

The presenting author is underlined.

## Session 2: Friday, November 16

Grand Ballroom V, 3rd Floor

### Poster Organization

Each poster is scheduled for either Poster Session 1 on Thursday, Poster Session 2 on Friday or Poster Session 3 on Saturday. Each session includes a one hour time period where the presenting author is available to answer questions.

Posters are organized within the final program by presentation day, and then by track within each day. The presenting author is underlined. In addition, the index provided at the rear of the final program includes all of the authors. A floor map showing the layout of posters is available in the poster hall and is available on page 118.

### Session 2 Schedule

Poster Set-up:	Friday, November 16 between 7:30 a.m. - 9:30 a.m.
Poster Display:	Friday, November 16 between 9:30 a.m. - 6:00 p.m.
Poster Presentation:	Friday, November 16 from 5:00 p.m. - 6:00 p.m.
Poster Dismantle:	Friday, November 16 at 6:00 p.m.

### POSTER DISMANTLE

Immediately following your scheduled poster session, display materials must be taken down and removed. Items not removed by the appointed poster dismantle time **will be disposed** of and are not the responsibility of ISTSS.

### Tracks

Posters will be presented on a wide variety of topics grouped by track:

1. Assessment, Diagnosis, Psychometrics and Research Methods (assess)
2. Biological and Medical Research (biomed)
3. Children and Adolescents (child)
4. Clinical and Interventions Research (clin res)
5. Community Programs and Interventions (commun)
6. Culture, Diversity, Social Issues and Public Policy (culture)
7. Clinical Practice, Issues and Interventions (practice)
8. Disaster, Mass Trauma, Prevention and Early Intervention (disaster)
9. Ethics (ethics)
10. International Issues (intl)
11. Media, Training and Education (train)
12. Theme: Prevention (prev)

### Recognition and Treatment of Posttraumatic Stress Disorder in the Primary Care Setting

Poster #F-100 (assess)

Graves, Ruth Elaine, PhD; Alim, Tanya, MD; Aigbogun, Notalelomwan, MS; Mellman, Thomas A., MD; Lawson, William B., MD<sup>1</sup>  
<sup>1</sup>Psychiatry, Howard University, Washington, District of Columbia, USA

Posttraumatic Stress Disorder (PTSD) is a common and potentially disabling disorder that often goes undiagnosed and undertreated in non-psychiatric settings. Primary care physicians assume a necessary role in the diagnosis, treatment, and referral of African-Americans with PTSD since for various reasons access to mental health providers is limited. The current study is an examination of diagnosis and treatment for PTSD in primary care settings with mainly African-American (96 percent) adult patients. Consenting

patients (738) in four academically affiliated primary care offices were screened for trauma exposure with the Life Events Checklist. Diagnoses were later determined using the Clinician Assessed PTSD Scale (CAPS) and the Structured Clinical Interview of the DSM-IV (SCID) in a trauma exposed subgroup of 375 participants. Of the 90 participants diagnosed with current PTSD, 62 (68.9 percent) had not been previously diagnosed, and 73 (81 percent) had never seen a mental health provider. Twenty nine (32.2 percent) were prescribed psychotropic medicines, and about half (53 percent) reported their primary care physician was aware of their having psychiatric symptoms. In this sample of African-Americans attending primary care settings, PTSD was typically undiagnosed although physician recognition of psychiatric symptoms and prescription of psychotropic medication were not uncommon.

### Psychometric Properties of the Trauma Assessment for Adults

Poster #F-101 (assess)

Gray, Matt, PhD<sup>1</sup>; Elhai, Jon, PhD<sup>2</sup>; Owen, Jodi, PsyD<sup>3</sup>; Cook, Joan, PhD<sup>4</sup>  
<sup>1</sup>Psychology, University of Wyoming, Laramie, Wyoming, USA  
<sup>2</sup>Psychology, University of South Dakota, Vermillion, South Dakota, USA  
<sup>3</sup>Capital Area Counseling Service, Pierre, South Dakota, USA  
<sup>4</sup>Columbia University, New York, New York, USA

The Trauma Assessment for Adults (TAA), a measure of exposure to potentially traumatic events, was developed at the National Crime Victims Center to facilitate identification of trauma history and sequelae. Although widely used in clinical and research contexts, the psychometric soundness of the TAA has never been formally evaluated. The proposed presentation will describe the performance of the TAA in two samples: college undergraduates (n = 142), and community mental health center clients (n = 67). Preliminary analyses suggest that the TAA exhibits adequate temporal stability in both samples. Further, it exhibits good convergence with an established measure of trauma history, and is significantly associated with variables known to be correlated with traumatic exposure (e.g., PTSD symptoms). Strengths and weaknesses of the TAA will be presented and implications for research and clinical utilization will be discussed.

### Lifetime Trauma Exposure in OIF/OEF Era Veterans: Association with Current Symptomatology

Poster #F-102 (assess)

Green, Kimberly, MSHS<sup>1</sup>; Caulhoun, Patrick, PhD<sup>1</sup>; Tupler, Larry, PhD<sup>1</sup>; Morey, Rajendra, MD, MS<sup>1</sup>; Marx, Christine, MD, MA<sup>1</sup>; Beckham, Jean, PhD<sup>1</sup>  
<sup>1</sup>VA Mid-Atlantic Mental Illness Research, Education and Clinical Center (MIRECC) and Duke University Medical Center, Durham, North Carolina, USA

This study examined whether trauma exposure before and during the military contributed to measures of current adjustment in veterans who served during Operation Iraqi Freedom or Operation Enduring Freedom (OIF/OEF). Volunteer OIF/OEF era veterans (n=309) completed self-reported measures on trauma history, resilience, intelligence, work status, suicidality, depressive symptoms, PTSD symptoms, alcohol misuse and general psychopathology. Findings indicated that trauma exposure was high in this sample, with 89 percent reporting lifetime trauma exposure and 63 percent reporting at least one exposure as meeting criterion A. Military trauma exposure was the most consistently significant variable related to all current functional measures including work status, resilience, PTSD symptoms, depressive symptoms, alcohol misuse, suicidal ideation, and general psychopathology. Pre-military trauma exposure was related to greater PTSD symptoms, depressive symptoms, suicidal ideation, and general psychopathology. Younger age was related to more severe depressive symptoms, alcohol misuse, general psychopathology and lower resilience. Intelligence was related to resilience, PTSD, depressive symptoms, and general psychopathology. Male gender was associated with greater alcohol misuse. Results underscore the importance of conducting thorough assessment of trauma exposure when evaluating returning veterans.



## Affects of PTSD and Smoking on Parasympathetic Functioning

Poster #F-103

(assess)

Grooms, Amy, Pre-Med Psychology<sup>1</sup>; Smith, Rose C., PhD Student<sup>1</sup>; Cardenas, Tania P., Undergraduate<sup>1</sup>; Feldner, Matthew T., PhD<sup>1</sup>  
<sup>1</sup>University of Arkansas, Fayetteville, Arkansas, USA

**Background:** While research has been done investigating the relationship between parasympathetic activity and PTSD, few studies have accounted for the effects of nicotine usage on the parasympathetic system. This study will investigate the relationship between PTSD and nicotine usage and their effects on parasympathetic activity, by analyzing the high frequency component of heart rate variability. We hypothesize that participants with PTSD will have less parasympathetic activity over the course of a guided imagery task relevant to the participant's traumatic experience. We also hypothesize that current nicotine use will also decrease parasympathetic activity during the guided imagery task.

**Methods:** Participants will be college students from the University of Arkansas as well as members of the community. All participants will have experienced traumatic event. This study will have a 2 (smoking vs. non smoking) x 2 (traumatized with PTSD vs. traumatized with no PTSD) design. Parasympathetic activity will be measured by measuring the high frequency component of heart rate variability at a resting, as well as during and after a guided imagery task relevant to a participant's traumatic event. The difference of HRV across the course of the task will be analyzed in order to determine the parasympathetic activity.

**Expected Results:** We expect the participants with PTSD will have the least change in HRV across the course of the imagery task and participants with no PTSD will have the most change in HRV across the course of the imagery task. We also expect participants with current nicotine usage to have less change in heart rate variability than the participants with no nicotine use.

## Perception of Child Abuse and Effect on Development of Posttraumatic Stress Disorder

Poster #F-104

(assess)

Guarnaccia, Clifford, PhD<sup>1</sup>; Crain, Daniel, BA<sup>1</sup>; Castleberry, Josh, BA<sup>1</sup>; Powers, Abigail, BA<sup>1</sup>; Ortigo, Kile, BA<sup>1</sup>  
<sup>1</sup>Emory University, Atlanta, Georgia, USA

A number of factors such as early childhood trauma in the form of sexual abuse have been linked to the development of PTSD. Rates of childhood sexual abuse and PTSD in low SES communities are particularly high. However, the link between childhood sexual abuse and PTSD isn't completely understood. Questions still remain as to why some childhood sexual abuse survivors develop PTSD in later life and why some don't. We examine the role of perception and idiosyncratic meaning of childhood sexual abuse with other environmental and genetic variables in predicting the development of PTSD. This study was part of a larger NIMH-funded study investigating environmental and genetic risk factors for PTSD in a sample of low SES, African-American men and women seeking care in the primary care and ob-gyn clinics of a public urban hospital. We currently have data on 800 participants. Correlation and regression analyses indicated that perception of childhood trauma as measured by the Childhood Trauma Questionnaire contribute to PTSD symptoms (as measured by the Modified PTSD Symptoms Scale) over and above level of lifetime exposure to traumatic experiences (as measured by the Traumatic Events Inventory). Moreover, different clusters predict PTSD symptoms better than full scale scores. Implications for treatment, research and policy are presented.

## Examining the Relationship Between Shame, Guilt, Social Cognitions, and PTSD Among Vietnam Veterans

Poster #F-105

(assess)

Harrigan, Paul, PhD<sup>1</sup>; Flowers, Blaine J., PhD<sup>2</sup>; Berger, Thomas J., PhD<sup>3</sup>  
<sup>1</sup>Counseling Psychology, University of Miami at Coral Gables, Lewiston, New York, USA

<sup>2</sup>University of Miami, Miami, Florida, USA

<sup>3</sup>Vietnam Veterans of America, PTSD/SA Committee Chairperson, Silver Spring, Maryland, USA

The purpose of this study was to examine if shame, guilt, causal attributions, and world assumption beliefs are related to PTSD symptom severity among Vietnam War combat veterans. The research questions that drove this study sought to specifically answer if shame proneness, guilt proneness, and social cognitions are related to PTSD symptom severity. Using moderation and mediation analysis, this study also attempted to identify how these internal affective and cognitive factors work together, contributing to the maintenance of PTSD symptoms. The results of this study found that shame proneness, guilt proneness, and social cognitions were indeed significantly associated with PTSD symptom severity. Furthermore, data from this study also found evidence of shame proneness as a mediating variable for the relationships observed between 1) several social cognitions and PTSD, and 2) level of combat exposure and PTSD.

## Factor Structure of the PCL in a Nonclinical Undergraduate Population

Poster #F-106

(assess)

Hoyt, Tim, BS<sup>1</sup>

<sup>1</sup>University of New Mexico, Albuquerque, New Mexico, USA

The potential symptom structure of PTSD has many implications in both research and clinical work. In this study, confirmatory factor analysis (CFA) was used to analyze the latent factor structure of the Posttrauma Checklist, Civilian version (PCL-C), in an effort to examine whether patterns of symptomatology among groups responding to daily stressors were similar to previous patterns in groups responding to traumatic events. A diverse sample of undergraduates (53 percent white; 51 percent male) at a southwestern university completed the PCL-C as part of a screening questionnaire. This data was used to test five different factor structure models proposed by Simms, Watson, and Doebbeling (2002) using oblique rotation. The least fitting models (from least to best fit) were the current DSM-IV symptom configuration, a two-factor model including intrusion/avoidance and hyperarousal/numbing, and a three-factor model including intrusion/avoidance, numbing, and hyperarousal, and a four-factor models which consisted of intrusions, avoidance, numbing, and hyperarousal. The best fitting model was a four-factor model ( $X^2 = 283.4$ ,  $df = 113$ ) consistent with previous findings (Simms et al., 2002) in which a combination of numbing and hyperarousal symptoms were combined in a dysphoria factor ( $CFI = .96$ ,  $ECVI = 1.26$ ,  $NFI = .94$ ,  $RMSEA = .06$ ).

## Sleep Problems Among Persons with PTSD and a History of Other Psychiatric Disorders

Poster #F-107

(assess)

Lauterbach, Dean, PhD<sup>1</sup>; Behnke, Courtney, BS<sup>2</sup>

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<sup>2</sup>University of Michigan, Ann Arbor, Michigan, USA

Sleep problems are included in the diagnostic criteria for a broad array of mood, substance use, and anxiety disorders, including PTSD. Previous research (Leskin et al. 2002) using the National Comorbidity Survey found that persons with PTSD suffer a greater proportion of sleep problems than persons with other, frequently co-occurring disorders (i.e., panic, major depression, generalized anxiety, and alcohol dependence). The current project was designed to replicate Leskin's findings using the recently released replication

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of the NCS and extend his work in three important ways: 1) expand the range of co-morbid disorders, 2) expand the range of sleep problems, and 3) use weighted values as suggested by Kessler. Preliminary findings indicate that sleep problems were not more severe among those with PTSD than among those with the following disorders: adult separation anxiety, generalized anxiety, dysthymia, major depression, or panic. However, persons with PTSD reported more sleep problems than persons with alcohol dependence. The presence of a second diagnosis (i.e., PTSD plus adult separation anxiety, dysthymia, major depression, or panic) elevated the severity of sleep problems. Additional findings will be presented on specific features of sleep problems among these groups.

## Predictors of Emotional Numbing in PTSD: A Replication Across Gender and Traumatic Events

Poster #F-108 (assess)

Luterek, Jane A., PhD; Gold, Sari, MA<sup>2</sup>; Simpson, Tracy L., PhD<sup>1</sup>

<sup>1</sup>VA Puget Sound Health Care System, Seattle, Washington, USA

<sup>2</sup>Temple University, Philadelphia, Pennsylvania, USA

Emotional numbing has been posited to result from emotional depletion caused by chronic hyperarousal symptoms in individuals with posttraumatic stress disorder (PTSD; Litz & Gray, 2002).

Hyperarousal symptoms have been found to predict emotional numbing more strongly than active avoidance, depression, and re-experiencing symptoms. However, investigations of the relationship between emotional numbing and hyperarousal symptoms have primarily focused on male combat veterans, with some data indicating similar patterns for female sexual assault survivors. The present study examines the relationship between emotional numbing and hyperarousal symptoms in a sample of male and female veterans who experienced a potentially traumatic event. Two hundred and five veterans (102 male, 103 female) completed the Traumatic Life Events Questionnaire, the PTSD Checklist, the PHQ-Depression subscale, and the AUDIT as part of a larger study. Results were consistent with and extended previous findings. Hyperarousal symptoms predicted emotional numbing symptoms over and above demographic variables, other PTSD symptoms, depression, and alcohol use. Gender did not influence the severity of emotional numbing symptoms. Endorsement of combat or sexual trauma (childhood or adulthood) did not impact the severity of emotional numbing symptoms or the relationship between emotional numbing and hyperarousal.

## Utility of the Davidson Trauma Scale in OIF/OEF Veterans

Poster #F-109 (assess)

McDonald, Scott, PhD; Beckham, Jean C., PhD<sup>2</sup>; Tupler, Larry A., PhD<sup>2</sup>; Morey, Rajendra, MD<sup>2</sup>; Marx, Christine, MD<sup>2</sup>; Calhoun, Patrick, PhD<sup>2</sup>

<sup>1</sup>VA Mid-Atlantic Mental Illness Research, Education and Clinical Center (MIRECC), Durham, North Carolina, USA

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There is an increasing need for brief valid instruments for PTSD screening and measuring treatment effects for combat veterans. Although the Davidson Trauma Scale (DTS; Davidson, 1996) has demonstrated good psychometric properties, it has not been validated with Operation Iraqi Freedom and Operation Enduring Freedom (OIF/OEF) veterans. This study examined the diagnostic accuracy and factor structure of the DTS with 254 veterans participating in the VISN-6 MIRECC OIF/OEF registry. The DTS demonstrated excellent reliability ( $\alpha = 0.98$ ). Receiver operating characteristic (ROC) curves suggested the DTS was good at discriminating individuals with and without a SCID-based diagnosis of PTSD ( $AUC = .89$ ,  $SE = .03$ ), and performed adequately in discriminating between those with PTSD and other psychiatric disorders ( $AUC = .78$ ,  $SE = .05$ ;  $z = 1.89$ ,  $p < .10$ ). Sensitivity, specificity, and predictive power are presented for several DTS cut-points. Veterans with PTSD ( $M = 85.4$ ;  $SD = 32.2$ ) had significantly higher DTS scores than others ( $M = 34.1$ ;  $SD = 30.4$ ) providing further evidence of construct validity. Confirmatory factor analyses suggested a four-factor model

(re-experiencing, avoidance, emotional numbing, and hyperarousal) fit the data better than the three-factor model proposed by Davidson (1996). Results are discussed in terms of their relevance to current challenges in the assessment of PTSD.

