD) symptoms are linked to demographic variables as female gender (e.g., Kaplow, Dodge, Amaya-Jackson, & Saxe, 2005) and age (e.g., Meiser-Stedman, Smith, Glucksman, Yule, & Dalgleish, 2008). Considerably less is known about relations between gender and age with PTSD’s latent factor structure. This study systematically examined the roles that gender and age (pre-adolescence vs. adolescence) may play as candidate moderators of the factor structure parameters of an empirically supported five-factor PTSD model (Elhai et al., 2011). The sample included 6,591 trauma-exposed children and adolescents selected from the National Child Traumatic Stress Network’s Core Data Set. Confirmatory factor analysis using invariance testing (Gregorich, 2006) and comparative fit index difference values (Cheung & Rensvold, 2002) reflected a mixed pattern of test item intercepts across age groups, with adolescents having greater PTSD severity for the factors of intrusions, numbing and dysphoric arousal. Further, the adolescent subsample produced lower residual error variances, reflecting less measurement error than the child subsample. Gender did not show a robust moderating effect. Implications for clinical assessment, theory building, and future research are further discussed.
FRI 108
Specific Fears in Children with High Levels of PTSD following Residential Fires
(Abstract #1276)

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Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA

Residential fires are potentially traumatic events that can challenge children's worldviews. Post-traumatic stress disorder (PTSD) is most commonly associated with post-trauma outcomes, though some research has shown that children can subsequently develop specific phobias. There is a gap in the literature for the relationship between PTSD and phobias following traumatic events. This study examines the association of child PTSD and the emergence of specific fears post-trauma. Data was obtained as part of an NIMH funded grant assessing the impact of residential fire on children and families. Children were assessed at four months (T1), 11 months (T2), and 18 months (T3) after the fire. The Fear Survey Schedule for Children-Revised (FSSC-R) was used to assess specific fears. Standard regression analyses revealed that child PTSD at T1 predicted specific medical fears at T2 (R² = .227, p < .05) and fears related to death and dying at T3 (R² = .297, p < .05). These findings suggest that experiencing PTSD after trauma may place children at-risk for the later development of specific fears. Further, the fears may be directly related to the traumatic experience. This study provides insight into a potentially comorbid disorder that may adversely affect post-traumatic functioning after residential fire.

FRI 111
Including Bullying Assessment in Trauma Evaluations: A Comparison of Survey Strategies
(Abstract #691)

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1 Boston University, Boston, Massachusetts, USA
2 University of California, Santa Barbara, Santa Barbara, California, USA

Studies document the detrimental impact of bullying (Copeland et al., 2013), yet disagreements remain about optimal assessment methods and how to best integrate with trauma-related evaluations. The most widely adopted tools (Olweus, 1996) use a definitional approach, defining “bullying” as repeated, intentional aggression in a relationship where there is imbalance of power, and ask respondents to indicate victimization. By using the emotionally-laden term “bullying,” these methods require respondents to self-identify as victims. We will describe a series of studies with children that use a behavioral assessment approach (i.e., do not use the term "bullying" and instead ask about defining characteristics). These studies find that definitional and behavioral approaches identify different populations of bully victims (Felix et al., 2010) and that definitional approaches may not detect power imbalance between peers (Green et al., 2012). We then present data from 413 adults who completed retrospective definitional and behavioral assessments of bullying. There was 79% agreement between methods, with the behavioral approach identifying higher rates of bullying (29%) than the definitional
approach (24%). We will compare the uses and limitations of these approaches, discussing their implications for including bullying assessments in trauma-related research and practice.

FRI 112
The Amsterdam Child Abuse Case in Day Care Centers: A Study of Sexual Abuse in Very Young Children
(Abstract #1103)

Poster #FRI 112 (Assess Dx/Child/Adol) M - Industrialized  Franklin A

Verlinden, Eva, MS, PhD Student, Diehle, Julia, MS, PhD Student, Verhoeff, Arnoud, PhD, Brilleslijper-Kater, Sonja, PhD, Lindauer, Ramón, MD PhD
1Academic Medical Center, University of Amsterdam, Amsterdam, Noord-Holland, Netherlands
2GGD Amsterdam, Amsterdam, Noord-Holland, Netherlands
3Academic Medical Center, Amsterdam, Noord-Holland, Netherlands

The infamous Amsterdam child abuse case involves the sexual abuse of infants and very young children at various daycare centers in Amsterdam. A male daycare worker sexually abused many very young children, in particular boys. The abuse was severe, occurred repeatedly and for prolonged periods of time, at the daycare center or at the child’s home where the perpetrator had offered to babysit. In many cases pornographic material from the abuse has been collected and disseminated on the internet. The purpose of the present study is to investigate (1) the physical and psychological signs of the sexual abuse, (2) the consequences of sexual abuse and potential disseminated pornographic material on children’s development and parents’ well-being, and (3) the relationships between risk and protective factors and the mental health outcomes for children and parents. The initial assessment took place shortly after the disclosure of the Amsterdam child abuse case in December 2010. Children were examined to identify physical and psychological signs of abuse (n=125). In the summer of 2013 parents will be asked to participate in the current study. A control group of children who have not been sexually abused (n=250) will be recruited. The research protocol for the project and preliminary data on the first initial assessment will be presented.

FRI 113
Relation between Post-Traumatic Stress Disorder, Depression, Social Support and Resilience amongst the Children and Adolescents who Survived the 2010 Haiti Earthquake
(Abstract #921)

Poster #FRI 113 (Assess Dx/Child/Adol) A - Latin Amer & Carib  Franklin A

Cénat, Jude Mary, Doctoral Student, Derivois, Daniel, PhD
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We examined the relationship between PTSD, depression, social support and resilience among the children and adolescent who survived the 2010 Haití’s earthquake. We analyzed data collected between June and July 2012 from a sample of 872 participants aged 7 to 17 in 12 schools at Port-au-Prince.
Participants completed the Children's Revised Impact of Event Scale (CRIES), the Peritraumatic Distress Inventory, the Child Depression Inventory 2 (CDI), the Social Support Questionnaire (SSQ-6), the Resilience Scale (RS) and sociodemographic questionnaire. Of 872 participants, respectively 322 (36.93%) ; 403 (46.21%) reported a prevalence symptoms of PTSD and depression ; respectively 22.7%, 21.8% and 7.6% presented a mod. high, a high and a very high score in Resilience Scale. The bests predictives variables are peritraumatic distress for PTSD (β= .53,p<.0001) ; traumatic exposure for depression (β= .23,p<.0001) ; and social support for resilience (β= .42,p<.0001). The commorbidity between PTSD and depression is 22,25%. This first study on the prevalence of PTSD and depression resulting from this earthquake demonstrates a need for improvement in treatment aimed at reducing PTSD and depression. Such treatment should be geared as a matter of priority towards girls, adolescents between the ages of 14 and 17 and those children and adolescents who have lost a family member.

FRI 114
Assessing Resiliency in Haitian Children living in the United States following the 2010 Earthquake
(Abstract #857)

Poster #FRI 114 (Assess Dx/Child/Adol) I - Industrialized  Franklin A

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Understanding resiliency and positive ways of coping with a tragedy such as this can be informative to both schools and families in formulating response plans after traumatic events and providing treatment to children. The earthquake in Haiti directly and indirectly affected many children and families of Haitian descent in the United States. This study utilized archival data collected in 2011 to assess the reactions of 90 children from a school in New York with a predominantly Haitian student population. Some students witnessed the earthquake first-hand and were relocated to the United States. Others lost family members and friends in the disaster. As part of this current research design, students were provided markers color-coded by gender and asked to write messages about their thoughts and feelings related to the earthquake in Haiti on a large poster mural. The content of these responses were coded using a coding scheme developed by Demaria (in process) based on coping responses used with school children exposed to traumatic violence. In the current study, themes of resiliency in the children's messages were identified and examined and gender differences will be discussed. Recommendations about how teachers, parents, and school administrators can promote and restore resiliency in children based on the findings of this study will be presented.
FRI 115
Predictors of Individual Differences of PTSD Symptom Patterns: A Latent Profile Analysis
(Abstract #1536)

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Although PTSD treatments are efficacious, they have high drop-out rates (Zayfert et al., 2005). Treatment may not be helpful to everyone because of individual differences in PTSD symptom patterns. PTSD is a polythetic diagnosis, wherein any six of 17 symptoms can lead to the same diagnosis. A few studies have found that traumatized individuals display qualitatively distinct patterns of emotional numbing and hyperarousal symptoms (e.g., Breslau et al., 2005). In the current study, latent profile analysis was conducted to assess individual differences in patterns of PTSD symptoms in a sample of trauma-exposed undergraduates (N=1,281) and to assess predictors of those patterns. A four class solution best fit the data, with resilient, mild distress/low hyperarousal, mild distress/high hyperarousal, and overall high distress classes. These classes significantly differed both in symptom severity and pattern. Neuroticism and depression predicted more severe symptom patterns. In separate analyses, individuals with directly vs. indirectly experienced traumas displayed qualitatively different symptom profiles, such that three symptom patterns were found after direct events, but only one symptom pattern after indirect events. Clinicians may be able to target treatments effectively and reduce the drop-out rate with information about individual differences in PTSD symptom presentation.

FRI 117
Long Term Effects of Exposure to Interparental Violence: Parenting and Perceived Social Support in Childhood as Protective Factors against Emotion Regulation Difficulties in Emerging Adults
(Abstract #1106)

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Exposure to interparental violence (EPV) in childhood has been found to be related to negative outcomes in both children and adults (Howell et al., 2010; Russell et al. 2010). Parenting practices and social support have been found to be protective factors against negative outcomes following EPV (Grych & Fincham, 1997). However, the relationship between EPV, parenting, social support, and emotion dysregulation in emerging adults has not been studied adequately. The current study aims to assess the relationship between frequency of EPV and emotion dysregulation and explore parental care and control and perceived social support as moderators in this relationship. Undergraduate students at a university will be asked to fill out a survey with several measures including the Difficulties with Emotion Regulation Scale (Gratz & Roemer, 2004), Parental Bonding Instrument (Parker et al., 1979), and a modified version of the Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, &
Farley, 1988). The adult recall version of the Revised Conflict Tactics Scale (Straus, 1999) will be used to measure the frequency of EPV. It is hypothesized that higher frequency of EPV will predict worse outcome. Furthermore, it is hypothesized that perceived social support and parental warmth will attenuate and parental control will exacerbate the relationship between EPV and outcomes.

FRI 118
Assessing Resilience in Adults as a Cognitive Construct Following Childhood Abuse Experiences: Personal Competence and Equanimity in Relation to Trauma Symptoms, Cognitive Distortions, and Self-Esteem
(Bookmark #1261)

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Bonanno and Mancini (2012) offer a model of trauma outcome that focuses on prototypical trajectories of trauma responses that include not only chronic dysfunction but resilience, as defined by healthy functioning. They posit that heterogeneity is present not only in the outcome from trauma but also in the factors that contribute to or detract from health functioning following trauma. Resilience is more complex than the absence of psychopathology. Consequently this study examined the relation between resilience and symptomatic distress, cognitive distortions, and self-esteem in a sample of 300 young adults as a function of childhood abuse experiences. Respondents completed standardized measures of childhood abuse, resilience (RS), trauma symptoms (TSI), cognitive distortions (CDS) and self-esteem (MSEI). ANOVA and MANOVA analyses indicated that while symptomatic distress and cognitive distortion scores were significantly different as a function of group status, with the sexual and combined abuse groups' scores being most elevated, resilience scores did not vary between groups or in regression analyses as a function of abuse severity in the four abuse groups. Moderate effect sizes between resilience and cognitive distortions (-.35 to -.26), trauma, self, and dysphoria distress (-.22 to -.25), and global (.55), self-control, and competence self-esteem scores were obtained.
FRI 121
Distinctiveness of Prolonged Grief Disorder symptoms among survivors of the Great East Japan Earthquake and Tsunami
(Abstract #491)

Poster #FRI 121 (Assess Dx/Disaster) M - Industrialized

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Prolonged Grief Disorder (PGD) has been proposed for diagnostic classification as an independent psychiatric disorder. Previous research has investigated it in relation to other axis I disorders in order to determine whether it could be considered an independent nosological entity. The distinctiveness of this condition was apparent in cases of ordinary bereavement and in those following human-made disasters. However, this disorder may be expanded to include bereavement resulting from natural disasters. The present study aims to clarify the differences between this disorder and post-traumatic stress disorder or major depressive disorder as experienced after the Great East Japan Earthquake and Tsunami. The subjects were 82 hospital workers. Each type of disorder was assessed by means of the Inventory of Complicated Grief, the Impact of Event Scale-Revised, and the Center for Epidemiological Studies Depression Scale. Exploratory factor analysis showed 3 dimensions, with PGD items independently clustering in the same dimension. Our findings support the uniqueness of PGD even in a post-natural disaster situation in a non-Western culture and warrant grief intervention for high-risk bereaved survivors.

FRI 124
Operation Desert Storm: Then and Now
(Abstract #908)

Poster #FRI 124 (Assess Dx/Mil/Vets) M - Industrialized

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We reported previously (1995) on a sample of 60 Veterans of Operation Desert Storm, noting PTSD related to both combat exposure and the extended wait time between deployment to the Persian Gulf and the start of the air and ground war. At that time, higher levels of social support were related to lower levels of PTSD and depression; physical health concerns (“Gulf War Illness”) were associated with
higher PTSD and depression. In the present study, we report on a 20-year follow-up of these Veterans. Repeating the same assessments as in the initial survey, the rates of PTSD and depression are similar, with some Veterans currently meeting criteria who did not before and vice versa. Over time, physical health concerns had increased. Current levels of social support and physical health were more related to current PTSD and depression than were initial support and health. There were discrepancies in reports of war-zone stressors between the initial and follow-up surveys. Veterans whose reports of exposure were more consistent over the 20-year interval were more likely to report similar symptom levels. Those reporting more or less exposure at follow-up, as compared to initial assessment, were more likely to have increased or decreased symptom levels, respectively. We discuss the implications of changes in event reporting, and relate the findings to the theme of surviving and thriving.

FRI 125
Reasons for Living among OEF/OIF Veterans with Post-Traumatic Stress Disorder
(Abstract #460)

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2Michael E. DeBakey VA Medical Center / Baylor College of Medicine, The Menninger Department of Psychiatry and Behavioral Medicine / South Central Mental Illness Research Education and Clinical Center (MIRECC) / Traumatic Brain Injury Center of Excellence, Houston, Texas, USA

Recent elevations in suicide among Veterans who served in Operations Enduring Freedom (OEF) and Iraqi Freedom (OIF) have prompted increased research on risk factors for suicidality; however, less is known regarding protective factors for suicidality among this cohort. Reasons for living (e.g., moral objections to suicide) have been identified as important deterrents to suicidality and may represent a potential avenue for preventing suicide. However, the extent to which reasons for living associate with suicidality among OEF/OIF Veterans is unknown. Furthermore, the most commonly-used measure of this construct – the Reasons for Living Inventory (RFL; Linehan et al., 1983) – has not been validated among OEF/OIF Veterans. Thus, our objectives were to: (1) examine the psychometric properties of the RFL among OEF/OIF Veterans; (2) examine reasons for living as predictors of suicidal ideation. Our sample consisted of OEF/OIF Veterans entering VA inpatient treatment for trauma. Participants completed measures of reasons for living, suicidal ideation, PTSD symptoms, and depressive symptoms. We examined the internal reliability, criterion-related validity, and factor structure of the RFL. Using hierarchical regression, we examined the extent to which different reasons for living predicted suicidal ideation. Clinical implications and directions for future research are discussed.
FRI 126
Psychological Impact and Cortisol Response of Portuguese Military to Peace Mission Deployment to Afghanistan
(Abstract #1698)

Poster #FRI 126 (Assess Dx/Mil/Vets) I – N/A

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We investigated longitudinally the changes in cortisol and psychological functioning that occurred with deployment exposure in a group of Portuguese military staff deployed to a peace mission in Afghanistan during six months. Method: Sixteen military male were assessed in four different moments: before, during the mission, early and later on after deployment. Military filled psychological scales (Childhood Trauma Questionnaire; Brief Symptom Inventory; Post Traumatic Diagnostic Scale; Impact Event Scale-revised) and collected salivary samples, in three different moments – after awake; half an hour after awake; around 4.00 pm. Statistical analyses such as mean differences and regression analysis will be used for the data interpretation. Results: Are still in analysis. We expect to confirm the hypothesis that deployment may increase the risk for PTSD and for psychological symptoms, namely in subjects with previous vulnerabilities such us childhood trauma exposure and atypical cortisol responses. Proposed discussion: If the data confirm the tested hypotheses, selection criteria of subjects for risk professions should consider the identified vulnerability factors. The validity of our study is increased by the used of longitudinal methodology. However, better generalizability will be gathered if a matched military control group not exposed to the mission would be assessed as well.

FRI 127
A Preliminary Analysis of the Relationships between Attachments and PTSD with Combat Veterans
(Abstract #112)

Poster #FRI 127 (Assess Dx/Mil/Vets) I – N/A

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Background: Attachment theory may provide key insights into the development of combat-based PTSD and possibly inform the question of who is most likely to develop and suffer from PTSD. However, the literature examining patterns of attachment in samples of combat Veterans has been equivocal. Objective: To investigate the relationships between attachment patterns and related family, peer, and clinical issues and self-reported PTSD severity with a sample of military Veterans. It was predicted that different attachment patterns to mothers, partners, and peers would emerge. Methods: Twenty two male combat Veterans in a VA outpatient clinic completed PTSD
Checklist – Military Version (PCL-M), Trauma Symptom Inventory, 2nd Edition (TSI-2), and the Attachment and Clinical Issues Questionnaire (ACIQ). A series of correlations were used to examine the resulting relationships. Results: Participants with more severe PTSD symptoms reported low avoidance and ambivalence towards mother, high avoidance towards partner, and disengagement from peers. Conclusions: These preliminary results suggest that combat-based PTSD may be related to unique attachment patterns that have not been documented elsewhere and which may inform future research, preventative measures, and more effective treatments.

FRI 128
The Role of Trauma Exposure and PTSD Symptoms in Tobacco Use Behavior Before, During and After Military Deployment
(Abstract #435)

Veterans have a high prevalence of tobacco use and PTSD. Individuals with PTSD have among the highest prevalence of tobacco use. Few studies have examined the effect of military deployment on tobacco use or investigated associations between deployment stressor exposure, PTSD and tobacco use. 2213 Veterans deployed in support of OEF/OIF (50.9% female; mean age=35.53), reported on tobacco use before, during and after deployment and completed the Deployment Risk and Resiliency Inventory and PTSD Checklist. Tobacco use rates were 37% before, 46% during and 31% after deployment. Exposure to combat and harassment during deployment were associated with initiation of tobacco use during deployment (OR=1.48, 95% CI= 1.24-1.77; OR=1.41, 95% CI=1.21-1.65). Tobacco use increased substantially during deployment and exposure to traumatic stressors partially explained this increase. Continued tobacco use post deployment was associated with PTSD symptoms post-deployment (controlling for trauma exposure; T=3.07, p=.002). Post-deployment PTSD symptoms were related to post-deployment tobacco use (among tobacco users during deployment; controlling for combat experiences and previous tobacco use; OR=1.27, 95% CI=1.06-1.54). These findings suggest that PTSD may interfere with successful tobacco cessation and/ or that tobacco use may interfere with PTSD recovery.
Sexuality, Relationship Agreement, and Civilian and Military Trauma in a Multi-Era Sample of Veterans
(Abstract #1093)

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In the study of Veterans who have experienced combat, the focus is typically on outcomes such as PTSD and depression. One area of study that is often neglected is relationship quality, particularly sexuality. We conducted an online survey of 1,055 West Virginia Veterans (ages 18-97, 94% White) from multiple eras (OEF/OIF: 15% Female, to WWII: 4% Female), evaluating combat exposure, civilian traumas (including sexual abuse and assault), PTSD, depression, and two relationship factors (agreement on major decisions and sexual satisfaction). Analyses indicate combat exposure is positively correlated with PTSD and depression, but is unrelated to the measures of Relationship Agreement and Sexual Satisfaction. Relationship Agreement does not differ by Sex (Female/Male) or Age. However, Sexual Satisfaction is significantly lower for Females and also declines with Age. Regression analyses reveal that depression, and not PTSD, best predicts Relationship Agreement and Sexual Satisfaction. We additionally present data on sexual orientation, HIV status, childhood abuse, and adult physical and sexual assault (including military sexual harassment and assault). These findings add to the limited literature on Veterans and their experiences with combat, PTSD, depression, and relationship factors with a particular emphasis on sexuality.
FRI 130
Examining the Underlying Dimensions of Post-Traumatic Stress Disorder (PTSD) and Alcohol Abuse Disorder
(Abstract #572)

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Elhai, Jon, PhD
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4 University of Michigan, Ann Arbor, Michigan, USA

The substantial comorbidity between Post-Traumatic Stress Disorder (PTSD) and alcohol abuse has been well documented. This study used confirmatory factor analysis (CFA) to analyze the factor structure of PTSD (using the PTSD Checklist) and a one-factor model of life-time alcohol abuse (assessed by a 12 item survey from the National Survey on Drug Use) in order to examine the correlations between the factors of PTSD and alcohol abuse so that the high comorbidity between these disorders could be examined at the latent level. Ohio National Guard soldiers with a history of over-seas deployment participated in the study. A total of 1,215 soldiers completed all necessary measures for this particular study. Results of the CFA indicated that a combined model of PTSD (using the dysphoria model of PTSD) and alcohol abuse fit the data excellently ($\chi^2$ (367) = 606.052, $p < .001$; CFI = .97; TLI = .97; RMSEA = .02). The correlations between PTSD's factors and the alcohol abuse factor ranged from r's of .258 to .285 with the dysphoria factor demonstrating the strongest correlation with the alcohol abuse factor. This result is consistent with previous research that also found that the dysphoria factor correlated most strongly with another measure of psychopathology, compared to the other factors of PTSD.

FRI 131
Social Desirability and Differential Responses to the Civilian and Specific Versions of the Post-Traumatic Checklist
(Abstract #992)

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The Post-Traumatic Checklist is one of the most frequently used self-report measures of PTSD symptoms. The civilian version (PCL-C) does not require that symptoms be tied to a particular traumatic event, whereas the specific version (PCL-S) does include such a requirement. With less specificity, the PCL-C may be more strongly influenced by sources of error, including social desirability. Indeed, the impact of social desirability on responses to the PCL has rarely been examined. Community participants (N = 42; data collection ongoing) completed questionnaires via telephone interview in the following
order: Crowne-Marlowe Social Desirability Scale, PCL-C, Traumatic Life Events Questionnaire, PCL-S (referencing the most distressing trauma reported on the TLEQ). Social desirability was significantly correlated with PCL-C and PCL-S scores (r = .48 and r = .31, respectively). In a multi-level model with social desirability predicting differential responses to the PCL-C and the PCL-S, a statistical trend emerged suggesting that social desirability more strongly impacts responses to the PCL-C than the PCL-S (d = .48). This effect was primarily a function of differential responses to the PTSD Cluster C avoidance questions (d = .63, p < .05). These results support use of the PCL-S to minimize the influence of social desirability on symptom reports.

