

have reported hyperresponsivity in the amygdala and dorsal anterior cingulate cortex, and hyporesponsivity in the ventral medial prefrontal cortex in PTSD. Recent research using a monozygotic twin design has suggested that exaggerated glucose metabolism and fMRI activation in the dorsal anterior cingulate is a familial risk factor for the development of PTSD after psychological trauma. In summary, several brain regions in the "fear network" appear to function abnormally in PTSD, and functional abnormalities in one of these regions (dACC) appear to act as a familial risk factor. Future research using twin and longitudinal designs will be needed to determine whether other functional abnormalities act as risk factors versus acquired signs of PTSD.

Participant Alert: Participant distress is extremely unlikely. Some participants who dislike viewing MRI images of the brain may be uncomfortable viewing such images in this presentation.

Should PTSD be Included in a New Cluster of Post-Event Psychiatric Disorders?

(Abstract #198300)

DSM-V (Asses Dx, Practice)

Grand Ballroom, 4th Floor

Keane, Terence, PhD¹

¹Boston VA Healthcare System, Boston, Massachusetts, USA

Over the past thirty years, we've entertained the inclusion of PTSD in the overarching categories of Anxiety Disorders and Mood Disorders. New data are emerging that suggest that PTSD belongs in neither category; it shares some characteristics in common with each. PTSD also shares characteristics with personality disorders and with dissociative identity disorders. The current presentation focuses on the need for reconsidering the matter entirely. PTSD might well be included in a distinct category of conditions that are roughly viewed as post-event psychiatric disorders. A rationale for this model will be presented as will data supporting the creation of a new overarching category that will encompass several extant psychiatric conditions under this diagnostic category. Evidence will be drawn from psychometric studies, from neurobiological studies, longitudinal cohort research, and behavioral genetics. The importance of viewing trauma symptomatology as dimensional, secondary to recent taxonomic studies will be highlighted.

Integrating Human Rights Principles Into Clinical Practice: Working With Refugees and Asylum Seekers

(Abstract #198266)

Master (Civil Ref, Cul Div)

Crystal Room, 3rd Floor

Steel, Zachary, MCLINPSYCH, MAPS¹

¹School of Psychiatry, University NSW, Center for Population Mental Health Service, Liverpool, New South Wales, Australia

In both western countries and in the developing world, refugee and asylum seekers face multiple ongoing threats to their mental health and well being. Many of these challenges are a direct result of state policies of deterrence which breach fundamental human rights principles. The clinician working with these populations must face these difficulties if they are to provide support, care and treatment to their clients. This workshop explores how an understanding of human rights principles can help the clinician in their therapeutic work in these and other settings. The three broad generations of human rights: civil and political rights; economic, social and cultural rights; and group and collective rights will be reviewed. The position of the therapist is rendered more complex as he or she is also a member of the society that is responsible for the human rights violations experienced by their clients. Threats within each of these broad domains can, thus, not only directly affect the client but undermine the therapeutic relationship. The experience of clinicians in Australia over the previous decade has underscored the need to understand clinical practice within a broader socio-political context. Similarly the experience of

clinicians working in post-conflict environments underscores the need to develop a broader understanding of clinical care and treatment. By way of case example the workshop will illustrate the dangers facing the clinician who fails to take account of the broader human rights context of treatment. The final section will demonstrate practical steps for integrating core human rights principles and analysis into cognitive behavioural clinical formulations and treatment.

Profiles of Resilience, Coping, and Adaptation: Survivors Tell Their Stories

(Abstract #196310)

Media Presentation

Salons 4-6, 3rd Floor

Hollander-Goldfein, Bea, PhD¹; Perlo, Aviva, MSW¹

¹Council for Relationships, Transcending Trauma Project, Philadelphia, Pennsylvania, USA

In this DVD of profiles of resilience, coping, and adaptation, ten survivors of trauma and their families convey first-hand accounts of war, genocide, gun violence, sexual abuse, close encounters with suicide, and what it is like living with limited mobility. The populations featured vary in age, cultural background, and types of trauma endured. The interviewer's questions focus on coping, adaptation, and resilience, rather than historical details. The narratives address the short-term and long-term impact of trauma, Posttraumatic stress and Posttraumatic growth, as well as the role of psychotherapy in the process.

Common findings emerge among the diverse interviews. Whether a refugee from Uganda, a Holocaust survivor, a survivor of sexual abuse by clergy or a survivor of gun violence; survivors demonstrate mechanisms of coping and adaptation in the aftermath of extreme trauma. As we witness survivors telling their stories, nuances in tone, intonation, and emotional emphasis offer a increased understanding of what it means to survive trauma and how to treat survivors. The impact of trauma does not dissipate but its negative affect diminishes over time.

Participant Alert: Distress may result from watching this DVD and hearing survivors tell their stories of encountering trauma.

The European Network for Traumatic Stress: Evidence Based Practice for Disaster Victims in Europe

(Abstract #196144)

Symposium/Panel (Disaster, Cul Div)

Salon 3, 3rd Floor

Witteveen, Anke, PhD¹; Nordanger, Dag, PhD²; Ajdukovic, Dean, PhD³; Bisson, Jonathan, DM, FRCPSYCH⁴; Olff, Miranda, PhD¹; Johansen, Venke A., PhD²; Tavakoly, Behrooz, PhD⁴

¹Psychiatry, Academic Medical Center Amsterdam, Amsterdam, Netherlands

²Resource centre for violence, traumatic stress and suicide prevention - Western Norway (RVTS-West), Helse Bergen - Haukeland University Hospital, Bergen, Norway

³Department of Psychology, University of Zagreb, Zagreb, Croatia

⁴Department of Psychological Medicine, Cardiff University, Cardiff, Wales, United Kingdom

At present post disaster activities and plans seem to vary widely across the European region. The European Network for Traumatic Stress (TENTS) aims to build capacity of evidence based and effective post disaster mental health services in countries across Europe. Findings from two main elements of TENTS will be discussed.

Mapping Existing Services for Post-Disaster Psychosocial Care Across Europe: Quantitative Findings

The European Network for Traumatic Stress (TENTS) aims 1) to map the current situation of posttraumatic stress treatment for victims of disasters in countries and regions across the European region; 2) to compare results from the mapping analysis with an evidence based model developed along with a systematic review

of the literature on posttraumatic stress treatment and psychosocial support for disaster victims; 3) to develop dissemination materials (teaching materials) tailored to the local needs in every country and 4) to start local implementation of the disseminated materials. This presentation will outline the quantitative results of the mapping work package (aim 1). We gathered address information of over 500 services involved in post disaster psychosocial health care from 33 countries and regions in Europe and invited them to participate in our study. The responding services were asked to fill out a web-based questionnaire about planning and coordination of post disaster psychosocial care, availability of human resources, screening instruments and interventions, and training and supervision of staff. Results of the questionnaire will be presented, area-specific needs will be analysed and challenges of disseminating and implementing services in a post-disaster environment will be discussed.

Post Disaster Structures and Resources in Romania and Norway

As part of The European Network for Traumatic Stress (TENTS) s ongoing process of mapping existing structures and resources on post disaster psychosocial follow-up throughout European countries, the present study investigates the situation in Romania and Norway respectively. Data on targeting structures, resources and working methods of post disaster services are partly collected through the mapping questionnaire developed by TENTS and partly through semi-structured individual and focus group interviews with key professionals in each country, going in depth on the same issues. Preliminary results show that the two settings differ substantially in historical, socioeconomic and socio-cultural terms. In the presentation of the results we will address how contextual differences are reflected in the organization and content of post disaster services, and in the perceptions of survivors' needs. In particular, certain socio-cultural factors will be discussed in terms of their implications for challenges and considerations' in the final capacity building phase of the TENTS project, where dissemination material tailored to each setting shall be developed and implemented.

Services and Psychosocial Care After Disasters—Qualitative Findings from South East Europe

Mapping of services for psychosocial care of trauma victims after disasters within The European Network for Traumatic Stress (TENTS) included qualitative data. Interviews and focus groups were done with key informants in Croatia, Bosnia & Herzegovina, Serbia, Slovenia and Macedonia. They included mental health providers and managers from governmental and non-governmental services involved in serving traumatized populations (psychiatric hospitals, community mental health centres, rescue services, disaster planning authorities, voluntary organizations, Red Cross, professional associations). The number of informants from 9 (Croatia, Serbia) to 3 (Slovenia, Macedonia) reflect the current level of delivery of psychosocial care and the stage of planning services after disasters. In Croatia, Slovenia and Serbia, the master planning is in the early stage, while it is still not on the agenda in Bosnia & Herzegovina and Macedonia. More experiences with traumatized survivors, mostly resulting from the recent war, is related to more advanced services and planning of psychosocial care for victims of disasters. Croatia has a network of 136 providers specifically trained in community-based psychosocial crisis interventions capable to respond on a short notice. It was developed within a non-governmental organization over 13 years and will become a part of the national disaster response.

Psychosocial Model of Care Following Disasters: Achieving Consensus Using the Delphi Method

Despite increasing research that has evaluated the efficacy of approaches aimed to prevent or reduce distress following traumatic events there is little evidence on which to base a psychosocial model of care. The European Network for Traumatic Stress decided to use the Delphi method to achieve a consensus on what should be included in an optimal model of care by consulting individuals with an expertise in this area. Service users,

clinicians, researchers and planners all took part. 106 (87%) of the individuals approached took part. The Delphi process comprised 3 rounds. During the first round individuals were presented with a set of statements and asked to rate how important they felt they were using a visual analogue scale. They were also asked to comment on their responses. During the second round the results were fed back to participants and they were asked to reconsider their views in the light of the results and comments of other participants. Round three was used to address issues that had not already been resolved using the same methodology. The results were used to help prepare a model of care which will be presented along with detailed results of the Delphi survey.

Addressing Barriers to Service Utilization for Returning Iraq and Afghanistan Veterans and Families
(Abstract #196178)

Symposium/Panel (Mil Emer, Clin Res) Adams Ballroom, 6th Floor

Scotti, Joseph R., PhD¹; Polusny, Melissa, PhD²; Unger, William, PhD³; Whealin, Julia, PhD⁴; Lyons, Judith A., PhD⁵; Majewski, Virginia, PhD, MSW⁶; Tunick, Roy, EDD⁷; Heady, Hilda, MSW⁸; Erbes, Christopher, PhD⁹; Arbisi, Paul, PhD¹⁰; Thuras, Paul, PhD¹¹; Reddy, Madhavi, MA¹²; Kehle, Shannon, PhD¹³; Erickson, Darin, PhD¹⁴; Murdoch, Maureen, MD, MPH¹⁵; Rath, Michael, MD¹⁶; Courage, Cora, PsyD¹⁷; Woolaway-Bickel, Kelly, PhD¹⁸; Southwick, Steven, MD¹⁹

¹Department of Psychology, West Virginia University, Morgantown, West Virginia, USA

²Psychiatry (116B), Minneapolis VA Medical Center and University of Minnesota Medical School, Minneapolis, Minnesota, USA

³Psychology, PTSD Clinical Team, Providence VA Medical Center, Providence, Rhode Island, USA

⁴VA Pacific Islands Health Care Network, National Center for PTSD, Pacific Islands Division, Honolulu, Hawaii, USA

⁵Trauma Recovery Program, G.V. "Sonny" Montgomery VAMC, South Central MIRECC & University of Mississippi Medical Center, Jackson, Mississippi, USA

⁶Department of Social Work, West Virginia University, Morgantown, West Virginia, USA

⁷Department of Counseling, Rehabilitation Counseling, & Counseling Psychology, West Virginia University, Morgantown, West Virginia, USA

⁸Office of Rural Health, West Virginia University, Morgantown, West Virginia, USA

⁹Psychiatry (116B), Minneapolis VA Medical Center, Minneapolis, Minnesota, USA

¹⁰School of Public Health, University of Minnesota, St. Paul, Minnesota, USA

¹¹Center for Chronic Disease Outcome Research, Minneapolis VA Medical Center, Minneapolis, Minnesota, USA

¹²Minnesota Army National Guard, Mankato, Minnesota, USA

¹³Minnesota Army National Guard, Evanston, Wyoming, USA

¹⁴National Center for PTSD, Pacific Islands Division, Honolulu, Hawaii, USA

¹⁵Psychiatry, Yale University, West Haven, Connecticut, USA

We report on the impact of the wars in Iraq and Afghanistan on returning veterans. Findings related to under-utilization of services will be presented, including problems of access, cultural and personal beliefs, and lack of satisfaction. Means for overcoming barriers and providing access and support to veterans and families will be discussed.

WV Veterans Returning From Iraq and Afghanistan: Impact on Personal and Family Functioning

A state-wide mail survey of 1,000 West Virginia Veterans who had one or more deployments in Iraq or Afghanistan was conducted over the period of November 2007 to March 2008. The respondents (10% female; mean age = 34) completed basic demographics (income, employment, education, etc.) and measures of combat exposure, PTSD, depression, and personal and family functioning. We will present the relations between several indices of combat exposure and reported symptoms of PTSD and/or depression. Overall, 45% of the sample met criteria for PTSD and/or

depression. Veterans with PTSD and or depression (P/D) were more likely than Other Veterans (OV) to report statistically significant declines in personal and family functioning; including general physical health, family relationships, social support, and the behavior and academic progress of their children. Mediators and moderators of the impact of exposure and psychological symptoms on family functioning will be presented. Further, those veterans who served with National Guard units (versus regular Army) reported higher levels of symptoms. The implications of these findings for identifying veterans in need and providing services to them and their families will be discussed. [Scotti and colleagues]

Mental Health Risk and Resilience in OIF Deployment National Guard Soldiers: Prospective Predictors

Combat exposure and deployment stressors are associated with the risk of PTSD, depression, and alcohol abuse. Understanding factors that increase risk and promote resilience is critical; existing literature is limited by retrospective, cross-sectional designs, and a focus on active duty personnel. Little is known about individual factors influencing outcomes among National Guard soldiers deployed to OEF/OIF. The Readiness and Resilience in National Guard Soldiers (RINGS) Cohort Study is a prospective, 4-wave investigation of the effects of pre-deployment, deployment, and post-deployment risk and resiliency factors on mental health outcomes, service utilization, and military retention/attrition. In March 2006 (a month prior to OIF deployment), a representative sample of 522 male and female National Guard soldiers completed a battery of instruments that assessed pre-deployment risk factors and baseline mental health. Using mail surveys, we plan to collect three waves of follow-up data from this cohort. We will present findings from the initial post-deployment assessment (74% current response rate, with non-response appearing minimal). Prospective pre-deployment predictors of initial post-deployment psychological and social functioning will be examined. Implications of the findings for intervening with returning military personnel will be discussed. [Polusny and colleagues]

Developing Outreach, Education, Prevention and Mental Health Services for Returning OEF/OIF Veterans

The PTSD Clinical Team (PCT) at Providence VAMC has provided mental health services to veterans for 18 years and has actively treated stress-related problems of veterans returning from Iraq and Afghanistan. Early assessment and treatment of PTSD and comorbid disorders related to war exposure is critical. A priority for the PCT has been outreach to both service members and families, with about 6,000 contacts over the past five years. By providing education and establishing contacts with returnees and their families, we can reduce barriers and improve access to care by increased awareness of signs/symptoms of PTSD and other problems. The clinical needs of newly returned veterans are assessed individually. Family evaluations are done, as needed. To date, the PCT has provided treatment to about 850 veterans of Iraq and Afghanistan. We have identified and addressed barriers to veterans seeking mental health services. The treatment focus is rehabilitation, health promotion, and preventative care; the goal is recovery of function to the greatest degree possible. The program was developed in response to the barriers to service utilization identified, and employs the Clinical Practice Guidelines for Management of Posttraumatic Stress Disorder (VA/DoD National CPG Council, 2003). Data on outreach effectiveness and entry into follow-up treatment will be discussed. [Unger and colleagues]

Cultural and Logistical Barriers to Mental Health Care of OIF/OEF Veterans in the Pacific Islands

Whereas the majority (78-86%) of war returnees acknowledge a need for help with mental health issues, less than one third (13-27%) follow through with mental health services (Hoge et al, 2004). We designed the present study to clarify the nature of barriers to mental health care among an ethno-culturally diverse group of OIF/OEF veterans referred for VA treatment for trauma-related problems. Forty subjects completed the Perceived Barriers to Care (Hoge et al., 2004), the Cultural Barriers to Care (Whealin, 2007), and the Beliefs about Psychotropic Medications and Psychotherapy

(Bystritsky et al., 2005) inventories. Results showed that the majority reported beliefs and/or logistical obstacles that impeded their willingness and ability to receive care in traditional mental health clinics. Additionally, cultural beliefs correlated with attitudes about psychotropic medications and psychotherapy. Based upon these results, we will present tactics to enhance treatment outreach programs, and discuss methods for incorporating the preferences and beliefs of veterans into treatment. [Whealin and colleagues]

The North Sea Oil Rig Disaster of 1980 Revisited and a Preventive Rock Slide Study

(Abstract #196223)

Symposium/Panel (Disaster, Res Meth)

Salons 7-9, 3rd Floor

Hoyer Holgersen, Katrine, PsyD¹; Boe, Hans Jakob, PsyD¹; Holen, Are, MD, PhD²; Rod, Kjetil, MA³

¹Dept. of Neuroscience, Norwegian University of Science and Technology, Trondheim, Norway

²Dept. of Neuroscience (INM), Norwegian University for Science and Technology, Trondheim, Norway

³Dept. of Neuroscience, Norwegian University of Science and Technology, Molde, Norway

The first three presentations cover preliminary findings from a 27-years follow-up study of survivors from the North Sea Oil Rig Disaster (1980). Whenever possible, the long-term and current data from survivors will be compared with matched oil rig workers unexposed to disaster; they also have been studied over decades. The fourth presentation will focus on preventive communication and risk perception in relation to a major potential rock slide.

Predicting Posttraumatic Growth in an Aging Disaster Population

Predictors of current reports of Posttraumatic growth were explored in men surviving the North Sea Oil Rig Disaster 27 years ago. In 1980, the survivor population included 75 men. In 2007, 45 survivors remained and completed the Posttraumatic Growth Inventory as part of a larger study. Past predictors were collected by self-reports and interviews done within the first year post disaster, after 1 year and after 5 years.