## The Stalking Behavior Checklist: Reexamination in a Sample of Acutely Battered Women

Poster #F-110 (assess)

Mechanic, Mindy, PhD; Resick, Patricia, PhD<sup>2</sup>

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<sup>2</sup>National Center for PTSD/Boston VA Healthcare System, Boston, Massachusetts, USA

Stalking has been identified as a core dimension of intimate partner abuse that co-exists with physical violence, emotional abuse and sexual coercion. Thus, it is important to develop psychometrically sound methods to assess for stalking and harassing behaviors and to understand the coexistence of stalking with other forms of intimate partner violence. The Stalking Behavior Checklist was developed in an effort to construct a behaviorally specific measure of stalking that could be easily administered and scored. 29-items assessing harassing and violent stalking behaviors using a six-point frequency scale (never to once a day or more) were developed. Using factor analysis of the SBC, two factors accounting for 45.5 percent of the variance were identified. The original sample was comprised of undergraduate students. It is unknown whether the factor structure of the SBC and its other psychometric qualities will be retained when administered to a sample of battered women. We administered the SBC and other measures of IPV to a sample of 350 battered women recruited from community agencies. To evaluate the factor structure of the SBC, a principal components analysis with oblique rotations will be performed. Results of the factor analysis will be used to assess relationships with other pertinent demographic, relationship, and violence characteristics.

## Confirmatory Factor Analysis of the PTSD Symptom Scale Using a Primary Care Sample

Poster #F-111 (assess)

Naifeh, James A., MA; Elhai, Jon, PhD<sup>1</sup>; Kashdan, Todd B., PhD<sup>2</sup>; Grubaugh, Anouk, PhD<sup>3</sup>

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<sup>2</sup>Department of Psychology, George Mason University, Fairfax, Virginia, USA

<sup>3</sup>Medical University of South Carolina, Charleston, South Carolina, USA

Several studies have employed confirmatory factor analysis (CFA) to evaluate the latent structure of posttraumatic stress disorder (PTSD) among various populations. Findings have generally failed to support the current three-factor DSM-IV (American Psychiatric Association, 2000) conceptualization, demonstrating the need to consider alternative models. This study used CFA to evaluate inter-correlated (first-order factor) and hierarchical (second-order factor) versions of four models that have received the most empirical support. Data were utilized from a heterogeneous sample of primary care patients ( $n = 252$ ) who completed the PTSD Symptom Scale (Foa, Riggs, Dancu, & Rothbaum, 1993) based on their most upsetting traumatic event. CFAs used robust maximum likelihood estimation because of multivariate non-normality. The current three-factor DSM-IV model demonstrated adequate to excellent fit on several indices, but proved inferior to alternative models. The strongest support was found for an intercorrelated four-factor model that separated avoidance and numbing symptoms into separate factors (i.e., intrusion, avoidance, numbing, and hyperarousal). Validity for this model was supported by the pattern of relations between each factor and external variables such as depressive symptoms and functional impairment. Implications of the findings are discussed.



## Self-Reported Growth Among Trauma Survivors

Poster #F-112 (assess)

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<sup>1</sup>Psychology, University of Connecticut, Storrs, Connecticut, USA  
<sup>2</sup>Community Medicine and Health Care, University of Connecticut, Farmington, Connecticut, USA

One of the primary goals of this study was to assess whether individuals who reported posttraumatic growth (PTG) on a standard measure of PTG (i.e., the Posttraumatic Growth Inventory; PTGI) would also show increased scores on standard measures tapping six typical domains of growth (e.g., gratitude, empathy). Because these measures did not exactly match the PTGI subscales, participants also completed a version of the PTGI on which they indicated their current standing on the PTGI items (e.g., I appreciate each day vs. I have a greater appreciation for each day). Thus, we assessed PTG in three ways: the PTGI completed with regard to a recent traumatic event, change in PTG domain measures from Time 1 to Time 2, and change in the current-standing version of the PTGI from Time 1 to Time 2. On the standard PTGI, trauma survivors indicated that they had grown from the event. However, scores on the domain measures did not increase from Time 1 to Time 2, with the exception of life satisfaction. There also was no significant change from Time 1 to Time 2 on the current standing version of the PTGI. Changes in the domain and current-standing measures generally were uncorrelated with PTGI scores, casting doubt on the validity of self-reports of growth.

## The Los Angeles Symptom Checklist for Children

Poster #F-113 (assess)

Ross, Leslie, PsyD<sup>1</sup>; Gaba, Rebecca, PhD<sup>2</sup>; Seilicovich, Irma, MFT<sup>3</sup>; Shin, Hana, MA<sup>4</sup>; Foy, Patrick, BA<sup>5</sup>; Foy, David, PhD<sup>6</sup>  
<sup>1</sup>Children's Institute, Inc., Los Angeles, California, USA  
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<sup>3</sup>The Village Family Services, North Hollywood, California, USA  
<sup>4</sup>Fuller Graduate School of Psychology, Pasadena, California, USA  
<sup>5</sup>Children's Institute, Los Angeles, California, USA  
<sup>6</sup>Pepperdine University, Encino, California, USA

Many measures have been constructed to assess posttraumatic distress among adults and children, but few have the capability of assessing across ages and comparing scores among members within families on a similar scale. The Los Angeles Symptom Checklist for adults (LASC; King, King, Leskin, & Foy, 1995) and the LASC for adolescents (Foy, Wood, King, King, & Resnick, 1997) have been psychometrically validated for use with several populations. The current study evaluates and reports the psychometric properties of the LASC for children, a 32-item self-report measure adapted for children ages 5-10 years. The instrument yields a 13-item posttraumatic stress disorder (PTSD) subscale, which provides both a continuous and dichotomous measure for PTSD diagnosis. A sample of children (N = 167) in group treatment for domestic violence against their mothers was assessed at intake and four follow-up assessments. Multilevel modeling analysis found that exposure to parental violence, but not direction of the violence, was a significant predictor for posttraumatic distress over time,  $t(43) = 2.56, p = .01$ . From a dose-response framework, construct and convergent validity appeared adequate as posttraumatic symptoms corresponded with exposure level. Implications for assessment of PTSD among children and within families are discussed.

## OEF/OIF Veterans, Combat Exposure and Health-Related Quality of Life

Poster #F-114 (biomed)

Baker, Dewleen, MD<sup>1</sup>; Heppner, Pia, PhD<sup>2</sup>; Afari, Nilofar, PhD<sup>3</sup>; Thorp, Steven, PhD<sup>3</sup>; Simmons, Alan, PhD<sup>3</sup>  
<sup>1</sup>Psychiatry, University of California, Davis, La Jolla, California, USA  
<sup>2</sup>Psychiatry, UCSD, California, USA  
<sup>3</sup>University of California, San Diego, San Diego, California, USA

Prior research has shown that there is an association between combat trauma, PTSD, and reduced health-related quality of life. Recent reports suggest that veterans returning from the Afghanistan and Iraq conflicts have increased rates of mental disorders, including PTSD. Between March 1 and October 1, 2006, we systematically, sequentially collected demographic data and questionnaires including the Combat Exposure Scale (CES) and the Short-Form 36 (SF-36) a measure of health-related quality of life from veterans registering for service at the main hospital, San Diego VA Healthcare System. Of veterans completing the CES, 19 percent reported moderately heavy, or heavy combat (CES scores < 25), in contrast to 81 percent who reported light to moderate combat (CES scores > 24). In addition to having significantly decreased social, role-emotional, and mental health functioning on the SF-36, the 19 percent of veterans reporting moderately heavy to heavy combat when compared to those reporting light to moderate combat, showed diminished role-physical [ $t(df = 374) = 2.1, p < .035$ ] and vitality [ $t(df = 374) = 3.7, p < .0001$ ] on this measure. These findings have implications for treatment and preventive interventions for combat exposed individuals.

## Sexual Dysfunction in OIF/OEF Veterans Treated with SSRIs for Trauma-Related Disorders

Poster #F-115 (biomed)

Anand, Vishal, MD<sup>1</sup>; Wolber, Kerry, PharmD<sup>2</sup>; Holohan, Dana, PhD<sup>3</sup>; Hawley, Joanne, PharmD<sup>2</sup>; Babbar, Jatinder, MD<sup>3</sup>  
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<sup>3</sup>Salem VA Medical Center, Salem, Virginia, USA

Serotonergic antidepressants are first line pharmacological treatments for posttraumatic stress disorder and are being increasingly prescribed for veterans returning from Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). These medications have a high incidence of sexual adverse effects, which may affect a patient's quality of life, compliance with treatment, and ultimately, clinical outcomes. Systematic data on the incidence and management of such adverse effects is lacking. We propose a pilot study intended to measure the incidence of selective serotonin reuptake inhibitor (SSRI) -induced sexual dysfunction in OIF and OEF veterans, to document the strategies commonly used to manage such dysfunction, and to evaluate the effectiveness of such strategies. Charts of 100-200 OIF and OEF veterans prescribed SSRI medications at a Veterans Affairs Medical Center will be retrospectively reviewed. Data collected will include demographics, primary diagnoses, SSRI prescribed, type of sexual dysfunction noted (if any), primary and secondary treatment strategies for managing such dysfunction, and effectiveness of such strategies. We expect that this pilot study will provide the first systematic database on SSRI induced sexual dysfunction in this important population, and will serve to guide future research in this vital area.

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## 5-HT<sub>2A</sub> Receptor Blockade Prevents Stress-Induced Enhanced Startle Response

Poster #F-116

(biomed)

Jiang, Xiaolong, PhD<sup>1</sup>; Xing, Guoqiang, PhD<sup>1</sup>; Zhang, Lei, MD<sup>1</sup>; Ursano, Robert, MD<sup>1</sup>; Li, He, MD, PhD<sup>1</sup>

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The occurrence of stress and anxiety disorders has been closely associated with alterations of amygdala GABAergic system. Administration of 5-HT or Methyl-5-HT, a 5-HT<sub>2</sub> receptor agonist, to basolateral amygdala (BLA) slices dramatically enhanced frequency and amplitude of spontaneous inhibitory postsynaptic currents (sIPSCs) in control rats. This effect was blocked by the selective 5-HT<sub>2A</sub> receptor antagonists. Double immunofluorescence labeling demonstrated that the 5-HT<sub>2A</sub> receptor is primarily localized to parvalbumin-containing BLA interneurons. These observations indicated that 5-HT<sub>2A</sub> receptors mediated serotonergic facilitation of BLA GABA release. In stressed rats, 5-HT<sub>2A</sub> receptor-mediated facilitatory effects on sIPSCs were severely impaired. Quantitative RT-PCR and western blot analysis showed that stress downregulated BLA 5-HT<sub>2A</sub> receptors. Treatment with the selective 5-HT<sub>2A</sub> antagonist, MDL 11,939 during stress prevented the occurrence of stress-enhanced acoustic startle response (ASR), a behavioral manifestation that depends on the amygdala. These findings suggest that 5-HT<sub>2A</sub> receptor is closely associated with stress-enhanced ASR, and 5-HT<sub>2A</sub> receptor antagonists appear to be effective prophylactic and therapeutic agents for stress-associated psychiatric disorders, such as posttraumatic stress disorder.

## Abnormal Lipid Metabolism in Patients with PTSD Identified in A General Medical Clinic

Poster #F-117

(biomed)

Jones, Heather, MD<sup>1</sup>; Ressler, Kerry, MD, PhD<sup>1</sup>; Gillespie, Charles, MD<sup>1</sup>; Umpierrez, Guillermo, MD<sup>1</sup>; Bradley, Rebekah, PhD<sup>1</sup>; Schwartz, Ann, MD<sup>1</sup>

<sup>1</sup>Psychiatry & Behavioral Sciences, Emory University, Atlanta, Georgia, USA

This study examines serum cholesterol, low density lipoprotein (LDL), high density lipoprotein (HDL), and triglycerides in patients with and without posttraumatic stress disorder (PTSD). Screenings were completed on >600 civilian low-income African-American patients from a general medical clinic in an inner-city hospital in Atlanta. Serum cholesterol, LDL, HDL and triglyceride levels were obtained by reviewing past hospital records for the full sample (N>600 assessed with the Posttraumatic Symptom Scale (PSS)). We also performed assessments of fasting lipids in a subset (N>100) who received extensive interviews including the SCID-DSMIV and Clinician Administered PTSD scale (CAPS). Patients with PTSD had significant increases in triglycerides and total cholesterol. There was a trend toward increased LDL and decreased HDL levels in PTSD patients. This is the largest sample to date examining alterations in lipid profiles with PTSD. PTSD may lead to diminished health-related behaviors as well as alterations in endogenous stress-related metabolic systems, resulting in altered lipid profiles. These data support the hypothesis that stress-related disorders significantly impact baseline metabolic health which may contribute to increased medical morbidity and mortality in patients with untreated PTSD.

## Psychophysiological Concomitants of Chronic Posttraumatic Stress Disorder and Acute Stress Disorder

Poster #F-118

(biomed)

Jovanovic, Tania, PhD<sup>1</sup>; Jambrosic-Sakoman, Andrea, MD<sup>2</sup>; Kozaric-Kovacic, Dragica, MD, PhD<sup>2</sup>

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Posttraumatic stress disorder (PTSD) and acute stress disorder (ASD) can develop after exposure to traumatic events, and are differentiated by the time after trauma in which the symptoms emerge. In some cases ASD develops into PTSD, while in others it does not; therefore multimodal longitudinal studies are needed to clarify the factors that lead to the resolution of ASD or to its prolongation into PTSD. Using psychophysiological measurements in diagnostic procedures can elucidate some risk factors for PTSD. The purpose of the current study was to compare basal psychophysiology and startle reflexes in a sample of Croatian war veterans with PTSD (>10 years since trauma), victims of motor vehicle accidents with ASD (<60 days since trauma), and non-trauma controls. We measured heart-rate, respiratory sinus arrhythmia, skin conductance, and eyeblink EMG startle response during an acclimation period and during the presentation of startle stimuli in 30 PTSD patients, 28 controls, and a preliminary sample of six ASD patients. We found that PTSD and ASD patients had impaired habituation of startle and skin conductance responses. PTSD patients had higher basal heart-rate and decreased respiratory sinus arrhythmia than the controls; the ASD patients had intermediate levels and did not differ from either group.

## Role of Nightmares in the Early Development of Sleep Disturbances in MVA Victims

Poster #F-119

(biomed)

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Researchers have suggested that nightmares after a traumatic experience may contribute to the development of insomnia in PTSD. The present study prospectively examined the extent to which post-MVA nightmares and subsequent PTSD diagnostic status moderate the development of insomnia symptoms. 406 MVA patients completed the Impact of Event Scale-Revised (IES-R) in hospital and 3 months later. The Clinician Administered PTSD Scale was administered 6-month post-MVA. Items 2 (I had trouble staying asleep) and 15 (I had trouble falling asleep) of the IES-R were used as measures of insomnia and Item 20 (I had dreams about it) was used as a measure of nightmares. Sleep problems have often been measured with one questionnaire item in PTSD research. We tested hierarchical linear models (HLM). Results showed that when IES-R Item 2 was the outcome variable,  $\beta_{00}$  ( $p<.001$ ),  $\beta_{02}$  ( $p<.001$ ),  $\beta_{10}$  ( $p<.001$ ), and  $\beta_{11}$  ( $p<.05$ ) were significant. For Item 15,  $\beta_{00}$  ( $p<.001$ ),  $\beta_{01}$  ( $p<.05$ ),  $\beta_{02}$  ( $p<.01$ ), and  $\beta_{10}$  ( $p<.001$ ) were significant. Contrary to the researchers' suggestion, our findings indicate that nightmares were associated with only in-hospital insomnia symptoms, but not change in these symptoms over time. In addition, subsequent PTSD diagnosis was associated with sleep initiation problems in hospital and deterioration of sleep maintenance over time.



## Trauma Exposure Predicts Impaired P50 Suppression During Stress

Poster #F-120

(biomed)

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Recent research (e.g., Neylan et al., 1999) demonstrates that P50 suppression is impaired in at least some PTSD populations, but this may arise from symptoms of PTSD or may represent an outcome of trauma exposure. To examine the relationship of traumatic exposure and PTSD symptoms to sensory filtering, P50 suppression was assessed during baseline and stressor conditions in a non-medicated, mixed-gender university student sample. Participants included 25 psychometric PTSD participants, 22 high trauma history/no PTSD participants and 26 low-trauma controls. A comparison of the three groups during baseline and stressor conditions revealed main effects for condition (stressor impaired P50 suppression) and group (high trauma group most impaired, PTSD group intermediate), qualified by a condition by gender by group interaction. Stress impaired suppression for both genders of PTSD subjects, but only male high trauma subjects showed impaired stressor suppression, while low trauma subjects failed to show stress effects. Covariance of depressive symptoms (BDI) did not alter these effects. Although increased trauma exposure correlated with reduced suppression during the stressor, PTSD scores failed to correlate with P50 measures. Taken together, these preliminary results suggest that impaired filtering associates with trauma exposure more than specific symptom patterns arising in PTSD.

## Distressing Nocturnal Arousals are Associated with Reduced Sleep Satisfaction

Poster #F-121

(biomed)

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**Objective:** Distressing nocturnal arousals (nightmares and panic attacks) are commonly reported in PTSD and Panic Disorder but have not been conclusively linked to impaired subjective quality of sleep upon awakening. We addressed this question using a methodology that minimized nocturnal reporting effort, retrospective bias, and contamination of morning reports.

**Methods:** A sample of 20 non-apneic adults was drawn from a larger sample of individuals with PTSD, PD, and comorbid PTSD and PD (PTSD/PD) based upon reports of distressing nocturnal arousals. Subjects' sleep was recorded actigraphically in their homes for multiple nights. Subjects reported the subjective characteristics of any nocturnal arousals using a continuous digital audio recording system. In the morning, subjects reported how often they had awoken during the night and how well they had slept.

**Results:** In the morning, perceived number of nocturnal arousals was elevated and subjective sleep quality reduced on nights containing reports of nightmares and/or panic attacks as compared to nights free of such reports. A summary sleep quality measure was significantly reduced ( $t(14)=2.51, p<.025$ ).

**Conclusions:** In this study, after minimizing report cross-contamination and retrospective bias, distressing nocturnal arousals were still associated with decreased satisfaction with sleep on awakening in the morning.