FRI 132
Psychological & Behavioral Responses to the 2002 Washington, D.C. Sniper Attacks
(Abstract #1075)

Poster #FRI 132 (Assess Dx/N/A) M - Industrialized
Franklin A

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For more than 3 weeks in October 2002, a series of sniper attacks in the Washington, D.C. metropolitan area left 10 people dead and 3 others wounded. We examined the relationship among sniper-related media exposure, feelings of safety and concern, and psychological and behavioral responses in community residents. Participants were 1238 Washington, D.C. area residents aged 17-90 (M=41.7 years). Participants completed the Impact of Event Scale-Revised, Peritraumatic Dissociative Experiences Questionnaire, Patient Health Questionnaire, and items pertaining to alcohol use and changes in routine activities. Relationships among media exposure, feelings of safety and concern, and PTSD, ASD, depression, and behavioral changes were examined through hierarchical linear and multivariate logistic regression analyses. Almost 8% of respondents (7.7%; N=93/1238) reported symptoms consistent with probable PTSD, 6% reported probable depression (N=75/1238), and 18.7% reported probable ASD (N=231/1238). More hours of sniper-related television viewing, threat to safety, and concern about routine activities predicted elevated PTSD, dissociative, and depressive symptoms, and a decrease in routine activities. The influence of media exposure and perceived threat have implications for appropriate information and intervention provision by community leaders and mental health care providers.
FRI 133
Examining the Specificity of Peritraumatic Emotions in Predicting PTSD Symptom Clusters
(Abstract #25)

**Poster #FRI 133 (Assess Dx/N/A) I - Industrialized**

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This study investigates whether peritraumatic emotions differentially predict PTSD symptom clusters in individuals who have experienced stressful life events. Hypotheses were developed based on the SPAARS model of PTSD (Dalgleish, 2004; Dalgleish & Power, 2004); it was predicted that the peritraumatic emotions of anger, disgust, guilt and fear would significantly predict re-experiencing and avoidance symptoms, while only fear would predict hyperarousal. One hundred and forty-four undergraduate students participated in this study by completing a packet of self-report questionnaires. Peritraumatic emotions were measured retrospectively using the Trauma Emotion Questionnaire, and PTSD symptoms were assessed using the PTSD Checklist – Specific. Hierarchical regression analyses were conducted with PCL-S symptom cluster scores as dependent variables and peritraumatic fear, guilt, anger, disgust, negative affect and gender as predictor variables. As hypothesized, peritraumatic fear, anger and guilt all significantly predicted re-experiencing. However, only fear predicted avoidance, while guilt, disgust and anger predicted hyperarousal. Results will be discussed in relation to the theoretical role of emotions in the etiology of PTSD following the experience of a stressful life event.

**CLINICAL PRACTICE**

FRI 134
Enhancing Service Engagement among Recent Adult Rape Victims
(Abstract #110)

**Poster #FRI 134 (Practice/Violence) I - Industrialized**

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The trauma of rape places victims at risk for physical and psychiatric health problems, indicating the need for preventive services. To address this need, it is recommended that victims attend follow-up medical and counseling services after the initial medical/forensic exam; however, most victims do not attend these appointments. Our team is working to enhance engagement of adult rape victims seen at Harborview Medical Center in follow-up services provided at the Harborview Center for Sexual Assault and Traumatic Stress. We present findings from the literature on predictors of attendance at recommended follow-up appointments and provide suggestions for future research in this area. We then present ideas for enhancing engagement in follow-up and invite feedback from session participants.
attendees. Findings from three published studies of adult female rape victims indicate that poor contact information, less concern about the health impact of the assault, and idiosyncratic practical issues are barriers to engagement. Although not empirically examined, we expect that avoidance of trauma reminders also plays a role. We are currently working on strategies to 1) enhance motivation and reduce ambivalence for follow-up attendance 2) address potential barriers to attendance, 2) engage victim-identified social supports, and 3) enhance outreach efforts prior to the follow-up.

**FRI 135**
**Post-Traumatic Symptoms and Post-Traumatic Growth Post Earthquake in Depressive Patients in a Public Hospital**
(Abstract #401)

**Poster #FRI 135 (Practice/Disaster) M - Latin Amer & Carib**

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Objective. To determine prevalence of PTSD and reveal the impact on the global clinical status and post-traumatic symptoms at six and two years after the F-27 Chile Earthquake Methodology. 75 women in treatment for severe depression evaluated at first month and six month post disaster, 56 were also evaluated at two years. According to the ICD-10, acute stress (AS) and post-traumatic stress disorder (PTSD) were clinically determined in all three times and also were evaluated with the Clinical Global Impression scale (CGI), the eight-item treatment-outcome post-traumatic stress disorder scale (TOP-8).

At two years was applied the post-traumatic growth inventory (PTGI). Results. AS: 58.7%, PTSD 53.3% at six month 47.4% at two years. The results on PTO 8 were (14.91; 14.45; 9.81) significantly only at two years (F=11.2; p=0.0). CGI improved (1.78; 2.6; 3.2) significantly at six month and at two years (F=17.341; p=0,0). 43.4% of patients have a low growth, 17.1% have moderate growth, and 10.5% have a high growth. There is a direct relationship between the CGI and PTGI. (r=.707; p=0.0; R²=.5). 50% of the variation in CGI would be explained by PTI. Conclusions. In this patients in treatment with severe depression the incidence of PTSD was elevated, at six and two years post earthquake, The post-traumatic growth proved to be an important factor of improvement in this sample.
FRI 136
Resilient Humanitarian Aid Workers: Styles of Relating, Perceptions of Stress and Trauma, and Practices of Self-Care
(Abstract #1307)

Poster #FRI 136 (Practice/EmergWrkrs) I - Global

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2 Headington Institute, Pasadena, California, USA

Resilience to stress and traumatic events has been associated with a variety of factors, including age, gender, ethnicity, personal and social resources, and even specific life circumstances. We investigated the styles of relationship attachment of 331 humanitarian aid workers through self-report questionnaires, along with their subjective perceptions of trauma and stress, and their practices of self-care. Interestingly, resilience was stronger when there had been more exposure to traumatic events, but only for women and for individuals in economically developing countries. In addition, workers who self-identified most closely with a fearful style of relationship attachment were less likely to be resilient, which suggests that a positive view of one’s self combined with a positive view of others is essential for resilience; however, having either a positive view of others or a positive view of one’s self may be adequate. Further, weaker perceptions of stress, and more self-care behaviors were also associated with resilience. These associations further confirm the multifaceted nature of resilience and suggest that resilience may be a trajectory of healthy functioning that reduces the physiological consequences of chronic exposure to stress.

FRI 137
Role of Family Relationships in Adaptation of Post-Deployment Marines
(Abstract #1517)

Poster #FRI 137 (Practice/Mil/Vets) M – N/A

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Since the start of the Global War on Terror (GWOT) in 2001, over 1.8 million service members have been deployed in support of Operation Iraqi Freedom (OIF) or Operation Enduring Freedom (OEF). Research has established that pre- and post-trauma factors, such as social support, contribute to a multicausal view of mental health problems following trauma exposure. Despite recognition of the importance of a supportive family throughout service members’ cycle of deployment and reintegration, quantitative research on the role of the family in service members’ adaptation has been limited. The current study used validated measures to examine combat stress, family relationships, and mental health in 105 active duty, enlisted Marines who had been deployed to combat at least one time. A correlational, cross-sectional design was used to examine the moderating impact of family environment on relations between Marines’ combat stress exposure and mental health. Hierarchical regressions demonstrated
that as hypothesized, Marines who reported better family relationships (greater cohesion, greater expressiveness, and less conflict) also reported fewer mental health problems. Clinical implications include prioritizing assessing and strengthening family relationships to promote resilience after combat.

FRI 138
The Peer Support Program: An Innovative Clinical Program for Veterans with PTSD and Substance Use Disorders (SUD) living in Rural California.
(Abstract #489)

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There is a need for innovation that enhances access to mental healthcare for veterans with PTSD and SUD. This issue is pronounced in rural regions of the United States as at least one third of Iraq/Afghanistan (OIF/OEF) veterans are returning home to rural areas, and there is often a shortage of professional staff in these areas. We implemented an innovative project called the Peer Support Program at a rural VA clinic. A part-time Peer Support Technician was trained and supervised to provide interventions that help rural veterans engage in mental health services. The PST has a lived experience with PTSD and SUD and, having experienced improvement in his own condition, offers services to peers seeking guidance in their own recovery. The PST self-discloses regarding his own experiences and shares what supports and sources of resiliency he has used to recover. In the last nine months, 54 veterans have used the program with 20 of these veterans being OIF/OEF era. Veterans attended, on average, eight total groups during this time period (range: 1-36). 28 veterans received individual “engagement visits” (total 48). We describe how this innovative program was designed, the role of the PST and the demographics of the veterans who utilize this program. Our data suggests that it is feasible to implement a peer support program, in a rural area, to increase access to underserved veterans

FRI 139
Fostering Resilience and Readjustment in Returning Veterans: Development and Evaluation of a Brief Group Intervention
(Abstract #1579)

Lamoureux, Brittain, PhD
Summa Healthcare System - Center for the Treatment and Study of Traumatic Stress, Akron, Ohio, USA

Returning veterans face a host of issues, from those related to readjustment to civilian life to the sequelae of multiple, repeated physical and psychological traumas. Though there is no consensus regarding how best to approach intervention for the spectrum of mental health issues these veterans are facing, there is some convergence of approaches in the literature that may guide the development
of such interventions. Drawing on both positive psychology approaches and evidence-based treatments for a variety of psychiatric disorders, the authors have developed a brief, group-based intervention which aims to benefit recently returning veterans in three ways. First, veterans may learn skills from these groups that address current difficulties in coping and prevent further difficulties or mental health issues. Second, veterans who are in need of more intensive mental health treatment may learn skills that can help them cope more effectively and prepare them for such treatment, such as trauma processing therapy. Finally, this intervention may serve as a point of access to additional mental health services, offering an opportunity to de-stigmatize mental health issues and provide more accurate information regarding treatment processes and outcomes. More specific information regarding the components of this intervention will be discussed and initial evaluation data will be presented.

FRI 140
Do Patient Characteristics Affect Therapist Willingness to Offer Evidence-Based Treatment for PTSD?
(Abstract #136)

Hundt, Natalie, PhD
Mott, Juliette, PhD
Barrera, Terri, MA
Cully, Jeffrey, PhD
Stanley, Melinda, PhD

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2Michael E. DeBakey VA Medical Center; Baylor College of Medicine, Houston, Texas, USA
3Baylor College of Medicine, Houston, Texas, USA

Implementation of evidence based psychotherapies (EBP) for PTSD has been slow. Research has begun to examine therapist characteristics associated with greater use of EBP (Couineau & Forbes, 2011; Craig & Sprang, 2010). Little research, however, has examined whether therapists are reluctant to use EBP with certain types of PTSD patients. If this is the case, it presents two problems: 1) disparities in which patients are being offered the most effective treatments, and 2) barriers to full dissemination and implementation of EBPs for PTSD. One recent study presented therapists with case vignettes in which patient factors were systematically varied and found that therapists were more likely to select EBPs for PTSD for patients with no comorbid depression (van Minnen, Hendriks, & Olff, 2010). We used this method to examine whether two factors, older age and prior history of alcohol abuse, were associated with therapist willingness to offer EBP for PTSD. We conducted an anonymous online survey in which therapists selected the most appropriate treatment for one of four randomly selected vignettes, with patient factors varied in a 2x2 design. Additionally, we examined whether therapist training, theoretical orientation, self-perceived comfort and skill level using EBP for PTSD, and demographic characteristics affected willingness to offer EBP.
CLINICAL/INTERVENTION RESEARCH

FRI 141
Pre-MVA and Concurrent Resilience Moderate PTSD Symptoms from Three to Six Months Post MVA
(Abstract #1365)

Poster #FRI 141 (Clin Res/Acc/Inj) M – N/A

Chen, Sue-Huei, PhD, Chen, Po-Jung, BS, Chen, Wei-Lin, BS, Lu, Chia-Hui, MS, Kung, Yi-Wen, MS
National Taiwan University, Taipei, N/A, Taiwan

Motor Vehicle Accident (MVA) is a common trauma and may lead to the development of PTSD symptoms. Although resilience has been suggested to be a protecting and/or moderating factor in etiological process of PTSD, previous findings were mostly based on cross-sectional studies and yet to be conclusive. To examine the psychological impact of the accident as clearly as possible, only the survivors of a recent MVA and without serious head injuries (GSC ≥ 13) were recruited for this prospective study. The first assessment (T1) includes PTSD symptoms (PDS) and two types of resilience. Concurrent resilience was evaluated at the time of assessment, while pre-MVA resilience asked retrospectively the pre-trauma psychological strengths. At about 6 months post MVA (T2), PDS was re-assessed. Results show that: 1) Although two resilience correlated with each other, only concurrent resilience predicted T1 PTSD symptoms. 2) Both concurrent and pre-MVA resilience moderated the relationship between T1 and T2 PTSD symptoms. 3) Only pre-MVA, but not concurrent, resilience predicted the reduction of PTSD symptoms (T2-T1). In conclusion, the moderating and protecting role of resilience on PTSD symptom changes is supported. Resilience at various stages in relation to the trauma may have various predictions to post-traumatic psychological distress.

FRI 142
The Relationship between Age of Trauma Onset and PTSD Symptom Clusters
(Abstract #1257)

Poster #FRI 142 (Clin Res/Adult/Cmplx) I - Industrialized

Hu, Emily, MA, Bruce, Steven, PhD, Sheline, Yvette, MD
1University of Missouri St. Louis, Saint Louis, Missouri, USA
2Washington University in Saint Louis School of Medicine, Saint Louis, Missouri, USA

Studies comparing individuals who differ on age of trauma onset have found several key differences. Survivors of child abuse have been found to present with more severe PTSD and more comorbidity than survivors of adult trauma. However, research to date has focused mainly on PTSD as a single construct. The present study sought to address this gap by examining the relationship between the age of trauma onset and the three symptom clusters of PTSD. As part of a larger study, 50 women who had experienced an interpersonal trauma were given the Clinician-Administered PTSD Scale (CAPS). Participants were grouped according to whether or not they experienced the index event before or after
age 12. Preliminary analyses indicated age of trauma onset was significantly associated with avoidance/numbing ($r = -.30$, $p = .03$) but not with the other symptom clusters. A subsequent one-way ANOVA also found that participants with an earlier age of onset evidenced more severe avoidance/numbing symptoms than those with a later age of onset ($F_{[49]} = 5.52$, $p = .02$). In broader clinical practice, these findings may help refine treatment by encouraging an emphasis on avoidance/numbing for individuals who have experienced childhood trauma.

FRI 143
Growth after Trauma: Coping Strategy Correlates of Post-Traumatic Growth
(Abstract #91)

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Kelly, Megan, Doctoral Student, Walter, Miriam, Other, Goodkind, Madeleine, PhD, Weiss, Elizabeth, PsyD, Etkin, Amit, MD, PhD Stanhope University/Palo Alto VA, Palo Alto, California, USA

INTRODUCTION: Emerging research on post-traumatic growth (PTG) provides a different perspective than the prevailing deficit-oriented understanding of the sequelae of trauma. The phenomenon of PTG is not well-understood but studies suggest that it contains both positive and negative facets (Hagenaars & van Minnen, 2010). We explored this duality by examining the relationship between PTG and diverse coping strategies. METHODS: 39 demographically diverse treatment-seeking adults with PTSD (27 female, 12 male; age: $M = 27.3$ yrs, $SD = 10.1$) completed the Post-Traumatic Growth Inventory (PTGI) and the BRIEF-COPE. RESULTS: A multiple regression indicated that PTGI is positively correlated with one avoidant coping strategy (Denial, $p < .001$), one problem-focused strategy (Active, $p = .015$) and one active emotional coping strategy (Positive Reframing, $p = .004$). PTGI was positively correlated to a second problem-focused strategy at trend level (Religion, $p = .024$). PTGI was not significantly associated with subscales representing ten other coping strategies. DISCUSSION: Results support the Janus face model (Maercker & Zoellner, 2004) in which PTG is conceptualized as encompassing both adaptive and maladaptive components. Understanding the association between coping strategies and the development of PTG can inform clinicians about how patients understand and process traumatic experiences.

FRI 144
Exposure to Intimate Partner Violence throughout the Lifespan Predicts Parenting Outcomes
(Abstract #997)

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Riggs, Jessica, BA, Rouleau, Erica, BA, Merlanti, Meredith, BA, Gutman, Emily, Undergraduate, Huth-Bocks, Alissa, PhD Eastern Michigan University, Ypsilanti, Michigan, USA

A diverse sample of women ($N = 120$) were recruited during the third trimester of their pregnancy and followed through their child’s third birthday. Women were asked about their experiences of physical or
sexual intimate partner violence (IPV), including exposure to parental violence during childhood and direct experiences of partner violence during adulthood. Four groups of women included those with no IPV experiences (n = 21), those who witnessed IPV as a child (n = 10), those who experienced IPV as an adult (n = 41), and those who were exposed to IPV during childhood and adulthood (n = 41). MANOVA analyses revealed women who experienced IPV only in adulthood were observed by researchers to show less maternal sensitivity \[ F(3, 109) = 3.09, p < .05 \], than women who were never exposed to IPV or who experienced IPV throughout the lifespan. Women who experienced IPV throughout life and in adulthood only reported more helpless caregiving \[ F (3, 109) = 2.57, p = .058 \] than women exposed to IPV during childhood. Coding of maternal behavior during a play interaction is currently underway, and group differences will be examined. Results suggest that IPV exposure negatively affects parenting, and that IPV experienced for the first time in adulthood may be particularly deleterious.

**FRI 145**
The Mediating Role of PTSD on Objective Diagnoses of Chronic Health Conditions in Sexual Violence Victims
(Abstract #1016)

**Poster #FRI 145 (Clin Res/Adult/Cmplx) I - Industrialized**

**Cunningham, Katherine, MA** \(^1\), **Wen, Frances, PhD** \(^2\), **Coon, Kim, EdD** \(^2\), **Foulks-Rodriguez, Kristin, MPH** \(^2\), **Hays-Grudo, Jennifer, PhD** \(^2\), **Jelley, Martina, MD** \(^2\)

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According to the CDC, 23.6% of men and 62.9% of women experience lifetime sexual violence. Twenty-one percent of children experience sexual abuse (CSA), and one in ten women experiences intimate partner rape (IPR). Sexual violence has been linked to negative health outcomes, including chronic health conditions and increased treatment seeking. The current study examined the mediating role of PTSD on the relationship of CSA and IPR with chronic physical health conditions. As part of a larger study, adult patients (N = 354) seeking medical treatment in primary care settings reported on their subjective health and a variety of stressors they may have experienced, including CSA and IPR. Patients’ medical charts provided chronic health diagnoses. Multiple regression analyses showed that both CSA and IPV have significant relationships with chronic health conditions and that PTSD partially mediates these relationships. These results suggest that sexual trauma victims with PTSD may have an increased risk of developing chronic physical health conditions. Implications of these findings will be discussed.
FRI 146
The Impact of PTSD Treatment on the Cortisol Awakening Response
(Abstract #374)

Poster #FRI 146 (Clin Res/Adult/Cmplx) M - Industrialized

Pacella, Maria, MA 1, Feeny, Norah, PhD 2, Zoellner, Lori, PhD 3, Delahanty, Douglas, PhD 4
1 Kent State University, Kent, Ohio, USA
2 Case Western Reserve University, Cleveland, Ohio, USA
3 University of Washington, Seattle, Washington, USA
4 Kent State University & Northeast Ohio Medical University, Kent, Ohio, USA

Post-traumatic stress disorder (PTSD) is associated with abnormal functioning of the hypothalamic-pituitary-adrenal (HPA) axis (Pace & Heim, 2011); however, little research has examined whether cortisol levels normalize/change following successful PTSD treatment (Gerardi et al., 2010; Olff et al., 2007). This study examined the impact of PTSD treatment on the cortisol awakening response. Twenty-nine adults participating in a treatment trial for chronic PTSD provided saliva samples (upon waking, 30, 45, and 60-min post-waking) before and after receiving either prolonged exposure therapy or sertraline treatment. Responder status (loss or retention of PTSD diagnosis) was the predictor, and area under the curve with respect to increase (AUCi; reflecting HPA/cortisol reactivity), was the outcome. No differences in AUCi emerged based on treatment group. Though no main effect emerged for responder status, hierarchical regression analysis revealed a significant gender by treatment response interaction (β = .54; SE = p = .035), such that female responders displayed a decrease in cortisol reactivity from pre- to post-treatment (β = .52; p = .08), whereas male responders did not experience changes in cortisol reactivity (β = -.33; p > .05). Post-treatment neuroendocrine changes may emerge only for specific subgroups, highlighting the importance of exploring treatment moderators.

FRI 147
Sexual Submissiveness and Dominance in Intimate Relationships: The Role of Cumulative Trauma and Attachment
(Abstract #265)

Poster #FRI 147 (Clin Res/Adult/Cmplx) M - Industrialized

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2 Université du Québec à Montréal (UQAM), Montreal, Quebec, Canada
3 University of Southern California, Los Angeles, California, USA

Cumulative interpersonal trauma can have long-ranging impacts on health and well-being (Felitti & Anda, 2010). Intimate relationships (e.g., sexual functioning, satisfaction, attitudes toward sex, and attachment security) are often negatively impacted by early trauma. Adult attachment was examined as a mediator of the link between cumulative interpersonal trauma and sexual submissiveness or dominance in intimate relationships. University women (n = 354) and men (n = 129) reported on
cumulative early trauma (sexual, physical, and psychological abuse, and neglect), adult attachment (ECR, Fraley et al., 2000), and sexual attitudes (submissiveness, dominance, need for security, and interest in bondage; Briere, 2012). Men endorsed greater dominance while women reported greater submissiveness and need for security. Cumulative trauma was associated with insecure attachment and all four sexuality dimensions. A well-fitting SEM ($\chi^2$/ df = 1.07, CFI = 1.0, RMSEA = .01) showed that anxious attachment partially mediated the link between cumulative trauma and sexual submissiveness in women. Anxious attachment was more strongly linked to women’s than men’s sexual attitudes (except for need for security, which was linked to anxiety in men only). Findings show the complexity of sexual relationships for women and men with histories of childhood maltreatment and suggest areas for intervention.