From the maximum obtainable PTGI score of 105, the survivors had a mean score of 48.4 (SD 20.44), thus reporting modest PTG. Preliminary analyses indicate positive correlations between PTG levels and concurrent symptom scores, and lower correlations between current PTG reports and past symptom levels. Current and past predictors of symptom levels and personality features will be examined and presented in a long-term perspective.

Reactivation of Posttraumatic Stress in Disaster Survivors

The prevalence of re-occurring episodes of Posttraumatic stress symptoms were studied in 50 disaster survivors in the wake of the North Sea Oil Ring Disaster 27 years ago. The survivors had been assessed by research methods in a longitudinal design with four measure points. Reactivation was assessed retrospectively from the disaster till the follow-up study 27 years later. The evaluation of each case was supported by data collected at 6 months, 1 year, and 5 years after the primary disaster. Reactivation were reported in 18 % (n=9) of the survivors. In six cases (12%), the reactivation fulfilled the *DSM-IV* diagnostic criteria for PTSD. The remaining three cases were sub-syndromal and did not meet the C criterion. All nine cases reached the B criterion. The reported precipitating events which instigated reactivation ranged from minor triggers to full A1 criterion stressors. Posttraumatic bridge symptoms and predictors of reactivation will be explored, and also, some case details will be shared.

Peritraumatic Death Threat as a Long-Term Predictor

Interviews with survivors from the North Sea Oil Rig Disaster were carried out right after the disaster, and again, after 5 and 27 years post trauma. One interview item addressed the perceived peritraumatic death threat, i.e., how the survivors saw their chances of dying or surviving in the midst of the disaster. Responses to these items remained rather stable over time, and also, they served as

predictors of symptom levels in a short-term and long-term perspective. In addition, the roles played by intermediate variables such as personality and the quality of the childhood environment of the survivors will be presented and discussed.

Living With Rock Slide Risk – People’s Communication Needs and Perception of Risk

On the west coast of Norway, about 3000 people are living in a danger zone under the threat of a major rock slide of 40-70 million cubic meters, which may splash into the fjord below and cause a tsunami. Waves estimated up to 40 meters may hit the communities along the fjord. A research project has been initiated to provide answers to two central questions: What factors may make the public comply with evacuation plans? What risk messages seem more effective in meeting the information and communication needs of the public? A similar disaster happened nearby in 1934 and caused 40 deaths. In the analyzes presented, subgroups will be contrasted: those living in areas likely to be hit when a major rock slide occurs, and those living above these sea levels; those with relatives involved in the former rock slide in 1934, and the rest, etc. Moreover, psychosocial data, personality issues and locus of control will be explored in relation to the perceptions of risk, and also, what are the possible implications for mass communication in such situations? An anonymous questionnaire survey was distributed to all 875 people above 18 years living in the communities under threat. A total of 400 questionnaires were returned. Preliminary data will be presented and discussed.

Children Living With Fear: The Effects of War, Terrorism, and Domestic Violence

(Abstract #196297)

Symposium/Panel (Child, Civil Ref) State Ballroom, 4th Floor

Weatherill, Robin, PhD¹; Nyaronga, Dan, PhD²; Posada, German, PhD³; MacDermid, Shelley, PhD⁴; Kamboukos, Demy, PhD⁵; Hume, Elizabeth, PhD⁶; Cloitre, Marylene, PhD⁵; Dekel, Rachel, PhD⁶; Green, Ohad, BSW⁶; Lavie, Tamar, PhD⁷; Ross, Leslie Anne, PsyD⁸; Larson, Linnea C., MA⁸; Gaba, Rebecca, PhD⁸; Seilicovich, Irma, MFT⁹; Foy, Patrick, BA⁸; Foy, David W., PhD¹⁰

- ¹National Center for PTSD, VA Boston Healthcare, Boston, Massachusetts, USA
- ²Military Family Research Institute, Purdue University, West Lafayette, Indiana, USA
- ³Child Development and Family Studies, Purdue University, West Lafayette, Indiana, USA
- ⁴College of Consumer and Family Sciences, Purdue University, West Lafayette, Indiana, USA
- ⁵Institute for Trauma and Resilience, NYU Child Study Center, New York, New York, USA
- ⁶The Louis and Gabi Weisfeld School of Social Work, Bar Ilan University, Ramat-Gan, Israel
- ⁷Shaar Hanegev Municipality, Rehovot, Israel
- ⁸Children’s Institute, Inc, Los Angeles, California, USA
- ⁹The Village Family Services, North Hollywood, California, USA
- ¹⁰Graduate School of Education & Psychology, Pepperdine University, Encino, California, USA

This symposium addresses the effects of domestic and war-related trauma on children. Presentations include data on children affected by domestic violence, parental military deployment, the 9/11 attacks in NYC, and Israeli children who experienced the Second Lebanon War. A treatment model for children exposed to domestic violence will be presented.

Relationships Between Parental Deployment and Child Adjustment in Military Families

Previous studies have shown a relationship between military deployment and children’s well-being (Cozza, Chun, & Polo, 2005) in military families. Young children may be particularly vulnerable to the effects of parents’ military deployment due to their lack of cognitive maturity and dependence on parents for their security. However, to date, few studies of child-parent attachment

relationships have been conducted with military samples. Using survey data from 367 English-speaking and Spanish-speaking mothers, this study examines relationships among the frequency, duration, and nature of deployment, parents’ behavior, and children’s behavior, in particular behaviors that may indicate attachment (in)security. Mothers of preschool children (3-5 years old) provided information on the variables of interest. Regression analyses examine whether the nature of military deployment (e.g., combat or non-combat) is related to parents’ reports of children’s behavior, over and above the frequency and duration of deployments. Our analyses also investigate the moderating effects of parents’ behavior and control for parents’ well-being.

Multiple Traumatization, Psychopathology and Resilience in Children Exposed to the 9/11 World Trade Center Attacks

While it is known that exposure to cumulative trauma greatly heightens children’s risk for PTSD, there is as yet no evidence regarding the possible influence of traumatic stressors on children’s resilience. We evaluated resilience, defined as an absence of symptoms of PTSD, depression and anxiety as well as the presence of normative levels of adaptive functioning among 203 middle-school children living in a largely immigrant community in downtown New York City that were directly exposed to the 9/11/01 attacks on the World Trade Center. Measures of self-reported PTSD (CPSS-SR), functional capacities (BASC-2) and lifetime exposure to traumatic stressor were obtained. Results indicate that among those children exposed to 9/11 who did not experience other traumatic stressors, 68% did not develop any psychiatric symptoms and 58% also maintained normative levels of functioning. However, with every additional traumatic stressor, both presence of psychopathology and risk for problems with adaptive functioning increased significantly. Among children with 3 or more traumatic experiences in addition to 9/11, only 28% were symptom-free and only 18% were both symptom free and functioning at normative levels. The data suggest that cumulative trauma results not only in increasing levels of psychopathology but also in diminishing adaptive capacities.

Emotional Reactions of Israeli Adolescents Following the Second Lebanon War

The current study examined the emotional reactions of Israeli adolescents following the Second Lebanon War and the contribution of gender, level of exposure, earlier traumatic events and relationships with the mother to the variability of these reactions. 3000 adolescents in the ages of 13-14 from the northern parts of Israel participated in the study one year after the war. Participants completed self-report questionnaires assessing socio-demographic background, PTSD, additional psychiatric symptoms, well being and their relations with their mothers (Parental Bonding Instrument). The rate of PTSD among the adolescents was 10%, while the rate of the girls among this group was almost doubled than that of the boys. Subjective fear during the war and earlier traumatic events contributed negatively to emotional reactions. Level of mother’s care, as perceived by the child, contributed negatively to emotional reactions, while level of mothers’ protectiveness contributed positively. The study highlights the resiliency of these adolescents. In addition, the study identified that gender, level of subjective exposure, earlier traumatic events and relations with the mother and especially protectiveness are risk factor for emotional distress.

Developmental Differences in Self-Reported Domestic Violence Exposure and Posttraumatic Stress Disorder in Children and Adolescents

Research is needed to inform developmentally appropriate assessment and treatment of PTSD in children and adolescents exposed to domestic violence. This study compared self-reported domestic violence exposure and PTSD symptoms between two groups of children representing two developmental stages: young children (ages 5-10, N = 126) and adolescents (ages 11-18, N = 70). Participants completed standardized self-report measures assessing PTSD (Los Angeles Symptom Checklist – LASC – Adolescent Version, and LASC-Child Version), and exposure to

domestic violence (Conflict Tactics Scale - CTS, and CTS - Child Version) as part of the intake process for domestic violence treatment groups. Clinically significant PTSD symptom levels were found in 20.8% of the children and 17.7% of the adolescents, and domestic violence severity was associated with PTSD symptom levels after controlling for other abuse. The top PTSD symptoms reported by the two age groups differed, suggesting developmental differences in PTSD symptomatology. An overview of Children's Institute's Group Treatment Model for Domestic Violence will also be presented.

Acute Medical Interventions for Prevention and Treatment of PTSD: Considerations and New Findings

(Abstract #196394)

Symposium/Panel (Bio Med, Clin Res)

Salon 1, 3rd Floor

Mouthaan, Joanne, MSC¹; Visser, Rogier, MSC¹; Gabert, Crystal, BS²; van Stegeren, Anda, PhD³; Zatzick, Douglas, MD, PhD⁴; Olf, Miranda, PhD¹; Witteveen, Anke, PhD¹; De Vries, Giel-Jan, MA, MSC¹; Goslings, Carel, MD, PhD⁵; Sijbrandij, Marit, PhD¹; Humphrys, Kimberly, RN⁶; Fallon, William, MD⁷; Delahanty, Doug, PhD⁸; Roozendaal, Benno, PhD⁹; Kindt, Merel, PhD³; Wolf, Oliver, PhD¹⁰; Joels, Marian, PhD¹¹

¹Department of Psychiatry, Center for Psychological Trauma, Academic Medical Center, Amsterdam, Netherlands

²Kent State University, Ravenna, Ohio, USA

³Department of Clinical Psychology & Cognitive Science Center, University of Amsterdam, Amsterdam, Netherlands

⁴University of Washington, Seattle, Washington, USA

⁵Trauma Unit, Department of Surgery, Academic Medical Center, Amsterdam, Netherlands

⁶Division of Trauma, Summa Health System, Akron, Ohio, USA

⁷Summa Health System, Akron, Ohio, USA

⁸Kent State University, Kent, Ohio, USA

⁹Center of Neurobiology of Learning and Memory, University of California, Irvine, California, USA

¹⁰Faculty of Psychology, Department of Cognitive Psychology, Ruhr-Universität Bochum, Bochum, Germany

¹¹SILS-CNS, University of Amsterdam, Amsterdam, Netherlands

There is a growing interest in pharmacological interventions for the prevention and treatment of PTSD, especially because of the need for easily implementable early interventions and the need to accommodate patients who have difficulties completing psychotherapeutic interventions. This symposium presents an overview of current research, and discusses considerations for pharmacological research from a real world perspective.

Acute Medication and Trauma-Related Psychopathology in Level I Trauma Center Patients

After traumatic injury, many patients receive acute medical interventions with pharmacologic agents which could have secondary psychological effects. Some pharmacological compounds (i.e. corticosteroids, beta-adrenergic antagonists) are currently being tested in randomized controlled trials for their preventive effects on PTSD, whereas other frequently prescribed medication (i.e. analgesics) –despite possible psychological effects– is not. In order to inform researchers of the posttraumatic effects of frequently prescribed and administered acute medication, this study focuses on the relationship between real world medication administered to injury patients at a Level I trauma center and subsequent trauma-related psychopathology. As part of a larger prospective study on the incidence and prediction of trauma-related psychopathology in injury patients (called Trauma TIPS), we collected data on prescribed and administered medication of Level I trauma center patients (N=530) within the first 4 weeks post-injury. Trauma-related psychopathology (i.e. PTSD, depressive disorders, anxiety disorders) is assessed at 1 week, 1 month, 6 months and 12 months. The findings of the study will be presented and discussed in terms of possible considerations for secondary prevention of PTSD after injury.

Salivary Cortisol and PTSD Symptom Clusters in Rescue Workers

Although low basal cortisol levels have inconsistently been related to PTSD, current research aims to investigate the inhibiting effects of glucocorticoids on PTSD symptomatology. The results of the current study might add some important findings to this research. Participants (N=1088 rescue workers) were assessed 8.5 years after exposure to the Amsterdam air disaster in 1992. Cortisol from saliva was collected either in the morning, at noon, or afternoon. After controlling for time of sampling and other potential cofounders, cortisol levels of rescue workers with PTSD did not differ from colleagues with no PTSD (Exp(B) = 0.80 (CI 0.53-1.19), p>0.05). Nor was there a difference between subclinical and clinical PTSD patients (Exp(B) = 0.99 (CI 0.57-1.74), p>0.05). When looking at symptom clusters, a significant group effect in the group of rescue workers with (subclinical) PTSD (N=173) on mean cortisol level was found (F(3, 169)= 2.82, p=0.04). Post-hoc analyses indicated that this effect was mainly due to the significantly lower mean cortisol levels in the intrusion cluster across all sampling times (total M=10.8, SD=5.4) compared to the mean cortisol levels in the arousal cluster (total M=14.4, SD=7.1) (p=0.025). Findings will be discussed.

Early Secondary Interventions With Hydrocortisone for In-Hospital Trauma Patients

Secondary pharmacological interventions hold promise for preventing/reducing symptoms of PTSD. However, few randomized trials have examined the efficacy of pharmacological agents. Participants were recruited from a level 1 trauma center within 12-hours post-trauma. Participants were randomized to receive hydrocortisone (20mg bid) or placebo for sixteen days. Symptoms of PTSD and comorbid disorders were assessed 1- and 3-months post-trauma. At 1-month post-trauma, preliminary results have suggested that participants who received hydrocortisone had lower PTSD symptoms (M=28.1, SD=24.7) than those receiving the placebo (M=35.3, SD=22.5), (F(2,14)=2.80, p=.095). Groups differed significantly on hyperarousal symptoms such that hydrocortisone recipients reported lower hyperarousal symptoms (M=7.3, SD=6.2) than those receiving the placebo (M=14.0, SD=11.2), (F(2,14)=6.95, p=.008). Updated findings of this on-going protocol will be presented.

Interaction of Noradrenaline and Cortisol on Brain Activation and Emotional Memory

Stress hormones like noradrenaline and cortisol are released during emotionally arousing events and prepare the body for an effective response to the stressor. Stress within the learning context facilitates encoding of information. Several studies have shown that particularly aversive information is well remembered which can be very disturbing in the case of Posttraumatic memories in patients with PTSD. Animal studies have shown that both the amygdala and hippocampus are involved in these effects of stress, the former particularly in emotionally arousing learning situations. Additionally the prefrontal cortex also plays a role in this process by regulating the emotional arousal process. In humans the role of the noradrenergic and the corticosteroid system separately on memory formation has been established. However, the putative interaction between the two hormonal systems has not been addressed in the human brain yet. In this fMRI study we administered 48 healthy men yohimbine and/or cortisol versus placebo. We demonstrate that central elevations of noradrenaline (induced by yohimbine) and of cortisol in interaction promote the formation of emotional versus neutral memory. The combined drug administration was linked to strong deactivation of the prefrontal cortex during acquisition, as well as reduced activation of the hippocampus and amygdala.

PTSD Clinical Complexity Associated With Co-Occurring Major Depression

(Abstract #196461)

Symposium/Panel (Clin Res, Practice) **Monroe Ballroom, 6th Floor**

Zoellner, Lori, PhD¹; Bedard, Michele, MS¹; Jaeger, Jeff, BS²; Eftekhari, Afsoon, PhD³; Echiverri, Aileen M., BS⁴; Stines Doane, Lisa, PhD⁵; Aguirre McLaughlin, AnnaMaria, MA⁶; Feeny, Norah, PhD⁷; Rothbaum, Barbara, PhD⁸

¹University of Washington, Seattle, Washington, USA

²Department of Psychology, University of Washington, Seattle, WA, USA

³Palo Alto VA, Palo Alto, California, USA

⁴Department of Psychology, University of Washington, Seattle, Washington, USA

⁵Psychology, Case Western Reserve University, Cleveland, Ohio, USA

⁶Case Western Reserve University, University Heights, Ohio, USA

⁷Case Western Reserve University, Cleveland, Ohio, USA

⁸Emory University, Atlanta, Georgia, USA

How common is the presence of co-occurring major depression (MDD)? How does this co-occurrence affect broader indices of functioning? and, how does it impact the therapeutic process during PTSD-related treatment? In this symposium, we will address these questions. Four talks will be presented. Michele Bedard and colleagues will initially ask the question about the nature of a "pure culture" or "pristine" PTSD, particularly focusing on the co-occurrence of MDD and who are typical patients within a PTSD clinical treatment trial. Aileen Echiverri and colleagues will then examine this impact of co-occurring MDD on psychophysiological indices and general health functioning. We will then shift to discussing the impact of co-occurring MDD on psychotherapy treatment-related processes. Lisa Stines Doane will discuss the potentially deleterious impact of co-occurring MDD on sudden early treatment gains; and finally, AnnaMaria Aguirre McLaughlin will explore the potential impact of co-occurring MDD on therapeutic alliance. Barbara Rothbaum will serve as a discussant, highlighting the clinical implications of co-occurring MDD in terms of understanding the nature of PTSD and its impact during psychotherapy.