## Neural Correlates of Emotion and Attention Processing in Posttraumatic Stress Disorder

Poster #F-122

(biomed)

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While it has been well established that patients with PTSD preferentially allocate attentional resources to threatening stimuli, the neural pattern reflecting the influence of negative emotion on attention in PTSD has yet to be demonstrated. In the present study, subjects with PTSD symptomatology engaged in an emotional oddball task while undergoing fMRI. Subjects discriminated infrequent target stimuli (circles) from frequent standards (squares) while emotional and neutral distracters were presented infrequently and irregularly. Twenty-six subjects were classified into a high PTSD symptom group (patients) or low symptom group (control) based on Davidson Trauma Scale (DTS) scores. Results showed that the patient group had greater neural activity than the control group for emotional stimuli in ventromedial prefrontal regions, while the control group showed greater activation in the ventrolateral prefrontal cortex. Additionally, the patient group showed attenuation relative to controls in the dorsolateral prefrontal cortex for the attention task. Regression analyses revealed that medial and lateral PFC regions covaried by PTSD symptomatology. These results provide evidence for the neural systems involved in emotional interference of attention in PTSD and may help to explain the mechanism of attention difficulties that patients with PTSD report in everyday life.

## Neurosteroids and Psychiatric Symptoms in Veterans who Served During OEF/OIF

Poster #F-123

(biomed)

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**Background:** Neurosteroids (NS) modulate the stress response, increase following SSRIs, and play a potential role in depression and PTSD. We determined if NS are related to psychiatric symptoms in veterans who served in OEF/OIF.

**Methods:** NS serum levels in 90 male OEF/OIF veterans were determined by GC/MS or RIA. Psychiatric assessments included the Beck Depression Inventory-II (BDI-II), Davidson Trauma Scale (DTS), and Symptom Checklist-90-R (SCL-90R). Stepwise regression analyses were conducted to investigate the relationship between psychiatric assessments and NS with the inclusion of smoking, alcohol use, age and h/o TBI as covariates.

**Results:** Allopregnanolone (ALLO) levels are inversely associated with BDI-II scores ( $p=0.046$ ) and SCL-90R depression ( $p=0.018$ ) and anxiety ( $p=0.048$ ) subscales. Pregnenolone (PREG) levels are inversely associated with the SCL-90R Global Severity Index (GSI), [ $p=0.049$ ]. DHEA is inversely associated with DTS re-experiencing symptoms ( $p=0.028$ ). TBI is positively associated with DTS avoidance/numbing symptoms ( $p=0.042$ ) and smoking is positively associated with the BDI-II, DTS total and SCL-90R GSI ( $p\leq 0.010$ ).

**Conclusions:** ALLO findings are potentially consistent with antidepressant and anxiolytic actions of this NS. PREG and DHEA may also represent candidate modulators of psychiatric symptoms. TBI and smoking may have relevance to symptom severity.

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## Predicting PTSD Expression From Multiple Traumas: A 30-Year Vietnam Veteran Cohort Follow-Up

Poster #F-124

(biomed)

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The expression of posttraumatic stress disorder (PTSD) is a function of cumulative psychological traumas as well as their severity and timing, given individual differences in vulnerability/resiliency and evolving psychosocial environments. Using the data from a Vietnam veteran and comparison group cohort (VES, 1972 baseline total N=1,227) prospectively followed up over 30 years to date, we estimate differential pathways to PTSD development and their predictors, utilizing the information including lifetime multiple traumas occurring at different points up to middle age. Using a logistic regression, childhood antisocial behavior was the only significant (negative) predictor for reporting no qualifying trauma assessed at the 25-year follow-up (7.4 percent, n=839) thus far. Among veterans who reported multiple traumas at the 30-year follow-up (n=292), the latent growth models (LGM) differentiated two groups: about 80 percent started with a low level of PTS symptoms that increased over time, while about 20 percent started with a high level of PTS symptoms which persisted over time. The preliminary results support the notion of multiple pathways leading to PTSD and the need for early intervention for those who experience multiple traumas early in their lives. Knowledge gained from further trauma-exposure-to-disorder-expression modeling will be valuable for screening and early intervention of PTSD.

## Relationship of Prior Trauma Exposure and Posttraumatic Stress Symptoms in Pediatric Burn Patients

Poster #F-125

(child)

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A small body of literature suggests that pediatric burn patients exhibit posttraumatic symptoms. Studies have begun to investigate factors associated with development of these symptoms. This study explores relationships between demographic, prior trauma, and burn characteristics variables (i.e., total body surface area, affected areas, facial involvement, intentional nature of burn, and grafting) and pediatric burn patients' posttraumatic stress symptoms (PTSS) during inpatient acute and rehabilitative treatment. Using self- and caregiver-report measures, 32 children ages 3-16 were assessed for PTSS and prior exposure to traumatic events. Data regarding burn characteristics were collected through chart review. The majority (59.4 percent) of patients experienced clinical levels of PTSS. Although demographic variables and burn characteristics were not associated with PTSS, the number of prior trauma exposures was positively correlated with level of trauma symptoms ( $r=.385$ ,  $p<.05$ ). 72 percent of children had histories of prior trauma exposure ( $M=1.875$ , range=0-6). 74 percent of children with 2 or more prior trauma exposures exhibited clinical levels of trauma symptoms compared to 33 percent of those who had experienced 1 or 0 ( $p<.05$ ). Results suggest that prior trauma exposure should be routinely assessed so that reactions to single traumatic events can be understood in the context in which they occur.

## The Cumulative Impact of Child Maltreatment on Experiences in Interpersonal Relationships

Poster #F-126

(child)

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The purpose of this study was to examine the cumulative impact of multiple forms of child maltreatment (CM) on interpersonal functioning in college women. It was expected that participants who reported any form of CM (sexual abuse, physical abuse, exposure to interparental violence, or emotional maltreatment) would report more general interpersonal conflict and greater amounts of anxiety and avoidance within intimate relationships compared to nonabused individuals. Furthermore, a cumulative effect of abuse type was expected. Participants were 589 college women. Approximately 40 percent of respondents were abused, and there was significant overlap among different types of CM. Those who reported any type of CM reported more interpersonal conflict, avoidance, and anxiety than those with no maltreatment experiences. Furthermore, an increase in the number of abuse types was associated with greater interpersonal conflict, avoidance, and anxiety. Many forms of child maltreatment have been examined independently as risk factors for a variety of long-term problems. The current study suggests that different types of abuse have similar effects. There is also evidence that maltreatment experiences, although harmful in isolation, exert a greater negative impact on interpersonal relationship functioning as the number of abuse types increases.

## Caregiver Influence on Children's Hurricane-Related Trauma Symptoms

Poster #F-127

(child)

Gil-Rivas, Virginia, PhD<sup>1</sup>; Kilmer, Ryan, PhD<sup>2</sup>; Williams, Justin, BA<sup>1</sup>; Hypes, Annada, MA<sup>1</sup>; Smith, Melissa, AA<sup>1</sup>

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In the aftermath of Hurricane Katrina, many families in the Central Gulf Coast experienced deprivation, unsafe living conditions, and violence. Many of them continue to struggle nearly 18 months later. Caregivers' symptoms, social support, and physical and emotional functioning may play an important role in their children's adjustment post-disaster. Between June of 2006 and March 2007 we interviewed 60 caregivers of children aged 7-10 years ( $M = 8.4$ ,  $SD = 1.1$ ) who were directly impacted by the hurricane. The majority of the families had to evacuate their community (95 percent) and had moved 3 times ( $SD=2.2$ ) since the hurricane. Higher levels of children's acute symptoms ( $\beta = .23$ ,  $p = .01$ ) and caregiver trauma-related symptoms ( $\beta = .40$ ,  $p < .001$ ) and physical functioning difficulties ( $\beta = .46$ ,  $p < .01$ ) were associated with higher levels of trauma symptoms. In contrast, children whose parents reported greater levels of social support ( $\beta = -.16$ ,  $p < .05$ ) and higher levels of emotional functioning ( $\beta = -.31$ ,  $p < .05$ ) had lower levels of symptoms. Ignoring parental influences on children will leave researchers and clinicians with an inadequate understanding of the mechanisms through which parents play a role in children's adjustment post-disaster.



## Child Resources and Children's PTS Symptoms Post-Hurricane Katrina

Poster #F-128

(child)

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Hurricane Katrina displaced approximately 372,000 school-age children in the Gulf Coast (U.S. Department of Education, 2005). Several children's resources, namely realistic control attributions (i.e., accurate and appropriate control beliefs), competency beliefs (i.e., perceived ability to handle problems), and tendency to use ruminative thinking to cope with stressful events may contribute to their adjustment post-disaster. A total of 53 child-caregiver dyads directly impacted by the Hurricane were interviewed between June 2006 and June 2007. The age of participating children ranged from 7 to 10 years ( $M = 8.4$ ,  $SD = 2.2$ ), and 75 percent were Black. Children reported an average of 6.28 acute trauma symptoms ( $SD = 3.0$ ) and mild levels of hurricane-related trauma symptoms ( $M = 1.5$ ,  $SD = .81$ ). Regression analyses revealed that after controlling for age, acute trauma symptoms, and a history of a mental health diagnosis, greater frequency of rumination was associated with higher levels of trauma symptoms ( $Beta = .39$ ,  $p = .001$ ). In contrast, children's competency beliefs were associated with lower levels of symptomatology ( $Beta = .20$ ,  $p < .05$ ). Helping children achieve realistic control attributions and enhancing their competency beliefs in the context of adversity may promote positive adaptation post-disaster. Research and clinical implications are discussed.

## Adverse Childhood Experiences, Parent Burnout, and Current Functioning in Foster/Adoptive Children

Poster #F-129

(child)

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Traumatic factors faced by children in foster care often result in persistent emotional and behavioral problems stemming from their experience of multiple forms of neglect, abuse, parental substance abuse and abandonment. This unique study examined the impact foster/adoptive parents' reported knowledge of their child's prior exposure to abuse and neglect could have on their perception of the child's present distress levels. Further, we sought to identify how parent's symptoms of burnout, as measured by levels of emotional exhaustion and depersonalization, influenced children's current distress symptoms. Participants ( $N=40$ ) completed the Adverse Childhood Experiences survey (ACEs) and Los Angeles Symptom Checklist (LASC) to measure pre-placement trauma exposure and current distress levels in their foster/adoptive child, as well as the Maslach Burnout Inventory (MBI). A significant relationship was found between levels of ACEs and severity of distress symptoms, as well as levels of emotional exhaustion and depersonalization and severity of distress symptoms. Results indicate that parents who identified their child as having high levels of pre-placement adversity tended to report the child currently exhibiting greater levels of distress. In addition, it appears that parent burnout is related to parental reports of traumatic stress symptoms in their child.

## Longitudinal Analysis of Children's Avoidant Coping Behavior Following Residential Fire

Poster #F-130

(child)

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Results of a longitudinal study examining change in children's coping strategies following residential fire are described. Strategies examined were: active, distraction, avoidant, and social support seeking. Additionally, we examined the degree to which the use of avoidant coping longitudinally could be predicted by the use of one or more of the remaining three strategies at times 1 and 2. At times 1 through 3, the use of avoidant coping was significantly correlated with the three other coping methods measured by the scale longitudinally. Results indicate 44.9 percent of the variance in the extent to which children employed avoidant coping at time three could be accounted for by examining how often these children implemented the other three methods at times 1 and 2. Additionally, 15.3 percent of the variance could be explained by examining the degree to which the other three methods were employed at time 1. Finally, 75.3 percent of the variance in avoidant coping was explained by examining the extent to which the other three methods were employed at all times. We conclude that children involved in residential fire engage in consistent styles of coping across time. Additionally, the mechanisms involved in each of the four strategies may be largely similar.

## Posttraumatic Growth and Posttraumatic Reactions in Children Following a Natural Disaster

Poster #F-131

(child)

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For some people an encounter with trauma, which may contain elements of great suffering and loss, can lead to positive changes. The process where difficult life struggles lead to positive change has been labelled posttraumatic growth (PTG). Though a considerable amount of research has explored PTG in adults, there is limited knowledge about this process in children. Furthermore, the relationship between posttraumatic symptoms and posttraumatic growth is still unclear within the non-adult population. The objective of the present study was to explore whether the duration of PTSD is influenced by the presence or absence of PTG. 145 Norwegian children exposed to the Southeast Asian Tsunami were interviewed 10 months and 2 1/2 years post disaster. PTSD reactions were assessed at both times utilizing the PTSD-RI. Posttraumatic growth was assessed at the second wave, using the PTGI for children. The relationship between posttraumatic growth and the development of posttraumatic symptoms were analysed using regression analyses. It was hypothesised that PTG would be associated with a larger decrease in PTSD reactions over time. Preliminary results will be presented. The results may give valuable insight into mechanisms that can facilitate children's coping and recovery following disasters and may be of clinical interest in treating children after trauma.

## Smoking and Reactivity to a Panic Provocation: Findings From a Sample of Trauma-Exposed

Poster #F-132

(child)

Hawks, Erin, Undergraduate<sup>1</sup>; Reardon, Laura, MA<sup>1</sup>; Leslie, Dodd, MA<sup>1</sup>; Jones, Rachel, Undergraduate<sup>1</sup>; Leen-Feldner, Ellen, PhD<sup>2</sup>

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A significant association between trauma exposure and panic has been documented (Nixon et al., 2004), potentially due to fear-relevant conditioning of bodily sensations that occur during trauma. However, the mechanisms underlying this association are empirically unclear. Of increasing interest is the role of cigarette smoking, which

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is common among trauma-exposed youth (Acierno et al., 2000), and may enhance fear-relevant conditioning via nicotine withdrawal. To examine the association between smoking and panic-relevant responding, 100 trauma-exposed (assessed using the Anxiety Disorders Interview Schedule; Silverman & Albano, 1996) youth (ages 10 to 17 yrs) were administered a voluntary hyperventilation procedure validated to elicit a panic-relevant state (Leen-Feldner et al., 2005). Data collection is 60 percent completed and findings are in the expected direction; trauma exposed current smokers respond more fearfully to the challenge than non-smokers, after controlling for a number of relevant variables (e.g., age;  $R^2 = .14$ ,  $p < .05$ ). Findings will be discussed in terms of the role of substance use in enhancing the negative consequences of trauma exposure among youth.

## Reporter Reliability of Somatization and Effects of Parental Symptoms on Reporting of Child Symptoms

Poster #F-133

(child)

Immel, Christopher, BA; Knepp, Michael, BS<sup>2</sup>; Hadder, James, BS<sup>2</sup>; Jones, Russell, PhD<sup>2</sup>; Ollendick, Thomas, PhD<sup>2</sup>

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The reliability of parent and teacher report forms for childhood disorders has long been studied. A data set of residential fire survivors was utilized to further explore these issues one month post-trauma. This poster explains the predictive relationship of parents' reports of children's somatic symptoms on the Child Behavior Checklist and teachers' reports of students' somatic symptoms as reported by the Teachers Report form for children's reporting of their own somatic complaints on the Youth Self Report. Additionally, the poster examines parents' own symptoms as reported by the Brief Symptom Inventory-II as they relate to the children's own reporting of symptoms. Statistical analysis found that parental endorsement of their child's somatic symptoms was a strong predictor of children's reported somatic symptoms ( $F=4.227$ ,  $p<.05$ ). Teachers reports of somatic symptoms were not found to be predictive of children's self-reports ( $F=.923$ ,  $p=362$ ). Finally, parental reports of their own somatic symptoms were also found to be a predictor of reporting of their child's somatic symptoms ( $F=11.024$ ,  $p<.01$ ). Results indicate parents' reports of children's somatic symptoms are reliable, but that teachers' reports may not be dependable. Further, it appears that children whom exhibit somatic symptomatology have parents who demonstrate similar characteristics.

## The Relation Between Pubertal Timing and Internalizing Problems Among Trauma-Exposed Females

Poster #F-134

(child)

Jones, Rachel, Undergraduate; Reardon, Laura, MA<sup>2</sup>; O'Dell, Amanda, BA<sup>2</sup>; Hawks, Erin, Undergraduate<sup>2</sup>; Leen-Feldner, Ellen, PhD<sup>1</sup>

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Puberty is a period of profound biopsychosocial change, the timing of which, particularly among females, appears to mark an increase in risk for internalizing problems (Graber et al., 1997; 2004). Specifically, youth who are "off-time" relative to peers may face developmental challenges during adolescence that increase risk for psychopathology. Some theorists have argued that the effects of early/late puberty may be particularly likely among trauma-exposed females (Hayward & Sanborn, 2002), although this has not been empirically tested. The current study examines the association between self-reported pubertal timing (Petersen et al., 1988) and internalizing problems (Youth Self Report; Achenbach & Rescorla, 2001) among 60 trauma exposed females (assessed using the Anxiety Disorders Interview Schedule; Silverman & Albano, 1996). Data collection is underway; 28 participants (Mage = 14.1; range 10 -

17 yrs) have been recruited so far. Findings indicate robust associations between late maturation and internalizing problems (e.g., anxious/depressed subscale [ $r = .57$ ]) but no associations with externalizing problems. Data from the entire sample will be presented and the role of other variables (e.g., age; trauma type) will be explored. Findings will be discussed in terms of the potential role of pubertal development on the effects of trauma exposure among females.

## Childhood Traumatic Grief and Psychological Functioning in Parentally Bereaved Children

Poster #F-135

(child)

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Although knowledge about childhood bereavement and traumatic stress has increased dramatically over the past 20 years, very few studies to date have examined childhood traumatic grief (CTG) - the loss of a loved one in traumatic circumstances resulting in traumatic stress symptoms which are thought to inhibit the child's ability to grieve. The goal of the current study was to examine the prevalence of CTG in a large, epidemiological sample of children as well as the ways in which CTG may be related to various measures of psychological functioning.