FRI 148
From Surviving to Thriving: Predicting Treatment Outcome in Trauma-Exposed Individuals with Nightmares and Other Sleep Disturbance
(Abstract #94)

Micol, Rachel, BS, Cranston, Christopher, MA PhD Student, Davis, Joanne, PhD
The University of Tulsa, Tulsa, Oklahoma, USA

Research has proposed sleep as an important component in promoting psychological resilience in the aftermath of trauma. Findings suggest sleep disturbances, including nightmares, are often resistant to general post-traumatic stress disorder (PTSD) interventions, while cognitive-behavioral interventions that target trauma-nightmares are often efficacious in reducing the intensity and severity of nightmares and other related sleep complaints, in addition to daytime functional impairment and distress. The present study sought to explore factors that might predict trauma-exposed individuals’ psychological outcomes using Exposure, Relaxation, and Rescripting Therapy, a treatment developed to target trauma nightmares. Primary outcome measures were PTSD and depression symptoms. Predictors included nightmare duration, frequency and intensity, sleep time, quality, and latency, and number of traumas. Preliminary hierarchical regression analyses indicated that poorer baseline sleep quality was the most robust predictor of greater post-treatment PTSD and depressive symptoms. These findings suggest that sleep quality may significantly impact how trauma-exposed individuals fare psychologically and may be helpful to target in order to promote psychological resiliency. Additional implications, limitations and future directions will be discussed.
FRI 149
Matters of the Heart: Physiological Correlates of Childhood Trauma
(Abstract #1455)

Van Cleave, Treva, MA, Freed, Steven, MA, PhD Student, Depietro, Jonathan, MA PhD Student, Minshew, Reese, MA PhD Student, McGreevy, Catherine, MA, D’Andrea, Wendy, PhD
The New School for Social Research, New York, New York, USA

The cardiovascular literature associated with trauma has largely examined heart rate, but has rarely parsed whether findings linking elevated heart rate to PTSD are attributed to sympathetic or parasympathetic activity. Within the current literature, findings show that people with Post Traumatic Stress Disorder have higher levels of cortisol and are at risk for poor health conditions; furthermore, childhood trauma is a strong predictor of adulthood disease burden. Cardiovascular measures of sympathetic and parasympathetic activity, indicative of stress reactivity, could potentially influence health outcomes and provide mechanistic information on the link between childhood trauma and adult health burden. Our study consisted of 71 female community members, who were measured for baseline heart rate, and given the Childhood Trauma Questionnaire as a marker of traumatic experience. Low heart rate was associated with more severe emotional abuse, high heart rate was associated with less severe emotional and physical neglect, and, we found no correlation for sexual or physical abuse history. Parasympathetic measures were not associated with childhood trauma in this sample. Given that both elevated and blunted heart rate may predict disease, the implications of these findings—associated with less frequently examined forms of maltreatment—are discussed.

FRI 150
Resilience to Trauma – Associated Factors and the Buffering Role of Positive Affect
(Abstract #851)

Vilete, Liliane, PhD, MD 1, Coutinho, Evandro, MD, PhD 2, Figueira, Ivan, MDiv, PhD 3, Andreoli, Sergio, PhD, MD 4, Mari, Jair, PhD, MD 4
1 Federal University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil
2 Escola Nacional de Saude Publica (ENSP-FIOCRUZ), Rio de Janeiro, Rio de Janeiro, Brazil
3 Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil
4 Federal University of Sao Paulo, Sao Paulo, SP, Brazil

Resilience is a dynamic process involving the interaction between intrapsychic and social factors of risk and protection. In order for it to be identified, there must be a significant threat to the individual, such as a traumatic event, and a good quality of adjustment. The aim of this study was to identify factors and possible mechanisms associated with resilience to traumatic events in the general population. We conducted a cross-sectional study with a random sample, aged 15 and older, living in the two largest cities in Brazil and exposed to trauma (n=3,231). They were considered resilient in the absence of a lifetime diagnosis of anxiety, PTSD, depression and alcohol related disorders. Male gender (IDR=1.34;
p<0.001) was associated to positive adaptation. There was an inverse dose-response relationship between childhood violence and resilience. Absence of parental mental disease (IDR=1.35; p=0.07) also was associated to positive adaptation. Furthermore, we found that resilience may depend on the buffering effect of the positive activation against a negative activation. This was the first Brazilian survey that addressed these issues, and it may subsidize preventive and health promotion interventions in people exposed to trauma.

**FRI 151**

**Psychotherapeutic Interventions in Relation to Adult Persons with an Intellectual Disability Exposed to Sexual Assaults**

(Abstract #326)

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*Copenhagen University, DK - 2100 Copenhagen Ø, Denmark, Denmark*

Introduction: The Centre for Sexual Assaults, at Copenhagen University Hospital, Denmark, have since 2000 admitted children, adolescents and adults exposed to sexual assault for examination and treatment. We are a multidisciplinary team of physicians, nurses, psychologists, and social counselors. The prevalence of children with an intellectual disability (ID) (0-14 years of age) admitted to the centre is about 8%, and for adults about 13%. Persons with an ID may be particularly vulnerable to sexual abuse and exploitation. Studies indicate that the risk is two to three times greater than for others. Although studies have found that reactions in ID individuals in the aftermath of sexual assaults are roughly the same as the reactions of non-disabled, only few of them are offered psychotherapeutic treatment. In order to improve the service offered the National Board of Social Services in Denmark has in 2011 initiated a 3-year project in developing and testing a psychotherapeutic method applicable in relation to a broad and complex target group of adult persons with ID Objective / purpose: The project, the psychotherapeutic interventions employed, and the experiences and knowledge obtained so far will be presented.

**FRI 153**

**Improvement of Objective and Subjective Attention in Trauma Survivors Treated with Cognitive Processing Therapy and Hypnosis**

(Abstract #985)

**Preston, Brittany, MA, Werner, Kimberly, MA PhD Student, Griffin, Michael, PhD, Galovski, Tara, PhD**  
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Cognitive deficits related to sleep disturbance include dysfunction in the attention network leading to difficulty concentrating and reduced alertness. To objectively assess behavioral alertness in a cohort of PTSD-positive female interpersonal violence survivors (N = 35), the Psychomotor Vigilance Task (PVT)
was completed prior to and following Cognitive Processing Therapy (CPT) alone or CPT preceded by sleep-related hypnosis. PVT was completed via palm pilot in the participant’s home three times daily for one week. Response to a flashing display which appeared at random intervals over a five minute period was recorded for each trial. Reaction time and number of lapses (reaction time > 500 ms) were chosen based on a recent meta-analysis which reported large effect sizes and high reliability for these indices (Basner & Dinges, 2011). Improvements were seen in both Clinician Administered PTSD Scale (CAPS) total scores and scores on the “difficulty concentrating” item of the CAPS (both $p < .001$) at post-treatment across treatment groups. However, no improvements were displayed in PVT reaction time ($p = .27$) or number of lapses ($p = .84$) at post treatment, suggesting CPT improved perception of concentration problems but not sustained attention as measured by the PVT. Additional analyses to be examined include differences across treatment groups (CPT only vs. CPT + hypnosis).

FRI 154
Women Victims of Intimate Partner Violence, Family Violence and Other Hardships: Survivors Building a New Future in Colombia
(Abstract #1659)

Poster #FRI 154 (Clin Res/Violence) M - Latin Amer & Carib

Caceres-Ortiz, Eduin, PhD
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The purpose is to review the resilience and adaptation of female victims of intimate partner violence also suffering other hardships (e.g. child abuse and violence between parents (36.2%), history of IPV (25%), child abuse (23.7%), violence by their children (18%), sexual abuse (15%), forced displacement due to armed conflict (52.5%) and natural disaster (27.5%). Treatment group (TG) and non-treatment group (NTG) were compared. Both presented PTSD. In 50% decision-making was difficult. Maladjustment was recorded as TG 19.15; NTG 15.68. Following trauma-focused treatment of the 40 women, 95% recovered and improved in all areas (family, work/school, social life, general adaptation). Maladjustment was reduced to 12.78, in follow-ups of one month (8.57), three months (7.35), six months (6.95) and twelve months (7.25). Several factors were the separation from their aggressor partners, social networks, family and social support, and obtaining employment (we implemented a program of micro-credits based on the system of Grameen Bank). It was concluded that psychological treatments are effective for reducing chronic PTSD, they facilitate coping skills, improve decision-making, and reduce rage. It is important for victims not only to undergo psychological treatment but also to participate in social development and productive programs to improve their resilience.
FRI 156
Perceived Vulnerability as a Risk Factor for Sexual Assault Victimization and Revictimization
(Abstract #202)

Poster #FRI 156 (Clin Res/Violence) M – N/A

Mouilso, Emily, MS (PhD Student), Calhoun, Karen, PhD
University of Georgia, Athens, Georgia, USA

Sexual violence is a significant problem in the United States. The dominant models proposed to explain revictimization focus on traumatic sequelae of earlier victimization producing risk for later victimization by impacting threat detection, behavioral responding, exposure to potential perpetrators, and perceived vulnerability. Unfortunately, relatively little is known about perceived vulnerability. The current study tested the association between perceived vulnerability and sexual victimization. Participants were 150 women. Sexual victimization was measured using the Sexual Experiences Survey-Revised. Traumatic sequelae assessed included PTSD symptoms and assertiveness. Recordings were covertly made of participants walking in a public place. After obtaining informed consent, the recordings were viewed by 250 male raters who responded to this question: “How vulnerable is this woman to sexual assault?” It is expected that victims will receive higher perceived vulnerability ratings and those with multiple victimizations will receive the highest ratings. Finally, it is expected that traumatic sequelae (i.e., PTSD symptoms and assertiveness) will mediate the association between victimization and perceived vulnerability. Implications of these findings include extending what is known about perceived vulnerability, a potentially important risk factor for victimization.

FRI 157
Associations between Past Trauma, Current Social Support, and Loneliness in Incarcerated Populations
(Abstract #1125)

Poster #FRI 157 (Clin Res/Violence) I - Industrialized

Reddy, Madhavi, PhD, Kao, Jennifer, BS, Chuong, Adam, BA, Gobin, Robyn, PhD, Zlotnick, Caron, PhD, Johnson, Jennifer, PhD
1Alpert Medical School of Brown University, Providence, Rhode Island, USA
2Brown University Warren Alpert Medical School, Providence, Rhode Island, USA

Prisoners are a vulnerable population with high rates of trauma. Social support is important for both in-prison adjustment and post-release community re-entry. We explored the relationship between past physical, sexual, and crime-related trauma, current perceived social support, and loneliness in a mixed-gender sample of 174 prisoners enrolled in depression treatment studies. Trauma history was assessed through the Trauma History Screen (THS). Perceived social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS). Loneliness was measured using the UCLA Loneliness Scale. To our knowledge, this study is one of the first examining the relationship between trauma history and current social support in an incarcerated population, and the first to examine the relationship between crime-related trauma and current social support in any population. We conducted
6 linear regressions testing the associations for each of the 3 trauma types with perceived social support and with loneliness. Of the trauma types, sexual and crime-related traumas were associated with lower social support scores; past physical trauma, however, was not. Past sexual trauma was associated with higher levels of loneliness, though physical trauma and crime-related traumas were unrelated to higher self-reported loneliness. Results inform intervention development for prisoners.

FRI 158
Do Negative Post-Traumatic Cognitions Uniquely Contribute to Lower General Functioning Among Adolescent Victims of Child Sexual Abuse with PTSD?
(Abstract #1661)

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Child sexual abuse (CSA) has long been linked with depression, post-traumatic stress disorder (PTSD), and impairment among adult samples, but less is known about CSA-related factors that influence impairment (Kessler et al., 1995; Kaysen, Scher, Mastnak, & Resick, 2005). Kaysen et al. (2005) found that negative post-traumatic cognitions about the self and others mediated the relationship between CSA and depression in adults. This study expands on these findings by examining whether negative cognitions contributes to lower general functioning after controlling for PTSD severity among adolescent victims of CSA. We hypothesized that 1) PTSD severity would be associated with lower functioning, 2) negative cognitions would be associated with PTSD severity and lower functioning, and 3) negative cognitions would account for lower functioning above and beyond PTSD severity. Participants included 61 adolescent girls who sought treatment for CSA-related PTSD. Our hypotheses were partially supported. PTSD severity was associated with lower functioning. Negative cognitions was also related to PTSD severity and lower functioning. Negative cognitions did not explain additional variance in functioning after controlling for PTSD severity. Established findings from adult samples can be extended to adolescents, but further investigation is needed to understand how CSA contributes to impairment.

FRI 160
The Association between Child Abuse Potential during Pregnancy and Post-partum Parental Responsivity and Harsh Parenting
(Abstract #1086)

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Child abuse can have serious, deleterious effects on children, as well as on the parent-child relationship. For this reason, it is important to predict the risk of child abuse as early as possible, perhaps even before
the child is born. The following study utilized an ethnically diverse sample of 120 women between the ages of 18 and 42. The majority of these women were single and had never been married (64%), and 30% were first-time mothers. They were first interviewed during pregnancy and followed over time until 1 year post-partum. Several measures were administered including the Brief Child Abuse Potential Inventory (BCAP; Ondersma, Chaffin, Mullins, & LeBreton, 2010) during pregnancy and the infant/toddler version of the Home Observation for Measurement of the Environment (HOME; Caldwell & Bradley, 2003) at 1 year post-partum. Preliminary analyses indicated a significant, negative association between child abuse potential and observed parental responsivity and harsh parenting practices. Possible protective factors that may influence the association between child abuse potential and later parenting will be examined, including maternal social support and self-efficacy. Understanding what may buffer the negative effects of child abuse potential on later parenting experiences can help inform more effective prenatal interventions.

FRI 161
Trajectory and Predictors of Depression among Adolescents Following the 2008 Wenchuan Earthquake in China
(Abstract #1042)

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To investigate trajectories and predictors of depression, among adolescents exposed to the 2008 Wenchuan earthquake. Adolescents were assessed by demographic information, depressive symptoms, exposure to earthquake-related damage, negative life events and social support at 6, 12, 18 and 24 months (n was 1573, 1429, 1287 and 1312, respectively). GMM analysis showed that four latent classes for Depression: chronic, delayed, recovering, and low symptom. Multinomial logistic regressions indicated that the main predictions were gender, social support, Negative life events and Exposure to earthquake-related damage. When compared with low symptom, the chronic groups had more family member injured or killed, higher levels of negative life events and lower levels of social supports at 6 and 24 months. The recovering groups had higher levels of social supports at 6 months, but lower at 24 months, it is just the reverse in delayed groups. The levels of house damage were higher in the recovering groups, but lower in the delayed groups. The recovering groups had quite higher directly witnessed the disaster, and it still had more compared with the chronic groups. Overall, the influence of different exposure to the individuals was not the same. Even if 18 months later, we should also continue to provide social support to victims.
FRI 163
An Exploratory Neurofeedback Pilot Study with Juvenile Justice Youth: The Impact of Trauma Symptoms and Attention Problems on Treatment effectiveness
(Abstract #1445)

Poster #FRI 163 (Clin Res/Child/Adol) I - Industrialized

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Youth involved with the juvenile justice system are among the most complexly traumatized populations (Abrams et al., 2007) and are in substantial need of innovative, evidence-based, cost-effective interventions. This poster will present some of the results from an exploratory pilot study that evaluated whether neurofeedback (a form of biofeedback using the EEG and aimed at modifying brain activity through operant conditioning) is a feasible and effective treatment option for this population. Of particular emphasis in this poster is the evaluation of reductions in trauma symptoms and attention and concentration problems. Twelve youth residing in a juvenile detention facility completed approximately six months of neurofeedback sessions and demonstrated significant improvements in emotional and behavioral functioning, including post-traumatic stress-related symptoms, as measured by self-report symptom inventories and behavior checklists (CDI, YSR, PTSD-RI). Worthy of note was the positive trend (although non-significant, likely due to the small sample size) observed in terms of attention and concentration improvements following the intervention, as measured by the computer-administered Integrated Visual and Auditory Continuous Performance Test (IVA+Plus). Implications of these preliminary findings for the larger-scale treatment effectiveness evaluation will also be discussed.

FRI 164
Investigating Gender Invariance in the Associations between Sexual Abuse and Post-Traumatic Stress Symptoms among Detained Youth
(Abstract #1015)

Poster #FRI 164 (Clin Res/Child/Adol) M - Industrialized

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Past research has established that sexual abuse (SA) is highly prevalent amongst detained youth, particularly girls, and results in a variety of negative outcomes. However, research to date has yet to investigate whether SA constitutes a unique form of abuse that is associated with specific outcomes for detained girls. Data were drawn from a sample of 436 detained youth (320 boys, 116 girls, Mage=16.17). Youth self-reports were obtained of emotional numbing, PTSD symptoms, dissociation, and emotion regulation (ER). Results of a MANOVA showed main effects of SA on PTSD symptoms, dissociation, and ER, indicating that both boys and girls endorsing a history of SA experienced more of these symptoms than youth who did not endorse SA. In addition, results of OLS regression showed that SA predicted PTSD symptoms and emotional numbing above and beyond the experience of physical
abuse across genders. Results of this study suggest that SA is associated with several mental health outcomes for both genders and is associated with emotional numbing. This finding is of particular interest given theoretical formulations suggesting that emotional numbing plays a role in linking trauma to juvenile delinquency, and suggests further that the experience of SA may place youth particularly at risk. Overall, few gender differences emerged indicating that SA impacts girls and boys in similar ways.

FRI 166
Understanding Change in Trauma and Grief Component Therapy: What Changes? When? For Whom?
(Abstract #38)

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Growing research supports Trauma and Grief Component Therapy for Adolescents (TGCT-A) as an effective treatment for Post Traumatic Stress Disorder (PTSD) and Complicated Grief (CG). Yet, there is significant variability in the extent to which individuals benefit from TGCT-A. Specifically, it is unclear if TGCT-A is similarly beneficial for adolescents who narrate trauma experiences and adolescents who narrate loss experiences. Further, pre-post designs used in previous studies provide limited information regarding the process of change during TGCT-A. Thus, it is undecided when symptom reduction occurs and which intervention strategies in this component-based therapy promote such change. Accordingly, in the current study, we specified therapy-focus as a moderator variable in order to test for whom treatment was beneficial and when change occurred in a sample of n=33 socioeconomically disadvantaged adolescents who participated in TGCT-A at school. Results from 2-level hierarchical linear models suggested that participants experienced significant reductions in PTSD (d=0.78) and CG (d=0.74). Piecewise analyses suggested that PTSD reduction occurred during both halves of TGCT-A, while significant CG reduction occurred only during the second half of treatment. Therapy focus did not moderate the rate of change during either half of treatment.

FRI 167
A longitudinal Study of Developmental Trajectories and Predictors of Prosocial Behavior among Adolescents Exposed to the 2008 Wenchuan Earthquake
(Abstract #1062)

Qin, Yanyun, MS, Ed, Fan, Fang, PhD, Long, Ke, MS, Ed, Wang, He, MS, Ed
Center for Studies of Psychological Application, South China Normal University, Guangzhou, Guangdong, China

The current longitudinal study examined the developmental trajectories of prosocial behavior and its predictors among surviving adolescents exposed to the 2008 Wenchuan earthquake across a 2-year
period. Adolescents from Dujiangyan area, 21 kilometers away from the epicenter, were assessed by standardized scales at 6 months (n = 1567), 18 months (n = 1280), and 30 months (n = 1035) after the earthquake. Results showed that adolescents’ prosocial behavior was relatively stable as a whole. However, growth mixture modeling (GMM) demonstrated that the course of prosocial behavior was heterogeneous and could be characterized by four growth curves: (1) high initial levels of prosocial behavior with a significant increase across time (n = 550); (2) high initial levels with slight increase across time (n = 462); (3) low initial levels with a significant decline across time (n = 528); and (4) low initial levels and decreasing tendency with a much steeper slope relative to the third curve (n = 32). Generalized estimating equation (GEE) showed that girls, high levels of resilience, social support and positive coping positively predicted prosocial behavior, meanwhile, clinical depressive symptoms was negatively associated with prosocial behavior in the aftermath of earthquake.

FRI 168
Longitudinal Linkages between Sleep Problems and Resilience among Adolescents Exposed to the 2008 Wenchuan Earthquake in China
(Abstract #1072)

Qin, Yanyun, MS, Ed¹, Fan, Fang , PhD¹, Tang, Kaiqing, MS, Ed¹, He, Xinyi, BS², Pan, Linlin, BA²
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The current study investigated the longitudinal linkage between resilience and sleep problem, a somatopsychic disturbance, among adolescents exposed to the 2008 Wenchuan earthquake in China. Adolescents in Dujiangyan area, 21 kilometers away from the epicenter, were assessed by Resilience Scale (RS) and Pittsburgh Sleep Quality Index (PSQI) at 12, 18, and 24 months after the earthquake (n at Time 1, 2, and 3 were 1433, 1287, and 1313, respectively). Cross-lagged analysis showed that all antecedent variables positively predicted the same subsequent variables (e.g., Wave 1 resilience → Wave 2 resilience), meanwhile, antecedent sleep problem negatively predicted succeeding resilience (Wave 1 sleep problem → Wave 2 resilience, Wave 2 sleep problem → Wave 3 resilience) with β were -0.08 and -0.06 respectively (ps < .05), which indicated that sleep problem could impair resilience during time course and exert long-lasting effects on resilience. Besides, resilience was negatively associated with sleep problem contemporarily (ps < .05), which showed that higher levels of resilience was accompanied by lower levels of sleep problem. The RMSEA of the model was 0.073 indicating a desirable fit. Effective interventions aiming at alleviating sleep problems will be beneficial to maintain adolescents’ resilience after catastrophic earthquake.
FRI 170
Immediate Effects of Narrative Writing Intervention in Traumatized Early Adolescents
(Abstract #1386)

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Children and adolescents exposed to traumatic experience in a disaster can suffer from high levels of PTSD. This study focuses on the application of a written narrative program as a group intervention applied in a school setting for child earthquake survivors. Participants were 108 Chinese 6th grade students in the 2008 Sichuan earthquake area, China. Two classes (N=73) were randomly assigned to the Guided Narrative Technique (GNT) group, which entailed specific verbal guidelines regarding what to write, and one class (N=35) was assigned to the control group which applied a simple expressive writing (EW), without specific guidelines. Participants were assessed before and after the intervention. 35.2% of participants did not fully meet the writing criteria. Further analyses indicated that incomplete narratives could trigger PTSD symptoms, lessen perceived social support, and increase passive coping. Only fully completed writing benefitted participants — both GNT and EW reduced PTSD scores but with a small effect. GNT decreased anxiety and depression, but EW did not. GNTs may improve post-traumatic symptoms better than simple EW if writing instructions are fully followed, though perhaps the writing narrative strategy is not suitable for all traumatized adolescents. Finding methods or resources to enhance intervention adherence must be an important goal of protocol improvement.