Who Seeks Treatment? The Complexity of PTSD in Clinical Trials
Efficacy trials investigating mental health treatments are often criticized for narrow inclusion criteria (e.g., Seligman, 1995; Westen, 2006), lacking generalizability to complex presentations and co-occurring disorders (e.g., major depressive disorder (MDD)). With PTSD-related treatment, it has been suggested that these efficacy trials are only more applicable to cases of "pristine" PTSD (e.g., Spinazzola et al., 2005). In the present study, we explore clinical complexity including multiple traumas, childhood trauma, extensive past treatment, and co-occurrence of MDD in a sample seeking treatment for chronic PTSD. Of the 173 men and women, studied a mere 7.1% reported one traumatic event, the majority (57.6%) reported greater than four traumatic events, and a substantial number (61.3%) reported childhood physical and/or sexual abuse (54.9% history; 24.2% index trauma). Furthermore, most received past psychotherapy (78%) or pharmacotherapy (64.2%). The majority of the sample met current criteria for MDD (53.2%), and individuals with co-occurring MDD reported more traumatic experiences (Cohen's $d = .57$) and more past pharmacotherapy (Cohen's $d = .55$). Thus, samples in research trials may exhibit complex presentations, and the notion of "pristine" PTSD may exist only as a conceptual model, not seen in clinical settings including research trials.

Physical Scars? Co-Occurring PTSD and MDD, Childhood Trauma, Cardiovascular Activity and Physical Health

Increasing evidence from animal and human studies shows that persistent exposure to both early stressors and diagnostic co-occurrence are associated with negative physiological health outcomes (Graham et al., 1999; Bernet & Stein, 1999). In the

present series of studies, we examined the impact of both on heart rate and subjective reports of physical health. In Study 1 ($n = 147$), cardiovascular activity was assessed in 70 men and women with chronic PTSD, 32 trauma-exposed with no PTSD, and 45 health controls using a five-minute electromyogram baseline recording. Individuals with PTSD, regardless of early childhood trauma or co-occurring major depression (MDD), showed elevated heart rate compared to trauma-exposed and healthy controls. In Study 2, using a sample of 173 treatment-seeking individuals with chronic PTSD, neither history of early childhood trauma or co-occurring MDD predicted physical health status above and beyond initial severity or demographic factors. These negative findings raise questions on the additive deleterious effects of early stressors and co-occurrence of MDD, beyond PTSD itself, on subsequent health.

Sudden Gains During Exposure Therapy for PTSD: Does Co-Occurring Depression Matter?

Sudden gains (SG), or large, rapid decreases in symptoms from one session to the next, have been identified across treatments for a range of disorders (e.g., Tang & DeRubeis, 1999; Stines et al., 2008). These SG often account for a large proportion of overall improvement and are consistently related to treatment outcome (Hardy et al., 2005). Given the high rates of co-occurrence between PTSD and depression (MDD), it is possible that those with MDD may evidence a different pattern of symptom improvement during treatment than those without MDD. The present study sought to examine SG among adults receiving prolonged exposure treatment for chronic PTSD ($n = 110$) and to compare patterns of symptom improvement for those with and without co-occurring MDD. SG were computed following Tang and DeRubeis' (1999) method. SG occurred for 61% of participants, with a mean magnitude of 11.86 ($SD=5.29$) points on the PSS-SR (Foa et al., 1997). SG occurred throughout treatment, with 44% by mid-treatment. Further, those with co-occurring MDD (51% of sample) were as likely to experience SG as those without MDD. Presence of SG in treatment may have implications for appropriate treatment duration, course of treatment, and outcome.

Alliance Patterns in Exposure Therapy for PTSD and PTSD Co-Occurring With Depression

Although exposure-based therapy is widely empirically-validated for PTSD little is known about underlying psychotherapeutic processes such as client-therapist alliance. In this growing area of research, stronger early alliance and alliance patterns characterized by the presence of a rupture-repair episode, that is, a decrease in alliance followed by a quick increase to previous level, have been associated with favorable outcome. Employing criteria consistent with prior approaches (e.g., Strauss et al., 2006), participants experiencing a rupture-repair were identified. Of the 78 participants receiving prolonged exposure, 19% experienced a rupture-repair, the presence of which was not significantly different between the two diagnostic groups and not associated with severity of PTSD, depressive, and anxiety symptoms. Further, no differences were found between overall alliance levels between PTSD and PTSD/MDD. A more nuanced understanding of the therapeutic relationship has the potential to assist clinicians in navigating the ups and downs of the alliance, which ultimately may improve treatment outcome by enhancing client commitment and engagement in therapy and client-therapist communication.

90

Friday: 8:00 a.m. - 9:15 a.m.

Implementation of TF-CBT: A Multi-Cultural Look at Multi-Level Influences From Policy to Fidelity

(Abstract #196438)

Symposium/Panel (Clin Res, Child)

Wabash Room, 3rd Floor

Berliner, Lucy, MSW¹; Murray, Laura, PhD²; Jensen, Tine K., PhD³; Saunders, Benjamin E., PhD⁴

¹Harborview Center for Sexual Assault and Traumatic Stress, Seattle, Washington, USA

²Boston University School of Public Health, Boston, Massachusetts, USA

³Norwegian Centre for Violence and Traumatic Stress Studies, Oslo, Norway, Norway

⁴Medical University of South Carolina, Charleston, South Carolina, USA

There is an increasing need to research the implementation of evidence based practices, particularly as the interest and political support increases. Various training programs, fidelity measures, supervision support, assessments, and local policies can greatly affect the implementation process. This symposium will highlight the status of implementation research in three areas of the world, in the context of ongoing research projects.

Implementing TF-CBT in the U.S.A.

The United States has seen a surge in state policies mandating the use of EBPs, yet few are trained in them and the implementation process is under-studied. Harborview in Washington state has had extensive experience attempting to implement TF-CBT in real-world, public mental health settings in WA state and British Columbia. This presentation will describe the implementation model (organizational consultation, basic learning session, telephone case consultation, advanced learning session) and lessons learned from successive cohorts. The recruitment and ongoing support for a cadre of local clinical supervisors will be highlighted as a successful strategy for agency wide adoption and diffusion. Experience with assessing competence in TF-CBT skills using selected tape review for the BC cohort will be described. Strategies for overcoming challenges at the organizational and clinician level will be discussed.

Implementing TF-CBT in Zambia

Implementation of evidence-based practices in low-resource settings is severely under-researched, often leading to inadequate or non-existent policies on mental health services. This is a critical dearth in knowledge as many developing countries experience staggering of traumatic events including wars, disease and massive population displacement. This presentation will describe a real-world implementation project being conducted in Lusaka, Zambia using TF-CBT. The identified population is HIV-affected youth that have been sexually abused. Data will be presented on the characteristics of child sexual abuse in Zambia, baseline trauma symptomatology, a training program designed for para-professionals, the supervision structure, case summaries and fidelity checklists. Discussion will include the challenges and successes of implementation in Africa, in addition to a broader perspective on how this work is affected by and should affect mental health policy in low-resource countries.

Implementing TF-CBT in Norway

European countries are not currently mandating the use of EBPs in mental health care, however professional organizations are increasingly encouraging the training in and use of EBPs. This presentation will discuss an ongoing effectiveness study in Norway that is implementing TF-CBT in three child guidance clinics in Norway. Traumatized youth are randomly selected to a treatment as usual group or a TF-CBT group. Lessons learned from recruitment and implementation will be presented, including development of an appropriate training program, fidelity measures, baseline symptoms, and cost-effectiveness design of TF-CBT versus treatment-as-usual. Discussion will include how the European and Norwegian government policies are affecting implementation and use of EBPs, as well as successes of implementation.

A Comparison of African-American and Caucasian Women in Cognitive Behavioral Treatments for PTSD

(Abstract #196116)

Paper Presentation (Cul Div, Clin Res)

Wabash Room, 3rd Floor

Lester, Kristin, PhD¹; Artz, Caroline, BS¹; Resick, Patricia, PhD¹

¹Women's Health Sciences Division, National Center for PTSD, Boston, Massachusetts, USA

Race and PTSD treatment is an understudied topic. Two studies suggest that for treatment completers, there are minimal racial differences in outcomes (Rosenheck, 1995; Zoellner, 1999); however, there are barriers to completion that also warrant attention. This study investigates race and psychotherapy participation among African-American and Caucasian female victims of interpersonal violence in treatment for PTSD. Study 1 consisted of 171 women randomized into cognitive processing therapy (CPT), prolonged exposure (PE), or a wait-list condition. In Study 2, 150 women were randomized into 3 conditions: CPT, cognitive therapy (CPT-C) and written account (WA). Results of study 1 revealed that African-Americans compared to Caucasians had higher drop-out rates (33% vs. 15%, respectively, $p=.007$) and lower percentage of session completion (58% vs. 86%, respectively, $p<.001$). Study 1 indicated a trend towards higher African-American participant drop-out in PE. Study 2 revealed a trend toward African-Americans completing fewer percentage sessions than Caucasians. Regression analyses indicated that although race was a significant predictor of higher session completion, other variables (e.g., employment, income and education) contributed to the model, suggesting the relevance of factors in addition to race. We will also present PTSD outcome data from intent to treat samples.

Understanding and Treating Anger in Canadian Forces Members and Veterans With Military Related PTSD

(Abstract #196322)

Workshop/Case Presentation (Practice, Mil Emer)

Salon 2, 3rd Floor

Smith, Wanda, PhD¹; Richardson, Don, MD²

¹McMaster University, Hamilton, Ontario, Canada

²Operational Stress Injury Clinic, Parkwood Hospital, London, Ontario, Canada

Canada's military involvement in Afghanistan and peacemaking initiatives has resulted in troops with trauma disorders. Research has enhanced understanding of PTSD identifying empirically validated treatments and highlighting co-morbidity of other disorders such as depression and substance abuse. Of growing interest is the relationship between PTSD and anger in the military population. Research has highlighted the rates of anger, hostility and aggression in military populations with PTSD and identified that anger is a negative predictor of treatment. Further, it is suggested that anger be considered independent from PTSD and may need to be treated separately from the disorder. Anger management training is well established however, the unique features of this population, namely military training and deployment experiences and the fear of physically hurting others often necessitates further treatments. The purpose of the proposed workshop is to describe the treatments for anger provided collaboratively by psychiatry and psychology to Canadian Forces members and veterans with PTSD. The treatment includes pharmacologic interventions, anxiety management training, cognitive behaviour therapy and behavioural rehearsal. The presentation will detail therapy for anger utilising case studies and reporting standardized rating scales, behavioural logs and quality of life scales.

Concurrent Session 6
Friday, November 14
9:30 a.m. – 10:45 a.m.

DSM-V

Why are Some People More Likely to Get PTSD Than Others?

Child and Adolescent Traumatic Stress and PTSD: A Developmental Perspective

(Abstract #198301)

DSM-V (Asses Dx, Child) Grand Ballroom, 4th Floor

Pynoos, Robert, MD, PhD¹; **Fairbank, John A., PhD²**; **Steinberg, Alan, PhD¹**

¹University of California, Los Angeles, Los Angeles, California, USA

²Duke University, Durham, North Carolina, USA

The diagnostic category of PTSD has permitted our field to give scientific voice to the legacy of trauma for children and adolescents. It has also provided an important opportunity for the developmental investigation of its strengths and limitations, and consideration of treatment implications and testing of intervention strategies across developmental stages. Adopting a developmental perspective in further strengthening the diagnosis will provide an important vantage point on the following issues: 1) the theoretical and conceptual framework underlying PTSD, making use of new knowledge in developmental neurobiology and genetics; 2) the evolving appraisal and response to danger; 3) the construct and factor analysis of PTSD, especially in regard to symptom profile; 4) the role of associated intense negative emotions, for example, shame and guilt; 5) the role of ongoing preoccupation with protection and intervention thoughts; 6) co-morbid considerations, including the intersection of childhood PTSD with anxiety disorders and depression; and 7) the interplay with disturbances in developmental competencies. There is a critical need to complement assessment of functional impairment with equal attention to developmental impairment, including trauma-related disturbances in achieving developmental competencies and reaching developmental milestones. In addition, children are at risk of exposure to traumatic losses that require assessment of a range of traumatic grief reactions and their intersection with posttraumatic stress reactions and co-morbid conditions. Overall, prior *DSM* criteria have given only limited attention to developmental considerations which need to have a much more prominent place in *DSM V*. Selected findings from the National Child Traumatic Stress Network Core Data Set that relate to these challenges will be included in this presentation.

Gene-Environment Interaction in Posttraumatic Stress Disorder

(Abstract #197569)

DSM-V (Bio Med, Res Meth) Grand Ballroom, 4th Floor

Koenen, Karestan, PhD¹

¹Department of Society, Human Development, Harvard University School of Public Health, Boston, Massachusetts, USA

The purpose of this presentation is to encourage research investigating the role of measured gene-environment interaction (GxE) in the etiology of posttraumatic stress disorder (PTSD). PTSD is uniquely suited to the study of GxE as the diagnosis requires exposure to a potentially-traumatic life event. PTSD is also moderately heritable; however, the role of genetic factors in PTSD etiology has been largely neglected both by trauma researchers and psychiatric geneticists. First, we summarize evidence for genetic influences on PTSD from family, twin, and molecular genetic studies. Second, we discuss the key challenges in GxE

studies of PTSD and offer practical strategies for addressing these challenges and for discovering replicable GxE for PTSD. Finally, we propose some promising new directions for PTSD GxE research. We suggest that GxE research in PTSD is essential to understanding vulnerability and resilience following exposure to a traumatic event.

Epigenetics and PTSD: A New Frontier in PTSD Risk and Implications for DSM-V

(Abstract #198156)

DSM-V (Bio Med, Asses Dx) Grand Ballroom, 4th Floor

Yehuda, Rachel, PhD¹

¹Mount Sinai School of Medicine Medical School, Bronx, New York, USA

The study of epigenetic modifications of DNA may provide important insights into PTSD risk and pathophysiology since it provides a mechanism for explaining functional changes in genomic activity (as opposed to structural changes associated with different allelic variations or gene polymorphisms) that can be induced by environmental events. These functional changes can even be transmitted intergenerationally (e.g., via maternal behavior) which may provide critical insight for why PTSD runs in families. Indeed, when considering that PTSD is fundamentally a response to an environmental event that is likely formed, not so much by the objective characteristics of the event, but by subjective interpretations of its meaning, it becomes obvious that neither genetic analysis alone, nor an understanding of the normative biological responses to stress or fear, can provide the information that explains why PTSD results in only a proportion of those exposed. The study of epigenetics may, in particular, provide a relatively stable measure that reflects early life events, rather than the cumulative effects of stress, that can help delineate developmental influences on biological alterations in PTSD from those reflecting pathophysiology. The implications for epigenetic contributions to diagnostic issues in PTSD will be discussed.

Diagnostic Overlap Between PTSD and MDE in Two American Indian Populations: Implications for DSM-V

(Abstract #197567)

DSM-V (Asses Dx, Cul Div) Grand Ballroom, 4th Floor

Beals, Janette, PhD¹

¹University of Colorado - Denver, American Indian and Alaska Native Programs, Aurora, Colorado, USA

Psychiatric epidemiology has come of age in the past 30 years. Landmark studies have provided for essential descriptions of the prevalence of common *DSM*-defined disorders, including PTSD. Yet, parallel efforts for important subpopulations have lagged, resulting not only in a dearth of data about groups that may be at special risk, but also neglecting an opportunity to examine the consequences for our common nosologies in culturally diverse settings. The American Indian Service Utilization, Psychiatric Epidemiology, Risk and Protective Factors Project (AI-SUPERFPF) was designed to assess the epidemiology of common mental health problems in two culturally diverse American Indian tribal groups using state-of-the-art methods. Perhaps the most interesting finding from this effort was a "crossover" between PTSD and major depressive episode (MDE) in the lay-administered interviews, whereby PTSD was found to be more common than in the general U.S. population, yet MDE was less common. At the same time, when clinicians interviewed a subset of those in the lay-administered sample, the pattern of findings was reversed (MDE more common than PTSD). In this presentation we will explore the implications of these findings for both *DSM-V*, generally, and for psychiatric epidemiology, in particular.

Friday: 9:30 a.m. – 10:45 a.m.

92

All the Way Home – A Documentary Film

(Abstract #196452)

Media Presentation

Salons 4-6, 3rd Floor

Buchen, Charlotte, MA¹; Caine, Julie, MA¹

¹University of California, Berkeley, Berkeley, California, USA

This is the story of coming home from war told through the eyes of veterans, and their families—conveying the flashbacks and paranoia that continue to plague them long after the battle is over.

Giving context are interviews with Dr. Barbara Rothbaum and Dr. Albert “Skip” Rizzo and a short history of Posttraumatic Stress Disorder- from Homer’s time, to the Civil War and “soldier’s heart,” to the “shell shock” of WWI, up to the current diagnosis of PTSD.

Sunny San Diego is a far cry from war-torn Iraq, and Jeff Stinchcomb never thought the war would follow him home. But it did.

Driving on San Diego’s freeways was a challenge. Trash on the side of the road evoked roadside bombs. His daughter’s three-year-old tantrums threw him into a rage.

Also guiding us through the story is Vietnam veteran, Steve Campbell who 35 years after the war ended still struggles with rage and anxiety. Steve has made it his mission to make sure the Iraq veterans don’t go through the trauma that he experienced, untreated for so long.

Steve and Jeff are friends, in the same therapy group.

The film draws no conclusions about whether Jeff will ever be the man he was before he went to war, but rather presents his story through his words, allowing audiences to draw their own conclusions about how the war comes home.

Participant Alert: Caution – this film includes some graphic images of war as well as potentially disturbing stories about war-time experiences.

Complex Trauma in Children and Adolescents: Treatment Needs and Methods

(Abstract #196053)

Symposium/Panel (Child, Practice)

State Ballroom, 4th Floor

Fletcher, Kenneth, PhD¹; Nader, Kathleen, DSW²; Stolbach, Bradley, PhD³; Cloitre, Marylene, PhD⁴; DeRosa, Ruth, PhD⁵; Saxe, Glenn, MD⁶; Ford, Julian, PhD⁷

¹Psychiatry, Center for Mental Health Services Research, University of Massachusetts Medical School (Worcester), Worcester, Massachusetts, USA

²Director, Two Suns, For the Assistance of Traumatized Children and Adolescents, Cedar Park, Texas, USA

³Behavioral Sciences, La Rabida Children’s Hospital / University of Chicago, Chicago, Illinois, USA

⁴Psychiatry, Institute for Trauma and Resilience, NYU Child Study Center, New York, New York, USA

⁵Cognitive Behavioral Associates, Great Neck, New York, USA

⁶Psychiatry, Children’s Hospital Boston, Boston, Massachusetts, USA

⁷Psychiatry, University of Connecticut Health Center, Farmington, Connecticut, USA

Researchers/clinicians will discuss important questions facing the field regarding the treatment of complex trauma in childhood (or Developmental Trauma Disorder). Panel members will discuss various important issues that arise when treating children and adolescents who have experienced chronic interpersonal violence.