The current study utilized the NIMH-funded Great Smoky Mountains Study (GSMS), to examine a subsample of 172 children and adolescents from 11 counties in western North Carolina who had lost a parent or parental figure. Analyses indicated that approximately 13 percent of the sample demonstrated one or more symptoms of CTG. The likelihood of developing any symptoms of CTG was associated with being older at the time of the loss and experiencing previous symptoms of generalized anxiety. Decreases in CTG over time were associated with increases in global functioning scores. This study has important implications for prevention and intervention efforts aimed at children who have experienced the traumatic death of a parent.

## A Meta-Analysis of Risk Factors That Predict Posttraumatic Stress Following Pediatric Trauma

Poster #F-136

(child)

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The search for factors that places children "at risk" of psychopathology post-accidental trauma has been researched widely within the literature, yet conflicting results emerge. This meta-analysis aimed to explore the risk factors which may potentially lead to the screening and identification of 'at-risk' children. The predictive power of eight factors was examined via transforming and combining the effect sizes to yield a weighted average effect size for each factor. The results indicated that the majority of effect sizes although significant, were inconsistent across the studies yielding little conclusive evidence of their predictive power. However, pretrauma psychopathology and threat to life were strong and the most consistent predictors of psychopathology post-accidental injury.

## Shifting From "The Blamable" to "The Surviving" Mothers: Mothers of Sexually Abused Children

Poster #F-137

(child)

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The purpose of the current study is to examine trauma history, attachment style, and its relationship with their daughter's attachment among mothers of sexually abused girls. Using the sample from an ongoing multigenerational, longitudinal study of child sexual abuse (Putnam & Trickett, 1987), in which mothers of sexually



abused and a demographically-matched comparison girls (n=166) participated, information on mothers' trauma and attachment was obtained. More mothers in abused group reported their own childhood sexual abuse experiences (Chi-square=11.4,  $p < .01$ ) and emotional abuse by their own mothers (chi-square=6.09,  $p < .05$ ), which were significantly associated with mother's current attachment style (chi-square emotional abuse =7.2,  $p < .01$ . chi-square physical abuse=5.6,  $p < .05$ ). Significant interaction effect of mother's and daughter's childhood sexual abuse was found in mother's autobiographical memory of their own father (F positive structure=3.5,  $p < .08$ ; F punitive control=8.6,  $p < .01$ ). In comparison-girl group, sexually abused mothers reported their father more negatively than non-abused mothers; but in abused-daughter group, abused and non-abused mothers showed comparable level in the recollections of their own father. The findings was discussed in the context of intervention programs for families of sexually abused girls.

## Parenting Functioning of Mothers with Childhood Sexual Abuse Trauma

Poster #F-138 (child)

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The purpose of the current study is to learn about parenting functioning among mothers with childhood sexual abuse trauma. This study utilized a prospective, multigenerational data on childhood sexual abuse (Trickett & Putnam, 1987). The sample included sexually abused and their demographically-matched comparison girls (total n=166). Non-offending mothers of both groups of girls also participated. Using interviews and standardized measures, information on the mother's childhood sexual abuse history, current social support, psychological functioning, and parenting style was obtained. Mothers' childhood sexual abuse history was a significant predictor of level of providing firm discipline ( $b = -.29$ ,  $p < .05$ ). The significant relationship between mother's childhood sexual abuse and firm discipline was maintained even after mother's other childhood variables were introduced to the model (e.g., separation from their own mothers, and other trauma history). Other significant predictors of firm discipline included current level of dissociation ( $b = -.26$ ,  $p < .05$ ) and social support ( $b = .27$ ,  $p < .05$ ). Lastly, we found a significant moderating effect of mother's childhood sexual abuse on these structural relationships. The findings was discussed in the context of intergenerational transmission of child sexual abuse and intervention strategies for parenting of abuse survivors.

## Children's Alexithymia Measure: Part Two of a Pilot Study

Poster #F-139 (child)

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Alexithymia is a cognitive and affective disturbance that affects how individuals process and express their feelings. To date, two measures have been developed for use with children (Alexithymia Scale for Children [ASC], Fukunishi et al., 1998; Alexithymia Questionnaire for Children [AQC], Rieffe, Oosterveld, & Terwogt, 2006). The English version of the ASC has not been validated and there are no established norms. The AQC is a self-report measure. The current study represents the second stage of piloting on a new caregiver-observer measure, the Children's Alexithymia Measure [CAM], for identifying children who have alexithymic characteristics. The CAM was developed by conducting focus groups of foster, biological, and adoptive parents of traumatized children, and receiving input from therapists, caseworkers, teachers, and researchers who work with

traumatized children. The CAM was administered to approximately 250 caregivers of traumatized children (ages 6 to 17). Some caregivers were also asked to complete the Child Behavior Checklist for Children (Achenbach, 1991), the Alexithymia Scale for Children (Fukunishi, 1998), and the Trauma Symptom Checklist for Children (Briere, 1996). This poster will present reliability and validity information on the CAM, including statistical analyses comparing the CAM data with data from other measures.

## Earlier Anticipated Future Coping Efficacy Predicts Present Coping Efficacy at a 1-Year Follow-Up

Poster #F-140 (child)

Knepp, Michael, BS<sup>1</sup>; Immel, Christopher, BA<sup>1</sup>; Moore, Rachel, BS<sup>1</sup>; Jones, Russell, PhD<sup>2</sup>; Ollendick, Thomas, PhD<sup>1</sup>

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This study aimed to determine the importance of early coping efficacy, hypothesizing that if coping efficacy was cogent immediately post-trauma, it will be strong at six-months and 12-months post-trauma. Equal predictions were made about meager coping efficacy. This study employed the Coping Efficacy Scale which measures children's present and future coping efficacy. Regarding present coping efficacy, this study found that 24 percent of the variance in present coping efficacy 12-months post-trauma could be predicted by the child's anticipated future coping efficacy at the one-month post-trauma interview ( $F(1,40)=10.917$ ,  $p < .005$ ). A model using future coping efficacy at 1-month and 6-months post-trauma predicted 31 percent of the variance for present coping efficacy 12-months post-trauma ( $F(1,40)=8.772$ ,  $p < .005$ ). Effects of future coping efficacy at one-month and six-months post-trauma on present coping efficacy were found to be mediated by future coping efficacy at the 12-month follow-up. This significant final model ( $F(1,40)=11.29$ ,  $p < .001$ ) predicted 47 percent of the variance in present coping efficacy 12-months post-trauma with the individual effects of 1-month efficacy ( $t(40)=1.364$ ,  $p = .181$ ) and 6-months ( $t(40)=1.651$ ,  $p = .107$ ) being non-significant while the 12-month post-trauma efficacy ( $t(40)=3.402$ ,  $p < .005$ ) was significant.

## The Pain of Domestic Traumatic Stress: Adolescent Somatization and Parental Marital Distress

Poster #F-141 (child)

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<sup>2</sup>University of Oregon, Oregon, USA

**Purpose:** This project examines associations between parental marital functioning (including marital violence) and mother/adolescent reports of teen somatic complaints.

**Methods:** Fifty-six teens (22 male and 34 female adolescents) and biological (N = 49) or step-mothers (N = 7) participated. Mothers reported marital functioning using the Marital Satisfaction Inventory-Revised (MSI-R) and adolescent somatic complaints on the Child Behavior Checklist (CBCL; Achenbach, 1991). Adolescent reports of somatic difficulties were measured using the Symptom Checklist 90 (SCL-90) scores.

**Results:** Pearson r correlations indicate that males' somatic symptoms are positively correlated with marital aggression ( $p = .36$ ) and parental conflict over childrearing ( $p = .31$ ). Female adolescents somatic symptoms are correlated with mothers' reports of global marital distress ( $p = .31$ ), difficulties with marital problem solving communication ( $p = .37$ ), marital disagreements over finances ( $p = .36$ ), marital sexual dissatisfaction ( $p = .31$ ), and parental conflict over child-rearing ( $p = .42$ ).

**Conclusions:** Targeting somatic symptoms shows promise in addressing traumatic stress exposure. It may be especially helpful for males exposed to domestic violence.

The presenting author is underlined.

## The Effects of Childhood Abuse on Parenting

Poster #F-142

(child)

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Childhood abuse has been associated with a broad range of problems in adulthood, including disruptions in parent-child relationships. The majority of the research has focused on the effects of childhood sexual abuse on mothers. It is important to better understand the effect of childhood abuse on fathers. The current study examined the effect of various forms of childhood abuse on parent-child conflict and relationship quality using the recent replication of the National Comorbidity Survey (NCS-R). The NCS-R is a nationwide household survey of 9,282 participants that included an assessment of the presence/absence of four forms of childhood abuse: severe physical abuse, rape, molestation, and witnessing physical violence at home. In addition, it asked these victims of childhood abuse to rate the level of conflict and the quality of relationships they have with their children. A series of 2(sex) X 2(exposure) MANOVAs were conducted with relationship conflict and relationship quality as dependent variables. A similar pattern of findings emerged across abuse type. Fathers with a history of childhood abuse reported less conflict with their own children than mothers but a worse overall relationship. Additional findings on the effect of various forms of abuse on parent-child relationships will be presented.

## The Impact of Family Factors on the Psychological Adjustment of Youth Who Witness Domestic Violence

Poster #F-143

(child)

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Youth who witness domestic violence demonstrate resilience, yet also experience psychological distress. The purpose of this study is to explore the relationship between family factors and the psychological well-being of youth in Latino families affected by domestic violence. The focus on Latino families is based on the rapid growth of the Latino population which has afforded new opportunities for research that may, in turn, facilitate the development of culturally appropriate intervention programs. Data for this study was provided by 50 Latino youth (8-17 year-olds) who participate in a community-based program for families experiencing domestic violence. Family factors of interest include the family structure and family dynamics such as problem solving abilities, support, connectedness, and distribution of caretaking responsibilities. Indicators of psychological health will include depressive and anxious symptomatology and social isolation. It is anticipated that youth reporting unstable family structure, low support, connectness, and problem solving ability and unequal distribution of responsibilities will demonstrate high levels of psychological distress. At the same time it is hoped that other findings may emerge from this study that provide an opportunity to develop new ideas regarding the relationship between family-based variables and youth adjustment.

## Peritraumatic Tonic Immobility Predicts A Poor Response to Pharmacological Treatment of PTSD

Poster #F-144

(clin res)

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Tonic immobility is the last defense against predation in animals and is characterized by paralysis/rigidity and analgesia. In humans, it has only been reported in women victims of sexual abuse. This study evaluated the prevalence of peritraumatic tonic immobility (PTI) in patients with PTSD and investigated its association with response to treatment. Victims of urban violence with PTSD diagnosed through the SCID-IV (n=23) underwent a naturalistic pharmacological treatment according to the recommended guidelines for PTSD. The Posttraumatic Stress Disorder Checklist - Civilian Version (PCL-C) and the Clinical Global Impressions (CGI) Severity scores were applied at baseline and endpoint. PTI, assessed using the Tonic Immobility Scale, was reported by both genders in 43 percent of the sample. Patients with PTI responded significantly poorly to treatment than those without it, either considering the PCL-C (p<.05) or the CGI (p<.001) scores. We have expanded the scope of the two previous investigations on PTI by showing its occurrence also in men and during non-sexual violence. In addition, the finding of a significant relationship between PTI and poor response to treatment of PTSD indicates that PTI may carry a prognostic value in this disorder and suggests that PTI should be routinely assessed in traumatized patients.

## The Prevention of Post Sexual Assault Stress Web site: A Dissemination Project

Poster #F-145

(clin res)

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The dissemination of evidence-based interventions for professionals working with crime victims is greatly needed. The National Crime Victims Research & Treatment Center (NCVC) recently developed the Prevention of Post Sexual Assault Stress Web site ([www.musc.edu/saprevention](http://www.musc.edu/saprevention)) to disseminate an evidence-based video intervention and accompanying brochure information designed to help adolescents and young adults undergoing a post-sexual assault (SA) medical examination. This 17-minute video provides information about the SA exam, common reactions to SA, and ways of coping with stress after SA. The Web site provides information to professionals working with SA victims about the recommended uses of the video and empirical findings from treatment outcome research on this intervention. Research at the NCVC, funded by NIDA, has found promising findings for this intervention, especially for SA victims with a prior rape history. Research on this intervention is ongoing. In the first two months since the Web site launched, over 330 professionals requested the video materials. Descriptive information is being collected about the professionals using this video, the intended uses of the video (e.g., research, training purposes, showing video to victims), the settings in which it is used, and the demographics of the populations being served. This information on dissemination will be presented.



## Differences in Help-Seeking Behaviors among Women in “Intimate Terrorism” or “Situational Couple Violence” Relationships

Poster #F-146 (clin res)

Flicker, Sharon, PhD<sup>1</sup>; Talbot, Nancy, PhD<sup>2</sup>; Cerulli, Catherine, PhD<sup>2</sup>; Zhao, Xi, PhD<sup>2</sup>; Caine, Eric, MD<sup>1</sup>; Tang, Wan, PhD<sup>1</sup>

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M.P. Johnson (1995) has proposed the existence of two qualitatively distinct forms of intimate partner violence, intimate terrorism (IT) and situational couple violence (SCV), the defining feature of which is the intent (or lack of intent, respectively) to exert general control over one’s partner. Johnson & Leone (2005) validated these constructs using the National Violence Against Women Survey (n=8000), in which women subjected to IT were found to experience more violence from their partners and were more likely to be injured, experience PTSD, miss work, as well as leave their partners, compared to women who experience SCV. This poster extends Johnson and Leone’s study by examining if there are differences in the amount of help and where women seek help between these two groups of women. It is hypothesized that, compared to women experiencing SCV, women experiencing IT seek more help and are more likely to seek the help of formal services, such as law enforcement, domestic violence services, and medical professionals.

## Disclosure-in-Action: Responses to First Disclosures

Poster #F-147 (clin res)

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Disclosure of traumatic experience impacts prevention and recovery (Rime, 1995; Chin & Kroesen, 1999; Resick et al., 2002; Riggs et al., 2006). The present laboratory study captures the processes underlying disclosing life events for the first time as they occur. Pairs of friends were randomly assigned to either a “discloser” or “listener” condition; disclosure of a life event not previously disclosed to the other participant was videotaped. Participants also completed self-report questionnaires regarding trauma, disclosure history, and relationship quality. After trained coders of the videotapes achieved high reliability, they rated posture, nonverbal and verbal interruptions, and types of responses to disclosure. A history of high betrayal trauma was related to more negative changes in mood following the disclosure activity as well as receipt of more negative responses to previous disclosure of high betrayal traumas. Stronger relationships between participants were associated with more negative changes in mood following the disclosure, suggesting that even close others may not be responding supportively to first disclosures. Since responses received following disclosure have a profound impact on later adjustment (Major et al., 1990; Lepore, 2000), gaining insight into characteristics of supportive responses is crucial to learning appropriate responses to traumatic disclosure.

## Coping Style Use Predicts Posttraumatic Stress and Complicated Grief

Poster #F-148 (clin res)

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Problem-focused coping, and active and avoidant emotional coping were examined as correlates of grief and posttraumatic stress disorder (PTSD) severity among 123 college students reporting the unexpected death of an immediate family member, romantic partner or very close friend. Participants were electronically administered (via the internet) five survey instruments that measured demographic characteristics, traumatic event exposure (Stressful Life Events Screening Questionnaire), complicated grief severity (Inventory of Complicated Grief-Revised Short Form), PTSD severity (PTSD Checklist), and coping style use (Brief COPE). Results demonstrated

that complicated grief and PTSD severity were both significantly positively correlated with problem-focused, and active and avoidant emotional coping styles. When controlling for time since the loss and trauma frequency in a path analysis, we found that only avoidant emotional coping remained significant in predicting complicated grief and PTSD severity. Clinical implications in treating individuals with traumatic losses are discussed.

## An Evaluation of Trauma Professional’s Attitudes Towards and Utilization of Evidence-Based Practices

Poster #F-149 (clin res)

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The use of evidence-based practices (EBPs) in psychological treatment has become a contentious issue among mental health professionals. The present study was designed to evaluate attitudes towards and utilization of EBPs among mental health professionals specializing in trauma. An internet survey was completed by 461 trauma professionals who were recruited via International Society for Traumatic Stress Studies membership rolls and electronic mailing lists of trauma special interest groups. The majority of participants were psychologists; however, social workers, psychiatrists, and other mental health professionals/counselors were well-represented. In terms of theoretical orientation, the highest endorsed orientation was Cognitive-Behavioral (n = 178; 38.7 percent), followed by eclectic 29.3 percent (n = 135) and psychodynamic 14.8 percent (n = 68), with client-centered (3.7 percent; n = 17) and Other (13.3 percent; 61) orientations less prominently represented. Although a minority of participants held negative views of EBPs, the overwhelming majority of respondents were supportive of the EBP movement. Urban-rural status, the amount of client contact, and age were related to EBP utilization. Theoretical orientation, training model and age were associated with EBP attitudes. Favorable EBP attitudes were not as strongly related to reported clinical behaviors as might reasonably be expected.

## Vicarious Resilience: A New Concept in Work with Those Who Survive Trauma

Poster #F-150 (clin res)

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This study explores the formulation of a new concept: vicarious resilience. It addresses the question of how psychotherapists who work with survivors of political violence or kidnapping are affected by their clients’ stories of resilience. It focuses on the psychotherapists’ interpretations of their clients’ stories, and how they make sense of the impact these stories have had on their lives. In semi-structured interviews, 12 psychotherapists who work with victims of political violence and kidnapping were interviewed about their perceptions of their clients’ overcoming of adversity. A phenomenological analysis of the transcripts was used to describe the themes that speak about the effects of witnessing how clients cope constructively with adversity. These themes are discussed to advance the concept of vicarious resilience and how it can contribute to sustaining and empowering trauma therapists.