FRI 171
An Initial Pilot Study of the Consumer Satisfaction, Feasibility, and Usability of a Web-Based Disaster Recovery Curriculum for Children and Their Families
(Abstract #1606)

Harrison, Katherine, MA PhD Student, Raines, Christine, MA, PhD Student, Kelley, Mary Lou, PhD
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In the aftermath of a natural disaster, children and adults often experience negative and unsettling feelings and emotions. Based on the research our team has conducted over several years (e.g., Schexnaildre, Adams, & Kelley, 2011; Vigna, Hernandez, Paasch, Gordon, & Kelley, 2009), as well as findings from the disaster literature, we are developing a disaster recovery curriculum for use by children with parental guidance. To our knowledge, this will be the first web-based curriculum designed for young children to aid in feelings associated with a disaster. The curriculum focuses on coping with worries and sadness post-disaster, and consists of age-appropriate educational materials and interactive games. It is being developed with input from FEMA and trauma experts. The curriculum will promote widespread dissemination of coping techniques to disaster-affected families. Focus groups of children, parents, and experts will be conducted, and the results of this pilot study will be presented as qualitative
evaluations of the content, format, and developmental appropriateness of the materials using best practice standards (National Crime Victims Research and Treatment Center, 2007). A video trailer outlining the major features of the curriculum will be shown, and storyboard samples and advisory feedback will be displayed.

FRI 172
The Impact of Shelter Condition, Hurricane Exposure, and Loss of Necessities on General Distress Symptoms in Women Post-Katrina & the Effects of Social Support and Coping on Distress Symptoms
(Abstract #1630)

Harrison, Katherine, MA, PhD Student, Kelley, Mary Lou, PhD
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Hurricane Katrina was one of the deadliest natural disasters in U.S. history, and nearly one million Gulf coast residents were affected by the storm (Knabb et al., 2006). Families were forced to evacuate or seek shelter during the storm and left without necessities for several days. There is a paucity of research investigating the effects of shelter condition, hurricane exposure, and loss of necessities on general distress symptoms post-hurricane. Research has identified social support and coping strategies as buffers in the relationship between traumatic experiences and stress symptoms (Prati & Pietrantoni, 2009); identifying these factors in relation to shelter conditions, hurricane exposure, and loss of necessities has been limited. The current study investigated the impact of shelter condition (e.g., home, shelter, car) and perceived threat and injury during the hurricane, as well as loss of necessities (e.g., electricity, water, clothing, food) post-hurricane on the presence of distress symptoms in women 3 months (Time 1) and 13 months (Time 2) post-Katrina. Coping and social support were examined as protective factors against stress symptoms 13 months after the storm. Participants included 200 women who resided in the New Orleans area when Hurricane Katrina made landfall. Results, implications, and limitations will be discussed.
FRI 173
Latent Transition Analysis of Resilience to PTSD among Adolescents After the 2008 Wenchuan Earthquake
(Abstract #191)

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Objective: To identify distinction trajectories of resilience and post-traumatic stress disorder (PTSD) after a natural disaster as well as explore how individual’s trajectory of resilience influenced his development of PTSD. Method: A longitudinal study of 1573 adolescents from the epicenter during the 2008 Wenchuan earthquake was conducted. Resilience and PTSD symptoms were accessed at 6, 12, 18 and 24 months after the earthquake, respectively. Latent class growth model was employed to identify distinction trajectories of resilience and PTSD, while latent transition analysis (LTA) examined the prediction of resilience membership on that of PTSD. Result: With integrated criteria, five subgroups were found in PTSD, including high resistance (65.5%), medium resistance (20.6%), recovery (5.3%), delayed distress (6.4%) and chronic distress group (2.2%). Three trajectories identified in resilience included high-high (25.9%), medium (59.9%) and low-lower group (14.2%). Outcomes of LTA revealed that those in better resilience function groups (e.g., high-high) would have a higher probability in lower-symptoms PTSD groups (e.g., high resistance). Conclusions: This was the first investigation to identify discrete trajectories of resilience after a natural disaster. In addition, trajectory of higher resilience would predict fewer PTSD symptoms in perspective.

FRI 174
Recalling a Devastating Tornado: Child and Mother-Child Recollections and Child Wellbeing
(Abstract #1599)

Hambrick, Erin, MA
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Exposure to disasters causes short-term distress for most children (Anthony et al., 2005), yet links between exposure and long-term distress and/or recovery are less understood (Bonanno et al., 2010). How children interpret and make meaning out the event (Fivush, 2009) may be related to more durable psychosocial outcomes. To investigate this relation, 50 children between the ages of 8 – 12 and their mothers who were in Joplin, Missouri during the deadly tornado in May, 2011 participated in a study one year following the tornado. Participants provided individual and joint (mother-child) recollections of the tornado, and completed the UCLA PTSD Reaction Index and the BASC-2. The first aim was to identify aspects of child recollections (length, emotion content) related to child symptoms of PTSD and
wellbeing. The second aim was to identify how ways mothers prompt children to remember the tornado (use of causal and explanatory language, maternal validation or negation of child generated content) and/or child responses to this prompting related to child symptoms of PTSD and wellbeing. Preliminary data indicate that 19 participants met partial PTSD criteria. We will present components of the recollections that were related to child PTSD and wellbeing, and implications for research.

FRI 175
Returning to School: Students’ Self Perceived School Functioning Four to Six Months after the 2011 Norway Attacks
(Abstract #1408)

Schultz, Jon-Håkon, PhD¹, Langballe, Åse, PhD², Wentzel-Larsen, ToRe, MSc¹, Dyb, Grete, MD, PhD¹
¹Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway
²Norwegian Centre for Traumatic Stress Studies, Oslo, Norway

The objective of the study is to examine the relationship between trauma-related reactions and self reported school functioning among Norwegian terror-exposed youth present at Utøya island terror-attack in 2011. Sixty nine people were killed; the majority was young members of the Norwegian Labor party. 490 adolescents were invited to participate in The Utøya Study. The response-rate was 66%. Among the respondents were 220 students in lower and upper secondary school and higher education. Students’ self-perceived school functioning is constructed from items of self-perceived school achievements and wellbeing at school compared to last year. The UCLA PTSD Reaction Index was used to measure the reactions of PTSD. Main analyses include partial Spearman correlation between trauma related reactions and self perceived school functioning variables, adjusted for depression and anxiety, sorrow, exposure and change of school within the last year. Exposure was measured by 20 items constructed for this study. Sorrow was measured by 5 items from Brief Dimensional CG assessment (Shear et al., 2011). Symptoms of depression and anxiety were measured by eight questions from the Hopkins Symptom Checklist (HSCL-8). The discussion emphasis the extent to which self perceived school performance is negatively correlated with PTSD- reactions.
FRI 176
(Abstract #1181)

Poster #FRI 176 (Clin Res/Disaster) M - M East & N Africa

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2King Saud University, Riyadh, Middle, Saudi Arabia

Objective: To explore the level of psychological distress amongst Syrian Refugees

Methods: 300 surveys were distributed in four Syrian Refugee Camps located in South Turkey. Surveys included demographic data, Impact of Event Scale-Revised (IES-R), and Hospital Anxiety and Depression Scale (HADS). Results: 178 of surveys were returned, making a response rate of (59.3%). 83 surveys were excluded due to missing data, and a total of 95 questionnaires were analyzed. The mean age was 34.2 years and the standard deviation was 11.9 years. 85.3% of respondents were males. The prevalence of PTSD among our sample was 61.1%. 52.6% had pathologic anxiety, 19.0% were at borderline anxiety level, 53.7% were pathologically depressed and 26.3% were at borderline depression level. There was a strong association with statistical significance between the refugees who had pathological anxiety symptoms and PTSD (p<0.001), while there was no statistical significant differences between PTSD and Depression in this sample. Anxiety, depression, and PTSD were not significantly associated with age, gender or marital status.

Conclusions: The political violence practiced by the Syrian Regime resulted in a high level of psychological traumas were represented strongly by the high level of PTSD amongst Syrian refugees in Syrian-Turkey borders which requires prompt crisis intervention campaign.

FRI 177
Facilitating Community Resilience in the Aftermath of Superstorm Sandy
(Abstract #22)

Poster #FRI 177 (Clin Res/Child/Adol) M - Industrialized

Howard, Jamie, PhD, Planet, Elizabeth, JD, Isler, Yael, MA, Steingard, Ron, MD
Child Mind Institute, New York, New York, USA

Superstorm Sandy caused mass destruction to the Queens and Staten Island areas of New York. Children and families most directly affected by the storm endorse symptoms of Post-Traumatic Stress Disorder (PTSD). An important way to provide care to families affected by the storm is to collaborate with the Department of Education to provide psychoeducation and disseminate evidence-based trauma treatment to children and families in need. The authors received grant funding to develop a program to address the mental healthcare needs of children and families who were directly affected by Superstorm Sandy. The first program aim is to train school staff, including guidance counselors, school social workers and psychologists, to assess children for symptoms of trauma and refer them for treatment as indicated. Data on school staff’s perceptions of competence in recognizing and describing symptoms of trauma exposure will be presented. The second program aim is to train
graduate students pursuing master's degrees in counseling to provide TF-CBT in the schools most affected by the storm. Ongoing supervision by a licensed clinical psychologist is provided to graduate students. Data on the number of students seen for care, the number of sessions received, and changes in symptom level will be presented.

FRI 178
Moral Trauma & Mental Health: An Exploration of Research and Clinical Implications
(Abstract #425)

Poster #FRI 178 (Clin Res/Diverse Pop) M - Global

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A growing body of research explores the role of “moral trauma” in the development of psychopathological states – such as PTSD, anxiety, depression, demoralization, and somatization disorders. Our work has shown that negative moral emotions – such as guilt, shame, regret and remorse – tend to be awakened by acts of “akrasia” which are acts that are performed knowingly and willingly but that violate the actor’s self-professed ethical standards and values. We have established that the stress associated with akratic behavior serves as a risk factor in the development of a variety of psychopathological conditions and a general decline in subjective well-being. These deleterious effects have been shown to be especially pronounced in veterans who have served in war zones. Negative moral emotions, however, are also critical to the proper development of moral character. In this presentation, we share our research findings and explore the implications of this work for clinical practice with those who are suffering from the deleterious impact of moral trauma.

FRI 180
Cognitive Markers of Resilience: Relationships between Trauma Attributions and Post-Traumatic Stress Symptoms
(Abstract #179)

Poster #FRI 180 (Clin Res/Diverse Pop) M - Industrialized

Reiland, Sarah, PhD
Winthrop University, Rock Hill, South Carolina, USA

The learned helplessness model and its various revisions suggest that causal attributions influence people’s responses to events. This study examined the relationships among the clusters represented in the DSM-IV 3-factor model of PTSD and the individual dimensions of dispositional attributional style and trauma-specific attributions (i.e., internal-external, stable-unstable, global-specific) in a nonclinical sample of 200 individuals who reported trauma exposure. Relationships among attributions and clusters of PTSD symptoms represented by the 4-factor dysphoria model were also examined. Trauma-specific attributions were most predictive of PTSD symptoms, with higher associations for avoidance/numbing
symptoms in the 3-factor model and dysphoria symptoms in the 4-factor dysphoria model. Specific attributions for events were associated with fewer PTSD symptoms and may be a marker of resilience. Results suggest that cognitive vulnerabilities could underlie the comorbidity between PTSD and depression and may represent a high-impact target for prevention of psychopathology following trauma exposure.

FRI 182
Resiliency in Veterans with Post-Traumatic Stress Disorder
(Abstract #1130)

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Objective: The prevalence of PTSD is between 6-8%, with combat exposure being associated with an increased incidence of acute and chronic PTSD, impairment, and decreased quality of life. Resiliency may be protective against the development of PTSD and associated with both earlier symptom remission and improvement in quality of life. This study evaluates the relationship between resiliency and treatment response in veterans receiving PTSD rehabilitative treatment. Methods: The study was conducted at the Miami VAMC PTSD Residential Rehabilitation Program and approved by the Miami VAMC IRB. Patients were voluntarily enrolled. The Connor-Davidson Resiliency Scale, Quality of Life Inventory, and symptom measures for PTSD and depression were administered within two weeks of admission and two weeks of discharge. Results: 29 subjects were enrolled and 22 completed the study with two lost to follow-up and five receiving an early discharge. Higher resiliency scores post-treatment were associated with higher quality of life and lower symptom scores for PTSD and depression. Changes in resiliency were positively correlated with changes in quality of life (r=0.79, p 0.0001). Conclusions: Resiliency is modifiable with treatment. Improvement in resiliency was enhanced with treatment and significantly correlated with improvement in quality of life and PTSD and depression symptoms scores.
The Role of TBI in Residential PTSD Treatment Outcomes with OEF/OIF Veterans
(Abstract #534)

Poster #FRI 183 (Clin Res/Mil/Vets) M - Industrialized

Dahm, Katie, Doctoral Student 1, Averill, Lynnette, Doctoral Student 2, Wanner, Jill, PhD 3, Stevens, Adrienne, Doctoral Student 4, Andrews, Shiquina, Doctoral Student 5, Menefee, Deleene, PhD 6

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There has been a recent surge of literature examining the relationship between post-traumatic stress disorder (PTSD) and mild traumatic brain injury (mTBI) in service members serving in Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND). Comorbid PTSD and mTBI are associated with significant functional and psychological impairment following deployments (Bryant, 2011), with TBI classified as the “signature injury” of the Iraq/Afghanistan wars (Okie, 2005). Approximately 20% of OEF/OIF Veterans screen positive for mTBI, with 34% of those also screening positive for PTSD (Tanielian & Jaycox, 2008). The clinical and conceptual challenges posed with comorbid mTBI and PTSD are well established (Vasterling et al., 2009); however, there is limited empirical data examining the impact of mTBI on PTSD treatment outcomes. This study assesses male OEF/OIF Veterans (N = 169) who completed a four-week residential CPT-focused treatment program for PTSD. History of mTBI was analyzed as a moderator between change in post-traumatic cognitions and change in PTSD symptom severity from pre- to post-treatment. Results did not reveal an interaction (β = - .156, p = .11), indicating that a history of mTBI does not negatively influence PTSD treatment outcomes. Implications for treatment and future directions are explored.
FRI 184
Treatment for Comorbid PTSD and mTBI: Complications, Pitfalls, and Suggestions for Research
(Abstract #1088)

Poster #FRI 184 (Clin Res/Mil/Vets) M - Industrialized

Dahm, Katie, Doctoral Student 1, Averill, Lynnette, Doctoral Student 2, Pastorek, Nicholas, PhD 3, Teng, Ellen, PhD 4
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Post-traumatic stress disorder (PTSD) and mild traumatic brain injury (mTBI) are classified as the “signature injuries” of the Iraq/Afghanistan wars. Approximately 20% of OEF/OIF Veterans screen positive for mTBI, with 34% of those also screening positive for PTSD. There has been a recent surge of literature examining the relationship between PTSD and history of mTBI in military personnel serving in Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND). Although diagnostic and conceptual challenges posed with comorbid mTBI and PTSD are elucidated, limited research focuses on the impact of mTBI on PTSD treatment outcomes. Evidence is mixed concerning the trajectory of symptoms and impact on functioning in comorbid PTSD/mTBI. This paper integrates information from the neuroscience, rehabilitation, and trauma literature to provide a comprehensive review of studies that have adapted PTSD treatment protocols to address comorbid PTSD/mTBI. Treatment and research implications are discussed, highlighting common pitfalls and factors to consider when designing research studies and treatment interventions for persons with PTSD and mTBI. The potential role of addressing known risk factors for the development of post-concussive syndrome within the context of standard PTSD treatments will be discussed.

FRI 185
Peritraumatic and Post-Traumatic Emotions in Active Duty Military Personnel
(Abstract #1625)

Poster #FRI 185 (Clin Res/Mil/Vets) M - Industrialized

Carpenter, Joseph, BA 1, McLean, Carmen, PhD 2, Foa, Edna, PhD 1, Schuster, Jennifer, PhD 3, Resick, Patricia, PhD, ABPP 3
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One’s emotional response during a traumatic event (i.e., peritraumatic emotional response) is strongly associated with PTSD severity (Ozer, Best, Lipsey & Weiss, 2003). This study investigated the relationship between peritraumatic emotions and the emotional response when reminded of the trauma post-
traumatically (i.e., post-traumatic emotional response). We used baseline data from 385 active duty military personnel enrolled in two PTSD treatment studies, examining responses on the Peritraumatic Emotions Questionnaire (Peri-PTEQ) and the Post-traumatic Emotions Questionnaire (Post-PTEQ). Results showed that total scores on the Peri- and Post-PTEQ were highly correlated, with participants scoring higher on the Peri-PTEQ. A factor-analysis identified five factors in each the Peri- and Post-PTEQ—fear, anger, sadness, embarrassment and detachment. Mean scores from the fear and detachment factors were lower on the Peri-PTEQ than the Post-PTEQ, while scores from the anger, sadness and embarrassment factors did not differ between the two. This study indicates that emotions experienced at the time of trauma are similar but more frequent than those felt when reminded of the event post-traumatically. Certain emotions, however, such as anger, sadness and embarrassment, appear to be experienced just as frequently post-traumatically as peritraumatically.

**FRI 186**
**Perceptions of Possible Selves in Veterans Seeking Treatment for PTSD**
(Abstract #1263)

**Harris, Katherine, PhD**, **James, Leah, PhD**, **Rauch, Sheila, PhD, ABPP**

1 **VA Ann Arbor Healthcare System/ University of Michigan, Ann Arbor, Michigan, USA**
2 **University of Denver, Denver, Colorado, USA**
3 **VA Ann Arbor Health Care System/University of Michigan Medical School, Ann Arbor, Michigan, USA**

Although the DSM-IV-TR identifies possessing a “sense of a foreshortened future” as a symptom of PTSD, little research has directly examined manifestations of this symptom. The current study is a preliminary investigation of the ways that veterans being evaluated for PTSD perceive their “possible selves” (images of themselves in the future). Participants were asked open-ended questions about possible selves and about strategies for attaining them. Preliminary analysis of coded data indicated that 62% of the participants endorsed at least one possible self focused on mental health, with 27%, 24%, and 15% endorsing possible selves focused on family and social relationships, school/jobs, and health respectively. A sizeable portion of respondents responded “do not know” or left the question blank when asked about the content of their possible selves (11%) or about the steps they might take to reach them (40%). Qualitative data will be presented to further explicate participant responses. Further analyses will examine the association between quantity and content of future images and strategies, PTSD symptom severity, trauma exposure, comorbid disorders, and negative and positive cognitions. The implications of attention to future selves and corresponding strategies as markers and/or predictors of resiliency, treatment retention, and response will be discussed.
FRI 187
Preliminary Findings from a Pilot Study of a Novel Treatment among Veterans with PTSD Who Have Killed in War
(Abstract #769)

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The purpose of this study was to test the acceptability, feasibility, and preliminary effectiveness of a novel treatment that addresses the mental health impact of killing in war, to be used with existing treatments for PTSD. Participants were combat veterans referred by clinicians in trauma clinics at one VA. Inclusion criteria included PTSD diagnosis, past trauma-focused psychotherapy, and reported killing-related distress. Participants were randomly assigned to either the treatment or waitlist-control condition. Veterans completed measures of acceptability and feasibility, as well as self-report measures of psychiatric symptoms, functioning, and beliefs related to killing in war. Treatment included 6-8 individual weekly sessions, and focused on physiology of killing responses, moral injury, loss, and self-forgiveness. All eight veterans who enrolled completed the study, and all reported the treatment was acceptable and feasible. Participants in the treatment condition demonstrated reductions in depression, anxiety, hostility, obsessive-compulsive symptoms, and overall psychiatric symptomology, as well as a reduction in maladaptive beliefs related to killing. Although larger trials are needed, preliminary evidence suggests this novel treatment may be acceptable, feasible, and helpful in decreasing psychiatric symptoms and maladaptive thoughts related to killing in war.

FRI 188
Randomized, Placebo-Controlled Trial of Dopamine-ß-Hydroxylase (DBH) Inhibitor, Nepicastat, for the Treatment of PTSD in Veterans
(Abstract #1655)

Davis, Lori, MD
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A substantial increase in noradrenergic (NA) activity is involved in the pathophysiology of PTSD. A therapeutic approach may be to inhibit the conversion of dopamine (DA) to NA with a dopamine-ß-hydroxylase (DBH) inhibitor and thus, dampen NA activity. Consenting US military Veterans with PTSD (n=91) were enrolled in a multi-site, randomized, double-blind, placebo-controlled trial of the DBH-inhibitor nepicastat, monotherapy. The study participants were predominantly Veterans of the Iraq and Afghanistan wars; however, Veterans of other eras were included. The primary outcome was the PTSD
hyper-arousal symptom D cluster derived from the Clinician Administered PTSD Scale (CAPS). A mixed-effects linear regression analysis was performed comparing the change in CAPS scores between the two groups over the 6-week treatment period. The difference between week 6 and baseline was -4.7+7.8 for the nepicastat group and -6.3+6.7 for the placebo group on the CAPS-D primary outcome; -19.9+22.3 for nepicastat and -22.2+17.2 for placebo on CAPS total score; -5.9+8.9 for nepicastat and -7.7+7.4 for placebo on CAPS-B; and -9.2+10.2 for nepicastat and -8.6+8.6 for placebo on CAPS-C. There were no significant differences between drug and placebo in primary and secondary outcomes. These results will be compared to those of other recent studies to provide direction for future research.