Is Trauma-Focused Narrative Work an Essential Component of Complex Trauma-Focused Treatment?

Stolbach, Bradley

Increasing attention has focused on the effects of complex trauma in childhood. Recognition of the limitations of PTSD as an explanatory diagnostic model for the developmental impairments and adaptations displayed by children with complex trauma

histories has correctly led to the development and promotion of treatments that emphasize domains such as attachment, self-regulation, developmental competencies, and body work over widely accepted “evidence-based” simple PTSD treatments. Many symptoms, whether related to simple or complex trauma, arise and persist as a result of a failure to integrate overwhelming experience. In developing treatment approaches that highlight the need to address symptom domains that most characterize children with complex developmental trauma disorders, clinicians should be wary of minimizing the central role that trauma integration plays in healing, and thus inadvertently reinforcing our clients’ and our own tendencies to avoid traumatic content in treatment. A treatment approach will be described that attempts to integrate a complex trauma intervention framework with trauma-focused therapy. The question of whether trauma-focused narrative integrative work should be viewed as an essential component of effective treatments for children with developmental trauma disorders will be addressed.

How Can Treatment Identify, Address and Resolve the Adverse Impact of Trauma on Development Among Traumatized Adolescents?

Cloitre, Marylene

Recent studies have established that adolescence is the period in life in which exposure to trauma is at its peak. It is also clear that by even the most conservative assessment standards, i.e., using the *DSM-IV* diagnoses, trauma produces a multiplicity of mental health problems and comorbidity is the rule rather than the exception, particularly in regards to the concurrent presence of PTSD, depression and substance abuse. There is growing evidence of the long-term effects of trauma on adolescents’ continued socio-emotional development and of its impact on the brain maturation processes that relate to the capacity for modulation of emotions, control over impulses, and addiction sensitivity. Thus, adolescence is a time of tremendous risk for multiple negative outcomes. This presentation will present the rationale for and training in an adolescent program which targets three central problem domains among adolescents: PTSD symptoms, emotion regulation problems and interpersonal and behavioral functioning. We will also highlight the importance of prevention programming in the preteen and middle school years to avert the various risk factors that lead to increased risk for trauma exposure during adolescence.

What Are the Essential Components for Complex Trauma Treatment With Adolescents?

DeRosa, Ruth

Like both younger children and adults, adolescents with histories of chronic interpersonal violence often struggle with domains of functioning in ways that stem beyond symptoms of anxiety, depression and Posttraumatic stress disorder. The trauma literature has described these common clinical presentations under a number of labels over the years, which include difficulties with regulating affect and impulses, hopelessness, problems with concentration and dissociation, somatization and physical health, and alterations in attachment, interpersonal relationships, and self-perception. Although there are some similarities across age groups, what are the treatment needs unique to adolescents who have experienced ongoing extreme stress? Vulnerabilities inherent in adolescent development increase significantly in the face of chronic trauma.

This presentation will highlight some approaches to treatment and engagement with chronically traumatized adolescents that focus on specific developmental tasks and demands including establishing independence, relationships, identity, and purpose and meaning in life.

What Processes Need to be Considered in Order for Effective Treatments to Take Hold in the "Real World"?

Saxe, G.

This presentation will focus on the issue of providing effective interventions and services for children with Complex Trauma in the social environments and services systems where these children usually receive care. The discussion will address the following question: What processes need to be considered in order for effective treatments to take hold in the 'real world'? Children with Complex Trauma frequently live in environments with ongoing stresses such as family and community violence, parental mental health and substance abuse, and poverty and homelessness.

Further, these children have problems that cross systems of care and can involve the mental health, educational, social service and juvenile justice systems. Treatments developed for children with Complex Trauma must conform to how interventions and services are paid for by the agencies that provide this care. Each of these issues must be thoroughly considered as our field endorses interventions that 'work'. This presentation details these issues and proposes ideas for how they can be considered in the process of treatment development. The presenter will use experiences developing the treatment model Trauma Systems Therapy to illustrate how these processes can be considered in the development of a treatment designed to help children with Complex Trauma.

PTSD and the Khmer Rouge Trials in Cambodia

(Abstract #196475)

Paper Presentation (Civil Ref, Commun) Crystal Room, 3rd Floor

Sonis, Jeffrey, MD, MPH¹; Gibson, James, PhD²; de Jong, Joop, MD, PhD³; Field, Nigel, PhD⁴; Hean, Sokhom, PhD⁵

¹*Social Medicine, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA*

²*Washington University in St. Louis, Saint Louis, Missouri, USA*

³*GGD Amsterdam, Amsterdam, North Holland, Netherlands*

⁴*Pacific Graduate School of Psychology, Palo Alto, California, USA*

⁵*Centre for Advanced Study, Phnom Penh, Cambodia*

Background: Cambodians suffered profound trauma during the reign of the Khmer Rouge. After years of impunity for the leaders, a joint United Nations-Cambodian tribunal ("the Khmer Rouge trials"), is expected to begin public trials in 2008. The goals of this study were to identify the correlates of PTSD, focusing on desire for revenge and perceived justice and to identify attitudes towards the trials.

Methods: We conducted a national face-to-face interview survey of 1,017 adult Cambodians in 2007.

Results: The prevalence of current PTSD was 10.7%. Desire for revenge was directly, but weakly, associated With PTSD (adjusted odds ratio [aOR], 1.80; 95% CI, 0.94-3.43) and perceived justice for violations during the Khmer Rouge era was inversely associated With PTSD (aOR, 0.47, 95% CI, 0.30 – 0.74). Despite positive attitudes for the trials, 81% of those over the age of 35 believed that the trials will create painful memories for them. Positive attitudes toward the trials were inversely associated With desire for revenge (aOR, 0.75, 95% CI, 0.57-0.99).

Conclusion: The Khmer Rouge trials may be able to reduce PTSD prevalence by increasing feelings of justice and reducing the desire for revenge. However, since most Cambodians believed that the trials will re-awaken painful memories, the trials might increase the prevalence of PTSD. Longitudinal research is needed.

Posttraumatic Stress and Refugee Status Decision-Making

(Abstract #196224)

Symposium/Panel (Civil Ref, Sos Ethic) Crystal Room, 3rd Floor

Herlihy, Jane, MPHIL, DCLINPSYCH¹; Cleveland, Janet, LLB, MSC, PhD²; Steel, Zachary, MPSYCHOL(CLINICAL)³

¹*Centre for the Study of Emotion and Law, London, United Kingdom*

²*Canada Research Chair in International Migration Law, Universite de Montreal, Montreal, Quebec, Canada*

³*Centre for Population Mental Health Research, School of Psychiatry, University New South Wales, Liverpool, New South Wales, Australia*

To claim asylum, refugees must describe their experiences of persecution. Emergent research shows a lack of understanding of trauma in this process. The presenters will bring data from different refugee-receiving countries demonstrating issues with assessing asylum claims that are systematically discriminating against those with the psychological sequelae of trauma.

Asylum Seekers With Posttraumatic Symptoms Facing the Canadian Refugee Determination Process

Many asylum seekers have trauma-related mental health difficulties such as PTSD and depression linked to torture, rape, or other forms of organized violence, often aggravated by post-migration stressors. To be accepted as refugees, asylum seekers must convince immigration officials that they would be at risk if repatriated, largely based on their account of past persecution. Trauma-related symptoms may negatively impact claimants' ability to credibly present their case because of memory lapses, confusion about details, emotional numbing, etc. This study examines how Canada's immigration system deals with asylum seekers with trauma-related symptoms through qualitative analysis of three types of data: 1) 120 refugee status decisions in cases involving mental health evidence; 2) focus groups with clinicians, lawyers, NGOs and immigration officials on addressing the needs of asylum seekers with mental health problems, and 3) interviews with asylum seekers on their experience of the Canadian refugee system. The study highlights a number of systemic problems, including the tendency of many decision makers to discount expert reports; decision makers' limited understanding of psychological issues, mirrored by clinicians' limited understanding of legal issues; and the unduly negative impact of refugee determination proceedings on claimants with mental health difficulties.

Refugee Decision-Making and the Tortured Asylum Seeker—Outcomes Amongst Recently Arrived Asylum Seekers in Australia

There are ongoing concerns that asylum seekers who have been tortured and who suffer trauma-related mental disorders are being refused protection by countries in which they seek asylum. The study described here assessed a consecutive sample of recently arrived asylum seekers attending immigration agents in Sydney, Australia, using a series of structured measures. Participants were followed up to assess the outcomes of their refugee applications. The 73 participants, who had resided in Australia for an average of 4.3 months, reported high rates of torture, and were at heightened risk of PTSD and major depression, a response pattern associated with substantial levels of psychosocial disability. Neither past torture nor current psychiatric disorder influenced the outcomes of refugee applications. The study examines some of the factors that were associated with poor refugee determination outcomes for tortured asylum seekers and others with trauma-related mental disorder.

Assumptions Underlying Refugee Status Decisions in the UK—A Qualitative Analysis

Previous research has highlighted assumptions being made by decision makers in the process of recognising refugees under the 1951 Geneva Convention. For example, late or non-disclosure of difficult personal history is often held to suggest that the individual is fabricating a story at a late stage of their asylum claim; inconsistencies between different versions of a person's story are believed to show that the account is untrue. These assumptions

do not fit with what we know about how people present accounts of traumatic experiences. In the UK, immigration judges write a full justification of each decision they make in the asylum appeal court. We developed a coding framework and extracted different categories of assumptions from a series of written determinations. These data (117 extracts) were subjected to an inductive (data-driven) thematic analysis. The resultant major themes demonstrated that judges make decisions about 1) the behaviour of individuals and families following experiences of trauma, 2) the behaviour of people seeking asylum and 3) the nature of a truthful account, often incognisant of the nature of traumatic memory. These results will drive future hypothesis-led investigations to establish whether such lay assumptions are consistent with the scientific and clinical literature.

Disaster Mental Health and Older Adults: Implications for Research, Practice and Policy

(Abstract #196048)

Symposium/Panel (Disaster, Sos Ethic)

Salon 3, 3rd Floor

Cook, Joan, PhD¹; Brown, Lisa, PhD²; Elmore, Diane, PhD, MPH³; Norris, Fran, PhD⁴; Tashakkori, Abbas, PhD⁵; Bryant, Carol, PhD⁶

¹Department of Psychiatry, Yale University School of Medicine, West Haven, Connecticut, USA

²Department of Aging and Mental Health, University of South Florida, Tampa, Florida, USA

³Public Interest Government Relations Office, American Psychological Association, Washington, District of Columbia, USA

⁴VA Regional Medical Center MS 116D, National Center for PTSD, White River Junction, Vermont, USA

⁵Department of Educational & Psychological Studies, Florida International University, Miami, Florida, USA

⁶University of South Florida, Tampa, Florida, USA

Natural disasters and acts of terrorism are increasingly important public health challenges. Growing attention has focused on potentially vulnerable subgroups during such events, including older adults. This presentation will discuss key research, practice and policy issues related to the mental health of older adults in the aftermath of disasters.

State of the Evidence: Older Adults' Disaster Mental Health Responses

Disasters can have considerable mental health effects for a significant proportion of survivors. The purpose of this presentation is to briefly review research regarding mental health consequences of natural, human-made, and technological disasters in older adults. Risk and protective factors for mental health vulnerability will be presented, and subgroups of older adults at particular risk will be highlighted. Implications for future research will also be discussed.

Despite methodological limitations of available research, there appears to be no differential vulnerability on the part of the general older adult population as compared with younger adults. Though age per se does not appear to be the determining factor in risk or vulnerability, age can interact with other social, economic, cultural, and historical factors to influence mental health responses. People of low socioeconomic status, individuals with physical and mental disabilities, ethnic minorities, and those residing in nursing homes or independent living facilities appear to be the most at risk. While the general older adult population may serve as untapped resources in helping to provide a variety of disaster-related services (e.g., community canvassing, house sitting, and meal preparation), those at risk should not be minimized or left to fend for themselves.

Meeting the Mental Health Needs of Elders After Disasters

Review of the Florida disaster crisis counseling programs conducted after the 2004 and 2005 hurricanes revealed that many older adults did not use services despite evidence of ongoing disaster-related psychological distress. It is not clear if older adults who survived the hurricanes experienced unique barriers to

treatment. While institutional, clinical, and personal barriers to care for late-life psychological disorders have been well documented, only recently has research begun to focus on issues related to access and use of disaster mental health services in this population. This presentation will discuss the application of a mixed methods approach to examine factors influencing use of disaster crisis counseling services by older adults who were adversely affected by the hurricanes (users n=91 and non-user n=147). Quantitative results indicate that a protracted recovery period adversely affects well-being, yet use of services is not commensurate with self-reported distress. Qualitative findings suggest that older adults who would benefit from intervention may not self-identify as having a mental health problem and thus refrain from seeking or accepting treatment. Traditional models of mental health service delivery and outreach may not be appropriate when the task is to provide care to older adults survivors of disasters.

The Role of Public Policy in Addressing the Needs of Older Adults During Disasters

A series of significant natural disasters and acts of terrorism in recent years have helped to focus the attention of scientists, clinicians, the public, and policy makers on issues of disaster preparedness and response. Among the preparedness and response issues of particular importance is the need to understand and address the impact of such events on the mental health of an increasingly diverse population, including the growing subgroup of older adults. While some important efforts have been made to improve federal disaster preparedness and response policies aimed at older adults, a great deal of work remains to ensure the mental health and well being of the aging population during disasters.

This presentation will identify existing federal emergency and disaster preparedness and response policies of importance to older adults. In addition, newly proposed federal legislation to address the needs of potentially vulnerable subgroups, including older adults and their caregivers, will be discussed. Opportunities for mental health professionals to use research and clinical expertise to inform the federal policy making process related to disaster mental health preparedness and response will also be highlighted.

First Responders: Recovery From Terrorist Attacks and Other Critical Incidents

(Abstract #196290)

Symposium/Panel (Mil Emer, Prev EI)

Wabash Room, 3rd Floor

Neylan, Thomas, MD¹; Halpern, Janice, MD²; Wild, Jennifer, DCLINPSY³; Gurevich, Maria, PhD⁴; Baum, Naomi, PhD⁵; Maunder, Robert, MD⁶; Schwartz, Brian, MD⁷; Handley, Rachel, DCLINPSY⁸; Brazeau, Paulette, MA, MED⁹; Defina, Piera, BSW⁴; Levaot, Yael, BA, BSW⁵

¹Psychiatry, University of California San Francisco, San Francisco, California, USA

²Psychiatry, University of Toronto, Toronto, Ontario, Canada

³Institute of Psychiatry, King's College, University of London, London, United Kingdom

⁴Psychology, Ryerson University, Toronto, Ontario, Canada

⁵Israel Centre for Psychotrauma, Herzog Hospital, Jerusalem, Israel

⁶Psychiatry, Mt. Sinai Hospital, Toronto, Ontario, Canada

⁷Sunnybrook Osler Centre for Pre-hospital Care, Sunnybrook Health Sciences Centre, Toronto, Ontario, Canada

⁸Institute of Psychiatry, King's College London, London, United Kingdom

⁹University of Toronto, Toronto, Ontario, Canada

This international symposium presents studies of large samples of first responders exposed to terror in globally traumatic events: SARS in Toronto, the London bombings of 7 July, and terrorist bombings in Jerusalem. The studies identify key predictors of PTSD, depression, resilience, and response to intervention, in this at-risk group.

Trauma in Paramedics: A Survey of Key Factors Affecting Psychological Outcomes

Objectives: Research suggests that perception of high arousal after trauma exposure is a key predictor of PTSD. We investigated the relationship of duration of arousal to PTSD, depression, burnout and somatisation in paramedics.

Methods: 220 paramedics completed surveys to assess PTSD, burnout, depression, and somatisation. They also completed measures of time for arousal to return to baseline after exposure to critical incidents. Post-incident support and perception of overall workplace stress were also assessed.

Results: Perceived recovery from arousal was associated with outcome. Those who reported longer duration of arousal after trauma had higher PTSD, depression, burnout, and somatisation scores. Perceived workplace stress was also associated with higher scores on all outcomes. Downtime after critical incidents was associated with lower depression and somatisation scores. Contact with others within 24 hours of an incident was associated with lower somatisation scores.

Conclusions: These data suggest that faster recovery from arousal and lower chronic work stress are associated with good health outcomes in ambulance workers. Downtime and supportive contact are also important. Developing evidence-based interventions to reduce arousal and chronic work stress, as well as provision of specific post-incident workplace supports, would benefit this at-risk group.

Paramedics Exposed to the London Bombings of 7 July: A Prospective Study Investigating Cognitive and Neuropsychological Predictors of PTSD

Objectives: Ambulance workers frequently encounter traumatic events and many suffer unwanted memories of them. This study examined the relationship between cognitive responses to intrusions, working memory capacity and traumatic stress in paramedics.

Method: Ambulance workers (N=68) were assessed for working memory capacity using the OSPAN (Turner & Engle, 1989). Intellectual functioning, PTSD, frequency of and responses to intrusions, depression, anxiety, trauma exposure, length of time in service, and alcohol and drug use were also assessed. PTSD was re-evaluated at six months and two years after the London bombings.

Results: Participants with low working memory had higher PTSD scores compared to participants with high working memory. Cognitive responses to intrusions, specifically negative interpretations and avoidance, predicted PTSD status at both follow-up time points.

Conclusions: The results suggest that ambulance workers with PTSD are more likely to have low working memory capacity than those without PTSD. It appears that low working memory capacity is not a risk factor for PTSD but could be affected once PTSD is established. The strongest predictors of PTSD were cognitive responses to intrusions: avoiding them or interpreting them negatively. These results have implications for existing models of PTSD and for pathways of prevention in emergency services.