The presenting author is underlined.

## Examining Resiliency: The Effect of Hardiness on PTSD and Quality of Life Following Deployment

Poster #F-151

(clin res)

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Past research has examined factors that predict negative outcomes following trauma exposure. Some examples of predictors of PTSD include the magnitude and type of stressor, prior trauma, and gender. In addition to understanding risk factors associated with PTSD, it is important to examine factors which predict well-being and quality of life following trauma. Past research suggests that pre-trauma personality characteristics, such as hardiness, may impact one's response to trauma and promote resiliency. Hardy individuals can be defined as those who view themselves as having control over their lives, approach change positively, and evaluate stress as a challenge that can be overcome and mastered. This study examines the role hardiness plays in protecting one from the negative sequelae of trauma exposure soon after deployment, as well as its role in promoting quality of life. Ninety reservists deployed to Iraq and/or Afghanistan were surveyed following their return home. Participants were administered the Hardiness Scale, the PTSD Checklist, the Combat Experiences Scale, and the Quality of Life, Enjoyment, and Satisfaction Questionnaire - Short Form. Parallel multiple regression analyses will be used to examine hardiness and combat exposure as predictors of PTSD symptoms and quality of life.

## Blogging About Trauma: Linguistic Markers of Recovery

Poster #F-152

(clin res)

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The content of traumatic event-focused blogs was analyzed for linguistic content associated with recovery from trauma. The Linguistic Inquiry and Word Count (LIWC) program was used to identify changes in cognitive mechanics, affective word use, and self-focused word use over the course of blog entries in 30 public access blogs. Hierarchical Linear Modeling (HLM6) was used to analyze changes in word use at both the individual and blog entry level. Results suggest that blogging about traumatic events does not elicit changes in word use associated with recovery following a traumatic event on average, but for individual blogs which show these patterns of word use, blogging may be therapeutic. In addition, more frequent blog entries were associated with therapeutic word change. Taken together, these results suggest that the inclusion of Web-based writing as a therapeutic technique could be more helpful if tailored to the individual's needs, and should include structure components, such as how often and how long a person should engage in therapeutic internet journaling.

## Sleep Patterns in Battered Women with PTSD

Poster #F-153

(clin res)

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**Purpose:** The purpose of this study is to describe sleep quality and disturbances in battered women with posttraumatic stress disorder (PTSD) symptomology.

**Methods:** A convenience sample of 43 ethnically diverse intimately abused women, average age 33 years, was recruited. The mean length of abusive relationship was almost five years. A descriptive correlational design was used. PTSD is measured by the Posttraumatic Stress Symptoms (PSS) Scale. Sleep patterns is assessed by the Pittsburgh Sleep Quality Index with the trauma addendum.

**Findings:** There were significant relationships between intimate physical and sexual violence and sleep quality. Significant relationships were also found between intimate physical and emotional abuse, threats of violence, and risk of homicide within the relationship and sleep disturbances. Severity of PTSD symptomology and each of the PTSD symptom clusters of re-experiencing, avoidance, and increased arousal were significantly correlated with global sleep quality (Pearson  $r$ 's ranged from .37 to .51,  $p < .05$  to .001).

**Conclusions:** Women experiencing intimate partner violence and PTSD symptomology have significant changes in sleep quality and disturbances. These alterations in sleep patterns may have long term consequences for the women's physical and mental health.

## Dream Trajectories in the Acute Aftermath of Trauma

Poster #F-154

(clin res)

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There is evidence that dreaming contributes to emotional memory processing. We hypothesized that sequential dreams following injury would become less similar to trauma and that this effect would be mitigated with PTSD. Twenty six participants of a larger study of PTSD following traumatic injury provided at least 2 dream report diaries within a month of traumatic injury. Self ratings of the dream's similarity to the trauma were reduced from the first to the second dream, while ratings for how "disturbing" the dream was were similar. The degree of similarity for the second, but not the first, dream was significantly correlated with PTSD severity. These findings support an emotional processing function for dreaming that is compromised with early PTSD symptoms.

## Intelligence and Child Physical or Sexual Abuse in Adult Schizophrenia

Poster #F-155

(clin res)

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<sup>3</sup>Hanyang University, Seoul, South Korea

**Objective:** This study investigated the difference in test findings from a standardized instrument for intelligence between adult schizophrenic patients with and without the history of childhood physical or sexual abuse.

**Methods:** From the ongoing study project for physical and sexual abuse in inpatients with schizophrenia, the authors identified forty six patients who completed Korean Wechsler Adult Intelligence Scale (K-WAIS) as a part of routine assessment. All the patients were confirmed of their schizophrenic diagnosis with SCID-I. Test scores from K-WAIS and Symptom Checklist-90-Revised were compared.

**Results:** Twenty one patients (46 percent) reported having been abused physically or sexually as children and 25 (54 percent) without such history. The abused patients had significantly lower score of verbal IQ ( $p < .05$ ) and level of education ( $p < .001$ ). After controlling effect of educational level by ANCOVA, however, the differences between two groups disappeared.

**Conclusions:** These findings suggest that schizophrenic patients abused as children have less educational attainment and in turn, presenting lower verbal IQ. Further neurocognitive studies on schizophrenia and trauma have to consider this relationship.



## Posttraumatic Growth and Posttrauma Psychopathology in Two Samples of Assault Survivors

Poster #F-156

(clin res)

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Authors have recently raised the question whether "finding something good in the bad is always good?" (Tomich & Helgeson, 2004). Although most studies link posttraumatic growth (PTG) to positive outcomes, not all research supports the idea that growth is solely beneficial. The present project assessed growth, as well as PTSD and depressive symptoms in two samples of assault survivors (Ns = 180 and 70). The majority of participants (almost 60 percent) reported some degree of PTG. Post-trauma symptoms (PTSD and depression) were generally positively associated with posttraumatic growth in both samples. In study 1, assault survivors' symptom severities were assessed at two weeks, and at six months post-assault. Perceived growth at six months related to both outcome measures in a nonlinear way, such that survivors with no or high growth levels reported fewer symptoms. These relationships were confirmed in the second, cross-sectional sample (study 2). Additionally, nonwhite ethnicity, religiousness, pain severity, peritraumatic fear, anger, helplessness and mental defeat, as well as posttraumatic cognitions and rumination, all assessed at two weeks in the prospective sample, predicted subgroups of low, moderate and high growth at six months. We conclude that PTG may be less adaptive in particular subgroups than one would assume, and discuss possible explanations for our findings.

## Reduced Autobiographical Memory Specificity Predicts Depression and PTSD After Recent Trauma

Poster #F-157

(clin res)

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Processing traumatic material at a specific level (i.e., by activating specific emotion-relevant information) arouses more intense emotion than processing it at a general level. Trauma survivors may thus attempt to regulate their emotion by avoiding activation of specific information and by remaining at an overgeneral level. This prospective longitudinal study examined the relationship between reduced specificity in autobiographical memory retrieval and the development of depression, posttraumatic stress disorder, and specific phobia after trauma. Assault survivors (N = 203) completed the Autobiographical Memory Test (J.M.G. Williams & K. Broadbent, 1986) at two weeks after the trauma, and structured clinical interviews and standardised self-reports at two weeks and six months. Participants with acute stress disorder or major depression at two weeks, but not those with phobia, retrieved fewer specific autobiographical memories than those without the respective disorder. Reduced memory specificity at two weeks also predicted subsequent PTSD and depression at six months over and above what could be predicted from initial symptom severity. Reduced memory specificity correlated with lower verbal intelligence, rumination about the assault and perceived permanent change. The results support the role of overgeneral memory in trauma-related psychopathology.

## Posttraumatic Symptoms and Quality of Life Among Child Survivors of World War II - Jewish and Polish

Poster #F-158

(clin res)

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The study investigated differences between three groups of child WWII survivors in PTSD symptoms, other symptoms of mental disorders, and quality of life. Participants were 68 Jewish Holocaust survivors, 32 Polish who were exposed to war trauma, and 31 Polish

who survived war but reported no war-related trauma. Participants' age ranged from 62 to 81 years (M = 72, SD = 4.29); 23 percent were men. The groups were equal in terms of age, gender, and education. PTSD was measured with Posttraumatic Stress Diagnostic Scale and Impact of Events Scale. Six dimensions of Quality of Life were assessed with Nottingham Health Profile and other symptoms of mental disorders were evaluated with General Health Questionnaire. The ANOVA revealed differences between Jewish Holocaust survivors and Polish who survived war but reported no war-related trauma in terms of severity of PTSD symptoms, (B and C). The groups did not differ in quality of life aspects or other symptoms of mental disorders. Perceived negative impact of the Holocaust/war experience on one's whole life predicted severity of PTSD symptoms (B, C, and D) among both Holocaust survivors and Polish war trauma survivors. These perceptions explained 16 percent to 42 percent of variance of PTSD severity.

## Does Not Acknowledging Rape Protect Victims From Developing PTSD? Evaluation in a College Sample

Poster #F-159

(clin res)

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**Purpose:** Unacknowledged rape victims, defined as victims who do not label their experience as a victimization, report less PTS symptoms than acknowledged victims. This presents the possibility that not labeling the assault as a rape may protect victims from the development of PTSD. Alternatively, the types of rapes experienced by unacknowledged victims may be less likely to lead to the development of PTSD. The goal of the current study was to evaluate these two possibilities through structural equation modeling. **Methods:** College women were screened for rape experiences. Victims completed a number of self-report measures including ones assessing the characteristics of the assault, label for the rape, and PTS symptoms. Two models predicting PTS symptomatology were evaluated, one including acknowledgment status as a predictor of PTS symptomatology, the other omitting this path. Findings: While the overall model fit was good,  $X^2(113) = 106.2$ , ns, the path from acknowledgment status to PTS symptoms was non-significant ( $B = -.20$ ), and removal of this path did not change the overall model fit,  $X^2(1) = 0.02$ , ns. **Conclusions:** Unacknowledged rapes are associated with factors that may result in reduced risk of developing PTSD, such as experiencing a less violent assault. However, not acknowledging rape per se does not appear to be protective against developing PTSD.

## Posttraumatic Stress Symptoms as Predictors of Substance Use

Poster #F-160

(clin res)

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Research has indicated that experiencing a traumatic event and reporting posttraumatic stress symptoms are associated with various risky behaviors, including drug use. This study was designed to determine to what extent experiencing a trauma and specific posttraumatic stress symptoms predicted specific substance use via logistic regression. Participants include 290 male and female college students who completed the Modified PTSD Symptoms Scale (MPSS; Falsetti, Resnick, Resick, & Kilpatrick, 1993), the Trauma Assessment for Adults (TAA; Resnick, Best, Freddy, Kilpatrick, & Falsetti, 1993), and a measure of drug use to include illicit drugs, marijuana, and abuse of prescription drugs. Results indicate that trauma and posttraumatic stress symptoms were not associated with abuse of prescription medication. However, reexperiencing and hyperarousal symptoms were significant unique predictors of marijuana use, and experiencing any trauma and avoidance symptoms were significant unique predictors of illicit drug use. These results

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have implications for research and the clinical setting. Research should determine why specific posttraumatic symptoms predict specific substance use. Clinicians should keep in mind these predictive relationships between specific substances and specific posttraumatic stress symptoms regarding clients who have experienced a trauma.

## Aggression and Gun Ownership in Male Veterans with Chronic Combat Posttraumatic Stress Disorder

Poster #F-161

(clin res)

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Miller, Azrael, Hemenway, and Vrinotis (2005) found 22 percent of people in the US keep loaded firearms in their home. Among 418 veterans in the present study, 28 percent own at least one gun. Freeman and Roca (2001) suggested PTSD veterans exhibit high levels of aggression and increased gun ownership. However, the relationship between gun ownership and aggression was not assessed. Thus, assessing this relationship will help clinicians evaluate the risk of gun violence in a population that has exhibited high rates of impulsive aggression (McFall, Fontana, Raskind, & Rosenheck, 1999). A health-risk behavior questionnaire was completed upon admission to a PTSD residential treatment program. Participants included 430 male chronic combat PTSD veterans; 57 percent were Caucasian, average age was 53 (SD=8). Aggression was measured by three questions assessing verbal threats, assault, and property damage. Within the four months before treatment, 24 percent made verbal threats, 6 percent assaulted others, and 10 percent damaged property. Chi-square shows that a significantly greater percentage of veterans who own a handgun endorsed an item assessing verbal threats versus those veterans who do not own a handgun (34 percent vs. 21 percent respectively). Additional results and their implications will be discussed.

Poster #F-162

WITHDRAWN

## A Brief Motivation Enhancement Intervention Increases Combat Veterans' PTSD Treatment Attendance

Poster #F-163

(clin res)

Murphy, Ronald, PhD<sup>1</sup>; Thompson, Karin, PhD<sup>2</sup>; Uddo, Madeline, PhD<sup>3</sup>; Rainey, Quaneecia, BS<sup>4</sup>; Murray, Marsheena, BS<sup>5</sup>

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The PTSD Motivation Enhancement (PME) Group, based on Motivational Interviewing, is a brief intervention designed to increase combat veterans' awareness of the need to change PTSD-related problems. The intervention rationale is that increased problem recognition leads to increased perceived treatment relevance, thereby enhancing treatment engagement and post-treatment functioning. This presentation describes early results from a randomized control trial (RCT) of the PME Group. The tested hypothesis was that relative to controls, patients given the PME Group early in a 12-month VA outpatient PTSD program would have higher treatment program attendance. Participants were randomly assigned to either four sessions of the PME Group (n=48) or psychoeducation (PE Control, n=41) in the second month of treatment. A 2 (Intervention: PME Group vs. PE Control) X 10 (Time: 1 - 10 months post-intervention) ANOVA with Repeated Measures yielded a significant interaction indicating that PME participants attended a higher percentage of program sessions later in treatment. Other significant results

showed that a greater percentage of PME participants completed 11 months of the program (86 percent vs. 57 percent of controls), and their time before dropout was higher (10.7 vs. 9.1 months).

Limitations, implications for motivation interventions for PTSD, and planned analyses are discussed.

## PTSD Veterans in Primary Care: Specialty Mental (MH) and Integrated Behavioral Health Care (IBH) Use

Poster #F-164

(clin res)

Coolhart, Deborah, PhD<sup>1</sup>; Ouimette, Paige, PhD<sup>2</sup>; Strutynski, Kate, BA<sup>1</sup>; Swezey, Allison, BA<sup>1</sup>; Schohn, Mary, PhD<sup>3</sup>; Lantinga, Larry, PhD<sup>3</sup>; Prins, Annabel, PhD<sup>4</sup>

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To inform program development for the PTSD treatment in primary care (PC), this study describes the predisposing, illness/need, and enabling factors of PTSD patients, who use specialty MH and/or IBH-PC services. Using VISN 2's database (FY05), 6,637 PTSD patients were identified who: 1) used IBH but no MH services (19 percent); 2) who used specialty MH care (68 percent) and 3) did not use IBH/MH services (12 percent). A random sample of those in IBH (N = 150) were selected for chart review to describe the interventions delivered in PC. As compared to patients seen only in PC, those receiving MH care were more often single, Vietnam veterans, taking anti-depressants and diagnosed with depression, substance use, and pain. PTSD patients seen only in PC were more often World War II veterans and hypertensive than those in MH settings. As compared to PTSD patients not receiving IBH services, those receiving IBH were more often post-Vietnam veterans/active duty personnel, diagnosed with depression or alcohol abuse, and prescribed psychotropic medications. The initial chart review indicated that the most common IBH interventions were: medication management (58 percent), supportive therapy and assessment (both 35 percent), patient education (32 percent), and referral to specialty care/relaxation (23-25 percent).

## Primary Care (PC) and Behavioral Health (BH) Providers' Perceptions of Evidence-Based PTSD Practices

Poster #F-165

(clin res)

Ouimette, Paige, PhD<sup>1</sup>; Coolhart, Deborah, PhD<sup>2</sup>; Funderburk, Jennifer, PhD<sup>3</sup>; Maisto, Stephen, PhD<sup>3</sup>; Sugarman, Dawn, PhD<sup>2</sup>; Strutynski, Kate, BA<sup>1</sup>

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Across VA Healthcare Network Upstate New York, behavioral health (BH) providers have been integrated into PC; patients with traumatic stress often seek help in PC settings. This study asked 47 PC and 14 BH providers working within PC, about their familiarity with VA/DoD PTSD practice guidelines for PC, and use of the 4-item VA PTSD screen and evidence-based practices in PC. Results indicated that on average, PC providers were "somewhat" familiar with and "sometimes" use the guideline. When using the guideline, the most common practices reported were PTSD education and referrals to specialty mental health. When aware of the screen, PC providers found it useful. BH providers rated their familiarity of guidelines as slightly higher than "somewhat" as well as use of guidelines as slightly higher than "sometimes." BH providers reported on average, that the guideline "sometimes" improves care and that the PTSD screen is "somewhat" effective and "sometimes" increases referrals to them. Qualitative responses indicated that BH providers do not uniformly view the PTSD screen as useful and report offering medication management, education, and coping skills interventions. Implications for PTSD care improvement within PC, such as increased education on screening and the guideline, will be discussed.