**FRI 189**

**PTSD in Iraq and Afghanistan Era Veterans May Diminish the Impact of Social Support as a Resiliency Factor**

(Abstract #1079)

**Poster #FRI 189 (Clin Res/Mil/Vets) I – N/A**

**Franklin A**

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Social support may buffer the harmful psychological distress and functional outcomes of psychiatric disorders. The importance of social support as a resiliency factor among veterans with PTSD and other psychiatric conditions remains unclear. This study examined whether PTSD and other comorbid psychiatric disorders moderates the buffering effects of social support in 1,825 Afghanistan/Iraq era veterans. Psychiatric diagnosis was assessed using the Structured Interview for DSM-IV disorders. Social support and psychological distress were measured using the MOS Social Support Scale and SCL-90R Global Severity Index. Multiple regression analyses modeled the association between psychological distress and social support for three comparison conditions (Controls vs. PTSD-only, non-PTSD diagnoses, and PTSD plus co-morbid psychiatric disorders [PTSD+]). Social support was associated with lower distress among all groups. Having non-PTSD diagnoses did not affect that relationship; however having PTSD significantly attenuated that relationship. Surprisingly, having PTSD+ did not result in significantly larger attenuation in that association compared to having PTSD-only. Results indicated that PTSD diminished the importance of social support as a protective factor. By understanding how PTSD affects social support, new avenues for enhancing treatment outcomes for veterans may be identified.
FRI 190
Blunted Reactivity and Emotion Regulation in Veterans
(Abstract #1401)

Poster #FRI 190 (Clin Res/Mil/Vets) I – N/A

Franklin A

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Blunted reactivity (diminished responses) suggests autonomic sympathetic dysregulation and has been associated with maladaptive states, including depression (Salomon, et al., 2009) and addiction (Lovallo, 2011). It may also serve as a marker of emotional and motivational dysregulation (Salomon, et al., 2009; Lovallo, et al 2011). To refine our understanding of resilience following trauma, a pilot study was conducted to examine emotion regulation in Veterans. Combat Veterans with PTSD, Combat Veterans without PTSD, and comparison group without PTSD completed three counterbalanced tasks: public speaking task, forehead cold pressor task, and passive trauma cue task (machine gun fire, explosions, casualties). This presentation provides data by Veteran status and cardiovascular responses, and PTSD symptom severity and cardiovascular responses. Psychophysiological measures of heart rate (HR), blood pressure (BP), pre-ejection period (PEP), total peripheral resistance (TPR) and cardiac output (CO) were assessed. Results indicate that 1) Veterans exhibit exaggerated reactivity to the painful cold pressor task but blunted reactivity to the more anxiety-provoking speech task; and 2) blunted reactivity was associated with symptom severity scores among Veterans in general, and among Veterans with a PTSD diagnosis. Results are discussed in terms of emotion regulation.

FRI 191
Pre-Deployment Partner Distress Predicts Post-Deployment Depression in National Guard Soldiers
(Abstract #996)

Poster #FRI 191 (Clin Res/Mil/Vets) I - Global

Franklin A

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Though PTSD, depression, and other psychological responses to trauma are most often defined as intrapersonal phenomena, they are clearly linked to interpersonal processes. Recent meta-analyses have provided evidence of mostly cross-sectional links between individual PTSD symptoms and both partner relationship satisfaction (Taft, 2011; Lambert, 2012) and distress (Lambert, 2012). This study was designed to assess for effects of pre-deployment partner adjustment on post-deployment soldier
adjustment in a sample of National Guard soldiers and their partners. We predicted that partner pre-deployment depression would predict soldier post-deployment distress. Data were collected from soldiers and their partners prior to deployment (Time 1, N=223), and again at three months post-deployment (Time 2, N=163). Multiple regression analyses assessed whether partner distress (i.e., Dysphoria) or depression (measured with the PCL and PHQ8) predicted soldier post-deployment outcomes (i.e., depression, PTSD, and dysphoria, in separate models). Models controlled for pre-deployment soldier outcome variables, combat exposure and family stressors and partner pre-deployment relationship satisfaction. Pre-deployment partner distress predicted greater post-deployment soldier depression (controlling for pre-deployment depression, combat exposure, family stressors, and relationship satisfaction).

**FRI 192**

**Supporting Military Family Health: Understanding Primary Trauma Experiences of Military Spouses**
(Abstract #31)

**Poster #FRI 192 (Clin Res/Mil/Vets) M - Industrialized**

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The objective of the current study was to understand how primary trauma experiences of military spouses impact coping. The study sample (161 female spouses of active duty service members) demonstrated a considerable amount of primary trauma and patterned associations with elevated current stress and lower socioeconomic and social resources. Spouses with higher symptom severity, including partial or full PTSD had significantly higher scores of family stress and psychological distress, more cumulative months of deployment, lower income and education, lower social support, and became parents at younger ages. Using a multivariate framework, findings confirmed the unique, significant contribution of family stressors, socioeconomics, and social support toward explaining variation in spouses’ symptomatology beyond that accounted for by trauma exposure. The regression model achieved significance for each block, with each change in R2 significant. This study is one of a few to examine primary trauma experiences of military spouses. Considering the importance of spouse psychological health to military family adjustment and coping, as well as care provision for service members who may experience combat stress, it is imperative to understand how trauma affects spouse health and well-being. Military spouse trauma represents a priority area for assessment, intervention, and education.
FRI 193
Adapting Group Cognitive Behavioral Therapy (GCBT) for Veterans Diagnosed with PTSD: Pilot findings
(Abstract #475)

Poster #FRI 193 (Clin Res/Mil/Vets) M - Industrialized

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2Providence VA Medical Center, Providence, Rhode Island, USA
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Although evidence-based individual treatments have been identified for post-traumatic stress disorder (PTSD), identifying effective group treatments is a high priority, particularly within the VA. One approach that holds promise is Group Cognitive Behavioral Therapy (GCBT). GCBT was adapted from an individual PTSD treatment to consist of 14 two-hour weekly group sessions focused on exposure-based exercises, while integrating a number of additional evidence-based cognitive-behavioral techniques (e.g. cognitive therapy). GCBT has demonstrated efficacy with a sample of civilian adults diagnosed with PTSD (Beck et al., 2009). Our team has adapted GCBT for use with the veteran PTSD population and examined the efficacy of this treatment. Several major adaptations were made including using language and examples more applicable to the veteran population, and altering the format in which exposures were conducted. Results from pilot groups indicate promising results in acceptability and feasibility (11 out of 13 completed the 14-week treatment), with high rates of treatment satisfaction and reductions in self-reported PTSD symptoms pre- and post-treatment (d = 1.92). These findings have led to a multi-site randomized controlled trial comparing GCBT to a supportive group condition and findings from the first two group cohort waves will also be presented.

FRI 194
Comparing OEF/OIF Active Duty and National Guard and Reserves: The Impact of Mission-Related and Interpersonal Stressors during Deployment on Post-Deployment PTSD Symptoms
(Abstract #855)

Poster #FRI 194 (Clin Res/Mil/Vets) I - Industrialized

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Previous research has documented the negative impact of mission-related stressors on mental health. However, interpersonal stressors during deployment have received less attention. Further, prior research suggests that deployment stressors and post-deployment mental health symptoms may differ
between Active Duty (AD) and National Guard/Reservists (NG/R) personnel. Given the increase of deployed NG/R personnel in recent years, it is important to understand how deployment may differentially impact Service members deployed from AD and the NG/R. This study examined four mission-related stressors (e.g., warfare exposure) and five interpersonal stressors (e.g., concerns about life and family disruptions) during deployment as predictors of post-deployment PTSD symptoms. The Deployment Risk and Resilience Inventory-2 and the PTSD Checklist were administered to male and female OEF/OIF veterans within two years of return from deployment (n=1046). AD personnel reported greater warfare exposure and preparedness than NG/R personnel. Two-way interactions revealed a stronger positive association between warfare exposure and PTSD for NG/R than AD Service members, and stronger negative association between preparedness and PTSD for AD than NG/R personnel. These results add to the growing literature surrounding deployment stressors and mental health outcomes among both AD and NG/R Service members.

FRI 195
Neuroimaging the Impact of Treatment on Neural Substrates of Trust in Veterans with PTSD.
(Abstract #476)

**Poster #FRI 195 (Clin Res/Mil/Vets) M - Global**

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Introduction: Exposure to trauma can substantially impact a person’s ability to trust and relate to other people, and recover in treatment. Method: Forty male and female OEF/OIF/OND Veterans with PTSD played the iterated trust game in an fMRI machine, half before and after a 12 week wait list period, and half before and after participating in 12 weeks of CPT-C group treatment. Subjects also completed the CAPS and an extensive list of paper and pencil measures when they were scanned. Results: All study subjects are enrolled, 80% have completed the group treatment or waitlist period, and all data collection will be complete by June, giving us sufficient time to analyze the data prior to ISTSS. Data gathered prior to this study indicate that the greater the Veteran’s level of trust in a social partner before treatment (as measured by the iterated Trust Game), the greater their reduction in PTSD symptoms during treatment. Preliminary analyses from the first 13 study subjects reveal significant increases in the striatal signal among treatment completers (p < .001, unc) suggesting that group treatment was helpful in correcting difficulties in trust present before treatment. Discussion: Our preliminary results point to the value of combining the iterated Trust Game and fMRI data as measures that mark changes in social functioning in psychotherapy.
FRI 196  
Emotion Regulation and Post-Traumatic Stress Symptoms: A Meta-Analytic Review  
(Abstract #1651)

Poster #FRI 196 (Clin Res/N/A) M - Industrialized  
Franklin A

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Emotion regulation has been implicated in the development and maintenance of Post-Traumatic Stress Symptoms (PTSS); however, this rapidly expanding literature has yet to be quantitatively reviewed. It is important to determine the nature of the relations between aspects of emotion regulation and PTSS in order to inform risk, resilience, and intervention efforts. The current study is a meta-analytic review of the relation between emotion regulation and PTSS. A search of the PsychInfo database resulted in 2,557 titles, of which 53 met full inclusion criteria. The strongest relationship with PTSS was observed for general difficulty in regulating emotion ($r = .58, p < .001$), followed by rumination ($r = .51, p < .001$), avoidance ($r = .40, p < .001$), suppression ($r = .39, p < .001$), and worry ($r = .33, p = .004$). Acceptance and reappraisal were not significantly related to PTSS. Results indicate that greater use of potentially maladaptive emotion regulation strategies is associated with greater PTSS severity, while use of adaptive strategies (i.e., acceptance and reappraisal) may not be as strongly related to symptom severity. These findings highlight aspects of emotion regulation that are associated with PTSS across a number of samples. To further explore these findings, moderator analyses (e.g., sample, trauma type) will also be discussed.

FRI 197  
Development of a Guided Self Help (GSH) Programme for the Treatment of Mild to Moderate Post Traumatic Stress Disorder (PTSD)  
(Abstract #1366)

Poster #FRI 197 (Clin Res/N/A) I – N/A  
Franklin A

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Trauma focused psychological therapies have been found to be effective for the treatment of Post-Traumatic Stress Disorder (PTSD). Unfortunately, there exists a shortage of suitably qualified therapists able to deliver these interventions. Guided Self Help (GSH) is an alternative method of delivering psychological therapy for PTSD, which has not been adequately explored. We will describe the process of systematically developing a GSH programme for the treatment of mild to moderate PTSD. The study followed Medical Research Council (MRC) guidance for the development of a complex intervention. A prototype GSH programme was developed through an initial modelling phase. Systematic reviews of the
literature informed a portfolio of up-to-date information for stakeholders to consider and discuss in a series of focus groups and semi-structured interviews. Data was analyzed through a process of Inductive Thematic Analysis and used to inform content, delivery and guidance options. The prototype was piloted with 19 PTSD sufferers in two pilot studies, and refined on the basis of their quantitative results and qualitative feedback. The programme includes modules encompassing psychoeducation, grounding, relaxation, behavioral activation, cognitive restructuring, in vivo and imaginal exposure, and relapse prevention.

**FRI 198**
**Comparisons across Stressful Events in College Students**
(Abstract #779)

**Poster #FRI 198 (Clin Res/N/A) I - Industrialized**

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The purpose of the current research is to analyze existing student data and look for mediating factors that influence distress outcomes after experiencing a traumatic event. Previous research has shown that individuals who have experienced a sexual assault in their lifetime are more likely to exhibit higher distress levels compared to those who indicate having experienced a sudden loss (Frazier, P., Steward, J., & Mortensen, H., 2004). We anticipated that social factors could have a significant impact on the efficacy of coping after a sexual assault, perhaps due to the social stigma attached to sexual traumas that is not commonly associated with bereavement coping. Using statistical analyses we identified three significant factors mediating the relationship between trauma type and distress outcomes. Self esteem, positive personal relationships, and the number of traumas experienced by an individual were all found to significantly mediate trauma outcomes. These indications may benefit the domain of trauma research and counseling psychology by allowing for better understanding of significant contributing factors following specific traumatic events.

**FRI 199**
**Attenuating Fearful Memories: Effects of Memory Cueing within the Reconsolidation Window**
(Abstract #1505)

**Poster #FRI 199 (Clin Res/N/A) M – N/A**

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Exposure therapies for PTSD are thought to reduce intrusive memories through extinction processes. Methods that enhance extinction may translate to improved treatment. Rat research suggests cueing a memory with a conditioned stimulus (CS) cue, within a specific reconsolidation window, enhances extinction (e.g., Monfils et al., 2010). In humans, two studies (Schiller et al., 2010; Kindt et al., 2011) using basic learning paradigms show discrepant findings; neither utilized real-world
stimuli or examined intrusions. Using a distressing film paradigm, participants (N = 148) completed fear acquisition and extinction (48 h later). At extinction, they were randomized to: CS cue within reconsolidation window; CS cue outside window, or non-CS cue within window. Intrusive memories were assessed 24 h following extinction. Participants receiving the CS cue inside the reconsolidation window had more intrusions (M = 2.40, SD = 2.54) than those cued outside the window (M = 1.65, SD = 1.70) or those receiving a non-CS cue (M = 1.24, SD = 1.26), F(2,145) = 4.52, p = .013, η2 = .059. Contrary to the reconsolidation hypothesis, presenting an isolated CS cue within the reconsolidation window increased rather than decreased the frequency of intrusions. Understanding parameters of pre-extinction CS cueing may help us better understand the reduction of patient distress and intrusions.

FRI 200
Effectiveness of a Brief Eclectic Psychotherapy for Post-Traumatic Stress Disorder (BEPP): Vilnius BEPP Study Preliminary Results
(Abstract #858)

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Brief eclectic psychotherapy for post-traumatic stress disorder (BEPP) is one of several recently developed psychological treatment methods aimed at PTSD. BEPP is a promising PTSD treatment approach, its efficacy was supported by several randomized controlled trials. The purpose of Vilnius BEPP study was to evaluate the effectiveness of BEPP among the Lithuanian population and to analyze changes in PTSD symptoms during therapy. This research was funded by a grant (No. MIP-011/2012) from the Research Council of Lithuania. The pilot study included a small sample from a general population with various traumatic experiences and clinically expressed PTSD symptoms (assessed using CAPS). BEPP was delivered by three experienced PhD level clinical psychologists, specially trained in BEPP. Continuous supervisions were organized to ensure the validity of BEPP. The changes in participants’ symptoms were measured every week using IES-R. Pilot results from Vilnius BEPP study revealed a significant decline in participants’ PTSD symptoms after completing the therapy. The decrease in symptoms of avoidance was the largest and the most rapid. The symptoms of hyperarousal varied significantly at the beginning of the therapy (approx. during first 6 sessions of BEPP), and only then began to decline. Limitations of the current study and implications for the future research are discussed.
FRI 201
Development of the Stress, Trauma, and Resilience (STAR) Program in an Academic Medical Setting
(Abstract #789)

Poster #FRI 201 (Clin Res/N/A) M - Industrialized

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The STAR Program is an initiative of Ohio State University’s Behavioral Health at the Wexner Medical Center that seeks to improve lives by developing and delivering trauma-informed and resilience-based clinical services, educational programs and research. In an effort to provide individualized patient care to address traumatic life experiences, the STAR Clinic was opened and is staffed by experienced clinicians trained in evidence-based approaches to treating trauma. Concurrently, clinical services were developed to address secondary trauma and second victim experience of health care providers within the academic medical setting. Concepts of trauma-informed care and addressing stress and burnout are usually not part of the medical model. Therefore the educational arm of the STAR Program provides symposia, ground rounds, community forums and hospital-based educational efforts to elevate awareness of the prevalence of traumatization. STAR also provides work-place resilience building tools such as stress reduction techniques based on the relaxation response, mindfulness interventions, and supportive debriefing sessions. The research arm evaluates the feasibility and effectiveness of the implemented programs. By contributing new knowledge on stress and resilience, STAR focuses on developing and providing resilience-building interventions that benefit both patients and providers.

FRI 202
Perceived Control over Traumatic Events: A Comparison Across Events
(Abstract #1412)

Poster #FRI 202 (Clin Res/N/A) I - Industrialized

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Traumatic experiences can lead to a variety of positive and negative outcomes. Identifying factors underlying the emergence of these diverse effects serves to inform interventions which not only alleviate negative symptoms, but also promote growth and well-being. One potential factor is perceived control. While research has typically explored control in general, the three types of perceived control identified by Frazier, Berman, & Steward (2001), have been found to relate differently to outcomes. More specifically, past control has been related to greater distress and present control to less distress, while future control has had varying effects. This study aims to further explore the relationship between these distinct forms of perceived control and outcomes across traumatic events. Through multiple regressions conducted on data from two samples (N = 637), it was found that the duration of a subject’s most distressing event (e.g. acute accident versus ongoing abuse), and whether the event happened to
the subject directly (e.g. own injury versus witnessing violence) were not significant. Yet, the objective controllability of an event did significantly moderate the relationship between each of the three forms of temporal control and post-traumatic growth, as well as between future control and distress. Implications for future research and interventions will be discussed.

FRI 203
Building a Two-Way Bridge between Research and Practice: Experiences in Conducting Empirically Supported Treatments for Post-Traumatic Stress Disorder (Abstract #739)

Poster #FRI 203 (Clin Res/Caregvs) M – N/A

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To move from empirically supported to evidence-based treatment, we need to enhance our understanding of the clinical experiences of therapists who utilize these supported interventions in actual clinical practice. Through an initiative of APA Divisions 12 and 29 to integrate research and practice, this study examined clinical experiences conducting ESTs for PTSD. Respondents (N=1939; 76.4% female; 23.4% male) completed an online survey on therapeutic technique, intervention utilization, and factors that limit successful treatment and symptom reduction. Of the ESTs for PTSD, approximately 74.3% of respondents use Eye Movement Desensitization and Reprocessing, 44.0% use Cognitive Processing Therapy, 25.8% use Stress Inoculation Therapy, 24.1% use Safety Seeking, 21.6% use Prolonged Exposure, and 17.2% use Skills Training in Affective and Interpersonal Regulation/Modified Prolonged Exposure. Factors perceived as limiting effective treatment include severity and chronicity of PTSD, type and chronicity of the trauma, feelings of guilt and shame, chaotic lifestyle and dysfunctional home life, high level of occupational or relational stress, social isolation, diagnostic comorbidity, dissociative coping style, pessimism about therapy and limited motivation from the onset, and premature termination. Implications for enhancement and implementation of ESTs for PTSD will be discussed.
FRI 204
Negative Cognitions Mediate the Effect of an Internet-Based Intervention on Symptoms of Post-Traumatic Stress and Prolonged Grief
(Abstract #1560)

Poster #FRI 204 (Clin Res/Caregvs) I - Industrialized

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Among the bereaved, negative cognitions are associated with the development and maintenance of prolonged grief disorder (PGD) and post-traumatic stress (PTS) symptoms. We hypothesized that our Internet-based cognitive behavioral intervention called HEAL (Healthy Experiences After Loss) for prolonged grief would decrease PGD and PTS symptoms by reducing negative cognitions. To test this hypothesis, we conducted a mediation analysis of bereaved caregivers (N=67) treated in our wait-list controlled trial of HEAL (an 18-session intervention). At pre- and post-test, the Post-Traumatic Cognitions Inventory (PTCI) was used to assess negative cognitions about the self and the world, and self-blame. PTS and PGD symptom severity were assessed with the PTSD Checklist (PCL-C) and Prolonged-Grief Inventory (PG-13). Bootstrap mediation indicated that change in negative self-related cognitions (e.g., “I am inadequate”) partially mediated the effect of the intervention on both PTS and PGD symptom severity (For PTS: standardized indirect effect=.20, 95% CI=.08-.34, p<.05; for PGD: standardized indirect effect=.16, 95% CI=.08-.28, p<.05). Negative cognitions about the world and self-blame did not mediate the effect of the intervention on PTS or PGD symptoms. We will discuss the implications and limitations of these results.

FRI 205
An On-The-Job Mindfulness-Based Intervention for Pediatric ICU Nurses: Pilot Study
(Abstract #791)

Poster #FRI 205 (Clin Res/Caregvs) I - Industrialized

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Studies have demonstrated the prevalence of nurse stress and burnout (Aiken et al., 2002; Huffman & Rittenmeyer, 2012). Mindfulness interventions provide aspects of social support, stress reduction and the promotion of self-efficacy (Chiesa & Serretti, 2009). However, there are few mindfulness interventions for nurses (Cohen-Katz et al., 2005; Mackenzie et al. 2006; Pipe et al., 2009) and none for nurses on the pediatric intensive care unit (PICU). We assessed the feasibility of a 5-minute mindfulness meditation for nurses on the PICU before each work-shift to investigate change in nursing stress, burnout, self-compassion, mindfulness and job satisfaction. Using a pre-post-test design we studied 38
predominately White female nurses under 40 years of age with less than 5 years of nursing experience at an urban academic pediatric hospital. The Nursing Stress Scale, the Mindfulness Attention Awareness Scale and the Self-Compassion Scale were administered at baseline, post-intervention and one month following. The intervention was found to be feasible for nurses on the PICU. A general linear model reported significant decreases in stress from baseline to post intervention and maintained one month following the intervention. There was also a significant decline in nurse burnout. Findings may inform future interventions that support on-the-job self-care and stress-reduction.

**RESEARCH METHODOLOGY**

**FRI 206**
Do Informed Consent Procedures Change Participant Responses In Trauma Studies?  
(Abstract #1643)

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Research on research participation reactions in trauma samples have generally shown that participation is generally well-tolerated by participants (Griffin, Resick, Waldrop, & Mechanic, 2003). Yet an average of 5% of participants do report strong negative emotions or unanticipated distress during research participation (Newman & Kaloupek, 2004). One way that trauma researchers have worked to decrease the chance of unanticipated distress is to improve participants' understanding of the informed consent procedures (Boothroyd & Best, 2003). Participants (N = 144) were randomly assigned to one of five groups in which informed consent procedures were manipulated (consent read to participant v. participant read consent; required short quiz on consent contents). Participants also completed the PDS (Foa et al., 1997), the Brief COPE (Carver, 1997), the CISS (Endler & Parker, 1999), and the Reactions to Research Participation Questionnaire (RRPQ; Newman et al., 2001). No significant differences among groups were identified for any outcome measure, including frequency of trauma, effects of trauma on functioning, coping, or experience of being a research participant. The results suggest that researchers can be fairly confident that various informed consent procedures will not unduly affect reports of trauma experiences and reactions or the reactions of participants.
FRI 207
Prevalence and Impact of Adverse Childhood Experiences Among an Urban Population
(Abstract #1090)

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Adverse childhood experiences (ACE) such as abuse and household dysfunction have been found to have a strong relationship with negative adult health outcomes. Studies linking ACE and poor outcomes have been conducted among the general population of adults in the United States. These studies have tended to include college educated white populations. Less research has focused on assessing the prevalence of ACE and its impact on health outcomes among urban or minority populations. Thus, the Institute for Safe Families and researchers from Public Health Management Corporation designed an urban ACE survey to assess ACE and health outcomes of diverse adults in an urban community—Philadelphia, PA. This urban ACE survey was conducted using a random digit telephone survey of 1,784 adults 18+. The survey found that 33% experienced physical abuse and 18% experienced sexual abuse during their childhood. 40% said they saw or heard someone being beaten, stabbed or shot during their childhood, 20% did not feel neighbors looked out for each other or could be trusted. Over 30% reported having used illicit drugs in the past year. These findings suggest the need for ACE screening and that trauma-informed services are needed by a substantial segment of adults in urban environments. Further analyses will look at the relationship between urban ACE and their influence on adult health outcomes.