Emergency Medical Dispatchers Rally Resources to Combat Stress

Objectives: The role of emergency medical dispatchers (EMDs) is critical to the outcome of emergency calls for help. They are the first point of entry for emergency calls; they act as conduit for information between civilians and emergency workers; and may administer limited interventions via telephone. However, their experiences have been virtually ignored. This is the first study to focus on critical incidents experienced by EMDs and to identify their coping strategies.

Method: Semi-structured interviews and focus groups were conducted with EMDs to explore how they define critical incidents and key coping strategies.

Results: EMDs use similar criteria to paramedics to designate calls as critical incidents (e.g., personally relevant or gruesome events).

While the personal strategies they use in recovering center on solitary activities (e.g., alone time during a shift, distracting activities, leaving work at work), the professional resources focus on peer and supervisor support. Notably, supervisor support was positioned as central to recovery, while its absence was described as exacerbating.

Conclusions: This is the first study to highlight the impact of critical incidents on EMDs and parallels research with other emergency communications workers, as well as paramedics. Implications for evidence-based interventions will be described.

Building Personal and Professional Resilience

This presentation will focus on our resilience building model "Building Personal and Professional Resilience" which has been adapted from initial work with educators and classrooms. The purpose of this intervention is to train police officers in understanding sources of stress in their lives, and what they can do to alleviate this, increase coping and build resilience. We piloted this intervention on an initial group of 220 police officers from bomb disposal units in Israel who have been highly and consistently exposed to trauma during their professional careers. We will present the resilience model and it's application to work with police. The model focusing on: Self, Strengths, Support and Significance, includes units of psychoeducation, skill development and an emphasis on building social supports within the professional work group. Initial evaluation data will be presented indicating that police officers experienced growth and change as the result of this intervention. The challenges and applicability of resilience building intervention programs with first responder groups will be discussed.

Studying the Phenomenology of PTSD in Groups and Individuals: What Can It Tell Us?

(Abstract #196464)

Symposium/Panel (Asses Dx, Res Meth) Monroe Ballroom, 6th Floor

Lauterbach, Dean, PhD¹; Orazem, Robert, BS²; Hebenstreit, Claire, BS³; King, Daniel, PhD⁴; King, Lynda, PhD⁵; Shalev, Arieh, PhD⁶; Palmieri, Patrick, PhD⁷; Mason, Shawn T., PhD⁸; Fauerbach, James, PhD⁹; Eve, Carlson, PhD¹⁰; Field, Nigel, PhD¹¹; Ruzek, Josef, PhD¹²; Spain, David, MD¹³

¹Psychology, Eastern Michigan University, Ypsilanti, Michigan, USA

²Boston University, Roslindale, Massachusetts, USA

³University of Denver, Denver, Colorado, USA

⁴National Center for Posttraumatic Stress Disorder, Boston, Massachusetts, USA

⁵Boston University, Boston, Massachusetts, USA

⁶Center for Traumatic Stress and the Department of Psychiatry, Hadassah University Hospital, Jerusalem, Israel

⁷Center for the Treatment and Study of Traumatic Stress, Akron, Ohio, USA

⁸Johns Hopkins Department of Psychiatry, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA

⁹Johns Hopkins, Baltimore, Maryland, USA

¹⁰Palo Alto VA Health Care System, Menlo Park, California, USA

¹¹Pacific Graduate School of Psychology, Palo Alto, California, USA

¹²National Center for PTSD, Palo Alto, California, USA

¹³Surgery & Critical Care, Stanford University School of Medicine, Stanford, California, USA

There is a broad array of measures to assess PTSD. However, the factorial invariance of these measures across time and groups is often assumed but untested. Moreover, the relationship between these structures and the phenomenology of PTSD is poorly understood. This symposium addresses these issues with an eye toward DSM-V.

Factor Structure of the Impact of Event Scale-Revised: Stability Across Cultures and Time

The Impact of Event Scale-Revised (IES-R; Weiss & Marmar, 1997) is a 22-item self-report measure of symptoms frequently endorsed following a stressor. The IES-R is a revised version of the IES (Horowitz et al., 1979). The most significant revisions (i.e., addition of six hyperarousal items and one reexperiencing item) resulted in a measure assessing all three DSM-IV PTSD symptom clusters. A

sample of US college students completed an English version of the IES-R, and an Israeli emergency room sample completed a Hebrew-language version on up to three occasions following the emergency room admission. To examine the IES-R's factor structure and structural invariance over samples and time, seven models initially were evaluated within each sample, and the best-fitting models for each sample was identified. Next, the number of factors and pattern of loadings for the pairs of solutions were examined to assess degree of invariance across samples. The best-fitting models conforming to configural invariance were extensions of the King et al. (1998) "numbing" model and the Simms et al. (2002) "dysphoria" model, with an additional sleep disturbance factor. When invariance over time for the longitudinal data was evaluated, configural invariance was obtained, metric invariance was upheld for all factors except reexperiencing.

PTSD Symptom Structure is Reasonably Invariant Across Comorbid Depression Status

PTSD factor analytic research has yielded little support for the *DSM-IV* 3-factor model of re-experiencing, avoidance, and hyperarousal symptoms, while providing little consensus on the best alternative conceptualization. Empirical evidence, however, has tended to favor one of two 4-factor models that include either an emotional numbing factor (King et al., 1998) or a dysphoria factor (Simms et al., 2002), along with the three current *DSM* factors. Differences in sample composition across studies might explain some of the discrepant findings. One such sample difference that is important to study is the degree of comorbid depression, given that depression commonly co-occurs with PTSD, and the two 4-factor models conceptualize depression-related symptoms somewhat differently. In the present study, confirmatory factor analysis of PTSD Symptom Scale data from several trauma-exposed samples was used to test several plausible structural models and invariance across groups defined by comorbid depression status. The emotional numbing and dysphoria models both fit the data well and outperformed the *DSM* 3-factor model and other models. Both also demonstrated reasonable invariance across groups, suggesting that the relationships among PTSD symptoms do not differ substantially based on the presence or absence of comorbid depression. Clinical and nosological implications will be discussed.

Confirmatory Factor Analysis and Invariance of the Davidson Trauma Scale in a Longitudinal Sample of Burn Patients

The Davidson Trauma Scale (DTS), a self-rating scale for assessing posttraumatic stress symptoms (Davidson et al., 1997), was used to assess symptoms in a burn population. Although the DTS has been used in many studies, none have examined the factorial and metric invariance of this measure across time. The current study addresses this issue. Data were collected at a regional burn center and patients were consented based on burn severity (total burn surface area=14%). The 268 participants were primarily male (70%) and Caucasian (68%), with a mean age of 41 years. In the PTSD literature two, four-factor models are commonly supported over the *DSM-IV* three-factor structure. One is characterized by a splitting PTSD cluster C symptoms into avoidance and numbing symptoms (King et al., 1998). The other is characterized by a combination of items from PTSD symptom clusters C and D, forming a dysphoria factor (Simms et al., 2002). CFA results were most supportive of a first order, four-factor, oblique model consistent with the King et al., numbing model at one month post discharge. Invariance of this factor structure was assessed at 6 and 12 months post discharge. Results suggest stability of PTSD factor structure across assessment points.

Individual Differences in the Phenomenology of PTSD Over Time
Studying intensive, longitudinal data on PTSD symptoms in individuals allows examination of diversity in the course of traumatic stress responses. Using Ecological Proximal Assessment (a portable, automated, electronic, data collection method), we studied symptoms of PTSD and moods in 60 trauma survivors who were injured hospital patients or family members of injured patients. Psychological phenomena were assessed every 4 hours

for a week, beginning 2 to 8 days after injury. Results showed clear differences in symptoms and moods between those who developed PTSD (assessed 2 months post-event) and those who recovered (no PTSD at 2 months). Within the group that developed PTSD, we observed a diverse pattern of emotional responses that appear to reflect three response subtypes: typical Acute Stress Disorder, Numb, and Volatile. We will present data showing evidence of subtypes in individual trauma survivors and data comparing the subtypes on characteristics such as personality disorder symptoms (MCMI Axis II subscales) and PTSD and depression symptoms assessed at three times (2 to 8 days after trauma, 9 to 16 days after trauma, and 2 months after trauma). Analyses of additional variables will be presented to shed light on possible explanations for subtypes and their implications for assessment and treatment.

Papers

PTSD After Mass Shootings

Salons 7 – 9, 3rd Floor

Chair: Laura DiGrande, DRPH, MPH,
Division of Epidemiology, New York City Department of Health and Mental Hygiene, New York, New York, USA

A Prospective Examination of Risk Factors for PTSD Following a Mass Shooting

(Abstract #196512)

Paper Presentation (Disaster, Prev EI)

Hattula, Mandy, MA¹; Orcutt, Holly, PhD¹; Varkovitzky, Ruth, BS¹
¹*Northern Illinois University, De Kalb, Illinois, USA*

Peritraumatic dissociation is widely considered a risk factor for the development of PTSD; however, the nature of this relationship is unclear. Researchers have proposed that peritraumatic dissociation may be related to experiential avoidance, in that dissociative experiences during a trauma function as a mechanism to avoid unwanted thoughts, emotions, and memories that a person is otherwise unable to regulate. The present study aims to examine the prospective relationship between emotion regulation difficulties, experiential avoidance, peritraumatic dissociation, and PTSD symptoms among survivors of the mass shooting that occurred at Northern Illinois University on February 14, 2008. Emotion regulation difficulties and experiential avoidance were assessed at Time 1 (pre-shooting) among 820 undergraduate females. Peritraumatic dissociation and traumatic stress symptoms were measured in a post-trauma assessment that was launched March 2, 2008. As of March 14, 2008, follow-up assessments were available for 446 participants, with data collection ongoing. Difficulties with emotion regulation and experiential avoidance are hypothesized to predict traumatic stress symptoms related to the shooting, with peritraumatic dissociation serving as a partial mediator of this relationship.

The Mental Health and Attitudes of People With a Personal Connection to the 9/11 Terrorist Attacks

(Abstract #196493)

Paper Presentation (Disaster, Practice)

Jones, Darren, MA¹
¹*Psychology, University of Toledo, Toledo, Ohio, USA*

The study examined the mental health and attitudes of people who had a personal connection to the September 11th, 2001 terrorist attacks. The data was drawn from the Collaborative Psychiatric Epidemiology Surveys (CPES) and was collected between 2001 and 2003. The CPES study is part of the National Comorbidity Survey project and its data is freely available online for research purposes. The study investigated a variety of key mental health indicators, including measures of depression, anxiety, and Posttraumatic

stress symptoms, among those participants that reported either knowing someone that was killed in the 9/11 attack (n = 378), knowing someone that was injured in the 9/11 attack (n = 113), or was an in person witness to the attack or the scene of the attack in the days following the event (n = 77). In addition, the impact of 9/11 on employment, income, patriotism, perceptions of safety, and feelings about the future were examined. Both between and within subject designs were utilized in order to examine the impact of both direct and indirect exposure to terror events. The study includes results, discussion, limitations, implications, and recommendations related to the diagnosis and treatment of those impacted by terror events.

PTSD and Risk Factors in Lower Manhattan Residents 2-3 Years After 9/11

(Abstract #195963)

Paper Presentation (Disaster, Asses Dx)

DiGrande, Laura, DRPH, MPH¹; Perrin, Megan, MPH²; Thorpe, Lorna E., PhD³; Wu, David, MS³; Farfel, Mark, SCD³; Brackbill, Robert, PhD⁴

¹*Division of Epidemiology, New York City Department of Health and Mental Hygiene, New York, New York, USA*

²*Nathan Kline Institute for Psychiatric Research, Orangeburg, New York, USA*

³*New York City Department of Health and Mental Hygiene, New York, New York, USA*

⁴*ATSDR/NYC Department of Health and Mental Hygiene, New York, New York, USA*

Research conducted after 9/11 documented resolution of PTSD in the general NYC population within six months. However, Lower Manhattan residents may have exhibited more persistent sequelae due to their proximity to the WTC epicenter. Between 9/2003 and 11/2004, we administered a CATI questionnaire to 11,037 adults who lived south of Canal Street on 9/11. Questions included demographics, peri- and post- event exposures, and the PTSD-Checklist. Multivariable logistic regression identified risk factors for PTSD. The prevalence of current probable PTSD was 12.6% (95% CI 12.0-13.2) and associated with older age, female gender, Hispanic ethnicity, and low education and income. Residents reporting injury, witnessing horror, and dust cloud exposure were at increased risk for PTSD. Post-disaster risk factors included evacuation and participation in rescue/recovery work. We conclude Lower Manhattan residents were at increased risk for PTSD several years after 9/11. The relationship between SES and PTSD suggests surveillance and interventions should target marginalized populations living in the area. Understanding how the post-disaster environment affects local communities can assist preparedness work to reduce the mental health burden of future disasters.

The Relationship Between Depression and Posttraumatic Stress Disorder Following a Mass Trauma

(Abstract #196360)

Paper Presentation (Disaster; Asses Dx)

Weiner, Elliot, BA¹; Cukor, Judith, PhD¹; Wyka, Katarzyna, MA¹; Difede, Joann, PhD¹

¹*Cornell University, New York, New York, USA*

Purpose: Depression is a common psychiatric reaction to trauma, however, its relationship to posttraumatic stress disorder (PTSD) remains unclear. This study examines the nature of Major Depression (MDD) in comparison to PTSD in disaster workers after a terrorist attack. Methods: 3,523 workers deployed to Ground Zero after 9/11 were diagnosed using the SCID and CAPS and surveyed with self-report measures between June 2002 and December 2007.

Findings: At initial screening, 3.3% met diagnostic criteria for MDD only, 5.0% met criteria for PTSD only, and 3.1% met criteria for both MDD and PTSD. These groups differed significantly with

regard to degree of exposure to the trauma, prior trauma history, and history of depression (p < .05 for all). MDD and PTSD were significantly more likely to remit by one-year follow-up when presenting independently than comorbidly (p < .001), though 18.4% of those who initially presented with only MDD developed PTSD by follow-up. While all three groups reported significant functional impairment, individuals with comorbid MDD and PTSD had greater impairment than those with either disorder alone (p < .05 for all).

Conclusions: MDD and PTSD each develop after unique histories and have unique courses, while comorbid MDD and PTSD are a synergistic combination resulting in significantly greater impairment and decreased likelihood of remission.

Assessing Readjustment From OIF/OEF Using the Post-Deployment Readjustment Inventory

(Abstract #195709)

Workshop/Case Presentation (Asses Dx, Mil Emer) Salon 2, 3rd Floor

Katz, Lori, PhD¹; McCarthy, Anna, PhD²; Williams, Jenny, MSW²; Cojucar, Geta, MS²

¹*Mental Health, VA Long Beach Healthcare System, Long Beach, California, USA*

²*Mental Health, VA Long Beach Healthcare System, Long Beach, California, USA*

This workshop will address assessment issues regarding readjustment of post-deployed men and women who served in Operation Iraqi Freedom/Operation Enduring Freedom (OIF/OEF). The results of three studies utilizing the Post-Deployment Readjustment Inventory (PDRI) (Katz, et al, 2007; Katz, et al, in review; Katz, et al, in progress) will be reviewed. The PDRI is a new measure that has strong internal consistency and convergent validity with standardized measures of symptoms. Exposure to certain types of war stressors (e.g., military sexual trauma, being injured, and witnessing death) seems to predict unique patterns of PDRI readjustment scores. With psychotherapy treatment, readjustment scores reflect changes over time. Other variables related to readjustment such as gender differences, resiliency, and risk factors will also be discussed. The audience will learn how to administer and score the PDRI. In addition, we will propose a model that distinguishes between "normal" and "pathological" post-deployment readjustment. Case examples will be presented and treatment recommendations will be proposed.

A New Past-Focused Model for PTSD and Substance Abuse

(Abstract #196182)

Workshop/Case Presentation (Practice, Clin Res) Salon 1, 3rd Floor

Najavits, Lisa, PhD¹; Schmitz, Martha, PhD²

¹*VA Boston Healthcare System, Boston, Massachusetts, USA*

²*VA San Francisco, Oakland, California, USA*

This workshop presents a new manualized psychotherapy for co-occurring PTSD and substance use disorder (SUD) (Najavits, in press). The new model is designed to offer additional therapeutic work beyond Seeking Safety (Najavits, 2002). Where Seeking Safety teaches coping skills in the present, the new model focuses on processing of past memories and emotions. Seventeen topics are offered, including "explore," "tell your story," "transform pain," "the larger context," and "honor your body." Like Seeking Safety, the new model offers flexible, integrated treatment of PTSD and SUD; and can be used for group or individual treatment; diverse settings and clinicians; and all types of trauma and substances. Similarities and differences with existing evidence-based PTSD and/or SUD treatments will be described. We will also address key issues such as client readiness and engagement, clinician selection, complex cases, research efforts to test the model, and the historical context of past-focused treatment models. The new model can be used alone or in combination with any other treatment.

Concurrent Session 7
Friday, November 14
11:00 a.m. – 12:15 p.m.

DSM-V

Examining the Construct Validity of PTSD and ASD

Factor Structure of PTSD: Implications for DSM-V

(Abstract #197962)

DSM-V (Asses Dx, Res Meth)

Grand Ballroom, 4th Floor

Palmieri, Patrick, PhD¹

¹*Summa-Kent State Center for the Treatment and Study of Traumatic Stress, Summa Health System and Kent State University, Akron, Ohio, USA*

The diagnostic criteria for Posttraumatic Stress Disorder (PTSD) have undergone considerable revision since the category was first established in the *DSM-III*. In terms of symptom criteria, the *DSM-IV* describes 3 symptom clusters that are intended to reflect the underlying dimensions of PTSD. These clusters include 5 reexperiencing (e.g., intrusive thoughts; nightmares), 7 avoidance (e.g., avoidance of thoughts, feelings, or conversations; emotional detachment), and 5 hyperarousal (e.g., difficulty sleeping; exaggerated startle response) symptoms related to exposure to one or more traumatic events. The original criteria as well as the revisions, however, were made primarily on rational grounds, leaving questions about the validity of this 3-factor model unanswered.