## Relationship of Anger and Coping Strategies to Veterans' PTSD and Depression Severity

Poster #F-166 (clin res)

Owens, Gina P., PhD<sup>1</sup>; Chard, Kathleen M., PhD<sup>2</sup>; Cox, Teri A., MS<sup>3</sup>; Beimesch, Barbara, MA<sup>2</sup>; Bhaskar, Tripti, MBA<sup>1</sup>

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The relationship among PTSD and anger among combat veterans has been established. Limited research has examined relationships between anger, coping strategies, and PTSD among this population. The current study examines relationships between anger, coping, PTSD, and depression for veterans attending a residential PTSD program. One hundred and twenty-five veterans completed the State-Trait Anger Expression Inventory-2, Coping Strategies Inventory, PTSD Checklist-Military version, and Beck Depression Inventory-II. The majority of participants were male (76 percent) and served in either the Vietnam War (60 percent), post-Vietnam War era (25 percent), or Persian Gulf War (11 percent). At pre-treatment, only depression predicted PTSD severity ( $F(5,85) = 7.52, p < .001$ ). When predicting pre-treatment levels of depression, PTSD severity, anger expression, disengagement, and engagement were all significant ( $F(5, 82) = 10.904, p < .001$ ). Post-treatment depression was predicted by PTSD severity and engagement coping strategies ( $F(6, 68) = 30.73, p < .001$ ). Post-treatment PTSD severity was predicted by depression severity, engagement strategies, and the interaction between gender and anger expression ( $F(9,65) = 24.53, p < .001$ ). Initial findings suggest that anger expression and engagement coping skills are particularly important to address in PTSD treatment.

## The Role of Experiential Avoidance in Posttraumatic Stress and Physical Pain Symptoms

Poster #F-167 (clin res)

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Experiential avoidance (EA) described by Hayes and colleagues (1996) is "the phenomenon that occurs when a person is unwilling to remain in contact with particular private experiences and takes steps to alter the form or frequency of these events." EA is considered to play a role in the development of psychopathology (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996), and provides a useful way of understanding the long-term correlates of a trauma history (Follette, Palm, & Hall, 2004). EA might explain the presence of posttraumatic stress and physical pain symptoms in individuals with a trauma history. Experimental data demonstrated that EA of pain leads to less pain tolerance (e.g., Hayes, Bisset, Korn, & Zettle, 1999). There is limited research examining the role of EA in co-occurring symptoms of posttraumatic stress and physical pain. Participants were veterans seeking treatment in a comorbid PTSD/substance abuse residential program. Participants completed measures at pre- and post-treatment. The relationship between EA, trauma-severity symptoms, trauma-avoidance symptoms, and reported physical pain were analyzed. Hierarchical regressions were employed to determine EA as a predictor of reported physical pain. Additionally, a repeated-measures t-test was employed to test differences between EA scores before and after participating in treatment. Implications are discussed.

## Predictors of Replicative Nightmares

Poster #F-168 (clin res)

Pennington, Hannah, BA<sup>1</sup>; Davis, Joanne, PhD<sup>1</sup>; Ensor, Kristi, BA<sup>1</sup>; Byrd, Patricia, MA<sup>1</sup>; Wright, David, PhD<sup>2</sup>

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Chronic nightmares have long been recorded as one of a range of symptoms experienced by some after exposure to a traumatic event. For some, these nightmares closely portray or actually replicate the traumatic event experienced. Replicative nightmares are associated with an increase in distress compared to nightmares that are similar or unrelated to the trauma (Davis, Byrd, Rhudy, & Wright, under review). Despite the distress caused by these nightmares and the frequency with which they occur, no studies have explored factors that may contribute to the development of replicative nightmares. The purpose of this study is to identify significant predictors of experiencing replicative trauma nightmares. Based on a review of the broader posttraumatic stress disorder literature, the following were hypothesized to be significant predictors of trauma nightmares: type of trauma, number of traumas, age when traumatic event first occurred, physical injury related to the trauma, perceived life threat during trauma, gender, and scores on an index of mental imagery vividness. Results indicated vividness of imagery and gender were significantly related to type of nightmare.

## Victimization History: Learning and Memory Performance

Poster #F-169 (clin res)

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Posttraumatic symptoms and victimization have been associated with hyper- and hypo-memory for trauma-related information. The current study examined trauma-related learning in the context of 1) hippocampal function; 2) psychiatric symptoms of anxiety and dissociation. Using paired-word associate learning and word stem completion tasks, explicit and implicit memory for neutral-neutral (N-N) and trauma-neutral (T-N) words was assessed. Seventy college participants were assigned to three groups: no victimization (NV), single victimization (SV), and multiple victimization (MV). Three hypotheses were evaluated. H1: If alterations in memory are due to hippocampal changes associated with prolonged stress exposure, MV group should show worse memory than SV and NV groups. H2: If alterations in memory are due to heightened processing of threat stimuli, greater PTSD severity should relate to better memory performance for T-N word pairs relative to N-N pairs. H3: If alterations in memory are due to symptoms of dissociation, higher levels of dissociation should relate to better memory performance for N-N word pairs. Partial support for H2 and H3 were observed, though victimization status was unrelated to overall differences in explicit and implicit memory. Implications of this research for understanding the complex relationship between violence exposure and memory are considered.

## Effects of Long-Term Community-Based Care: A 38-Year Follow-Up Study of Ehime Maru Accident

Poster #F-170 (commun)

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On the 10th of January in 2001, The Ehime Maru, the Japanese fisheries training vessel, rammed and sunk by the nuclear submarine USS Greenbill off Honolulu, Hawaii. Four students, two teachers and three crew members drowned. A psychiatric assistant team which consisted of staff of Uwajima Health Center and Kurume University Hospital began the psychiatric examination and psychiatric intervention for the nine surviving students since two months after the acci-

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dent. Three self-rating scales, Impact of Event Scales Revised version (IESR), General Health Questionnaire 28-items (GHQ) and Self-rating Depression Scale (SDS) were completed by students and Clinician Administered PTSD Scales (CAPS) the psychiatric structured interview, were performed to diagnose and assess PTSD. Seven students were diagnosed as PTSD and six students were major depression, and all three self-rating scales showed very high score at first and second examination (two months after the accident). In addition to serious PTSD symptoms, they were blaming themselves for helping their classmates and teachers at the accident. We will present the result of a 38-month follow-up study for the surviving students, and show effects of long-term community-based care.

## The Interaction Between Experiential Avoidance and Stress to the Development of Depression

Poster #F-171

(commun)

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Literature has demonstrated that measures of episodic life events has found higher levels of significant stress prior to the onset of major depressive episodes in community samples. Literature has also demonstrated that the avoidance of unpleasant internal experiences (e.g., thoughts, feelings, sensations) is a common method of regulating affect for most people. However, little research has investigated how experiential avoidance and stress interact in the development of one of the most prominent mental disorders, depression. This study attempted to determine how experiential avoidance and the stressfulness of life events affected the occurrence of depression in a community sample of women. It was hypothesized that women who report greater experiential avoidance and greater stress would report higher symptoms of depression. Results indicate that the effect of the interaction between experiential avoidance and stressfulness of the event on depression was, as predicted, significant ( $F(1,155)=4.43, p=.04$ ). Additionally, results indicate that there was a trend suggesting that the interaction between experiential avoidance and stressfulness of life events would increase the chance of developing depression when individuals had no prior history of depression ( $F(1,143)=3.57, p=.066$ ), which has been consistent with the literature.

## Increasing Access to and Use of Services for Sexually Abused Children

Poster #F-172

(commun)

Rheingold, Alyssa, PhD<sup>1</sup>; De Arellano, Michael, PhD<sup>1</sup>; Silcott, Lauren, BA<sup>2</sup>; Cunningham, Angela, BA<sup>3</sup>; Rives, Sydney, BA<sup>1</sup>

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The negative impact childhood sexual abuse (CSA) has been well documented. This problem is compounded by the fact that only a small percentage of victims actually obtain appropriate services that can help victims and families cope with the aftermath that often ensues. Difficulties that interfere with accessing services include acute psychological reactions, confusion in understanding the system and negotiating the agencies involved, and logistic barriers, such as transportation, child care, and lack of health insurance. This paper will describe a novel program whose goal is to ensure CSA victims do not "slip through the cracks" in accessing services. This has been accomplished through the following objectives: 1) to provide crisis intervention and psychoeducation to CSA victims and their families during the post-assault medical examination and/or interview, 2) to coordinate services among the various agencies and providers serving victims following the forensic evaluation, 3) to address the needs of traditionally underserved and multi-problem families by overcoming the barriers that prevent their access to services. Preliminary findings on the impact of the program on serv-

ice utilization (e.g., medical follow-up appointments, mental health counseling) and rating of satisfaction (e.g., psychoeducational intervention, the program as a whole) will be presented.

## Contexts of Intimacy and Unwanted Sex in a U.S. University Sample

Poster #F-173

(culture)

Flack, William, PhD<sup>1</sup>; Brian, Lauren, BA<sup>1</sup>

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Recent studies suggest that "hooking up" (sexual encounters without expectations of further relational commitment) has largely replaced exclusive committed relationships on U.S. college campuses (e.g., Paul & Hayes, 2002). However, little is known about hooking up, including its heterogeneity, and its relationship with unwanted sexual experiences. A representative sample of 321 randomly selected undergraduates at a small university in the northeastern U.S. were surveyed about their frequencies of participation in different intimacy contexts (four types of hooking up, exclusive relationships, both, and neither). Women in the sample were also asked about the frequencies of their unwanted sexual experiences (unwanted touching, attempted and completed unwanted intercourse) in each intimacy context. Thirty-one percent of women who had engaged in exclusive relationships reported one or more experiences of unwanted sex, as compared with 20-52 percent of women who had engaged in one or more of the four types of hooking up. The results of this survey will be discussed in the context of feminist routine activities theory (e.g., Schwartz, Dekeseredy, Tait, & Alvi, 2001).

## Unwanted Sex, Alcohol Use, and Hooking Up at Two U.S. Colleges

Poster #F-174

(culture)

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Although much is known about unwanted sex among college students in the context of the monogamous dating culture, little is known about this problem in the more recent, "hooking up" (i.e., sexual interactions with no future commitment between partners) collegiate culture. Standard measures were used to assess the incidence rates of unwanted sex (ranging from unwanted touching to completed unwanted intercourse) and alcohol consumption, along with new measures of hooking up, in representative samples from two campuses in the northeastern U.S. ( $N_1 = 116, N_2 = 192$ ). Multiple regression analyses in both samples indicated that hooking up and alcohol consumption predicted unwanted sexual experiences (Sample 1  $F(3,115)=5.25, p<.01$ ; Sample 2  $F(3,181)=8.67, p<.01$ ), but only hooking up contributed significantly to the model (Sample 1  $p<.01$ ; Sample 2  $p<.01$ ). In Sample 2, the interaction term was nearly significant ( $p=.05$ ). The interaction indicated that the lowest rates of unwanted sex occurred in those who did not hook up or consume alcohol, whereas the highest rates of unwanted sex were reported by those who did hook up but did not consume alcohol. These and related findings will be reported and discussed in the context of feminist routine activities theory (e.g., Schwartz, Dekeseredy, Tait, & Alvi, 2001).



## Effects of the 2002 Sniper Attacks on the Homeless in Washington, DC

Poster #F-175 (culture)

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Despite the prevalence of homelessness, the homeless population has rarely been included in planning for disasters and terrorism. To better understand the mental health needs of the homeless in planning for, and responding to, traumatic events, our study group examined psychological and behavioral responses of homeless individuals to the 2002 Washington, DC sniper attacks. We interviewed 151 homeless individuals in shelters one year post-event and examined extreme fright/terror, perceived threat, change in activities, perceived safety, substance use and identification with victims at the time of the event. Interview excerpts illustrate findings. 61 percent reported extreme fright/terror and 58 percent reported high perceived threat. Participants reporting high perceived threat were more likely to report extreme fright/terror, increased substance use, lower safety, and decrease in activities (e.g., participation at shelters). 41 percent increased substance use with females being more likely to increase substance use. 44 percent reported identification with victims ("it could have been me"), with females and non-Whites more likely to report identification. Distress was mediated by social supports, news media, and confidence in the police. Better understanding of the impact of terrorism and disasters on the homeless is critical to public health planning for future events in vulnerable populations.

## Prevalence of Trauma Exposure and Help-Seeking Behaviors in Japan: A Pilot Study

Poster #F-176 (culture)

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Many epidemiological studies have indicated that the majority of general population in the United States experiences trauma. However, very little is known about the prevalence of trauma exposure in non-western countries. The author conducted a pilot study to identify what is the prevalence of trauma exposure in Japan, and how many victims sought professional help for trauma related problems. Residents (age 20-70 years old) were randomly selected from the resident registries of three rural cities in the eastern Japan. A total of 732 people received a questionnaire on trauma exposure [natural disaster, accident or fatal illness, personal loss, crime victimization, child abuse or domestic violence (DV)], and consequent help-seeking behaviors. Of the 732 residents, 197 completed the questionnaire. Results indicated that 68.82 percent of respondents reported one or more trauma experiences or the witnessing of above trauma experiences. Very few in this group sought professional help for problems related to the identified trauma(s). More women reported witnessing any trauma, accident and/or fatal illness, and child abuse and/or DV. However, no gender difference was found in reported direct experience of any trauma type except child abuse and/or DV. The result was compared with other epidemiological findings from other cities in Japan.

## Comparing Symptoms, World View, and Coping in Old and Young Burn Survivors

Poster #F-177 (culture)

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This study compared posttraumatic stress, depression, world view, and coping in older survivors (ages 55-81) and younger survivors (ages 18-54) of burn injury. There is a paucity of information on trauma in late life. Older adults could have increased vulnerability (e.g., due to physical frailty, cognitive deterioration, and other associates of aging) or decreased vulnerability (e.g., due to benefits of

life experience). In this study, adult burn survivors (n=130) a research assistant screened burn survivors about two weeks post-admission to a burn center with clinical interview and self-report measures. Older respondents (n=30) did not differ significantly from younger respondents (n=100) in posttraumatic stress, measured by the Impact of Events Scale, or depression, measured by the Brief Symptom Inventory (p's > .05). However, older respondents reported significantly more belief in meaningfulness of the world (X=3.85) than younger respondents (X = -1.56), t = -2.29, p = .05, on the World Assumptions Scale. They also reported more use of religious coping (X=12.86) than younger respondents (X=12.88), t = -2.67, p < .01 on the STRESS-B. This finding points to the potential fruitfulness of further research to elucidate whether older adults consistently respond to trauma in ways that set them apart from younger trauma survivors and the psychiatric consequences.

## Experience of Trauma is Related to Comfort with Seeking Help in Former Vietnamese Refugees

Poster #F-178 (culture)

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Forty- seven former refugees from Vietnam (mean age = 44.38, SD = 16.36) currently living in North-East United States answered a checklist of traumatic events commonly experienced by Vietnamese refugees. They also responded to a number of behavioral scenarios that measured their level of comfort with asking for help from a Vietnamese they knew, a Vietnamese they did not know, a non-Vietnamese they knew, and a non-Vietnamese they did not know. Correlational analyses revealed that number of trauma experiences was negatively correlated with comfort with asking for help from a non-Vietnamese, r (33) = -.46, p = .007, comfort with asking for help from an unknown person, r (33) = -.37, p = .03 and was marginally negatively correlated with total comfort with asking for help, r (34) = -.30, p = .08. These results indicate that the more traumatic experiences one has suffered, the less comfortable one is at asking for help from unknown individuals and individuals not of one's own race.

## Experiences of Discrimination Among Somali Adolescent Refugees in the United States

Poster #F-179 (culture)

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While recent data suggests that the United States is becoming increasingly ethnically and racially diverse, due in part to an influx in immigrant and refugee populations, there has also been a corresponding increase in the levels of xenophobia and islamophobia following 9/11. While extant research find an association between discrimination and mental health problems, including symptoms of posttraumatic stress disorder, few empirical studies have examined the experience and impact of discrimination on refugees resettled in the United States. This mixed method study aims to investigate experiences of discrimination in a sample of 144 Somali adolescents between the ages of 11 and 20, living in New England. Results show that overall, 27 percent of the adolescents in this study reported experiencing discrimination post-resettlement. The most frequently cited reasons for discrimination were Somali identity and Muslim religion. In qualitative interviews, adolescents described heightened levels of discrimination following 9/11, largely targeting participants'

The presenting author is underlined.

Muslim faith. Understanding the discrimination experienced by refugee and immigrant populations in the United States is critical to developing effective preventative intervention efforts for newly resettled refugee youth.

## The Influence of Attachment Style and Coping on PTSD Symptoms Among Persons Living with HIV/AIDS

Poster #F-180 (practice)

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<sup>1</sup>PGSP-Stanford PsyD Consortium, Palo Alto, California, USA  
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Research indicates that a significant proportion of people living with HIV/AIDS report symptoms of posttraumatic stress disorder (PTSD). Moreover, attachment style has been associated with psychological and behavioral outcomes among persons living with HIV/AIDS. Thus, attachment style may influence the ability to cope with traumatic stress and affect PTSD symptoms. To examine, we assessed 94 HIV-positive adults (18 years and older) on self-report measures of traumatic stress, coping, and attachment style. Multiple regression analysis showed that avoidant attachment and emotion-focused coping were positively and significantly associated with greater PTSD symptomatology. Interestingly, an interaction effect was found between the level (high or low) of attachment style (avoidant or secure) and PTSD symptomatology in the presence of emotion-focused coping, suggesting that interventions that develop coping skills and focus on the underlying construct of attachment style may be particularly effective in reducing morbidity associated with PTSD symptoms in adults living with HIV/AIDS.