FRI 208
The Clinical Relevance of the Intersection between Shame, PTSD Risk Factors, and PTSD Symptoms
(Abstract #1034)

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As evidenced by the proposed DSM-V PTSD diagnostic criteria, a growing body of research suggests that a range of emotional-responses to trauma, including shame, are important contributors to PTSD (Friedman et al., 2010; La Bash & Papa, 2013). It is important to identify factors and associated processes that may put survivors at heightened risk to experience trauma-related shame so appropriate intervention can be used to facilitate better post-trauma adjustment. Results will be presented of a cross-sectional study assessing the interaction of state shame and empirically-linked PTSD risk factors in PTSD symptom maintenance in a sample of 114 undergraduates. Hierarchical linear regression results indicate that shame interacted with interpersonal (vs. impersonal) traumatic events to predict PTSD, as
it did with individual psychiatric history and familial psychiatric history, but not gender, in predicting PTSD. Post hoc mediational analysis (Preacher & Hayes, 2008) suggests that the effect of fear on PTSD maintenance was contingent on its effect on the experience of shame. Findings suggest that those with the associated PTSD risk factors may require a more thorough assessment of underlying shame when planning intervention, including shame over fear-based responses to their trauma, since shame’s interaction with these risk factors may uniquely contribute to the maintenance of PTSD.

**FRI 209**

The Telephone-Administered PHQ-9 in Trauma Research with a Military Population: Validation against the In-person Administered SCID-I Major Depression Module.

(Abstract #254)

**Poster #FRI 209 (Res Meth/Mil/Vets) M - Industrialized**

Fine, Thomas, MA¹, Contractor, Ateka, MA¹, Elhai, Jon, PhD¹, Cohen, Gregory, MSW², Liberzon, Israel, MD³, Calabrese, Joseph, MD⁴

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We assessed item-to-item correspondence between the Patient Health Questionnaire-9 (PHQ-9) and the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) major depression episode portion of the major depressive module. Four hundred and ninety-eight soldiers in the Ohio National Guard were administered the PHQ-9 and SCID-I. Data were analyzed using chi-square analyses, logistic regression, Receiver Operating Characteristic (ROC) curve analyses and diagnostic efficiency statistics. To screen for depression effectively, results indicate use of the cardinal first two items, items representing fatigue, appetite and sleep changes with an item level cut-off point of two, and the item representing suicidal ideation with item level cut-off point of one. Further, total PHQ-9 scores significantly predicted SCID-I major depressive episode (MDE) and diagnosis (MDD) with moderate accuracy. Lastly, the cut-off total score of 10 had the optimal balance of sensitivity and specificity compared to other PHQ-9 scoring options.
FRI 210
The Journalist Trauma Exposure Scale: Assessing Intensity and Frequency of Trauma
(Abstract #1024)

**Poster #FRI 210 (Res Meth/N/A) I - Industrialized**

Drevo, Susan, MA, PhD Student; Newman, Elana, PhD; Parker, Kelsey, MA, PhD Student; Brummel, Bradley, PhD; Cook, Nigel, Undergraduate
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Increasingly, research is examining the resiliency and vulnerability of journalists witnessing traumatic events as part of their occupational duties. The Journalist Trauma Exposure Scale (JTES) is often used by researchers in these efforts but its utility has not been examined, especially whether frequency and intensity ratings of exposure severity should be considered distinct dimensions or not. Using a sample of 172 US journalists, this study examined the JTES in detail. First, analyses revealed the JTES psychometric properties were sound. Second, a regression model explored if frequency and intensity were strong predictors of post-traumatic stress symptoms. When analyzing frequency and intensity as separate dimensions, the intensity subscale emerged as a better predictor of post-traumatic symptoms than the frequency subscale. Further, correlation analyses indicate that although frequency and intensity subscales are correlated, they are assessing distinct dimensions. These results suggest that although journalists are a frequently trauma exposed population, it is the intensity of such events that increase susceptibility to the development of post-traumatic stress symptoms. This study demonstrates the utility of distinct frequency and intensity ratings in a sample of U.S. journalists.

**BIOLOGICAL/MEDICAL**

FRI 211
Brain-Derived Neurotrophic Factor and PTSD: a New Perspective
(Abstract #674)

**Poster #FRI 211 (Bio Med/Acc/Inj) M - Industrialized**

Martinotti, Giovanni, MD; Di Giacinto, Alessandra, PhD(c); Ricci, Valerio, PhD; Vellante, Federica, MD; Brunetti, Marcella, PhD; di Giannantonio, Massimo, MD, PhD
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2 IRCCS Santa Lucia Foundation, Roma, Italy

Sepede G, Stuppia L. The aim of the present study is to investigate the role of BDNF and NGF serum levels in subjects exposed to traumatic experiences. Methods: two group were recruited: 23 drug-free outpatients with a diagnosis of Post-Traumatic Stress Disorder (PTSD) and 19 outpatients with trauma exposure who have not developed PTSD as control group. The assessment included: the Structured Clinical Interview for DSM-IV Axis-I disorders and the Clinician Administered PTSD Scale (CAPS). Venous blood was collected and centrifuged within 20 min after sampling at 2000 xg for 20 min for the analysis
of neurotrophins. Serum was then aliquoted and stored at −80°C until analysis. NGF and BDNF were detected in sandwich ELISAs. Results: NGF serum levels were unchanged, BDNF serum levels were lower in PTSD patients compared to subjects who had experienced a trauma without developing PTSD (P<0.05). Discussion: BDNF may have a major protective role against neuronal damage by stimulation of sprouting and synaptic reorganization, promoting resilience of brain cells to cope with stress. Our hypothesis is that in some cases the physiological repairing action exerted by BDNF cannot be exerted, with the development of PTSD. A prospective assessment of BDNF levels after traumatic experiences in a larger sample size is warranted.

FRI 213
Comfortably Numb: The Psychophysiology of Directed Dissociation
(Abstract #1473)

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Utilizing suppression as a tactic for emotion regulation negatively impacts the physical health and social relationships of the suppressor. However, emotion suppression research protocols typically ask participants to suppress the outward signs of emotional responding, not the emotions themselves. Evidence suggests that trauma can result in ongoing state dissociation. Dissociative individuals report feeling “numb” in the face of stimuli, they do not report a struggle to suppress the outward signs of emotion. This project uses emotionally evocative conversation clips to test the efficacy of self-regulatory strategies in reducing self-reported affect and physiological arousal in traumatized and non-traumatized participants. Participants were asked to listen to positively and negatively salient conversational sound clips, and, in one of the only directed dissociation paradigms to date, were asked to use suppression, reappraisal, and directed dissociation to manage their affect. Phenomenological data and psychophysiological data (heart rate and respiratory sinus arrhythmia) were recorded. Participants reported significantly more emotional arousal (p < .001) when listening to negative as opposed to positive sound clips regardless of coping strategy. Additionally, individuals with physical abuse showed significantly lower RSA than healthy controls across conditions (p < .001).
FRI 214
Childhood Sexual Abuse and Neurotrophic Factors in Crack Cocaine Addiction
(Abstract #1427)

Poster #FRI 214 (Bio Med/Adult/Cmplx) A - Latin Amer & Carib

Grassi-Oliveira, Rodrigo, MD, PhD 1, Viola, Thiago, BA 1, Tractenberg, Saulo, BA 1, Pezzi, Julio, MD, MsC 2, Bauer, Moisés, PhD 1, Teixeira, Antônio, MD, PhD 3
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3Universidade Federal de Minas Gerais, Belo Horizonte, MG, Brazil

OBJECTIVE: To assess the plasma levels of GDNF, BDNF, NGF, NT3 and NT4/5 in crack users during 3 weeks of early abstinence. METHOD: Follow up of female crack cocaine-dependent inpatients with (CSA+; n = 22) and without (CSA-; n = 82) a history of childhood sexual abuse. For comparison purposes a group of non-user control participants (n=20) were included. During the first 3 weeks of detoxification plasma samples were collected once a week to further protein analyses. In addition a comprehensive clinical assessment took part in this study. RESULTS: GDNF plasma levels in CSA+ group increased dramatically during 3 weeks of detoxification. In contrast, CSA- patients showed lower and stable levels of GDNF under the same conditions. Compared with the control group, BDNF plasma levels remained elevated and NGF levels were reduced during early abstinence. It was found an increase in NT4/5 levels regardless childhood abuse history within crack users. CONCLUSION: Overall GDNF, NGF, NT-3 and NT4/5 levels are below the control group at any time point, in contrast with higher levels of BDNF detected. This study supports the positive association between childhood sexual abuse and higher GDNF protein levels during early abstinence in crack cocaine users.

FRI 216
Chronically Traumatized Midlife Women Resistant to PTSD or Recovered from PTSD Have Similar Health-Related Quality of Life
(Abstract #1576)

Poster #FRI 216 (Bio Med/Violence) M - Industrialized

Szabo, Yvette, MA, PhD Student 1, Fernandez-Botran, Rafael, PhD 1, Miller, James, PhD 1, Burns, Vicki, PhD, RN 2, Newton, Tamara, PhD 1
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Health-related quality of life (HRQoL) has been linked to post-traumatic stress disorder (PTSD) symptom trajectories following assaultive trauma. Women who recover from PTSD report better HRQoL compared to women with persistent PTSD (Gill et al., 2012). The present study expands on these results by including a group of trauma-exposed PTSD-resistant women, and by focusing on midlife women for whom HRQoL predicts mortality risk. Using the CDC HRQoL measure, a group of midlife women with remitted partner abuse (N=63) reported on number of unhealthy days in the last month and rated the quality of their overall health. Clinician Administered PTSD Scale (CAPS) interviews assessed current and
lifetime PTSD symptoms, from which three groups were formed: persistent PTSD (n=15), remitted PTSD (n=22), PTSD-resistant (n=26). Women with persistent PTSD reported more unhealthy days (M+SD=12.73+10.73) than women with remitted PTSD (4.41+3.53) or PTSD-resistant women (6.38+7.11), p=.015. The latter two groups did not differ in mean number of unhealthy days. Further, remitted (95%) and resistant (75%) women were more likely to report their health as very good/excellent compared to good/fair, while persistent women (53%) were not (p =.028). Results show that chronically traumatized women who developed, but then recovered from PTSD, had comparable HRQoL to those who were PTSD-resistant.

**FRI 217**
An Eye-Tracking Study of Attention Bias and Involuntary Physiological Responsiveness to Threat in PTSD
(Abstract #87)

**Poster #FRI 217 (Bio Med/Violence) M - Industrialized**

**Franklin A**

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Prior studies have reached different conclusions as to whether PTSD is associated with an attentional bias toward threat. Recent efforts have linked attentional biases to involuntary physiological responsiveness as indicated by pupil dilation. In the present study, data were collected from 22 participants, 7 who met diagnostic criteria for PTSD, and 7 who were trauma-exposed but did not develop PTSD. The remaining 8 were no trauma controls. Eye movement patterns were compared while participants observed threatening or neutral images, which were presented sequentially. Individuals with PTSD made fewer fixations to threatening images than neutral images, compared to both control groups. However, when specific gaze patterns toward threat elements within the images were evaluated, opposite attentional patterns emerged. Relative to non-trauma controls, both trauma-exposed groups showed greater attention to specific threatening figural elements, such as a gun, as evidenced by more fixations and longer dwell times to threatening elements compared to matching neutral elements. Despite similar attentional patterns in both trauma groups, only those with PTSD displayed higher physiological responsiveness to threat (more pupil dilation). Pupil responses to threat may offer a potential physiological biomarker for PTSD risk and resilience as well as a physiological method to evaluate treatment outcome.
FRI 218
Residual Injury, PTSD and Body Image Distress following Intimate Partner Violence: Psychophysiological Assessment for Comparative Cues
(Abstract #454)

Weaver, Terri, PhD 1, Buchanan, Tony, PhD 1, Griffin, Michael, PhD 2, Weber, Stefanie, MS, PhD Student 1, Riebel, Jordanna, MS, PhD Student 1, Bosch, Jeane, MS, PhD Student 1
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2 University of Missouri St. Louis, Saint Louis, Missouri, USA

Women evidence disproportionate risk for both PTSD and intimate partner violence (IPV). PTSD and IPV may be linked through the under examined pathway of injury. Previous research has conceptualized injury as a single dimension with an acute onset, short rise and course. However, after acute injuries have healed, residual injuries, defined as permanent alterations in appearance such as marks or scars, may remain. These residual injuries may serve as a cue, provoking or maintaining symptoms of PTSD. This study explored women's psychophysiological responses to photographs of their residual mark or scar, photographs of a control mark or scar, photographs of a nonaffected body part, and standardized neutral, positive and negative photographs. To date, 19 female participants, who have experienced past-year moderate to severe IPV and have an IPV-related mark or scar, have completed the ongoing study. Indices of skin conductance, corrugator electromyogram, and heart rate showed increased reactivity to the index scar compared with standardized photographs. Reactivity to the index scar will also be compared with the control scar and other bodily stimuli to explore possible generalization to other trauma-related cues. Implications of these findings for trauma-focused research and interventions will be discussed.

FRI 220
On the Relationship between Dissociation and Boredom with Autonomic Correlates
(Abstract #213)

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The experience of dissociation is a key feature of the disorders that occur after trauma. The experience of dissociation shares many of the features of another state, boredom, such as lapses in attention and changes in time perception. Being able to distinguish the subjective rating of these other states plays an important role in the diagnosis of and research relating to these experiences. This study attempts to differentiate these subjective self-states through analyzing psychometric relationships and physiological changes. 50 non-clinical participants were administered an 8-minute resting task while EKG data was collected. The experience of dissociation and boredom could not be distinguished psychometrically. Physiologically there was an increase in heart rate, but was non-specific. However, the experience of
boredom and dissociation could be differentiated physiologically as change in dissociation was positively correlated with change in parasympathetic tone. Taken together, these suggest that these states can be differentiated physiologically as the change in dissociation is positively correlated with the change in parasympathetic tone. In turn, this suggests the possibility that individuals can utilize dissociation to cope with aversive states, which is driven by parasympathetic activation. Individual differences were also investigated.

CULTURE/DIVERSITY

FRI 221
Racial Disparities in Alcohol Use among Traumatized Police Officers
(Abstract #1670)

Poster #FRI 221 (CulDiv/Mil/Vets) M - Industrialized
Franklin A

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The best epidemiological evidence suggests that ethnic minorities in the general population are less likely to meet criteria for substance use disorders than their Caucasian counterparts. Despite heightened stress in minority groups, this finding is often explained by the protective role of strong ethnic identity development in minority groups. It is unclear whether this general pattern would hold in specialized populations such as police officers where job role identity may conflict with ethnic identity. A national sample of 182 Caucasian and 139 ethnic minority retired police officers completed an online survey. We found that the ethnic minority participants reported significantly more alcohol use and had higher rates of probable alcoholism (89.2% vs. 65.4%, X2 = 24.32, p < .001) than Caucasian respondents. Greater alcohol use was associated with greater PTSD symptom severity in both groups: Caucasians (r = .47, p < .001) and minorities (r = .40, p < .001). Stronger ethnic identity was associated with less drinking in the Caucasian group (r = -.20, p < .01) but not the minority group (r = -.03, p = ns). These findings draw attention to the heightened risk for alcohol abuse in this specialized population of ethnic minorities and raise questions about whether elements of police culture mitigate against the normal protective role of ethnic identity for minority officers.
FRI 223
Demographic and Trauma-Related Factors and Psychiatric Comorbidity Associated with Dissociation in Taiwanese Community Youths
(Abstract #1279)

Poster #FRI 223 (CulDiv/Child/Adol) M - E Asia & Pac Franklin A

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The current study aimed to investigate the demographic and trauma-related characteristics of dissociative phenomenon and to examine the association between dissociation and general psychopathology among Taiwanese community adolescents. A total of 230 community adolescents, aged from 11 to 17, were recruited. They reported their dissociative tendency on the Chinese Adolescent Dissociative Experiences Scale (C-ADES). They specified their most disturbing Criterion A1 trauma and reported related PTSS. They reported depression and general anxiety and their parents reported their ADHD-related and oppositional symptoms and internalizing/externalizing problems. No age-related or gender-related group differences in dissociation were found. Besides, survivors of interpersonal violence displayed the highest C-ADES score. Results from correlation analysis indicated positive correlations between the between the C-ADES scores and PTSS (r = .75, p < .001), supporting that PTSD and dissociation share common pathogenetic mechanisms. Dissociation were moderately correlated with depression and general anxiety and had low positive correlations with externalizing problems and oppositional symptoms. Among Taiwanese youths, dissociation has been shown to be associated with interpersonal trauma and elevated general psychiatric comorbidity and needs clinical attention.

FRI 224
Bias Victimization and Identity as Predictors of Depression and Self-Esteem in Lesbian, Gay, and Bisexual Adults
(Abstract #1223)

Poster #FRI 224 (CulDiv/Diverse Pop) I - Industrialized Franklin A

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Lesbian, gay, and bisexual (LGB) individuals disproportionately experience sexuality-based harassment, threats, and abuse, and are at higher risk than heterosexual individuals for experiencing psychopathology as a consequence, but little is known about other predictors of these outcomes. Ethnic minority research suggests identity-based victimization and social identity factors (e.g., identity centrality) predict negative outcomes such as poor self esteem and depression. However, these relations have not been examined within an LGB sample. We compared past bias victimization, collective identity, past-month depression, and self esteem in a sample of heterosexual (n = 502) and LGB (n = 50) young adults. We then tested a regression model of victimization and identity as predictors of depression in the LGB sub-sample. LGB participants experienced more identity-based victimization
and reported more depression symptoms and lower self-esteem than heterosexual participants. Depression was predicted by past experiences of bias victimization, higher LGB identity centrality, lower private regard, and higher public regard. Lower self-esteem was predicted by higher identity centrality and lower private regard. These results suggest that bias victimization may be a risk factor for depression, whereas identity factors may function as either risk or resilience factors for LGB wellbeing.

**BIOLOGICAL/MEDICAL**

**FRI 226**
*An Exploration of the Impact of Vestibular Problems on Functioning in Veterans with PTSD*  
(Abstract #1428)

**Poster #FRI 226 (Bio Med/Mil/Vets) M – N/A**  
Franklin A

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The aims of our research are to 1) determine whether rates of vestibular dysfunction are greater among Veterans with PTSD than those without PTSD; 2) evaluate the impact of PTSD and vestibular problems on functioning. Our first step was to examine data collected at the War Related Illness and Injury Study Center (WRIISC), a tertiary care clinic for Veterans with unexplained illness. We conducted retrospective chart review of self-reported symptoms and performance on Neurocom Balance Master testing. We examined balance function with eyes closed to eliminate the use of visual cues to compensate for vestibular deficits. We also analyzed survey results from WRIISC Veterans participating in a longitudinal study of health. 26% of Veterans with PTSD reported having dizziness on weekly basis (vs. 6.1% of those without PTSD, p<.001) and 15% (vs. 5.5%, p<.001) report nausea. PTSD was associated with poor balance function in an eyes closed condition (SOT condition 5, p<.05) and both PTSD and balance dysfunction predicted social functioning deficits (ps<.05). Dizziness-related handicap was rated at least “moderate” in 6.3% of Veterans with PTSD compared to none in the group without PTSD. The data support the notion that vestibular dysfunction may contribute to impairment in Veterans with PTSD. Our program of research will progress to conduct specific vestibular function testing.
FRI 227
The Role of Sleep in Emotional Memory Processing in PTSD Patients
(Abstract #1037)

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Sleep appears to play an important role in emotional recovery and resilience. Disturbed sleep is one of the key symptoms of post-traumatic stress disorder (PTSD) and may play an important role in aetiology and maintenance of PTSD. A previous sleep study in healthy subjects suggests that adaptive changes occur in sleep architecture after emotional experiences, which benefit emotional housekeeping and the attenuation of emotional responses to negative emotional experiences. The current controlled patient study aims to replicate this experimental design in PTSD patients. It assesses the impact of an emotionally distressing film fragment on sleep parameters in PTSD patients, including the distribution of sleep stages, REM sleep-related variables and EEG power spectral parameters. Groups of traumatized police officers and veterans with PTSD (N=25) and without PTSD (N=25), and a control group of non-trauma exposed controls (N=25) are compared. The experimental setup involves presentation of neutral or distressing film fragments in the evening, followed by polysomnography of undisturbed, whole night sleep, and cued recall of film content on the next evening. The order of the film conditions is counterbalanced across subjects. Emotional state and physiological measures are assessed before and after film viewing and recall. Preliminary results will be presented and discussed.

FRI 228
The Effects of Autonomic Function and Cognitive Strategies on Aggression
(Abstract #710)

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Childhood adjustment problems can escalate into psychological disorders during development and into adulthood (e.g. Beauchaine, 2001; Calkins, Graziano, Keane, 2007). Autonomic system (ANS) activity may interact with psychosocial risk factors to affect later adjustment (e.g., Gordis, Feres, Olezeski, Rabkin, Trickett, 2010; El Sheikh et al 2006, El Sheikh, 2009). The present study examines the relationship between emotion regulation strategies (in response to stressful life events) and aggression, evaluating Respiratory Sinus Arrhythmia (RSA), an indicator of parasympathetic activity, as a moderator. As part of a larger study, seventy three young adults completed measures of emotion...
regulation strategies and aggressive behaviors. We measured RSA in response to a social stress task. All procedures were approved by the University’s IRB. Results of regression analyses were consistent with RSA moderating the link between emotional regulation and aggression. At lower levels of RSA, emotion regulation strategies are not significant predictors of aggression. Among males, at higher levels of RSA, the relation between positive emotion regulation strategies and verbal aggression is positive and significant. In females, at higher levels of RSA, negative emotion regulation strategies are positively associated with higher levels of physical aggression.