Confirmatory factor analysis (CFA) is well suited for answering questions about structural validity. Accordingly, many CFA studies have been published in the past 10 years evaluating plausible structural models of PTSD in both military and civilian trauma samples. By far the most consistent finding has been the lack of empirical support for the *DSM-IV* 3-factor model. Among alternative models, two 4-factor models have garnered the most support. The emotional numbing model specifies the same reexperiencing and hyperarousal factors as the *DSM-IV* 3-factor model, but separates the avoidance factor into distinct effortful avoidance and emotional numbing factors. The dysphoria model specifies the same reexperiencing and avoidance factors as the emotional numbing model, but re-casts the emotional numbing symptoms and three of the five hyperarousal symptoms as indicators of a dysphoria, or general distress, factor and views the two remaining symptoms as indicators of a purer hyperarousal factor. Results demonstrate clearly that the *DSM-IV* avoidance symptoms do not reflect a coherent avoidance factor, a fact that any proposed revision to the diagnostic criteria must address.

Research and discussion in the following areas will help guide specific revisions to the PTSD diagnostic criteria: 1) more model invariance testing across samples, instruments, and time; 2) more assessment of construct validity of factors in good fitting models; 3) using additional indicators of putative factors to better cover factor space and yield more stable factor solutions; 4) including indicators of associated factors (e.g., guilt); 5) studying if psychogenic amnesia (which usually has low factor loadings) needs to be assessed differently, or whether it is even an essential feature of PTSD; 6) examining whether linking symptoms to an index trauma versus trauma in general affects model fit; and 7) examining whether different definitions of trauma affect model fit.

PTSD and The Internalizing/Externalizing Model of Comorbidity

(Abstract #197566)

DSM-V (Asses Dx, Bio Med)

Grand Ballroom, 4th Floor

Miller, Mark, PhD¹

¹*Department of Psychiatry, National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA*

This presentation will review evidence for a model of the structure of posttraumatic psychopathology which suggests that patterns of comorbidity and other clinical correlates of PTSD are organized by temperament-based propensities towards internalizing versus externalizing disorders. A theoretical framework for conceptualizing the structure and etiology of patterns of PTSD comorbidity will be presented along with evidence to support the model. Implications for conceptualizing heterogeneity among trauma survivors will be discussed along with recommendations for PTSD biomarker identification and treatment matching.

Acute Stress Disorder in DSM-V

(Abstract #198002)

DSM-V (Asses Dx, Prev EI)

Grand Ballroom, 4th Floor

Bryant, Richard, PhD¹

¹*University of New South Wales, Sydney, New South Wales, Australia*

Acute stress disorder (ASD) describes initial stress reactions that occur in the initial month after trauma and purportedly predictive of chronic posttraumatic stress disorder (PTSD). There has been much debate about the utility of this disorder. First, it has been criticized because it resembles PTSD in many regards apart from the timeframe. Second, the emphasis placed on dissociation has been challenged by numerous studies. Third, prospective studies of children and adults have shown that the majority of people who develop PTSD do not initially have ASD. The accumulating evidence challenge the utility of the ASD diagnosis and demonstrate that it is not a useful means to identify people shortly after trauma who will develop PTSD. Accordingly, this review will argue that there is insufficient evidence to include ASD in *DSM-V*.

Leave None Behind

(Abstract #193595)

Media Presentation

Salons 4-6, 3rd Floor

Grenier, Lt. Col Stephane, MSC, CD¹; Bailey, Suzanne, MSW²

¹*National Defence, Canadian Forces OSI Special Advisor, Ottawa, Ontario, Canada*

²*Mental Health Training & Education, Canadian Forces Health Services Group HQ, Ottawa, Ontario, Canada*

The Canadian Forces launched a Speakers Bureau to assist with psycho education within the military community around Canada. The Bureau employs military members and families who have first hand experience with mental health issues and who are trained to deliver educational modules to raise the understanding and acceptance of non physical injuries with an aim at reducing stigma and increasing trust in clinical interventions.

As part of this initiative, two 30 minute long videos were produced as visual support for the Bureau. This video is an educational tool intended for military personnel to raise awareness of mental health and reduce stigma. It introduces the audience to clinical theories surrounding Operational Stress Injuries (OSI) but more importantly, through personal testimony from Canadian Veterans it delivers a strong message regarding the importance of seeking clinical help early and on the critical role that social support plays in the recovery process. Canadian Veterans who served in such places as Bosnia, Croatia, Rwanda and Afghanistan share compelling stories about their struggle after their tours of duty and

the effect on not only themselves but as well on their entire family. This video production completed in March 2005 is now a key component of a nation wide initiative to reduce stigma within the military community.

A City-Wide School-Based Model for Building Resiliency in the Wake of War and Terror

(Abstract #196008)

Symposium/Panel (Child, Commun) State Ballroom, 4th Floor

Pat-Horenczyk, Ruth, PhD¹; Baum, Naomi, PhD²; Brom, Danny, PhD²; Benbenishty, Rami, PhD³; Schiff, Miriam, PhD⁴; Astor, Ron, PhD⁵

¹Hebrew University of Jerusalem, Jerusalem, Israel
²Israel Center for the Treatment of Psychotrauma, Jerusalem, Israel
³Social Work, Bar Ilan Univeristy, Ramat Gan, Israel
⁴Social Work, Hebrew University, Jerusalem, Israel
⁵University of Southern California, Los Angeles, California, USA

This symposium will present an ecological model for addressing the needs of children and teachers as individuals and the school community as a whole, in coping with the aftermath of exposure to war and terror. The presentations will include discussion of the interventions, and conceptual and methodological issues in the model as applied in Israel.

A Conceptual and Methodological Framework for City-Wide School-Based Monitoring in Communities Exposed to Prolonged and Severe Violence

This presentation will describe the conceptual underpinnings of a city-wide school-based monitoring system. This evidence-driven system is designed to support an ecological public health model for prevention and intervention in communities exposed to prolonged and severe violence such as war, terror, and community crime and violence. The goal of the system is to provide the evidence and processes required to build awareness of the situation, mobilize multiple constituents in the community to address the problems and build resiliency, make informed shared decisions on priorities, resource allocation and appropriate evidence-based interventions, monitor progress over time, assess the effectiveness of interventions, and suggest directions for future change. Monitoring is perceived as a democratic process of eliciting the voices of all members of the school community.

We will present examples that will highlight ethical, methodological and technological challenges and solutions.

Teachers Resilience and Needs in the Wake of War

Our school-based intervention model employs assessment and monitoring of students' and teachers' self reports on their psychological and behavioral status and needs. This presentation reports on a teacher survey conducted in parallel to a student assessment process undertaken in the North of Israel, nearly one year after the Second Lebanon War. The aim of the survey was to assess the impact of the war on teachers in terms of Posttraumatic symptoms and difficulties in family and school functioning, their self efficacy in dealing with future challenges, and their perceived needs. We also asked about their perceptions of the effects of the war on their students and their school as a whole.

The sample consisted of 337 Jewish and Arab teachers (a response rate of 30%) who completed structured questionnaires. Our findings indicate that significant group of teachers report on Posttraumatic symptoms and difficulties in functioning a year after the war, and express a range of needs for support for them and for their schools. In the presentation we will compare Arab and Jewish teachers and focus on gaps in services and perceived needs of teachers, both personal and professional.

Do Children Know When They Are Distressed? Employing Students' Self Reports of Emotional Status and Need for Help

Our school based model for building resiliency employs students' and teachers' self reports in the processes of assessment and monitoring of psychological and behavioral status, risk and

protective factors and needs. The current study examines whether children and adolescents can in fact play an active role in the assessment and monitoring process by directly being asked whether and how much help they need. We examined whether students' reports on the extent they would like to get help after their exposure to the Second Lebanon war, would be a significant predictor of their distress over and above known risk and protective factors.

The study is based on a representational sampling of all Jewish and Arab (4th-11th grade) students in the North of Israel. The sample included 2,651 Jewish students and 4,028 Arab. Our findings indicate that the students' report on the total extent of seeking help from all sources was a significant predictor of their distress, over and above background variables, risk factors and protective factors.

A School-Based City-Wide Intervention Model for Building Resilience in the Shadow of War and Terror

This paper presents a school-based intervention model for building resilience among children and adolescents who have been exposed to war and terrorism. The Building Resilience Program is an ecological public health model that addresses the needs of multiple constituents in the school community and combines intervention and prevention on multiple levels. The program was developed by the Israel Center for the Treatment of Psychotrauma in Jerusalem. A major component of the school based intervention is preventive and universal, i.e., to train teachers and other school personnel in understanding resilience, trauma awareness and coping skills. Trained school personnel then educate children and adolescents, through modeling and hands-on activities, in developing the strengths that will buffer traumatic experiences.

A second element of the program focuses on students who have been adversely affected by either direct or indirect exposure to terrorism and war. Students are identified through class administered self reports designed to screen for PTSD and other consequences of exposure to war and terror. Once the diagnosis of PTSD is confirmed, children are offered one of two modules of short-term cognitive-behavioral treatments. This paper presents evidence regarding teachers' workshops and screening and referral of more than 10000 students.

Current Perspectives on the Role of Cognitive Factors in the Maintenance and Treatment of PTSD

(Abstract #196228)

Symposium/Panel (Clin Res, Asses Dx) Monroe Ballroom, 6th Floor

Ehring, Thomas, PhD¹; Wild, Jennifer, DCLINPSYCH²; Heims, Hannah, DCLINPSYCH²; Ehlers, Anke, PhD²; Stines Doane, Lisa, PhD³; Moore, Sally, MS⁴; Echiverri, Aileen, BS⁴; Zoellner, Lori, PhD⁴; Feeny, Norah, PhD⁵; Kleim, Birgit, PhD²; Grey, Nick, DCLINPSYCH²; Hackmann, Ann, DCLINPSYCH²

¹Dept. of Clinical Psychology, University of Amsterdam, Amsterdam, Netherlands
²Dept. of Psychology, Institute of Psychiatry, King's College London, London, United Kingdom
³Case Western Reserve University, Cleveland, Ohio, USA
⁴University of Washington, Seattle, Washington, USA
⁵University of Oxford, Oxford, United Kingdom

Cognitive factors are suggested to play a key role in the maintenance of PTSD. The symposium includes new research into the role of cognitive variables in the maintenance of PTSD using experimental and longitudinal designs as well as studies testing whether symptom reduction in PTSD treatment is mediated by cognitive change.

First Responders at the London Bombings of 7 July: Predictors of Recovery From PTSD

(Wild, Heims & Ehlers)

Objectives: This study investigated predictors of recovery from PTSD in a cohort of paramedics who attended the London bombings of 7 July.

Method: First responders who attended the London bombings completed measures of PTSD, depression, emotion regulation, use of social support, alcohol and drug use, cognitive and behavioural responses to intrusive memories, trauma cognitions, trauma history and trauma exposure within one month of exposure to the bombings. They were re-assessed six months later on measures of PTSD, trauma exposure and use of social support. The Structured Clinical Interview for *DSM-IV* Axis I Disorders (SCID) was administered to confirm a diagnosis of PTSD.

Results: Twenty six per cent of paramedics met criteria for PTSD in the aftermath of the London bombings. Six months later, the rate had dropped to 4%. Emotion regulation and adaptive responses to intrusive memories predicted recovery.

Conclusions: The London bombings led to high rates of initial PTSD that resolved significantly within six months. Those who continued to have PTSD demonstrated problems regulating negative emotions in the aftermath of the bombings, as well as dissociating in response to intrusive memories. The results have implications for prevention and intervention planning in the emergency services.

Characteristics of Explicit and Implicit Trauma Memory in PTSD (*Ehring & Ehlers*)

Two hypotheses derived from cognitive models of PTSD were tested: (1) the idea that the explicit trauma memory is fragmented and disorganized in PTSD (e.g., van der Kolk & Fiesler, 1995) and (2) the hypothesis that PTSD sufferers show a heightened perceptual priming for trauma-related stimuli (Ehlers & Clark, 2000).

We conducted a cross-sectional (N = 101) and a prospective study (N = 147) with injured accident survivors. The degree of trauma memory disorganisation was coded from narratives of the trauma and a non-traumatic event (inter-rater reliabilities: .80 - .95). In addition, a word-stem completion and a picture identification task were used to investigate perceptual priming.

Results from earlier studies showing disorganisation of trauma narratives in PTSD were replicated. However, in contrast to the fragmentation hypothesis, this was not specific for the trauma narrative. The results underline the importance of a control condition when investigating trauma memory characteristics and suggest a modification of the fragmentation hypothesis. Results of the implicit memory tests were in line with the idea that individuals with PTSD showed a heightened perceptual priming for trauma-related stimuli.

Implications for cognitive theories of PTSD and future research will be discussed.

Trauma-Related Cognitions in Critical Sessions: Does Cognitive Change Precipitate Symptom Reduction? (*Stines Doanes, Moore, Echiverri, Zoellner & Feeny*)

Evidence suggests that a large proportion of overall symptom reduction in CBT often occurs as a sudden gain (SG), or a large, rapid decrease in symptoms from one session to the next (e.g., Tang & DeRubeis, 1999; Hardy et al., 2005; Stines et al., 2008). Thus, the session prior to the gain may be critical to stimulating these abrupt reductions in symptoms. However, little research to date has examined factors that may precipitate these sudden improvements, and changes in trauma-related cognitions may play a role. The purpose of this study was to explore the relationship between cognitive change and SG in prolonged exposure therapy (PE) for PTSD. Data for the current study were collected as part of an ongoing RCT comparing PE and sertraline; only data from those who received PE were evaluated for this study (n = 110). SG were computed following the methods suggested by Tang & DeRubeis (1999), and reliable cognitive change was computed using the test-retest reliability coefficient reported on the Posttraumatic Cognitions Inventory (Foa, Ehlers, Clark, tolin, & Orsilo, 1999). Preliminary results suggest that 61% of the sample experienced a SG, with 44% occurring prior to session 5. Cognitive change in relation to SG could have significant implications for course of treatment as well as potential modes for treatment augmentation among those who do not respond to PE.

Cognitive Change Mediates Symptom Reduction in Cognitive Therapy for PTSD

(*Kleim, Grey, Hackmann, Wild & Ehlers*)

Objectives: Cognitive Therapy for PTSD (CT, Ehlers & Clark, 2000) has been shown to be effective, but there is yet little empirical evidence on the hypothesized mechanisms of change. We tested the hypothesis that change in cognitive appraisals characteristic for PTSD mediate symptom reduction with treatment, and that appraisal change precedes symptom change.

Methods: We analysed weekly cognitive and symptom measures from CT sessions.

Results: Preliminary analyses suggested that change in cognitive appraisals from initial assessment to mid-treatment mediate symptom reduction with CT by the end of treatment.

Conclusion: Symptom reduction in cognitive PTSD therapy can be explained by cognitive change during therapy.

Early Diagnosis and Intervention in Mass Casualty Events

(Abstract #196326)

Symposium/Panel (Prev EI, Asses Dx) Adams Ballroom, 6th Floor

Kutz, Ilan, MD¹; Dekel, Rachel, PhD²; Schreiber, Shaul, MD³; Resnick, Victor, MD¹; Dolberg, Ornah T., MD⁴; Barkai, Gabriel, MD⁴; Leor, Agnes, MD⁴; Rapoport, Elena, MD⁴; Bloch, Miki, MD⁴

¹Meir Hospital, Tel-Aviv, Israel

²Bar Ilan University, Ramat-Gan, Israel

³Sourasky medical center, Tel Aviv, Israel

⁴Psychiatry, Tel Aviv Sourasky Medical Center & Tel Aviv University Sackler Faculty of Medicine, Tel-Aviv, Israel

Since September 2000, Israeli and Palestinian societies suffered great losses. on the Israeli side, civilians of all ages, and ethnic groups, have been exposed to various types of terrorist attacks. This symposium examines issues of diagnosis and interventions in the immediate aftermath of these mass casualties events.

Acute Stress Reaction (ASR): Methods of Assessment and Prediction of Acute Stress Disorder

Purpose: To develop an assessment tool for measuring the intensity of acute stress reaction symptoms in mass causality events and to examine it's ability to predict emotional reactions 4-6 weeks later.

Method: Two ways of measuring the intensity of ASR were compared: verbal and numerical ASR-Rating Scale (ASR-RS), comprised of six clusters of symptoms, based on the literature and accumulated experience of several ER clinicians and the ASR Visual Analogue Scale (ASR-VAS) which include both the general level of distress of the patient, and the Clinical Global Impression (CGI) of ASR, as perceived by the examiner.

Findings: The ASR-VAS was found to be superior to the ASR-Rating Scale because it is simple to use, easy to clinically interpret, and provides clear guidelines for follow-up decisions. The level of ASR-VAS predicted the level of emotional reactions 4-6 weeks later in various types of traumatic events.

Conclusions: The clinician's use for rating distress by the ASR-VAS is a novel use of the VAS method. Assessment of ASR can be taught to clinicians using a training kit, that includes: An overview presentation of Acute Stress Syndromes; The ASR-RS (for practice guidelines); The ASR-VAS; Training movies with various interviews of simulated ASRs.

The Effect of a Single Session of EMDR on Intrusive Distress in Acute Stress Syndromes

Purpose: To examine the efficacy of a single session of a modified abridged EMDR protocol in reducing Acute Stress Syndromes (ASS) following accidents and terrorist bombing attacks.

Methods: Treatment was provided, in a general hospital inpatient and out-patient setting to 86 patients with ASS.

Findings: Fifty percent reported immediate fading of their intrusive symptoms and general alleviation of their distress, 27% described partial alleviation of their symptoms, while 23% reported no improvement. Four week and six month follow-up, in the terror victims group only, showed that the immediate responders remained symptom free, while half of the non-responders, who also received subsequent additional interventions modalities, were still symptomatic.