## The Process of "Getting Better" After Torture From the Perspective of the Survivor

Poster #F-181 (practice)

Isakson, Brian, MA<sup>1</sup>; Jurkovic, Gregory, PhD<sup>1</sup>  
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Western models of the treatment of trauma typically focus on reducing symptoms of PTSD, depression, and anxiety. The goal is to reduce pathology. In addition, the treatments have often been modeled after treatments for Western clients of traditional mental health services regardless of where the survivor is from. In this system, the mental health professionals are the experts, and the clients learn from the professionals. This study seeks to expand the understanding of the treatment of torture survivors by investigating, from the perspective of torture survivors, the process of "getting better" after torture and what aspects of survivors' lives need to be impacted in order to get better. By understanding the survivor's perspective, treatments will be able to focus on the most salient issues to the survivor. The poster will present qualitative data as part of a grounded theory study on this subject. Data is being gathered at a torture treatment center and 10-15 adult torture survivors from Africa and Asia will be interviewed. Themes of getting better that have already emerged include being future oriented, rebuilding trust, forgiveness, faith, witnessing the truth of experiences, forgetting the emotional pain and having a deep connection with a mental health professional.

## Screening for Trauma Exposure in Afghani Immigrant Women in a Primary Care Clinic

Poster #F-182 (practice)

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<sup>3</sup>New York Hospital Medical Center of Queens, Fresh Meadows, New York, USA

This action research project aimed to strengthen primary care residents' assessment of potential trauma exposure in Afghani women who presented to the primary care clinic at New York Hospital Medical Center of Queens with "medically unexplained symptoms." It attempted to achieve this goal by delivering three training sessions to the primary care residents on the underlying social, cultural and psychological aspects of medically unexplained symptoms in these women, including a trauma screening instrument, the PC-PTSD. Upon completion of the training, the PC-PTSD was piloted in the clinic. The investigators expected, based on their professional and scholarly experience, that medical staff needed education in understanding the role of both migration experiences and potential trauma exposure on these women's lives. Qualitative interviews were conducted with five community leaders, twelve primary care residents, and thirteen patients. Pre and post test surveys measured primary care residents' knowledge and skills. Findings revealed that for some Afghani women trauma exposure is considerable, and that screening should be a regular practice in primary care. Social work services can play an important role in educating medical practitioners in culturally competent practice.

## Acceptance as a Moderator in the Relationship Between PTSD Symptomatology and Posttraumatic Growth

Poster #F-183 (practice)

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Our aim was to investigate the relationship of PTSD symptoms to posttraumatic growth. Findings in the literature are mixed, with no clear understanding of whether PTSD symptoms make growth more likely, less likely, or if there is no relationship between the two. Our suggestion is that emotional processing of the trauma may make both growth and distress more likely and therefore emotional processing activities may help explain the relationship between distress and growth. We suggest acceptance as a potential indicator of such processing and define acceptance as the ability to consider the experience as part of one's autobiographical history and therefore display decreased emotional avoidance of the trauma. We hypothesized that acceptance would moderate the relationship between PTSD symptoms and posttraumatic growth, with those suffering from PTSD symptoms, but also endorsing acceptance, reporting more growth. We administered self report questionnaires to 176 undergraduates. Our hypothesis was confirmed and remained significant when controlling for depression. Acceptance also showed a hypothesized pattern of correlation with another indicator of processing — disclosure. Additionally, acceptance was negatively correlated to more purely negative forms of thinking as measured by reports of rumination and negative cognitions. Treatment and Research implications are discussed.



## Religious Beliefs About Suffering in an Urban U.S. Sample

Poster #F-184

(practice)

Linscott, Alexandra C., MA<sup>1</sup>; Lee, Hanna, MA<sup>1</sup>; Gable, Phillip G., MA<sup>1</sup>; Eriksson, Cynthia B., PhD<sup>2</sup>

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Although religious coping has been found to play a crucial role in the aftermath of traumatic events, the impact of trauma on religious beliefs has not been widely explored. Religious beliefs may play a crucial role in the meaning making process that traumatic events often instigate in an individual. The development of the Religious Beliefs About Suffering Scale (RBASS; Webb, 1995) among a population of seminarians found three primary factors describing perspectives on divine involvement in suffering: Demand/Punish, Loving Will, and Necessity. A brief RBASS was administered to 284 urban workers across five major US cities. A principal component analysis extracted Demand/Punish as a primary factor. Loving Will and Necessity emerged as one combined factor. A third factor representing the direct intervention of the divine in human suffering, Divine Participation, also emerged. A correlation between each factor and positive and negative religious coping scales yielded significant relationships. Results indicate that an individual's beliefs about suffering are related to their use of religious resources in coping. In addition, perspectives on religious beliefs about suffering also must take into account notions of a higher power either enduring in suffering with humanity or remaining distant. Implications for clinical intervention are discussed.

## The VA Military Sexual Assault Screen: Clinical Implications for Health Care Providers

Poster #F-185

(practice)

Lucas, Emma, MSW, MPH<sup>1</sup>; Frayne, Susan, MD, MPH<sup>2</sup>; Lee, Tina, MD, MS<sup>3</sup>; Ruzek, Josef, PhD<sup>3</sup>; Weitlauf, Julie, PhD<sup>4</sup>

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**Purpose:** We sought to: 1) characterize exposure to lifetime sexual assault (LSA) among women veterans; and 2) examine whether history of military sexual trauma (MST), assessed by the VA MST clinical reminder (MST-CR), a chart-based mandatory MST screen, predicted higher rates of LSA among women veterans.

**Method:** Sixty-six female veterans accessing VA primary care services were administered the Sexual Experiences Survey - Short Form (Version V) (SES-SFV) to assess LSA exposure (childhood, military and adult civilian sexual assault). MST-CR information was collected on all participants from their available medical records.

**Findings:** According to the SES-SFV, 73 percent of the women had LSA exposure, 39 percent reported MSA exposure, and 29 percent had childhood sexual assault (CSA) exposure. Among those MST-CR positive, 68 percent reported MSA and 82 percent reported LSA. Among those MST-CR negative, 64 percent reported LSA.

**Conclusions:** Sexual assault was an alarmingly common event for women in our sample. Many patients with MST-CR positive reported both MSA and LSA. However, a substantial proportion of women with MST-CR negative reported histories of exposure to LSA (civilian assault or CSA). We encourage VA clinicians to be vigilant in their awareness of the prevalence of all forms of sexual assault (not just MST) in this population.

## Effect of Audio CD Use in Sleep Impaired PTSD Veterans

Poster #F-186

(practice)

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**Introduction:** Insomnia is one of the most common symptoms of posttraumatic stress disorder (PTSD). Healthy sleep patterns are essential to physical and psychological health, and are related to many health related problems. Evidence suggests that insomnia may persist for many PTSD patients after other symptoms have responded to cognitive-behavioral therapy (CBT).

Most interventions for sleep impairment with PTSD veterans involve the use of medications. Sleep hygiene is taught as a necessary prelude to healthy sleep patterns, but this intervention is not sufficient to produce consistent and healthy sleep patterns.

**Method:** In this study we will evaluate to effectiveness of listening to an audio CD, with a spoken transcript specifically written for PTSD veterans, in the development of healthy sleep patterns with veterans who are experiencing significant sleep impairment for at least 2 years duration. 20 Veterans with PTSD and insomnia will listen to this CD nightly for 30 nights. Pre and post test data will compare hours per night of self reported sleep, corroborated by their spouses' report.

**Preliminary Results:** 19 Veterans with PTSD and sleep impairment are enrolled in this study to date. Of the 4 who have completed the study, one demonstrated no change in hours of sleep per night, and three veterans report a 50 percent increase in hours of sleep per night.

## Counseling for Work and Relationships for People Who Have Been Traumatized

Poster #F-187

(practice)

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This poster presentation develops the position that counseling for work and relationship is a perspective that is especially useful in the healing process of people who have been traumatized. Counseling in this context refers to the general domain of counseling and psychotherapy practices with a particular emphasis on the nature of work and relationships in clients' lives. Relationships refer to the significant relationships that people have in both the public and private domains of lives; that is, it includes co-workers, mentors, friends, and family members. Work also is located in both public and private domains of life. It includes the jobs people have, the work they do at home caring for themselves and their families, and personal projects such as volunteer work, hobbies, and church and community involvements. This poster presentation provides definitions of the meaning of counseling for work and relationship in this context, discusses contemporary understandings of trauma, and describes how counseling for work and relationship applies to trauma intervention. Counseling for work and relationship immediately after a traumatic event and for chronic trauma are reviewed and specific examples and suggestions provided.

The presenting author is underlined.

## Maternal Psychopathology and Its Impact on the Recognition of Facial Emotion in Very Young Children

Poster #F-188

(disaster)

Dugan, Kelly, MA<sup>1</sup>; Schwartz, Kathryn, BA<sup>1</sup>; Abramovitz, Robert H., MD<sup>2</sup>; Jones, Russell, PhD<sup>3</sup>; Chemtob, Claude, PhD<sup>4</sup>

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<sup>3</sup>Psychology, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA

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Research suggests that maternal depression can greatly impact the quality of interaction with children. Moreover, higher levels of symptomatology have been associated with a decreased accuracy for recognition of facial expressions of emotion in children. Studies have also found that impairment in maternal emotional functioning can increase a child's risk for developing problems later in life. The current study attempted to address the impact of maternal depression on their recognition of expressed emotions in infants. It was hypothesized that depressed mothers would rate pictures of infants more negatively than nondepressed mothers. Data was collected as part of a larger study assessing the effects of the September 11, 2001, World Trade Center attacks on families with young children that were directly affected. Current depressive symptoms were obtained via self-report (CES-D), and Robert Emde's Infant Facial Expressions of Emotion from Looking at Pictures (IFEEL) was used to assess emotion recognition. Preliminary analyses suggest that depression is not significantly correlated with a greater likelihood of identifying negative emotions in children. Analyses in progress are examining differences in ratings for intensity of emotional expression for depressed and nondepressed mothers and relating these to level of exposure.

## Symptom Prevalence of PTSD, Anxiety Depression, Level of Exposure and Mediating Factors on a Population From Southern Lebanon

Poster #F-189

(disaster)

Farhood, Laila, PhD, CS, RN<sup>1</sup>; Dimassi, Hani, MPH, PhD<sup>2</sup>; Rady, Alissar, MD, MPH<sup>3</sup>

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<sup>3</sup>World Health Organization, Beirut, Lebanon

Several areas in the south of Lebanon were under occupation until the year 2000. Events associated with the occupation have affected the psychological and physical health of the population. The purpose of the present study was to investigate the prevalence of Posttraumatic Stress Disorder (PTSD), general psychiatric morbidity and depression among residents in the formerly occupied region. Predictors for PTSD, as well as general psychiatric morbidity were also addressed in the study. The study population consisted of randomly selected participants from six towns in the formerly occupied region. Traumatic events and symptoms of PTSD were measured by the Harvard Trauma Questionnaire. General psychiatric morbidity was assessed by the General Health Questionnaire (GHQ-28), and depression by the Beck Depression Inventory. Results show that the majority of the population in all towns has experienced at least one war related traumatic event. Levels ranged bet 17.6 percent to 33.6 percent for PTSD and 9.2 percent to 19.7 percent for depression. These are considered higher, even five years after the end of the occupation, than found in studies conducted in countries not suffering from recent armed conflict. The extent of exposure to traumatic events was a positive predictor both for PTSD as well as general psychiatric morbidity. Some socio-economic and life-style factors were also able to partly predict PTSD.

## Developing and Implementing a Protocol for Workplace Re-Entry

Poster #F-190

(disaster)

Flanagan, Leo, PhD<sup>1</sup>; Almoguera Abad, Antonio, MD<sup>2</sup>

<sup>1</sup>Flanagan Social Initiatives, Stamford, Connecticut, USA

<sup>2</sup>Department of Psychiatry, Bellevue Hospital Center, NYC Health & Hospitals Corporation, New York, New York, USA

This presentation will provide participants with:

1. The ability to execute a protocol for post-attack workplace re-entry designed to prevent secondary traumatization
2. Practice in modifying the protocol to address business needs, available resources and the local infrastructure
3. Skills in negotiating business leaders' commitment to the execution of the protocol and long-term follow-up

The protocol was developed and implemented following the September 11th attacks in NYC. It was originally used to facilitate the reoccupation of the second corporate building to resume operations within Ground Zero. The success of the intervention is supported by:

- Low utilization of onsite intervention and support services after reoccupation
- Qualitative interviews with survivors following reoccupation
- Observation common environments in the workplace (e.g. cafeterias, conference rooms, lobbies)

The session will be highly interactive providing participants with hands on experience in modifying the re-entry protocol as well as role-playing negotiating with business leaders to secure their support.

Participants will be provided with:

- Revised version of the re-entry protocol
- Planning tool to modify the protocol for individual circumstances
- Training agenda for medical, mental health, security and facilities management personnel responsible for implementation of the protocol.

## Public/Academic Collaboration in the Care of Displaced Hurricane Katrina Survivors

Poster #F-191

(disaster)

Frank, Julia, MD<sup>1</sup>

<sup>1</sup>George Washington University, Washington, District of Columbia, USA

After Hurricane Katrina, three hundred survivors were airlifted to a large shelter in Washington, D.C. To meet their mental health needs, the DC Department of Mental Health and departments of psychiatry from three local medical schools developed an ad hoc plan for continuous professional coverage for shelter residents. Over three weeks, the academic insitutions provided and coordinated the services of twenty psychiatrist and resident volunteers, supporting on site, initial care for residents with severe syndromes including mania, depression and mental retardation, as well as grief reactions, acute stress disorder, and acute psychosomatic syndromes such as uncontrolled hypertension. Factors facilitating this response included prior collaboration between a local psychiatrist, DMH and the mental health service of the Red Cross, local licensure of all volunteers, and an emergency credentialing system set up for the shelter. Barriers to optimal response included erratic follow up due to the lack of transferability of medicaid benefits, divergence of Red Cross and DMH approaches to disaster mental health, and the lack of a system for tracking unsheltered evacuees or for sheltered evacuees after placement in other living situations. The experience provided valuable training for the residents involved and has stimulated several initiatives to improve preparation for future events.



## Generalized Anxiety Disorder after The 9/11 World Trade Center Attacks

Poster #F-192

(disaster)

Ghafoori, Bita, PhD<sup>1</sup>; Neria, Yuval, PhD<sup>2</sup>; Gameroff, Marc, PhD<sup>2</sup>; Olfson, Marc, MD, MPH<sup>2</sup>; Gross, Raz, MPH, MD<sup>2</sup>; Myrna, Weissman, PhD<sup>2</sup>

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**Objective:** To examine the relationships of past traumatic events, exposure to the 9/11 terrorist attacks, 9/11-related PTSD, and Generalized Anxiety Disorder (GAD) in a systematic sample of primary care patients interviewed approximately one year after the 9/11 attacks. **Method:** 1,146 adult primary care patients completed the following study instruments: Life Events Checklist, the Primary Care Evaluation of Mental Disorders, Patient Health Questionnaire, the PTSD Checklist-Civilian Version, and the Medical Outcomes Study 12-Item Short Form Health Survey. **Results:** 10.5 percent of the sample screened positive for current GAD. GAD was significantly more common among patients with (vs. without) 9/11-related PTSD (34 percent vs. 9 percent;  $p < .0001$ ). Individuals who were exposed to pre-9/11 traumas were 1.9 times (95 percent CI, 1.3-2.8) as likely to have GAD compared to individuals without pre-9/11 trauma exposure. Degree of past trauma exposure was found to be a significant predictor of GAD independent of PTSD ( $F[1,793] = 7.3, p = .007$ ). Among patients without 9/11-related PTSD, patients with GAD reported significantly worse physical ( $t[810] = 3.0, p = .003$ ) and mental health-related quality of life ( $t[810] = 12.6, p < .0001$ ). **Conclusions:** The findings suggest that GAD is related to trauma exposure, PTSD and significant functional problems. Clinical and policy implications will be discussed.

## Examining Symptom Intensity Longitudinally and the Moderational Role of Life Threat

Poster #F-193

(disaster)

Immel, Christopher, BA<sup>1</sup>; Moore, Rachel, BA<sup>1</sup>; Knepp, Michael, BS<sup>2</sup>; Jones, Russell, PhD<sup>2</sup>; Ollendick, Thomas, PhD<sup>1</sup>

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The purpose of the current poster was to examine the role of overall reported symptom intensity and life threat one month post-trauma and their ability to predict symptom intensity one year post-trauma. Through use of the Brief Symptom Inventory's Positive Symptom Distress Index, which assessed symptom intensity, and a Fire Questionnaire, which assessed life threat during the traumatic event, the authors examined the ability to predict overall symptom intensity one year post-trauma. Regarding symptom intensity, 65 percent of the variance one year post-trauma was found to be predicted by both symptom intensity and life threat as reported one month post-trauma ( $F=18.826, p < .001$ ). Symptom intensity one month post-trauma correlated with symptom intensity one year post-trauma ( $t=-.439, p < .001$ ). Reported life threat at one month post-trauma failed to correlate with symptom intensity at one month post-trauma ( $t=.175, p=.118$ ), however, life threat did correlate with symptom intensity at one year post-trauma ( $t=.406, p < .05$ ). A linear regression indicated that the relationship between symptom intensity one month and one year post-trauma is moderated by perceived life threat as reported one month post-trauma ( $t=2.955, p < .01$ ). Results indicate that conveyed life threat and symptom intensity reported shortly after traumatic events are valid predictors of symptom intensity longitudinally.

## Causes of Postwar Distress and PTSD Symptoms Ten-Plus Years After Yugoslavia's Dissolution

Poster #F-194

(disaster)

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The war between Yugoslavia and Croatia in 1991 devastated the ethnically mixed town of Vukovar, Croatia. When the Yugoslav army and Serb paramilitary captured the town, they ethnically cleansed Vukovar of Croats making it an ethnically pure Serb town. Between March 2002 and April 2003 95 Serbs, Croats and non-Serb minority men and women between ages 40 and 80 years were interviewed about their adjustment to postwar stresses such as returning to live beside former friends who had become enemies during the war. Data on demographics, belief changes, social support, PTSD symptoms and mental distress were collected. Findings: structural equation modeling tested a theoretical model of postwar distress and was significant, accounting for 54 percent of the variance for distress. Factors that increased distress included severer PTSD symptoms, the greater loss of confidence in others, more family members employed, and being male. Conversely, stronger social support decreased distress. PTSD symptoms were amplified by shorter time since return along with the more traumatic a person perceived his/her war experience to be. Stronger social support decreased symptoms of PTSD. **Conclusion:** to decrease postwar distress we must build survivors' confidence in others, decrease their PTSD symptoms, create a stronger economy and social support networks.