FRI 230
Investigating the Effects of Post-Traumatic Stress on Memory Encoding
(Abstract #952)

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Background: Post-traumatic stress disorder (PTSD) is linked to changes in the amygdala and hippocampus, regions that play a central role in forming emotional declarative memories. This study tests the hypothesis that the formation of emotional memories is disrupted in PTSD. Methods: 19 African-American participants with trauma (7 PTSD, 12 non-PTSD controls) viewed negative and neutral stimuli from International Affective Picture System (IAPS) during an fMRI. Participants completed a cued-recall task afterwards. Results: Both groups rated negative stimuli more emotionally arousing than neutral (controls: t=5.28, p<.001; PTSD: t=4.10, p=.009). Analyses showed an enhancing effect of negative emotion on cued recall in controls (t=2.25, p=.05), not in PTSD (t=2.07, p=.09). During stimulus encoding, right amygdala activation to negative stimuli correlated positively with subsequent cued recall (33,-6,-21, k=76; pcorr<.05). Amygdala response to negative minus neutral stimuli correlated negatively with overall PTSD symptom severity (right: 24,-6,-15, k=59; left: -21,0,-24, k=22; pcorr<.05). Conclusions: Relative to traumatized controls, PTSD participants exhibited lower recall and decreased amygdala response to negative stimuli. Findings support the hypothesis that PTSD interferes with emotional memory formation.
PREVENTION/EARLY INTERVENTION

FRI 231
Nightmare-related Hypnophobia: Are All Nightmares Equal?
(Abstract #1198)

Poster #FRI 231 (Prevent/Adult/Cmplx) I – N/A
Franklin A

Scholl, James, BA, Micol, Rachel, BS, Cranston, Christopher, MA, PhD Student, Hancock, Kelsey, BA, Davis, Joanne, PhD
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It has been hypothesized that fear of sleep plays a central role in sleep disturbances in individuals with post-traumatic stress disorder (PTSD). Krakow, Tandberg, Scriggins, and Barey (1995) found that individuals with acute or chronic nightmares were significantly more likely to report fear of going to sleep. Research has indicated that individuals experiencing nightmares, which replicate traumatic events, reported greater fear of sleep (Davis, Byrd, Rhudy, & Wright, 2007). Clinical reports also suggest that individuals who suffer from frequent nightmares engage in various maladaptive strategies to delay the onset of sleep [e.g., vigorous exercise late at night; Davis, 2009], possibly exacerbating sleep deprivation and its effects. The purpose of the study is to determine whether nightmare characteristics moderate fear of sleep in a sample of trauma exposed individuals (n = 67). Preliminary analyses revealed that greater panic symptoms upon awakening, nightmare severity, and replicative nightmares predicted greater fear of going to sleep. By addressing factors, which influence fear of sleep, we might better tailor interventions to decrease subsequent sleep disturbances.

FRI 232
Common Risk Factors to ASD and PTSD
(Abstract #1052)

Poster #FRI 232 (Prevent/Violence) I - Industrialized
Franklin A

Hansen, Maj, MS, PhD Student, Armour, Cherie, PhD, Wittmann, Lutz, PhD, Elklit, Ask, MSc, Shevlin, Mark

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2 University of Ulster, Coleraine, Northern Ireland, United Kingdom
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4 University of Ulster, Northern Ireland, United Kingdom

Numerous studies have investigated the prediction of acute and long term post-traumatic symptoms following traumatic exposure. As a result several factors have been shown to be predictive of Acute Stress Disorder (ASD) and Post-Traumatic Stress Disorder (PTSD) respectively. Furthermore, research suggests a strong relationship between ASD severity and subsequent PTSD severity. However, little is known in relation to whether there are common pathways to the development of ASD and PTSD. Peritraumatic responses to trauma are found to be associated with both the development of ASD and
PTSD. Although research indicates that the interplay between these peritraumatic responses and their combined effect on the development of post-traumatic symptoms is complicated, they may point to a common path to post-traumatic stress. Thus, this study implements structural equation modeling to examine the role of peritraumatic factors such as symptoms of tonic immobility, panic, and dissociation on the development of ASD (N = 458) and PTSD (n = 378) symptoms in a national study of Danish bank robbery victims. The estimated ASD rate was 11.1% (n = 41) and the estimated PTSD rate was 6.2% (n = 23). The results will be presented and discussed in relation to existing research.

FRI 233
Sexual Assault in Female Undergraduates during Study Abroad
(Abstract #1114)

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Since 2007, more than 250,000 American students annually study abroad for a semester or more. While there are obvious benefits to such programs, personal risks (including sexual and physical assault) occurring while abroad have not been systematically assessed. This study investigated the possibility of increased risk for sexual assault for female undergraduates who go abroad. Two hundred and eighteen female students completed the revised version of the Sexual Experiences Survey (RSES: Koss et al., 2007) about their sexual experiences both abroad and on campus. Sixty (27.5%) women reported at least one experience of non-consensual sexual contact (“unwanted touching”) while abroad. Thirteen (6.0%) reported an attempted sexual assault (either oral, anal, or vaginal), and ten (4.6%) reported completed sexual assault (either oral, anal, or vaginal). These rates are significantly higher relative to on-campus rates. Follow up data from two smaller samples confirm these findings. Study abroad programs should consider educating students of increased risk and develop response protocols when sexual assaults happen while abroad.
FRI 234
Associations between Distress Tolerance, Anxiety Sensitivity, and Post-Traumatic Stress Disorder in Veterans
(Abstract #1569)

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Distress tolerance (DT) and anxiety sensitivity (AS) have been implicated in the development and maintenance PTSD symptom clusters. Specifically, DT has been shown to moderate the relationship between AS and avoidance symptom severity (Berenz et al., 2012). The aim of the present study was to test the hypothesis that DT moderates the relationship between AS and avoidance symptoms in a sample of 52 combat-exposed veterans (Mage=27, SD=2.45, 92% male). The assessment battery included the Anxiety Sensitivity Index, the Computerized Titrating Mirror-tracing Persistence Task as a behavioral index of DT, the Deployment Risk and Resilience Inventory-2 as a measure of combat exposure severity, and the Clinician Administered PTSD Scale to evaluate PTSD and avoidance symptom severity. AS, DT, and their interaction were entered into a hierarchical regression predicting PTSD avoidance symptom severity. Combat exposure severity was included as a covariate. The overall model was not significant but a main effect of DT on avoidance symptoms was present (p=.03). Additionally, a trend towards significance of combat exposure on avoidance symptoms was present (p=.06) but the interaction between DT and AS was not significant. The results suggest that low DT and a high degree of combat exposure may be more relevant to the development of PTSD avoidance symptoms than AS in young veterans.

FRI 235
The Impact of Intimate Partner Violence on Physical Health: Findings from the Missouri Behavioral Risk Factor Surveillance System
(Abstract #53)

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Violence against women, specifically intimate partner violence (IPV) is a major public health problem in the United States. Prior studies have found that African American women are more likely to experience intimate partner violence compared to Caucasian women. A number of studies have also found that a history of IPV is associated with a range of adverse physical health outcomes. The goal of this study is to replicate and extend prior findings by examining the 2005 Behavioral Risk Factor Surveillance System (BRFSS) data for the state of Missouri. The BRFSS is an ongoing, cross-sectional, telephone survey
collected at the state level which assesses health conditions and behavioral risk factors among adults in the United States. This study will examine the relationship between IPV and adverse physical health consequences such as diabetes, hypertension, high cholesterol, obesity and asthma. This study will also examine racial/ethnic differences in the prevalence of IPV as well as racial/ethnic differences in prevalence of these physical health outcomes among women with and without a history of IPV. We hypothesize differences in prevalence rates of negative health outcomes by history of IPV and by race/ethnic background. Possible implications of these findings and future directions for research will be discussed.

**FRI 236**
**Overview of Outcome Data of Potential Meditation Training for Soldier Resilience**
(Abstract #287)

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In order to identify potential training to enhance comprehensive soldier fitness, this analysis searched medline via PubMed and elsewhere for 33 reasonably significant modalities, screening over 11,500 articles for relevance regarding soldier resilience. Evaluation of modalities that are exclusively educational or cognitive/educational in nature is deferred. Using the volume and quality of research over roughly 40 parameters distributed among the five domains of resilience (physical, emotional, spiritual, social, and family life), these data allow culling of most of the meditative modalities and discrimination among the remaining techniques. The resulting order of merit is Transcendental Meditation, mindfulness, and progressive muscle relaxation, in that order, as those three modalities have the most supporting data. Fortuitously, they also represent a cross section of the domain of techniques regarded as meditation, stress management, or relaxation, with three very different mechanisms of action. They are suitable potential options for improving soldier resilience. Rees, B. Overview of outcome data of potential meditation training for soldier resilience. *Military Medicine, 176,* 11:1232, 2011
FRI 237
Hurricane Exposure and School Problems: The Mediating Roles of Post-Traumatic Stress Symptoms and Substance Use
(Abstract #904)

Poster #FRI 237 (Prevent/Child/Adol)  M – N/A

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After exposure to a traumatic event, adolescents often experience symptoms of PTS such as difficulty concentrating, irritability, and withdrawal. These symptoms can lead to substance use which can negatively impact school performance. The current study explores PTS symptoms and substance use as mediators of the established relationship between hurricane exposure and school problems. Data were collected from 652 females attending grades eight through twelve at a school in southeastern Louisiana six months after Hurricane Katrina. Students reported their degree of hurricane exposure and completed the Los Angeles Symptom Checklist which indexes PTS symptoms and school problems. A structural equation analysis showed an excellent fit of the data with the hypothesized double mediation model [χ² (6) = 8.24, p= .221, CFI = .998, TLI = .995, and RMSEA = .024]. Hurricane exposure predicts PTS symptoms which predict substance use which in turn leads to school problems. PTS symptoms and substance use fully mediate the relation between exposure and school problems whereas substance use partially mediates the relation between PTS symptoms and school problems. Our findings help explain mechanisms responsible for impairments in children’s school performance following trauma and can serve to guide assessment and intervention procedures in schools following traumatic events.

FRI 239
The Influence of Sexual Trauma and Age of Onset of Risky Behaviors on Suicidal Behaviors among U.S. High School Students
(Abstract #178)

Poster #FRI 239 (Prevent/Child/Adol)  I – N/A

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The link between sexual trauma and suicidal behaviors (Ullman & Brecklin, 2002), and the link between early risky behaviors and suicidal behaviors are well established (Kim & Kim, 2010). However, to our knowledge, no study to-date has examined the probability of suicidal behaviors, as predicted by both sexual trauma and age of onset of risky behaviors. Utilizing data from the Centers for Disease Control 2011 National Youth Risk Behavior Survey, we performed a series of logistic regressions to predict the probability of suicidal behaviors (i.e., creating a plan for suicide) in sexually traumatized (i.e., experienced forced sexual intercourse) U.S. high school students based on their age of onset of risky behaviors (e.g., sexual intercourse, smoking, substance use). Preliminary results indicate that for
sexually traumatized students, as age of onset of sexual intercourse increases, the probability of engaging in suicidal behaviors significantly decreases, $b = -0.112$, $Wald \chi^2(1) = 6.01$, $p = .014$. Follow-up analyses will examine the role of additional risk behaviors, as well as the influence of gender and race/ethnicity. The results of this study will have implications for reducing suicidal behaviors U.S. high school students by informing preventive intervention programs and improving suicide risk assessment protocols.

FRI 240
Community Resilience Model: Building Capacity for Resilient Communities through Biologically Based Skills for Self-Care
(Abstract #883)

Poster #FRI 240 (Prevent/Diverse Pop) 1 - Global
Franklin A

Miller-Karas, Elaine, MSW, LCSW 1, Dust, Mark, PhD Candidate 2, Citron, Stephanie, PhD 3
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This paper presents findings from the Trauma Resource Institute’s (TRI) two year long Community Resiliency Model (CRM) Innovation Project for the San Bernardino County Department of Behavioral Health, funded by the California Mental Health Services Act - Proposition 63. The purpose of the project was to bring biologically based trauma intervention training (CRM) to seven marginalized populations, Latino, African-American, GLBTQ (Gay, Lesbian, Bisexual, Transgender, Questioning), API (Asian Pacific Islander), Veteran and At-risk youth. These groups were chosen because they were likely experiencing the effects of the cumulative trauma associated with racism, homophobia, poverty, and untreated post-traumatic stress from military service including combat. 141 trainees, representing six of the seven groups, were recruited. Participants reported an average of six physical distress symptoms and five emotional distress symptoms prior to training on the Symptom Questionnaire (SQ). At post-training participants reported a statistically significant decrease in anxiety, depression and hostility scores and maintained significant decreases in depression and hostility scores at follow up. We believe these results indicate a strong potential for CRM skills to mitigate the physical and emotional effects of traumatic stress and could serve as the foundation to build resilient communities.
PTSD Symptoms among Police Officers: Associations with Frequency, Recency, and Types of Traumatic Events
(Abstract #34)

Policing necessitates exposure to traumatic, violent, and horrific events, which can lead to an increased risk for developing post-traumatic stress disorder (PTSD). The purpose of this study was to determine whether the frequency, recency, and type of police-specific traumatic events were associated with PTSD symptoms. Participants were 359 police officers from the Buffalo Cardio-Metabolic Occupational Police Stress (BCOPS) Study (2004-2009). Traumatic police events were measured using the Police Incidents Scale (PIS); PTSD was measured using the PTSD Checklist-Civilian Version (PCL-C). ANCOVAs were conducted to determine associations between PIS and PTSD symptoms using contrast statements to test for linear trends. Increased frequency of specific events was associated with increased PCL-C scores in women, particularly women with no history of prior trauma exposure and those who reported a high workload (p<0.05). Recency of seeing severely assaulted victims was inversely associated with PCL-C scores in men (p<0.02). Frequency of several traumatic events was associated with higher PTSD scores in women, while recency of seeing victims of assault was associated with higher PTSD scores in men. These results may be helpful in developing intervention strategies to reduce the psychological effects following exposure and these strategies may be different for men and women.

Quality of Life Indicators and their Association with Suicidal Ideation among Veterans
(Abstract #1645)

This study examined factors that predict suicidal ideation in a sample of military veterans. This investigation examined the extent to which several quality of life indicators (e.g., employment status, income level, functional impairment, life stressors, psychiatric symptomatology) were related to and predictive of suicidal ideation among a sample of veterans. Participants were 179 males, 31 females, and 1 intersex veterans who completed self-report instruments. Correlational analyses revealed that suicidal ideation score was significantly associated with overall psychosocial functioning (r=.43), distress related
to social problems ($r=.34$), distress related to unemployment problems ($r=.16$), depression symptom severity ($r=.49$), PTSD severity ($r=.39$), number of traumatic events ($r=.31$), and alcohol use disorders ($r=.21$) (all $p<.05$). These analyses were followed by a multiple regression analysis that included all variables that were significantly related to suicidal ideation. This regression model explained 26.6% of the variance ($R^2=.316$, $F(8,108)=6.251$, $p<.001$). Factors that most significantly predicted suicidal ideation were depression symptom severity ($β=.39$, $p<.05$) and total number of life stressors ($β=.22$, $p<.01$). Our findings suggest that these factors may be important for clinicians to consider in identifying individuals with significant levels of suicidal ideation.

**FRI 243**

**Predictors of Improvement in Mental Health in OEF/OIF Veterans following Return from Deployment**

(Abstract #1168)

**Poster #FRI 243 (Prevent/Mil/Vets) I – N/A**

**Franklin A**

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Study objectives were to: 1) examine change in mental health over a 6-9 month period in a national sample of 512 OEF/OIF veterans and 2) identify predictors of improvement. We assessed veterans within 1 year of return from deployment and again 6-9 months later using validated measures of risk, resilience, mental health, PTSD and alcohol use through a mailed survey. Using an effect size of .5, suggested in the literature as indicative of clinically meaningful change, we classified participants into 2 groups: improved and same or worse. For PTSD 23% showed clinically meaningful improvement; for mental health 22% showed clinically meaningful improvement. Predictors of PTSD improvement included service in the Marines, post deployment social support and higher education. Predictors of improvement included better deployment environment, fewer deployment concerns and Black race. Some of the factors related to improvement can be modified by appropriate and timely interventions, e.g., education and social support. Better understanding of predictors of improvement in mental health will help inform development and implementation of interventions to foster resilience and recovery from trauma for Veterans in VHA. Improvement is of particular interest because it has implications for future service use and cost, as well as for mental health and quality of life among veterans.
FRI 244
Stakeholder Perspectives on Improving Access to VA’s Suicide Prevention Services
(Abstract #571)

Matthieu, Monica, PhD LCSW CTS 1, Gardiner, Giovanna, MSW2, Ziegemeier, Ellen, MA2, Buxton, Miranda, MSW Candidate2
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2Washington University in St. Louis, George Warren Brown School of Social Work, St. Louis, Missouri, USA

The overall objective of the study is to examine the need for suicide prevention services in the local communities where Veterans live from the perspective of a diverse group of VA and community providers. The study identified organizational barriers to care with a focus on those unique to Veterans living in rural areas that are at risk for suicide. Survey and interview data from a diverse group of stakeholders (N=70) that represent key VA and non-VA community-based agencies that provide a range of health and psychosocial services to veteran populations. Interview questions focused on the perception of Veteran's needs for VA and/or community-based services and more specifically, suicide prevention services, as well as referral mechanisms to address service needs and potential barriers to receiving services. Broad themes from a preliminary qualitative analysis suggest that both community and VA providers perceive a need for increased services, both generalized and suicide prevention-specific. Suicide prevention services should be tailored to reach each generation of Veterans where they are most comfortable. More can be done by the VA system to improve connections with community providers in several different service sectors. A variety of platforms for communication, including targeted interventions for providers, public service announcements, and smart phone apps, are discussed.

FRI 245
Examination of Risk Propensity, Perceived Threat, Combat Experiences, and PTSD in a Sample of Returning Veterans
(Abstract #1449)

Hawn, Sage, BS 1, Keuper, Leah, Undergraduate 2, Overstreet, Cassie, BA3, Stratton, Kelcey, PhD4, Brown, Ruth, PhD5, Amstadter, Ananda, PhD6
1Virginia Institute for Psychiatric and Behavioral Genetics, Richmond, Virginia, USA
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3Virginia Commonwealth University, Richmond, Virginia, USA
4Hunter Holmes McGuire VA Medical Center, Richmond, Virginia, USA

Combat exposure has been shown to increase risk for post-deployment internalizing problems (e.g., post-traumatic stress disorder [PTSD]). Participation in risk-taking behaviors has been found to increase in soldiers returning from combat deployments. The present study examined factors related to risk taking propensity (RTP) measured via the Balloon Analogue Risk Task in a sample of male combat
trauma-exposed Iraq/Afghanistan veterans (N=44, Mage=27, SD=2.21) from an ongoing NIAAA-R01 (PI: Amstadter). Assessments included Clinician Administered PTSD Scale, Deployment Risk and Resilience Scale assessing severity of and perceived threat during combat exposure, and a demographic questionnaire. PTSD symptom severity, perceived threat, combat exposure, and participant age were entered into a linear regression predicting RTP. The overall model was not significant, but there was a trend towards significance of age on RTP (p=.07). Analyses showed a significant correlation between age and perceived threat, r=.52, p<.01. Data collection is ongoing and we expect to have a minimum of 75 participants for inclusion in the final analyses for the proposed poster. Discussion will include implications of findings for understanding associations between demographic factors (e.g., age), deployment experiences, and post-deployment behaviors with the goal of fostering resilience among combat veterans.

FRI 246
Mutilation Fear and Childhood Trauma Increase Risk of PTSD in Previously Deployed Active Duty Soldiers
(Abstract #1267)

Poster #FRI 246 (Prevent/Mil/Vets) I – N/A

Franklin A Naifeh, James, PhD, Sottile, James, BA, Benevides, Kirsten, MA, Fullerton, Carol, PhD, Benedek, David, MD, Ursano, Robert, MD
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PTSD is a major public health concern for the U.S. Army. Although the relationship between PTSD and combat exposure is well established, the importance of pre-military vulnerabilities remains unclear. Identification of risk factors that are present prior to enlistment may improve our understanding of the etiology of PTSD within military populations and inform prevention efforts. Two potentially important factors are exposure to childhood trauma and mutilation fear, a cognitive-emotional vulnerability involving fear of gruesome tasks or events where bodily injury is possible. Previously deployed, Active Duty Soldiers (n=544) were administered questionnaires assessing mental health outcomes and potential risk factors. Hierarchical logistic regression was used to predict probable PTSD diagnosis, based on the PTSD Checklist. After controlling for demographic variables, number of combat-related stressors, and social desirability, probable PTSD was predicted by exposure to childhood trauma and mutilation fear (Mutilation Questionnaire) (OR=1.15 for each one-point increase on the MQ; 95% CI: 1.08–1.22). Findings suggest that pre-military vulnerabilities may play an important role in post-traumatic stress reactions among Soldiers. Limitations and future directions are discussed, including the need for prospective studies on mutilation fear.
MEDIA

FRI 247
Understanding Psychological Response to Direct vs. Indirect Exposure to Trauma: A Study of People’s Worst Life Experiences
(_abstract #1032)

_Thompson, Rebecca, BS, Borges Garcia, Raquel, MPH, Holman, E. Alison, PhD, Silver, Roxane, PhD_  
_University of California, Irvine, Irvine, California, USA_

Research on coping with traumatic life events typically addresses the direct effects of exposure on physical and psychological well-being. However, individuals indirectly exposed to trauma via media may exhibit stress responses similar to those reported by people experiencing the event firsthand (Silver, Holman et al., 2013). We compared the psychological impact of directly and indirectly experienced traumatic events. Using an anonymous web survey to collect data on a national probability sample of adults (n=1819), we assessed lifetime history of stressful events, as well as the degree of media exposure to the September 11, 2001 terrorist attacks (9/11). Approximately 20% of our sample reported that 9/11 was the worst experience of their lives, despite only being exposed to the attacks via the media. Controlling for lifetime trauma exposure, respondents who were younger and reported less prior exposure to violence and bereavement were more likely to report that 9/11 was the worst event of their lives. Prior exposure to violence was also associated with higher post-traumatic stress symptomatology following indirect exposure to 9/11. Prior violence exposure may render individuals vulnerable to psychological distress following vicarious exposure to collective stress.

SOCIAL ISSUES – PUBLIC POLICY

FRI 248
Coping as a Predictor of Physical and Psychological Health in the Years Following a National Disaster
(abstract #154)

_Borges Garcia, Raquel, MPH, Thompson, Rebecca, BS, Holman, E. Alison, PhD, Silver, Roxane, PhD_  
_University of California, Irvine, Irvine, California, USA_

We investigated the role of early coping strategies in predicting psychological and physical symptoms over time following collective trauma. Using anonymous web surveys with a nationally representative sample (n=1909), we examined coping strategies employed shortly after the September 11 terrorist attacks (9/11) to predict post-traumatic stress symptoms (PTSS), general distress, positive affect, life
satisfaction, and reports of MD-diagnosed physical health ailments over the next three years. Early use of religious coping was associated with higher PTSS, poorer physical health, but also higher positive affect and life satisfaction, at 2 and 3 years post 9/11. Early active coping predicted better physical and mental health 3 years later. Early acceptance predicted lower levels of PTSS and higher positive affect, though also poorer physical health, over time. Denial was associated with higher distress and poorer physical health over time. Although previous research has demonstrated the short-term role of coping with a community disaster (Silver et al., JAMA, 2002), longer-term analyses suggest a relationship between strategies used to cope with a collective disaster and mental and physical health over several years. These findings offer insight into distinct patterns of mental and physical health impacts of early coping following collective stress.