Conclusions: The difference in response may be attributed, in part, to the fact that immediate responders tended to have an uncomplicated ASS with fewer risk factors for PTSD, while the non-responders had higher exposure to former traumas and endorsed more risk factors for PTSD. These results support other anecdotal reports on the rapid effects of brief EMDR intervention in uncomplicated cases and offer a psycho-physiological hypothesis for immediate response. While additional controlled studies are essential, this immediate symptomatic relief may be a potential addition for focused interventions in acute trauma victims.

Intervention for Memory Structuring and Meaning Acquisition With Survivors of Terror

Purpose: To assess the impact of a primary intervention for memory structuring and meaning acquisition in the emergency department with survivors of terror on their medium term mental health outcome.

Method: Injured survivors of terror attacks, aged 16-72 were given the intervention at the ER. Follow up assessment 3-9 months and 24 months post injury were conducted.

Findings: Out of 213 injured survivors evacuated to the ED, 129 were retrieved 3-9 months after the incident, and 53 were available for assessment 2 years later. Being hospitalized and treated were the only predictors for PTSD with no effect for the current treatment vs. other supportive intervention.

Conclusion: This treatment is as good as the non-specific supportive treatment performed routinely in the ED.

When Post-Trauma is Also a Pre-Trauma: Working with Mental Health Teams Under Ongoing Rocket Attacks

Purpose: Improving the skills of an outpatient mental health team (MHT) in Sderot, a town that has been bombarded by rocket attacks for the past seven years. This MHT were charged with providing a comprehensive mental health outpatient services while manning the acute stress intervention site and responding to daily mass casualty events.

Method: A psychiatrist experienced in trauma intervention sent to improve trauma intervention skills to the MHT.

Findings: The posttraumatic symptoms of the sensitized residents were compounded by 'pre-traumatic' symptoms of hyper-vigilance, helplessness, and demoralization in anticipation of the next attacks. There was no 'safe place' for psychological intervention. The MHT members were also suffering from emotional exhaustion and demoralization. Gradually, both supervisor and MHT members had to redefine concepts like safety, stress and survival. The process involved a gradual shift from explicit teaching and supervision to implicit group and individual support, employing principles of individual, family and community interventions.

Conclusions: The attempt of supervisor and team to enter an enduring alliance afforded a growth experience with some restructuring of outer reality (like intervention protocols) while expanding professional insight (recognition of limitations, developing group cohesion).

Improving Disaster Mental Health Care Through Evaluation: Program Outcomes and Treatment Referrals

(Abstract #196392)

Symposium/Panel (Disaster; Clin Res)

Salons 7-9, 3rd Floor

Norris, Fran, PhD¹; Rosen, Craig, PhD²; Hamblen, Jessica, PhD³; Mathieu, Monica, PhD⁴; Pietruszkiewicz, Siobhan, LCSW⁵; Gibson, Laura, PhD⁶; Naturale, April, MSW⁷; Louis, Claudine, PhD⁸

¹Dartmouth College, White River Junction, Vermont, USA

²Stanford University, Menlo Park, California, USA

³VA National Center for PTSD, White River Junction, Vermont, USA

⁴School of Social Work, Washington University, St. Louis, Missouri, USA

⁵School of Social Work, Louisiana State University, Baton Rouge, Louisiana, USA

⁶University of Vermont, Burlington, Vermont, USA

⁷Silver School of Social Work, New York University, Montclair, New Jersey, USA

⁸Dartmouth Medical School, White River Junction, Vermont, USA

The high prevalence of PTSD after disasters has sparked tremendous interest in improving the quality of mental health care for disaster victims. Presenters describe program outcomes and examine linkages between crisis counseling programs that aim to provide extensive services to the general population and treatment programs that aim to provide intensive programs to distressed individuals.

Service Characteristics and Outcomes: Lessons From a Cross-Site Evaluation of Crisis Counseling After Hurricanes Katrina, Rita and Wilma

The 2005 hurricane season was the worst on record in the USA, resulting in disaster declarations and the implementation of federally-funded crisis counseling programs in five states. After Katrina, the CCP implemented a standardized data collection system for cross-site evaluation. Data from 2,850 participant surveys, 805 provider surveys, and 132,733 encounter logs were aggregated to the county level (N = 50) and used to test hypotheses regarding factors that influence program performance. Program performance was measured by the Counseling Outcomes and Experiences Scale (COES), a 10-item (100-point) scale that assesses the extent to which the counselor (a) created an encounter characterized by respect, cultural sensitivity, and sense of privacy and (b) achieved realistic immediate outcomes as perceived by the participant. There was striking variability across the 50 counties. County-level outcomes improved as service intensity, service intimacy, and frequency of psychological referrals increased, and as provider job stress decreased. The percent of providers with advanced degrees was indirectly related to outcomes by increasing service intensity and referral frequency. The results yielded recommendations for achieving excellence in disaster mental health programs.

Factors Predicting Referrals to Other Crisis Counseling, Disaster Relief, and Psychological Services After Hurricane Katrina

Nationwide data from 703,000 individual counseling encounter logs completed by workers in 19 crisis counseling programs funded in the aftermath of Hurricane Katrina were analyzed to draw conclusions about factors that influence crisis counselors' decisions to make referrals to other crisis counseling services, disaster relief, and psychological services. Between Months 3 and 18 postdisaster, 159,500 persons (22.7%) were referred to other crisis counseling, 410,500 (58.4%) to disaster relief, and 46,500 (6.6%) to psychological services. Referrals to disaster relief were stable, but referrals to other crisis counseling and psychological services declined sharply over time. Encounters in urban settings were far more likely to yield referrals of all types, especially to psychological services. Disaster experiences predicted referrals of all types, but psychological referrals were related more strongly to participants' past mental health problems than to experiences in Katrina. Adults, especially young and middle-aged adults, were much more likely to receive psychological referrals than were

Friday: 11:00 a.m. – 12:15 p.m.

children. A participant survey suggested that the prevalence of need for psychological services far exceeded the prevalence of referrals to those services.

Evaluation of Cognitive Behavioral Therapy for Post-Disaster Distress (CBT-PD) for Hurricane Katrina Survivors
Hurricane Katrina displaced hundreds of thousands of residents of New Orleans, many of whom settled in Baton Rouge, Louisiana. The Baton Rouge Area Foundation sponsored a mental health initiative, the cornerstone of which was InCourage, a free 10-session program of CBT-PD that local (predominantly masters-level) clinicians were trained to provide. During 2007, 128 persons (80% female, 57% African American) enrolled in InCourage. To date 80 persons have completed the program, which is still active. Participants were assessed five times (referral, pretreatment, intermediate treatment, posttreatment, and 4-month follow-up). Consistent with hypotheses, participants showed little change between referral and pretreatment or between posttreatment and follow-up, but large change between pretreatment and intermediate treatment ($ES = 1.2$) and again between intermediate treatment and posttreatment ($ES = 1.0$). Effect sizes were comparable for White and African American participants and for persons with very high and moderately high symptomatology at enrollment. Although InCourage was effective for completers, the number of participants was less than anticipated. Issues that may have influenced enrollment and retention are discussed.

EMDR HAP Training in Pakistan in the Aftermath of the 2005 Earthquake and the 'War on Terror'
(Abstract #196217)

Paper Presentation (Disaster; Media Ed) Salons 7-9, 3rd Floor

Farrell, Derek, PhD¹; Tareen, Saleem, MBBS²; Keenan, Paul, MSC³
¹College of Medicine, University of Birmingham, Edgbaston, Birmingham, United Kingdom
²General Adult Psychiatry, Belfast Health & Social Care, Belfast, United Kingdom
³Faculty of Health, Edge Hill University, Liverpool, United Kingdom

On Saturday 8th October 2005, a devastating earthquake measuring 7.6 on the Richter scale struck northern Pakistan. The magnitude of the earthquake wiped out entire villages and communities, destroyed 400,000 houses and created over 73,000 fatalities and 135,000 people injured.

EMDR UK & Ireland, EMDR Europe, the British/Pakistani Psychiatric Association & the University of Birmingham supported an eighteen month Humanitarian Assistance Programme to help train forty-nine mental health workers, mainly psychiatrists and psychologists from the earthquake affected areas, in the theory and practice of EMDR in the management of psychological trauma. This programme was one of the first University based HAP trainings in EMDR ever to be undertaken.

This paper will provide an insight into the development and progression of the trainings in light of the ongoing political problems in Pakistan both in terms of post earthquake reconstruction and the continued threat of terrorist attacks throughout Pakistan. It will also consider cultural perspectives of trauma and how this related to both EMDR and the conceptual framework of PTSD. The paper will also highlight some of the psychometric data acquired from survivors from the earthquake areas and demonstrate the ways in which EMDR is being utilised as a psychological treatment intervention in Northern Pakistan.

Papers Refugee Mental Health

Crystal Room, 3rd Floor

Chair: Kenneth Carswell, DCLINPSYCH, MPHIL, BA,
The Traumatic Stress Clinic, London, United Kingdom

Trauma, Mental Health, and Anger in Timor Leste
(Abstract #196374)

Paper Presentation (Civil Ref, Cul Div)

Steel, Zachary, MPSYCHOL(CLINICAL)¹
¹Centre for Population Mental Health Research, School of Psychiatry, University NSW, Liverpool, New South Wales, Australia

There has been a strong tendency for epidemiologic studies in post-conflict developing countries to focus on PTSD and depression. Clinical observations suggest that exposure to persecution may generate a wider array of outcomes amongst survivors including persisting anger. This paper reports on the findings of a two-phase small area total population survey of 1,544 adults in an urban and rural area of Timor Leste between February and November 2004. The study assessed the prevalence of PTSD, depression, psychosis, and *fiu kotu*, a severe, explosive form of anger identified in that culture. The prevalence of PTSD and depression was low despite extensive population wide exposure to trauma. However, 38% of respondents reported episodes of *fiu kotu* with the risk for this condition increasing with heightened exposure to trauma. These findings provide a challenge for clinical researchers to examine a broader range of outcomes in culturally diverse trauma affected populations.

Terror and its Aftermath: Impact of Persecution and Refugee Camp Experiences on Arab Immigrant Women
(Abstract #196543)

Paper Presentation (Cul Div, Civil Ref)

Norris, Anne, PhD, APRN BC, FAAN¹; Aroian, Karen, PhD, RN, FAAN²
¹William F. Connell School of Nursing, Boston College, Chestnut Hill, Massachusetts, USA
²College of Nursing, University of Central Florida, Orlando, Florida, USA

It has been argued that persecution significantly damages the self, particularly in relation to others, increasing risk of PTSD and depression symptoms, but other research highlights multiple trauma's damaging effects. Many Arab immigrant women have experienced persecution or a multiply traumatizing refugee camp. This study investigated effects of pre-migration persecution and refugee camp experiences on post-migration functioning in Arab Muslim immigrant women ($n=635$) who completed Arabic language versions of the POMS, CES-D, PDS, social support and stress measures, and measures of immigration and demographic characteristics during interviews in their homes. Few women (6%) reported only refugee camp experience. More reported persecution only (23%) or both persecution and refugee camp (27%). Many reported neither (44%). No interaction effect was observed: Women who only experienced persecution or a refugee camp were not significantly less distressed or symptomatic than those who experienced both ($p > .50$). Women not reporting these experiences were least symptomatic of PTSD ($p < .01$). No group differences were found for social support ($p=.27$) arguing against damage to self in relation to others being uniquely related to persecution. Findings underscore negative effects of persecution and repetitive trauma, and highlight need for intervention with study population.

Culture, Trauma, and Psychiatric Impairment Amongst Vietnamese Living in Vietnam and Australia

(Abstract #196320)

Paper Presentation (Civil Ref, Cul Div)

Steel, Zachary, MPSYCHOL(CLINICAL)¹

¹Centre for Population Mental Health Research, School of Psychiatry, University New South Wales, Liverpool, New South Wales, Australia

Uncertainty persists about the long-term mental health of post-conflict populations and resettled refugees. The present paper assesses the contributions of trauma to mental disorder amongst Vietnamese refugees resettled in Australia and resident in the Mekong Delta region of Vietnam. The study involved multi-stage probabilistic samples of Vietnamese refugees resettled in Australia for 11 years (n = 1,161) and from Can Tho City and Hou Gian Province in Vietnam (n=3039). Both surveys applied the CIDI and an indigenously-derived measure of mental disorder. In the Australian sample Latent Class Analysis identified three classes of respondents on the basis of trauma exposure: (1) war affected ex-combatants; (2) Vietnamese exposed to trauma during refugee flight; and (3) a no trauma group. In the Mekong Delta group two classes emerged: (1) war affected ex-combatants (2) and a no trauma group. Despite a low prevalence of mental disorder amongst Vietnamese in both surveys the trauma affected classes remained at high risk of mental disorder. of notable interest was evidence to suggest that the manifestation of mental disorder amongst both trauma affected and non-trauma affected respondents is affected by exposure to westernization.

The Relationship Between Post-Migration Problems and Refugee Mental Health

(Abstract #196304)

Paper Presentation (Practice, Sos Ethic)

Carswell, Kenneth, DCLINPSYCH, MPHIL, BA¹; Barker, Chris, PhD, MA, MSC, BA²; Blackburn, Pennie, DCLINPSYCH, MA³

¹The Traumatic Stress Clinic, London, United Kingdom

²Sub-Department of Clinical Health Psychology, University College London, London, United Kingdom

³Mangere Refugee Reception Centre, Auckland, New Zealand

There is growing evidence of the impact of the post-migration environment on the mental health of refugees and asylum seekers. to date, there has been little research conducted in the UK. Participants (n = 47) recruited from clinical settings completed self-report measures assessing post-migration problems, psychopathology and social support. Bivariate associations were identified between psychopathology and number of traumas, adaptation difficulties, a loss of culture and support and social support. In multivariate analyses post-migration problems were significantly associated with psychopathology, but there were no significant associations between psychopathology and number of traumas or social support. The findings are discussed with reference to clinical services and UK asylum policy. Changes to UK asylum policy have attempted to assist the integration of individuals by reducing the amount of time taken to process applications, whilst also making the process of adaptation more difficult through practices including the provision of temporary leave to remain, dispersal of asylum seekers and restricted rights to work and education.

Papers

First Responders

Wabash Room, 3rd Floor

Chair: Neil Greenberg, MD,

King's College London, London, United Kingdom

Atypical Work Hours and PTSD Among Police Officers

(Abstract #196135)

Paper Presentation (Mil Emer, Sos Ethic)

Violanti, John, PhD¹; Hartley, Tara, MS²; Mnatsakanova, Anna, MS²; Andrew, Michael, PhD³; Burchfiel, Cecil, PhD⁴

¹Social & Preventive Medicine, University at Buffalo, Buffalo, New York, USA

²Health Effects Laboratory Division, NIOSH, Centers for Disease Control and Prevention, Morgantown, West Virginia, USA

³Health Effects Laboratory Division, NIOSH, Morgantown, West Virginia, USA

⁴Biostatistics and Epidemiology Branch,, National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, Morgantown, West Virginia, USA

The impact of circadian disruption (shift work) on PTSD symptomatology has not yet been adequately examined. This cross-sectional study of 111 police officers examined associations between shift work and PTSD that could be influenced by irregular sleep hours and police rank. Shift work data were obtained from daily payroll records between 1994 -2000, categorized as day, afternoon or midnight, based on the highest percent of hours worked on each of these shifts. PTSD symptoms were measured with the Impact of Event Scale (IES). Sleep duration was dichotomized (<6 vs. 6 hours/day) and police rank as patrol officer vs. other. IES scores were compared across shift types using ANOVA and ANCOVA. Officers working midnight shift had higher IES scores than officers working day or afternoon shifts (15.77 vs. 13.98 and 15.09, respectively). Adjustment for age and gender did not alter the results. Stratification by sleep duration yielded the highest IES score for midnight shift workers with insufficient sleep (<6 hours/night) compared with dayshift workers (22.00 vs. 13.07, p=0.59). Among patrol officers, midnight shift workers had the highest IES score compared to dayshift workers (16.05 vs. 7.72, p=0.098). These results suggest cross-sectional associations between shift work and PTSD symptoms among patrol officers.

The Psychological Impact of the 7th July London Bombings Upon London Ambulance Service Personnel

(Abstract #195909)

Paper Presentation (Mil Emer, Disaster)

Greenberg, Neil, MD¹; Misra, Monika, MD²

¹King's College London, London, United Kingdom

²Occupational Health, King's College London, London, United Kingdom

Aim: To assess the psychological impact of the London bombings of July 7th 2005 on London Ambulance Service (LAS) personnel. Method: Cross sectional questionnaire survey two months after the bombings of all 525 London Ambulance Service personnel involved in the bombings, and a control group. Probable PTSD was assessed using the Trauma Screening Questionnaire, and substantial, psychological, distress, using an identical tool used to assess the emotional impact of the bombings on the population of London.

Results: 341 (32%) responded. 4.3% reported probable PTSD & 13% reported substantial distress. Probable PTSD was more common in those involved in the bombings or who worked at the disaster scene. The majority were aware of the post incident support available and how to access this, moreso if personnel were involved in the bombings.

Conclusions: Despite dealing with the aftermath of the bombings LAS did not reported higher levels of probable PTSD and

psychological distress than the rest of the London population. However those more proximal to the incident were more likely to have been affected in spite of being aware of various staff support measures put in place.

9/11 Responders and High Rates of Posttraumatic Stress Disorder

(Abstract #196487)

Paper Presentation (Asses Dx, Clin Res)

Barrett, Minna, PhD¹; Demaria, Thomas, PhD, Vice President Behavioral Health²

¹Psychology, State University of New York at Old Westbury, Oceanside, New York, USA

²Behavioral Health, South Nassau Communities Hospital, Oceanside, New York, USA

This paper reports results on rates of emotional distress in 310 9/11 First Responders who participated in rescue and recovery during the attacks/aftermath and who sought health monitoring/mental health treatment services for respite, post-trauma symptoms or family dysfunction. Employing a federally approved assessment protocol, mental health staff in a federally sponsored program dedicated to 9/11 responders, provided services to more than 4000 rescue, recovery and cleanup workers and about 300 of their spouses and children. The protocols include assessment of: direct exposure (NIH 9/11 Impact Scale); health, physical and emotional (SF 36); post trauma impact (Penn Inventory of Posttraumatic Stress); depression (BDI) and five other measures. Rates of PTSD were 300% higher than those reported in a similar study of Oklahoma City Firefighters suggesting that professional Firefighters (FDNY), with rates of 49% PTSD, may not necessarily be inoculated to the psychological impacts of this work as was posited by North, et. al. (2002). Findings of Bacharach and Zelko (2004), Levin et.al. (2006) and Raskin (2005) with regard to psychological and health impacts of 9/11 on Responders are shared along with importance of cultural sensitivity during assessment and implications for intervention during and following terrorist attacks.