## Factors Related to Professional Help-Seeking in WTC Disaster Workers

Poster #F-195

(disaster)

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Although psychiatric distress is not uncommon among disaster workers, significant numbers never seek professional help (Jayasinghe et al, 2006a; Jayasinghe et al., 2006b). This study assessed the relation of demographic factors, insurance coverage, stigma concerns, and psychiatric symptoms to help-seeking in WTC disaster workers as well as their reasons for not seeking help. Workers ( $n=368$ ) who at one time met criteria for full or subthreshold posttraumatic stress disorder or depression responded to semi-structured, clinician-administered questions about professional help-seeking during psychiatric screening held approximately four to five years post-disaster. In this predominantly male (97 percent), white (62 percent), married (70 percent) sample with at least high school education (97 percent), 43 percent reported having sought professional help. Workers who sought help had evidenced more severe posttraumatic stress, depression, and overall psychiatric distress in prior years than those who did not (all  $p$ 's  $< .01$ ), but did not differ on other study variables. The majority of those who did not seek professional help (92 percent) reasoned that it was not needed. While rates of help-seeking were not negligible, interventions targeting disaster workers' recognition of symptoms and understanding of the utility of professional help are likely to further improve service use.

The presenting author is underlined.

## Examining the Effects of Hurricane Ivan and Hurricane Katrina on Children

Poster #F-196

(disaster)

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The study examined posttraumatic distress and in particular post-traumatic stress disorder symptomology in children across developmental stages that were affected by one of two hurricanes, Hurricane Ivan and Hurricane Katrina. Differences in symptom presentation across ages and the effects of loss and time in children affected by the hurricane were examined. Children were assessed for symptoms of PTSD, using two PTSD assessment measures. Additionally children were asked to complete a questionnaire that examined the amount of loss they experienced as a result of the hurricane; and parents were asked to complete an assessment on their children's behavior after the hurricane. Subjects included 135 children between the ages of 6 and 21 ( $M = 12.29$   $SD = 3.02$ ), and 75 parents. Results indicated that a child's cognitive age, as determined by Piaget's stages of development, was a predicting factor in the presentation of symptoms of PTSD. Additionally, results indicated that the reexperiencing cluster of symptoms was the best predictor of posttraumatic distress in children; and subjects' experience of loss during the hurricane was the best predictor of both reexperiencing symptomology and hyperarousal symptomology. Time was another factor that affected PTSD symptomology, with certain symptoms dissipating and recurring at different time periods.

## Outcome of Different Kinds of Support in a National Sample of Swedish Tsunami Victims

Poster #F-197

(disaster)

Michel, Per-Olof, MD, PhD<sup>1</sup>; Lundin, Tom, MD, PhD<sup>1</sup>; Bergh Johannesson, Kerstin, PsyD<sup>1</sup>; Schulman, Abbe, MD, PhD<sup>2</sup>; Hultman, Christina, PsyD, PhD<sup>3</sup>; Arnberg, Filip, MA<sup>1</sup>

<sup>1</sup>Department of Neuroscience, Uppsala University, National Center for Disaster Psychiatry, Uppsala, Sweden

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<sup>3</sup>Department of Medical Epidemiology and Biostatistics, Karolinska Institute, Sweden

Studies are conducted in the Scandinavian countries in order to learn more about the effects of the tsunami disaster in Southeast Asia in December 2004. A questionnaire was sent out 14 months after the disaster to 10 116 individuals that were returning from Southeast Asia in the weeks following the disaster, and registered by the national Police at Swedish airports. The questionnaire was returned by 4,932 individuals of which 4,910 were included. This presentation will focus on satisfaction and outcome of different kinds of support in the Swedish sample. More than 90 percent were satisfied with the immediate help from local population, close relatives, the help from other victims and local medical personnel. After returning home, 96 percent were satisfied with the support from close relatives, but fewer were contented with community and governmental support. Dissatisfaction with different kinds of support affected mental health negatively, whereas, those reporting that they did not need support were better off. These kinds of studies are important in order to improve the community support systems after disasters.

## Violence, Trauma, and Masculinity: Findings from The MSM Community in India

Poster #F-198

(intl)

Lary, Heidi, MHS<sup>1</sup>; Duvvury, Nata, PhD<sup>2</sup>; Rahman, P.K. Abdul, PhD<sup>3</sup>

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<sup>3</sup>University of Madras, Chennai, Chennai, India

Prior research has shown early trauma is related to relationship violence in adulthood. Examining connections between victimization and perpetration is vital to inform our understanding of the underpinnings of partner violence. In India, sex between men is seen as an additional sexual outlet to heterosexual sex. Married men often entertain same sex relationships while also engaging in heterosexual sex with their wives. Purposive, random sampling was utilized to recruit heterosexual and MSM men from migrant, urban, and rural groups within Delhi. The MSM category included 3 subcategories of self-identified sexual identities. Both quantitative ( $n=152$ ) and qualitative ( $n=25$ ) data collection methods were utilized to explore similarities and differences between concepts of masculinity, gender roles, and violent behaviors in marital and same-sex relationships across sexual categories. Preliminary correlation and regression analyses suggest that men who are traumatized in one relationship are more often the men who aggress in another, concurrent relationship. Though the Intergenerational Cycle of Violence demonstrates that early trauma can lead to aggression in later life and subsequent generations, the current study suggests a relationship between victimization and perpetration can also be demonstrated in concurrent relationships.

\*Men who have sex with men (MSM)

## Physical and Mental Health After Trauma: A Study of National Aid Workers

Poster #F-199

(intl)

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Humanitarian relief and development work is by nature stressful, particularly as aid workers are increasingly losing their privileged status and becoming military targets. Exposure to trauma and life stress is known to be associated with physical and mental health concerns. In consequence, the present study examined the hypothesis that mental health variables mediate the relationship between stressors and physical health in this population. Participants were 436 national aid workers working for an international aid organization in six countries in the Middle East and Eastern Europe. Mild-to-moderate symptomatology was noted on all measures of anxiety, posttraumatic stress (PTS), and physical health. Exposure to a life-threatening event was reported by 34 percent, and the average number of life stress events was 8.78. Analysis showed that PTS symptoms partially mediated the relationship between trauma exposure and physical health symptoms. Both reexperiencing symptoms and hyperarousal symptoms were salient in this equation, but a mutual suppressor effect was noted. PTS symptoms fully mediated the relationship between life stress and physical health. In addition, anxiety symptoms fully mediated the relationship between trauma exposure and physical health and between life stress and physical health. Implications for national aid workers will be discussed.



## Journalist's Responses to Trauma Exposure - Both Salutory and Adverse

Poster #F-200

(train)

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The preliminary findings of the Australian study focus on quantitatively examining both salutary and adverse responses to traumatic exposure experienced by 105 journalists. Measuring for PTSD, dissociation, depression, anxiety, stress, anger and posttraumatic growth the study suggests that whilst some journalists exposed to trauma experience adverse effects, many of those also experience the positive outcome of Posttraumatic Growth (PTG) as measured by the Posttraumatic Growth Inventory. PTSD was the only correlating factor with PTG in this study. The study proceeded to classify the journalist's trauma narratives using Singer and Blagov's classification system for self-defining autobiographical memories to determine integration of meaning for those experiencing both posttraumatic stress and posttraumatic growth outcomes. This qualitative aspect of the study raises questions about the nature of trauma response and its incorporation into the memory narrative post-trauma exposure.

## Promoting Preventive Programs and Trauma Therapy in Romania

Poster #F-201

(train)

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This paper presents a proposal for a structured plan to implement trauma therapy courses and preventive strategies in Romania. Even though Romania is well known for traumatic experiences - dictatorship, abandoned children, car accidents, natural disasters etc. - there is a strong need for coherent preventive and trauma therapy programs. The proposal is based on some facts: adolescents and young people (aged 20-40) are now the majority of clinical population in private practice, acknowledging the need for trauma education and therapy; only 1300 registered clinicians and psychotherapists for a population of 22 million people, working in medical settings and private practice; few courses that focus on trauma topics. The main objectives of the plan are: to train specialists in trauma therapy and trauma education through courses organized by academic institutions, professional and/or non-profit organizations; to publish educational materials on coping with trauma to normalize effects and psychological help in times of crisis, to organize support groups or crisis intervention teams. Examples are given for each type of objective. This paper is also a call for professional connection and collaboration with international trauma specialists.

## Smoking and Its Association with Other Health-Risk Behaviors in Veterans with Combat-Related PTSD

Poster #F-202

(prev)

Jakle, Katherine, MA<sup>1</sup>; Metz, Sarah, MS<sup>2</sup>; Didion, Lea, MA<sup>1</sup>; Drescher, Kent, PhD<sup>2</sup>; Foy, David, PhD<sup>3</sup>

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Veterans with PTSD evidence increased health-risk behaviors as compared to the general population (Buckley, Mozley, Bedard, Dewulf, & Greif, 2004). PTSD is established as a non-genetic pathway for smoking (McFall & Cook, 2006), but the relationship between smoking and other health-risk behaviors in the PTSD population is less well understood. This study investigates whether PTSD veterans are more likely to smoke if they exhibit other health-risk behaviors. 430 male veterans provided questionnaire data on certain health-risk behaviors upon entrance to residential PTSD treatment. The sample was 58 percent Caucasian with an average age of 53 years (SD=8). 48 percent were smokers, 40 percent were obese, 60 percent did not exercise, 19 percent reported aggressive driving, 25 percent reported making verbal threats and 13 percent reported

discontinuing medications without consulting a doctor. Adjusting for age and ethnicity, odds ratios and 95 percent confidence intervals were obtained from logistic regression (LR) with smoking as the outcome. Results suggest that PTSD veterans who exercise are less likely to smoke, veterans who are obese are less likely to smoke and veterans who are aggressive drivers are more likely to smoke. No other LR models were significant. Implications for health-risk prevention efforts in PTSD veterans are discussed.

## Smoking Prevalence and Desire to Quit Among Combat PTSD Veterans

Poster #F-203

(prev)

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Smoking is the leading cause of preventable death with more than 12 million mortalities attributed to cigarette smoking since 1964, with the rate remaining stable for several decades (United States Department of Health and Human Services, 2004). Individuals diagnosed with mental illness have significantly higher incidence of smoking than the general population. Recent research has shown that those diagnosed with a mental illness are twice as likely to smoke compared with individuals without a history of mental illness (Leonard et al., 2001). Clinical and epidemiological studies have indicated that when compared with the national average, higher rates of smoking are associated with Posttraumatic Stress Disorder (PTSD). Population data from a nationally representative sample indicate individuals diagnosed with PTSD are more likely to be current smokers (45 percent versus 22 percent) and have higher rates of lifetime smoking (63 percent versus 39 percent; Lasser et al.). Our sample of 637 veterans in treatment for PTSD, involved in conflicts ranging from Vietnam to Operation Iraqi Freedom, smoked at a rate of 44 percent with over 60 percent indicating a desire to quit. Ethnic differences in smoking rates were significant (54 percent African-American, 43 percent Caucasian, and 34 percent Hispanic). Results suggest the need to integrate smoking cessation within PTSD treatment.

## Anger: Risk Factor or Predictor for PTSD

Poster #F-204

(prev)

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The association between anger and PTSD is of interest because anger disrupts social support, and, in the context of PTSD, has been linked to interpersonal violence. One important question concerns whether anger is a predictor or result of PTSD. To date, there have been few studies which assess the role of anger both as a predictor and a consequence of PTSD. This work fills that gap by providing the first large, prospective dataset which addresses the relationships among pre-exposure trait anger, critical incident related PTSD symptoms and post-exposure state anger. The following hypotheses were tested in 180 police academy recruits, who were PTSD negative at baseline: 1) Trait anger during training will be positively associated with symptoms of PTSD at one year of police service; 2) State anger at one year will be positively associated with PTSD symptoms at one year, controlling for trait anger during training. Both hypotheses were confirmed, suggesting that trait anger is a risk factor for PTSD, but that PTSD also causes an increase of state anger beyond that accounted for by pre-exposure trait anger.

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## Predicting the Recurrence of Child Maltreatment: A Classification and Regression Tree Analysis

Poster #F-205

(prev)

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Research has suggested that recurrent child maltreatment may be best predicted by a combination of factors that vary across families. The present study used a pattern-centered analytic approach to examine the presence of subgroups of families at high-risk for recurrent maltreatment based on case characteristics and risk assessment items. Archival data from substantiated investigations during 2003 were collected from a Connecticut Department of Children and Families (DCF) county branch. Families (n=244) with a substantiated index case were followed forward 18 months to identify the presence of additional substantiated cases within the DCF system. Classification and Regression Tree (CART) analyses revealed that prior DCF involvement was the best predictor of future maltreatment. Further, risk items that were associated with recurrence were different for families with and without previous DCF investigations. More specifically, families with only prior unsubstantiated DCF investigations and poor child visibility within the community were at high-risk for recurrence. In contrast, families without prior CPS involvement that were not actively involved in case planning and had a history of domestic violence were at high-risk for recurrence. These findings inform prevention efforts designed to reduce recurrence by delineating subgroups of families at high risk for future maltreatment.

## Hardiness and Psychological Distress in a Cohort of Police Officers

Poster #F-206

(prev)

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Since police officers are frequently exposed to high stress situations, individual differences in the response to stress and trauma are of interest. We examined the association of hardiness components (commitment, control and challenge) with depression and posttraumatic stress disorder (PTSD) symptoms in police officers. The random sample included 105 officers (40 women and 65 men) from the Buffalo Cardio-Metabolic Police Stress (BCOPS) study baseline visit. Components of hardiness were measured using the Bartone (1999) 15-item hardiness scale. Depressive symptoms were measured using the Center for Epidemiological Studies Depression scale (CESD) and PTSD symptoms were measured using the impact of events scale (IES). Associations were assessed using linear regression analysis. Models were adjusted for age, education and marital status. Because of significant gender interactions, analyses were stratified by gender. The control subscale was significantly and negatively associated with CESD for both genders but was not associated with IES. Commitment was significantly and negatively associated with both CESD and IES in women. Men had negative but non-significant associations for commitment with CESD and IES. Gender differences in these associations show that for depressive and PTSD symptoms, hardiness may be more protective in female police officers than in male officers.

## Nicotine Dependence as a Mediator Between Insomnia and PTSD Among a Nationally Representative Sample

Poster #F-207

(prev)

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Research has demonstrated elevations in insomnia among persons with PTSD relative to people without psychopathology. Relatively less is known about the processes that may account for this relation. The current study aimed to evaluate the relations between insomnia and PTSD by examining nicotine dependence, as an index of nighttime nicotine withdrawal, as a mediator of this relation among a nationally representative sample of 5692 adults from the National Comorbidity Survey - Replication. Consistent with hypotheses, nicotine dependence partially mediated the relations between insomnia and PTSD after controlling for variance accounted for by diagnoses of major depressive episodes, drug and alcohol dependence, and gender. These findings support theoretical and empirical work suggesting persons with PTSD may be particularly reactive to nicotine withdrawal symptoms. This research also suggests smoking-related processes among these groups, such as nicotine withdrawal, may be accounting for other health problems, such as insomnia.

## Can Preparation for a Forensic Medical Exam Prevent Psychosocial Problems Among Abused Youth?

Poster #F-208

(prev)

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When it is suspected that a youth has experienced child sexual abuse (CSA), the youth is often referred for a comprehensive medical exam. Research among adult SA victims indicates that a brief video intervention that describes the procedures performed in the exam can help reduce acute distress and can help prevent later mental health problems and substance abuse (Aciero et al., 2003; Resnick et al., 1999). Thus, a video intervention has been developed to reduce acute distress at the time of the forensic medical exam and potentially prevent later psychosocial problems for youth who may have experienced CSA. The purpose of this study is to determine if there are differences in the psychosocial functioning in youth six weeks following the exam among those who observed the video at the time of the exam versus those who did not. Participants were youth (4-15 years) and their caretakers randomly assigned to view the video or to receive standard practice. Distress before, during, and after the exam was assessed. Six weeks following the exam, information on the psychosocial functioning of the youth was collected via phone interview and psychometric measures. Results of the six-week follow-up will be presented and discussed in the poster.



## Health-Risk Behaviors Among Female Veterans with Chronic Posttraumatic Stress Disorder

Poster #F-209

(prev)

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Health-risk behaviors among veterans are of great concern; specifically, obesity and smoking, which are both more prevalent among veterans than non-veterans (Das et al., 2005; Davis et al., 2003). However, less is known regarding the occurrence of these behaviors among female veterans. Prevalence data will be presented on multiple health-risk behaviors gathered from 66 female veterans upon entrance into residential treatment for chronic PTSD. Sample was 68 percent Caucasian with a mean age of 46 years (SD=8). Significant effects found between female veterans' Body Mass Index (BMI) scores (M=30.8) as compared to the female national average BMI scores (M=28.2) obtained from the CDC gathered until 2002 (Ogden, 2007), indicating that the BMI scores of female veterans were significantly higher than those of women in the general population. More recent data indicates that 18 percent of women in the general population were current smokers (NCHS, 2006) versus 47 percent of the female veterans entering residential treatment. This rate is higher than that reported in prior research (Davis et al., 2003), thus indicating the need to address this growing concern among female veterans. Implications for the prevention of health-risk behaviors of female PTSD veterans are discussed.