FRI 249
Promoting Community Resilience: Integrating Contextual Factors in Trauma Training and Practice
(Abstract #483)

Poster #FRI 249 (Social/Diverse Pop) M - Global
Franklin A

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Trauma training has become a necessity given the prevalence of trauma exposure and the heightened risk for traumatic stress in the general population. Most recently, the field of traumatic stress has also recognized the need to implement effective trauma interventions in community settings and to develop interdisciplinary interventions at multiple levels that protect, promote and restore community strength and resilience. For the most part, predominant training paradigms favor an individual clinical approach to trauma and individual resilience at the expense of more efficacious community interventions and of fostering ecological resilience. Similarly, clinical training does not adequately prepare practitioners to enter a community thereby neglecting the socio-cultural and political context in trauma interventions. Learning how to enter the context of the trauma helps inform our interventions and improve the quality of our care of diverse populations. This presentation will address the skills necessary to train practitioners on the development of community engagement skills and ethnographic assessment in trauma interventions. The author will present a multiframework analysis to trauma interventions in communities.
FRI 250
The Role of Acceptance of Social Changes on Post-Traumatic Stress Reactions in Lithuania
(Abstract #1356)

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Restoration of Lithuanian independency about 20 years ago and following integration into EU was related with profound social changes in the country. Majority of population was very enthusiastic and optimistic in the beginning of social changes. On the other hand everybody soon realized the need to accommodate to new social structures and had to face new challenges, including those who experienced persecutions during oppressive regime before changes, and those who were collaborating with regime. Our main goal of this study was to examine relationship between reactions to trauma exposure, psychological well-being and acceptance of changes in a non-clinical sample of Lithuanian population. 487 participants, mean age about 38 (from 18 to 80 years) participated in our study. Acceptance of social changes was measured by self-report Social Changes Inventory (SOCHI) developed by the authors of this study. Measures also included perceived life-time trauma exposure, traumatic stress reactions were measured using Lithuanian version of Impact of Event Scale – Revised (IES-R). Results of our study supported our prediction, that traumatic stress reactions were related with negative appraisal of social changes.

COMMUNITY-BASED PROGRAMS

FRI 251
The Relationship between Endorsement of Rape Myths and Resilience in Individuals Who Have Experienced or Been Exposed to Trauma: A Between and Within Group Study
(Abstract #942)

Dilmanian, Donna, BA, Whittington, Daniel, BA, Zito, Danielle, BA, Muschel, Andrew, PsyD Candidate, Pascal, Sara, PsyD Candidate, Demaria, Thomas, PhD
Long Island University, C.W. Post Campus, Brookville, New York, USA

One in six women and one in 33 men are victims of sexual assault, yet fewer than five percent of completed rapes are reported to police (Fisher, Cullen, & Turner, 2000; Tjaden & Thoennes, 2000). Rape-myth acceptance has been shown to discourage reporting among rape victims; rape-myths can lead to secondary victimization in addition to the trauma of the assault itself (Suarez & Gadalla, 2010; Yamawaki, Darby, & Queiroz, 2007). Secondary victimization is a significant threat to resilience and treatment-seeking in individuals following sexual assault. This study will examine the frequency of rape-myth endorsement among individuals with and without a history of sexual trauma, and the
relationship between rape-myth endorsement and support/treatment-seeking behaviors among individuals with a history of sexual trauma. Participants (N=115) completed an anonymous survey as part of an outreach initiative on their college campus. We hypothesize that individuals with a history of sexual trauma will endorse significantly fewer rape myths than individuals without such history. Among individuals with a history of sexual trauma, we hypothesize a negative correlation between rape-myth acceptance and support/treatment-seeking. This study seeks to add to growing literature on resilience in victims of trauma and support continued development of campus resources for this population.

FRI 252
Teaching Resiliency: An Examination of a Resiliency Program Targeting Maladaptive Behaviors in At-Risk Adolescents
(Abstract #584)

Feliciana, Jeffray, MA Student, Scalera, Amy, BA, Thome, Kathleen, MA Student, Suppan, Ashling, Undergraduate, Oglesby, Alicia, MA Student
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Resiliency is generally defined as the ability to cope with risks under stressful circumstances. In previous studies, McKnight and Loper found that adolescents with higher levels of resiliency are less likely to become involved in delinquent activity (2002). Teen UpRise (TU) is a non-profit intervention program modeled after the Penn Resiliency Program (PRP) and aims to decrease risk behaviors in adolescents through the teaching of techniques that emphasize emotional regulation, cognitive abilities, and social skills. The present pilot study examines the efficacy of the program at teaching resiliency methods by measuring the prevalence of risk behaviors (and changes in these behaviors over a period of 12 months) of adolescents in the TU program versus a matched sample of adolescents not enrolled in the intervention program. The study is still ongoing, and the authors hypothesize that participation in the TU intervention program will be associated with fewer risk behaviors and greater reductions in these behaviors over time.
GLOBAL ISSUES

FRI 254
What if Trauma becomes too Severe? No Resilience in a Sample of Adult Survivors of Institutional Abuse (IA) in Austria
(Abstract #652)

Lueger-Schuster, Brigitte, PhD, Knefel, Matthias, MS (PhD Student), Weindl, Dina, MS, PhD Student, Kantor, Viktoria, MS, PhD Student, Butollo, Asis, MSc, Jagsch, Reinhold, PhD
University of Vienna, Vienna, Vienna, Austria

To date, just a few results on mental health of survivors of IA exist. IA is defined as a process of inappropriate use of power and authority by caregivers in institutions that control almost every aspect of a child’s life. Resilience in a sample of survivors with a history of IA was analyzed. 52 adult survivors of IA in foster homes in Austria were surveyed using the Structured Clinical Interview for DSM Disorders (SCID), the Conn-Davidson Resilience Scale (CD-RISC) and the Life Orientation Test (LOT-R). The data of 45 participants (Age: M= 55.2, SD=10.9; 84.3% men) could be analyzed. Age at first experience of violence was 10.6 years (SD=3.5). All adult survivors experienced at least one type of violence (physical, sexual, emotional). The mean time spent in an institution was 5.9 years (SD=4.0). 95.6% were diagnosed with at least one psychological disorder: anxiety disorders (77.3%), personality disorders (64.6%), affective disorders (56.8%), and disorders due to substance use (55.6%). The number of diagnoses correlated with the total resilience score (r=-.32, p=.032). Optimism was negatively (r=-.25, p>.05) and pessimism positively correlated (r=.16, p>.05). Resilience seems to be limited to forms of traumatic experiences less severe and lasting than IA.

FRI 255
Exposure to Rapid Succession Natural Disasters: Results from a Representative Sample from Chile
(Abstract #1472)

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Although critical for informing relief efforts, epidemiological studies following rapid succession disasters are rare. Predictors of post-disaster outcomes were examined in a representative sample of adults (N=1000) living near the epicenter of the 2010 Chilean earthquake. Three months post-earthquake, interviews assessed psychosocial outcomes (probable PTSD, global distress, functional impairment), exposure to the earthquake and associated secondary stressors (e.g., property loss, injury, personal loss), and experience with two related disasters (tsunami and violent looting) that followed immediately after the precipitating earthquake. Variables were tested for their individual vs. additive contribution to
outcomes. Respondents were highly exposed to the disasters; probable-PTSD prevalence was 18.07%. Demographics, economic disadvantage, prior mental health problems, injury, and severity of destruction predicted probable-PTSD, higher global distress, and functional impairment. Tsunami exposure predicted probable-PTSD and greater global distress; property loss correlated with probable-PTSD. Exposure to the looting was positively associated with functional impairment. Analyses indicate type of trauma more strongly predicts negative outcomes than does cumulative exposure. Implications for effective targeting of services and increasing community resilience are considered.

FRI 256
A 10 Year Follow-Up on War-traumatized Civilians in Bosnia: Risk Factors for PTSD and General Distress
(Abstract #839)

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²Ludwig-Maximilians-University, Munich, 80802, Germany

Objective: The goal of this study was to follow a random sample of civilians in a post-war society ten years after a first interview. Method: A random sample of civilians (house-to-house survey) which was conducted in Sarajevo in 1998-9 was interviewed. A total of exactly 100 of originally 299 persons were re-identified. Measures used were: Post-Traumatic Diagnostic Scale, Brief Symptom Inventory, Post-Traumatic Growth Inventory, Vengeance Scale and Complicated Grief Inventory and an extensive questionnaire concerning current living conditions. Results: The prevalence of PTSD fell substantially, from 13 % in the original sample to just 1% in the 2010 sample. The level of general psychological symptoms, which was high in the original sample, has not fallen in the intervening ten years. Within the sample an increase amongst returnees from abroad and a decrease amongst people who did not leave the country was found. The surprising recovery of nearly all those who appeared to have PTSD in 1998-9 is explained by a drop in the A2 criterion, while on the other hand there is an increase in the F criterion. Conclusions: Flight history and current living conditions are connected to various symptom developments. Public health implications of these findings will be discussed.
FRI 257
Extortive Kidnapping in Colombia: Global Public Mental Health Implications
(Abstract #1628)

Poster #FRI 257 (Global/Civil/Ref) 1 - Latin Amer & Carib  Franklin A

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²Columbia University and New York State Psychiatric Institute, New York, New York, USA

Introduction: In Colombia, 15,372 people were kidnapped for ransom between 1996 and 2008, a practice known as extortive kidnapping. While this is unparalleled by any other country, kidnapping is expanding globally. Kidnapping is a prominent tactic within Mexico’s brutal drug wars. Kidnapping has been documented in Middle East conflict zones (Pakistan, Afghanistan, Egypt, Algeria) and used by rebel forces in Africa (Nigeria, Sudan, Somalia, Mali, Mauritius). Kidnapping is currently emerging in Asia (Philippines and Malaysia). Methods: We are completing a systematic review of the literature dealing with 1) the epidemiology and global spread of extortive kidnapping, and 2) the nature of traumatic exposures and hardships experienced by kidnapped persons while in captivity in relation to the spectrum of psychiatric outcomes - ranging from psychopathology to resilience. We also examine the broader societal effects for nations where kidnapping is prevalent. Results: Detailed results from the systematic review will be presented with implications for 1) outreach and evidence-based treatment for kidnapping victims and 2) policy interventions to prevent the ongoing spread of kidnapping. Conclusions: The Colombian experience provides insights into extortive kidnapping, a practice that is expanding geographically with increasing violence and rising mortality rates for those in captivity.

SOCIAL ISSUES – PUBLIC POLICY

FRI 258
Contextual Mentoring of Student Veterans - A Communication Perspective
(Abstract #448)

Poster #FRI 258 (Social/Mil/Vets) M - Industrialized  Franklin A

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Background: As increasing numbers of troops return from wartime service in Iraq and Afghanistan, nearly a million veterans have now returned to colleges and universities. There is little effective coordinating structure in place to guide them through the process of transition between very different social worlds. Purpose: This study was initiated to address the question of how wartime military veterans experience the transition process of becoming students, how one or more “Mentors” (Daloz, 1999) may play a role in this process, and how the veterans find and work with these mentors in the context of higher education. Method: Phenomenologically-based narrative interviews were conducted
with student veterans, age 24-46, who have been enrolled as students for at least one year. Participants were identified by campus counselors as having shown signs of successful transition or personal growth while enrolled. Hermeneutic tools of the Coordinated Management of Meaning (CMM) theory (Pearce, 2008) were used to illustrate and analyze data from the narrative interviews. Results include criteria student veterans use to select mentors, and suggest approaches to coordination between mentors with diverse backgrounds and skills (military, clinical psychology, education/developmental) to promote effective transition and possibilities for post-traumatic growth.

**FRI 259**

**Evaluations of Hypothetical Bereavement and Grief: The Influence of Gender, Loss Type, and Recency of Loss**

(Abstract #5)

**Poster #FRI 259 (Social/N/A) M - Industrialized**

Franklin A

**Miller, Eric, PhD**

*Kent State University, East Liverpool, Ohio, USA*

Individuals often hold very strict and erroneous expectations for how others should grieve following the loss of a loved one, including after traumatic events. Very few studies have examined, with experimental means, how individuals assess their expectations for others' grief under different circumstances. This within-subjects 2x2x2 design examined how individuals rate and judge hypothetical bereaved individuals as a function of the gender of the bereaved, the nature of the hypothetical loss (death of a spouse vs. death of a child), and the recency of the hypothetical death (one month vs. one year ago). Using a 7-point Likert scale, 161 subjects completed this experiment by assessing the degree to which they felt it would be appropriate for the hypothetical bereaved individual to do each of the following: attend a party or other social event, spend time with or seek a romantic partner, engage in personally satisfying activities, feel sorry for oneself, and express happiness. In general, as expected, subjects gave harsher evaluations regarding perceptions of appropriate social behavior to hypothetical bereaved individuals who were women, had lost a child, and the loss occurred more recently. This experiment has many implications for societal expectancies of grief, including resiliency following loss and trauma.
COMMUNITY-BASED PROGRAMS

FRI 261
An Evaluation of the Homicide Transformation Project
(Abstract #1594)

Sharpe, Tanya, PhD MSW¹, Massey, Johari, PhD²
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The objective of this study was to assess the effectiveness of a culturally compatible educational grief and trauma therapy group intervention with African American adult survivors of homicide victims. Pre and post-test results indicate that; participants showed a decrease in their levels of complicated grief; the use of spiritual centered coping strategies were high and remained high after participation, collective and cognitive coping strategies increased moderately among participants, and they were more likely to reach out for support post intervention. Implications for practice and research will be discussed.

FRI 262
Addressing Violence and Trauma in the Lives of Young Men of Color
(Abstract #348)

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Young men of underrepresented minority backgrounds, particularly in urban areas, are disproportionately afflicted by gun violence. We created a culturally accessible screening tool to identify men of color who have trauma symptoms, and to determine potential brief interventions for victims of violent trauma who present for services and are experiencing symptoms of trauma. Young men of Color represent an extremely vulnerable sector of the population and are particularly at high risk for injury, recidivism and negative physical and mental consequences of violent trauma. Because of mistrust and maltreatment, these victims do not access the healthcare system consistently, but rather seek alternative methods for healing. In addition, they have developed negative perceptions of local hospitals and through community circuits have perpetuated a cycle of disconnection and isolation from the health care system. Identifying ways to engage these victims should, therefore, be the priority for medical providers and public health professionals at all Level I trauma centers. Using literature, focus groups, and surveys, of men of color who have been impacted by violent trauma Youth ALIVE! has extracted best practices the nonmedical treatment of boys and men of color in health, and other public, systems.
FRI 263
Stress and Trauma in Youth: Overcoming Barriers with the Transform Program  
(Abstract #747)

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This research project investigates outcomes from Year One of Transform—a life empowerment pilot program tailored for youth exposed to violence and abuse. Transform was implemented through the partnership of two community based organizations working at a Los Angeles inner-city middle school. Trauma and stress affects many communities, they are more likely to be amplified in economically disadvantaged communities where opportunities are limited. Unable to constructively regulate themselves, they have little control over what is happening in their minds and bodies, which may lead to disruptive behavior. The focus of Transform is on the whole person and helping students gain control of their bodies, minds and emotions while helping them increase their self-awareness, confidence and ability to set and realize goals. Transform encourages youth to learn in their own way with a variety of learning modalities which are both practical and therapeutic inspired by yoga, meditation, rhythm and other healing modalities. Results from Year One support that Transform is empowering students with critical lifeskills, improved self-control, and better impulse control.

GLOBAL ISSUES

FRI 264
Cross-Cultural Construction of PTSD among Trauma Survivors in Northern Iraq, Thailand, and the Democratic Republic of Congo  
(Abstract #413)

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Background: There has been ongoing debate in the trauma field regarding the validity of Post-Traumatic Stress Disorder (PTSD) as a construct among trauma-affected populations in non-Western, low and middle income countries. In addition, even in Western settings, research has been inconsistent regarding the most informative factor structure of PTSD. Aim: To explore the cross-cultural validity of the PTSD construct Methods: Secondary data analysis was conducted from studies among torture survivors in Northern Iraq, sexual violence survivors in the Democratic Republic of Congo, and Burmese survivors of mass human rights violations in Thailand. Confirmatory factor analyses were conducted to
compare models using standard screeners for PTSD: 1) a unidimensional one-factor model; 2) a two-factor re-experiencing/avoidance and arousal/numbing model; 3) a three-factor avoidance, arousal model; 4) a four-factor avoidance, intrusion, arousal, numbing model; and 5) a four-factor intrusion, avoidance, dysphoria, arousal model. Results: While all of the models had adequate fit with the whole sample as well as with DRC and Thailand, the best fitting model was the four-factor avoidance, intrusion, arousal, numbing model (N=3,183; RMSEA=.064; CFI=.97; TLI=.97). Conclusions: Results suggest cross-cultural comparability of the PTSD construct.

VICARIOUS TRAUMATIZATION AND THERAPIST SELF-CARE

FRI 265
The Emotional Experiences of Social Science Researchers of At-Risk Populations and the Potential for Compassion Fatigue
(Abstract #1681)

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Numerous studies have previously documented the mental health consequences for helping professionals vicariously exposed to the traumatic experiences of medical and mental health patients, as well as those helped via emergency and humanitarian response efforts. To date, there are no known studies of the incidence of compassion fatigue among researchers studying traumatized populations, and there are limited studies addressing the emotional experiences of conducting social science research in general. This study explored variables pertinent to social science researchers that may influence responses to vicarious exposure to trauma by examining levels of secondary traumatic stress (STS), compassion stress (CS), and burnout as measured by the ProQOL-R-IV (Stamm, 2005). A group of social scientists (N=104) engaged in both qualitative and quantitative research completed an online survey for the study. Participants were identified by contacting several organizations of social scientists with subgroups researching traumatized populations.
**TRAINING/EDUCATION/DISSEMINATION**

**FRI 266**  
Relationship between Gratitude and Symptoms of PTSD  
(Abstract #1317)

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**Poster #FRI 266 (Train/Ed/Dis/Child/Adol) A - E Asia & Pac**  
Franklin A

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To examine the relationship between gratitude and symptoms of post-traumatic stress disorder (PTSD) and explore the mediated role of resilience and social support playing in that relation. By conducting an assessment 18 months after the disaster with a school-based sample of 1439 students who experienced the May 12th Wenchuan Earthquake. Results indicated that: (1) PTSD symptoms were significantly correlated to gratitude (r = −0.18, p < 0.001), social support (r = −0.17, p < 0.001) as well as resilience (r = −0.24, p < 0.001), and (2) gratitude not only had direct effect on PTSD symptoms, but also indirectly influenced PTSD symptoms. Significant partial mediation of resilience and social support on the association between gratitude and PTSD symptoms were revealed.

**FRI 267**  
Trauma Competencies: Results from A Consensus Conference  
(Abstract #1013)

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**Poster #FRI 267 (Train/Ed/Dis/Caregvs) M - Industrialized**  
Franklin A

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The field of traumatic stress studies has so rapidly advanced over the past three decades such that there is an extremely large amount of information available; it is difficult to cull what is essential for trauma-focused providers to know and what is not. Given this dilemma, one approach is to develop a list of trauma competencies – the essential knowledge, skills, attitudes, values and judgments that are necessary for skilled practice in the field at various levels of professional development. This approach can help build and train a trauma-focused workforce to meet the needs of survivors. In serve of this goal, a national consensus conference entitled “Advancing the Science of Education, Training and Practice in Trauma,” which was held in April 2013 and included multiple disciplinary experts working with a variety of trauma exposed groups from various theoretical perspectives. The results of this conference will be presented. Specifically, the consensus on the five broad core competencies in Scientific Knowledge, about Trauma; Psychosocial Assessment; Psychosocial Intervention; Professionalism; and Relational/Systems will be shared.
VICARIOUS TRAUMATIZATION AND THERAPIST SELF-CARE

FRI 268
Adaptive Spiritual Meanings Made of Trauma-Related Spiritual Crises among Urban Development Workers from Faith-Based Organizations
(Abstract #159)

Poster #FRI 268 (Self-Care/Caregvs) M - Industrialized

Gottuso, Ann, PhD, Wilkins, Ashley, MA, Fort, Christin, MA, Huston, Melissa Beth, BS, Kilman Liu, Rebekah, MA, Eriksson, Cynthia, PhD
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Urban workers in faith-based service organizations encounter trauma in their work, which may negatively impact the development of their spirituality. This study examines adaptive spiritual meanings made in adjustment related to trauma among urban development workers. Thirteen urban development workers in Los Angeles were interviewed on the impact of trauma on their spiritual development and adjustment. By use of consensual qualitative research methods, 2 domains of themes emerged for how urban workers cognitively coped with their trauma in the context of their faith. Five core ideas arose in the Assimilative Spiritual Meanings Made domain: causal appraisal of event, appraisal of responsibility for resolution, the framework of the discipleship and ministry, identification with divine suffering and Scriptures, and positive reframe of event. Six core ideas arose in the Accommodative Spiritual Meanings Made domain: worldview expanded, opportunity for change, acceptance of suffering and the nonsensical, positive reframe, challenge build strength, and personal identification with suffering of others. The research offers a rich narrative of adaptive meaning making outcomes urban workers utilize to face difficult adjustments in their faith post-trauma that allows them to move towards spiritual thriving and post-traumatic growth.

FRI 269
Group Drumming and Well-Being: A Promising Self Care Strategy for Trauma Professionals
(Abstract #680)

Poster #FRI 269 (Self-Care/Caregvs) M - Industrialized

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The use of group drumming, or drumming in a drum circle, is gaining attention as a creative arts self care strategy for use with professionals in high stress positions, especially trauma treatment providers who may experience vicarious trauma. However, there is a dearth of research that examines these potential positive influences, especially psychosocial well-being. This quantitative study evaluates the influence of a group drumming intervention on the psychosocial well-being of professionals of diverse backgrounds.
who work with trauma and high stress populations. Using a pre-and post-test and a sample of 73 professionals who participated in the 1.5 hour I-We Rhythm Program, it was found that the drumming intervention improved the psychosocial well-being and feeling of empowerment and reduced stress. These findings have important implications for the use of the arts as a creative self care strategy that has individual and group effects. The presentation includes a live demonstration of the use of drumming for psychosocial well-being.
Healing Lives and Communities: Addressing the Effects of Childhood Trauma Across the Life Span

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