Manhattan Clinicians' Resilience and Professional Satisfaction in the Aftermath of the 9/11 Disaster

(Abstract #196491)

Paper Presentation (Practice, Disaster)

Tosone, Carol, PhD¹

¹Silver School of Social Work, New York University, New York, New York, USA

Purpose: This paper uses cluster analysis to examine relationships among six psychological variables in a sample exploring the long-term impact of 9/11 on Manhattan clinicians.

Methods: A total of 481 clinicians from the NASW Manhattan Chapter (38% response rate) replied by mail to the Post 9/11 Quality of Professional Practice Survey.

Findings: A three cluster solution was chosen for substantive interest. Of 481 respondents, 294 are in a cluster showing the highest resiliency and compassion satisfaction, and the lowest compassion fatigue, posttraumatic stress, and ambivalent and avoidant attachment. The other two clusters, one with 89 respondents and one with 98 showed more unusual patterns. The first were relatively high on resiliency and compassion satisfaction but showed the highest levels of compassion fatigue, posttraumatic stress, and ambivalent and avoidant attachment. The final cluster had the lowest resiliency and compassion satisfaction, and moderate on all other measures.

Conclusion: Although one might expect respondents high on compassion satisfaction and resiliency to be correspondingly low on compassion fatigue, posttraumatic stress, and ambivalent and avoidant attachment, findings indicated somewhat paradoxical

relationships among these variables. Clinicians could be professionally satisfied yet experience professional fatigue and PTSD symptoms.

Supported Employment Versus Standard Vocational Rehabilitation for Veterans With PTSD

(Abstract #196205)

Workshop/Case Presentation (Clin Res, Practice) Salon 1, 3rd Floor

Davis, Lori, MD¹; Drebing, Charles, PhD²; Toscano, Rich, MA³; Riley, Allen, MS¹; Drake, Robert, MD¹; Newell, Jason, PhD¹

¹Research (151), VA Medical Center, Tuscaloosa, Alabama, USA

²Mental Health, Bedford VA Medical Center, Bedford, Massachusetts, USA

³Institute on Human Development and Disability, University of Georgia, Decatur, Georgia, USA

⁴Harvard University, Hanover, New Hampshire, USA

Posttraumatic stress disorder (PTSD) often causes chronic occupational dysfunction and may lead to unemployment or disability. This workshop will present a description of Individual Placement Services (IPS), an evidenced based supported employment (SE) method of vocational rehabilitation, and make a comparison with standard vocational rehabilitation programs (VRP). While IPS SE has been proven more effective than standard VRP in the serious mentally ill (SMI; i.e. psychotic disorders), it has not been adequately studied in PTSD populations. Preliminary data and case examples from an ongoing randomized trial of IPS SE versus standard VRP in veterans with PTSD will be presented and discussed. In addition, case examples and data from a multi-site "pathways-to-care" study of 200 veterans with mental health (33% with PTSD) and vocational problems will be presented. This study includes a random assignment trial of motivational interviewing and provides evidence that the single-session intervention resulted in a 50% increase in both entry and retention rates in vocational rehabilitation services. Challenges of occupational recovery and symptomatic management of PTSD during vocational rehabilitation will be discussed. The essential elements of IPS SE treatment fidelity will be clearly delineated. Barriers to occupational recovery in patients with PTSD will also be discussed.

Conducting Ethical and Responsible Trauma-Focused Research With Special Populations

(Abstract #195959)

Workshop/Case Presentation (Res Meth, Sos Ethic) Salon 2, 3rd Floor

Nelson Goff, Briana, PhD¹; Schwerdtfeger, Kami, PhD²

¹Kansas State University, Manhattan, Kansas, USA

²Oklahoma State University, Stillwater, Oklahoma, USA

Recent emphasis on the ethical conduct of researchers has resulted in a growing body of literature exploring the impact of trauma-focused research on participants. This workshop will focus on applying ethical principles of research (autonomy, beneficence, nonmaleficence, and justice) in trauma-focused research protocols. To illustrate these ethical principles, the presenters' experience conducting research with special populations of trauma survivors, specifically pregnant females and couples in which one or both partners have a trauma history will be described. These are two groups of participants that are unique for trauma research, primarily because of the Institutional Review Board and ethical considerations for research with these populations, as well as the broader systemic impact trauma may have. The presenters will provide examples of direct experience with conducting trauma-focused research with special populations, barriers and issues that need to be addressed in the research, and benefits from their research for participants, the researchers, and the broader field of traumatic stress. The workshop will include a focus on a couple and family systems perspective, a lifespan perspective, and the role of resilience in the research procedures and results. Best

practices for conducting ethical trauma-focused research will be provided. As well, recommendations for future research will be outlined in an effort to further extend the ethical understanding of the benefits and costs of trauma-focused research.

The Challenges of Conducting and Analyzing Small to Moderate Sized Longitudinal Studies

(Abstract #196236)

Workshop/Case Presentation (Res Meth, Asses Dx) Salon 3, 3rd Floor

Sunday, Suzanne, PhD¹; Labruna, Victor, PhD¹; Kaplan, Sandra, MD¹; Kline, Myriam, PhD¹

¹Psychiatry, North Shore University Hospital, Manhasset, New York, USA

Conducting longitudinal research is a challenging endeavor and provides unique methodological and statistical difficulties. Follow-ups, particularly those with intervals of 10 years or more, often have retention rates of less than 50% and longitudinal studies of trauma survivors often have very high rates of loss to follow-up. Participant attrition presents unique obstacles to the conduct and analysis of such studies. It is the purpose of this workshop to discuss the difficulties of conducting and analyzing a 10-15 year follow-up of young adults who were documented as physically abused during adolescence. In the original study, 99 physically abused and 99 comparison middle-class adolescents were enrolled. Follow-up participants were 67 in the physical abuse group and 76 in the comparison group. Issues of subject retention and comparisons between follow-up participants and non-participants will be presented. Qualitative and quantitative analyses of data, approaches to handling missing data, statistical and graphic analyses of regressions and interactions, and the development of models of risk factors and outcomes will be discussed and the results and interpretations of these analyses will be compared and contrasted. Workshop participants will be encouraged to share their own longitudinal research issues and questions during the workshop.

Concurrent Session 8

Friday, November 14

2:00 p.m. – 3:15 p.m.

DSM-V

Should There be a Complex Trauma Diagnosis in DSM-V?

Developmental Trauma Disorder: Towards a Rational Diagnosis of the Sequelae of Chronic Childhood Abuse and Neglect

(Abstract #198507)

DSM-V (Asses Dx, Res Meth) Grand Ballroom, 4th Floor

van der Kolk, Bessel, PhD¹; Ford, Julian, PhD²; Stolbach, Bradley, PhD³; Spinazzola, Joseph, PhD⁴; D’Andrea, Wendy⁵

¹Boston University School of Medicine, Brookline, Massachusetts, USA

²University of Connecticut Health Center, Farmington, Connecticut, USA

³La Rabida Children’s Hospital, Chicago, Illinois, USA

⁴Boston University, Brookline, Massachusetts, USA

⁵University of Michigan, Ann Arbor, Michigan, USA

Purpose: Each year over 3,000,000 children are reported to the authorities for abuse and/or neglect in the US. Research has well documented that adverse childhood experiences have a powerful relation to adult health a half-century later and expressed as increased depression, suicide attempts, alcoholism, drug abuse, sexual promiscuity, domestic violence, obesity, and a variety of physical illnesses. Childhood trauma is probably our nation’s single most important public health challenge.

Method: While isolated traumatic incidents tend to produce discrete conditioned behavioral and biological responses to reminders of the trauma, as captured in the PTSD diagnosis, chronic maltreatment has well-documented and pervasive effects on the development of mind and brain. This workshop will present convergent data from 10 different data bases comprising over 100,000 children that document consistent problems with affect regulation, dissociation, cognition, and interpersonal relationships that are not captured in the PTSD diagnosis. Some of these problems are currently captured by a variety of different DSM “co-morbid” diagnoses.

Conclusion: We will conclude with provisional diagnostic criteria for Developmental Trauma Disorder as formulated by the NCTSN DSM V Taskforce.

What is Complex About Complex PTSD and Does it Matter for Treatment?

(Abstract #197963)

DSM-V (Asses Dx, Clin Res) Grand Ballroom, 4th Floor

Cloitre, Marylene, PhD¹

¹Institute for Trauma and Resilience, New York University Child Study Center, Cathy and Stephen Graham Professor of Child and Adolescent Psychiatry, New York, New York, USA

Complex PTSD has been defined as arising from exposure to prolonged and multiple traumatic stressors, typically of an interpersonal nature and often in childhood, that inflict harm to the physical or psychic integrity of the person (e.g., childhood abuse, neglect, domestic violence, being taken hostage, witness to or target of genocide). Such experiences can result in self-regulatory disturbances which include not only PTSD symptoms but also self-destructive and impulsive behaviors, substance abuse, chronically impaired relationships with others, dissociation, and somatic and identity disturbances. While it has been argued that these problems can be readily captured through the designation of one or more co-morbid psychiatric disorders, many of the symptoms

Friday: 11:00 a.m. – 12:15 p.m.

do not reach threshold for such a designation and thus fall "under the radar" for formal identification and consequently, effective treatment. This presentation will offer data indicating that (1) increased type of traumatic exposures, particularly in childhood is associated with increasingly complex symptom profiles and (2) the accumulation of various self-regulatory symptom clusters as defined above (and that do not meet criteria for a psychiatric disorder) significantly contribute to functional impairment. Treatment implications will be discussed.

Dissociation and the Complex Trauma Reactions

(Abstract #198501)

DSM-V (Asses Dx, Practice)

Grand Ballroom, 4th Floor

Vermetten, Eric, MD, PhD¹; Lanius, Ruth, MD, PhD²

¹Central Military Hospital Q3, Military Mental Health – Research Center, Utrecht, Netherlands

²University of Western Ontario, London, Ontario, Canada

Traumatic dissociation has a long tradition that has seen a come and go in psychiatry. The psychiatric approach to the dissociative disorders for long time failed to acknowledge any relationship to psychological trauma. Before *DSM-III* dissociation was grouped with the old remnant of hysteria, conversion disorder, and called "dissociative hysteria." Due to this the dissociative disorders had difficulty shaking the suspicion that they were not true disorders, or that they were a disguise for secondary gain, malingering, or criminality. In 1980 the dissociative disorders were separated from hysterical neurosis and gained independent status. Since then PTSD and the dissociative disorders have developed in a somewhat parallel fashion. Its link with trauma has given dissociation an opportunity to be examined in relation with PTSD studies. Contemporary psychological and psychiatric sciences have used the term dissociation to denote alterations in conscious experience, a breakdown in integrated information processing and psychological functioning and the operation of multiple independent streams of consciousness. As a response to threat it manifests as a kind of body/mind problem that reflects in dysregulated brain functions that are rooted in critical developmental periods of life. Neuroimaging studies have shown neural systems which play a key role in emotion and autonomic nervous system regulation, sensory processing, attention and memory that exhibit altered levels of brain activation during dissociation, and are different from responses of 'simple' intrusions and hyperarousal – each representing unique pathways to chronic stress-related psychopathology. The phenomenology of traumatic dissociation is recognized in acute 'narrow defined' posttrauma reactions, but is also seen in cases classified as complex PTSD. Dissociation can be both symptom or a disorder, or a descriptive of a vulnerable phenotype. The complexity of trauma responses is revealed not in the complexity of the trauma, but in the multitude or spectrum of response types in which dissociative symptoms, but also depressive and somatization symptoms, substance abuse, eating disorders as well as general anxiety symptoms are present.

Eye Movement Desensitization and Reprocessing: Clinical Case Presentation

(Abstract #197560)

Master (Practice, Clin Res)

Salons 4-6, 3rd Floor

Solomon, Roger, PhD¹

¹Buffalo Center for Trauma and Loss, Buffalo, New York, USA

Eye Movement Desensitization and Reprocessing (EMDR) is an integrative psychotherapeutic approach that conceptualizes current symptoms resulting from experiences that are inadequately processed, that is, "frozen" in the brain). When these inadequately stored memories are triggered, symptoms result (e.g. nightmares, flashbacks, intrusive thoughts, etc.). The EMDR protocol involves accessing the dysfunctionally stored information, stimulating the

innate processing system through standardized protocols (including eye movements), allowing it to transmute the memory to an adaptive resolution. Processing is evident by a rapid progression of intrapsychic connections as emotions, insights, sensations, and memories surface and change with each new set of bilateral stimulation. The mechanisms of action include adaptive information from other memory networks linking into the network holding the dysfunctionally stored information. There is a shifting of the information from implicit to episodic and then semantic memory. The memory is no longer isolated, and becomes appropriately integrated within the larger memory network. Hence, processing involves the forging of new associations and connections enabling learning to take place with the memory stored in a new adaptive form.

This presentation will discuss the eight phases, three-pronged, EMDR treatment model and illustrate the dynamics of treatment through a video case presentation.

Participant Alert: A taped session with a client who has experienced trauma will be presented.

Innovations in Experimental Psychopathology Research

(Abstract #196191)

Symposium/Panel (Res Meth, Clin Res)

Monroe Ballroom, 6th Floor

Malta, Loretta S., PhD¹; Karl, Anke, PhD²; Kleim, Birgit, PhD³; Milad, Mohammed R., PhD⁴; Rothbaum, Barbara O., PhD⁵; Davis, Michael, PhD⁶; Difede, Joann, PhD⁷; Ehlers, Anke, PhD⁸; Ehring, Thomas, PhD⁹; Houry, Debra, MD¹⁰; Leiberg, Susanne, PhD¹¹; Myers, Karyn, PhD¹²; Orr, Scott P., PhD¹³; Pitman, Roger K., MD¹⁴; Rabe, Sirko, MA¹⁵; Rauch, Scott L., MD¹⁶; Shin, Lisa M., PhD¹⁷

¹Weill Medical College of Cornell, New York, New York, USA

²University of Southampton, Southampton, England, United Kingdom

³Institute of Psychiatry, King's College London, London, England, United Kingdom

⁴Massachusetts General Hospital/Harvard Medical School, Boston, Massachusetts, USA

⁵Emory University School of Medicine, Atlanta, Georgia, USA

⁶University of Amsterdam, Amsterdam, Netherlands

⁷University of Zurich, Zurich, Switzerland

⁸Harvard Medical School/VA Medical Center, Manchester, New Hampshire, USA

⁹Saxonian Hospital, Grossschweidnitz, Germany

This panel will discuss innovations in PTSD experimental psychopathology research, including clinical and experimental analogue research on the role of cognitive factors in the development of PTSD; applications of the deficient extinction animal model of PTSD to early intervention and neuroimaging research; and novel uses of virtual reality and electrophysiology to test etiological models of PTSD.

Using Novel Technologies to Develop and Test Laboratory Models of PTSD

Malta, Karl, Leiberg, Rabe & Difede

This presentation discusses the use of novel technologies to study PTSD. Study 1 used EEG event-related potentials (ERPs) to investigate functional neuroanatomical changes associated with affective processing alterations in PTSD. A study with 110 treatment-seeking trauma survivors found that those with PTSD showed altered EEG responses to trauma-related stimuli in frontal brain regions, including increased P300 amplitude and decreased evoked EEG coherence between frontal and temporal areas in the theta band. The results suggest that ERPs and evoked coherence to trauma-related stimuli are useful complementary correlates of PTSD symptom severity. In study 2, veterans were presented with virtual reality (VR) combat scenarios, followed by either suppressing thoughts of the scenarios, or recounting events in the scenarios. One week later, volitional memory and intrusive memories of the scenarios were tested in surprise memory tests and a thought suppression task, respectively. PTSD re-experiencing symptoms, poorer initial encoding, and heart rate

variability during scenarios predicted more intrusive memories one week later. Predictors of volitional memory were general verbal memory and levels of anxiety and immersion during the scenarios. The results suggest that VR could be used to test laboratory models of PTSD re-experiencing symptoms.

Cognitively Oriented Experimental Approaches to Modeling PTSD Symptoms

Kleim, Ehrling & Ehlers

This presentation discusses experimental approaches to modeling cognitive processes that may be involved in the etiology or maintenance of PTSD, using two examples, perceptual priming and rumination. First, Ehlers and Clark (2000) suggested that perceptual priming for trauma-related stimuli contributes to PTSD reexperiencing symptoms. Studies using word-stem completion and blurred pictures identification tasks found that enhanced priming for trauma-related stimuli was associated with PTSD. Experimental studies that used picture stories depicting traumatic scenes found that perceptual priming for stimuli from trauma-related picture stories was higher than for control stories and predicted intrusive memories. Second, it has been suggested that rumination maintains PTSD. Prospective studies showed that rumination predicts PTSD. Analogues studies found that experimentally induced rumination increases symptom levels. The findings suggest that a combination of two different types of paradigms appears fruitful: information-processing paradigms with clinical samples to establish a correlation between cognitive variables and PTSD; and experimental analogue studies testing the causal status of cognitive variables. Modeling particular aspects of PTSD symptoms may require the development of novel paradigms, as in the example of the priming experiments.

Clinical Translational Early Intervention Research Based on Animals Models of PTSD

Rothbaum, Davis, Myers & Houry

The initial symptoms of PTSD can be considered part of the normal reaction to trauma, but, those who suffer from chronic PTSD do not recover in the weeks and months following a trauma the way others do. Those with PTSD may not worsen, but they don't extinguish their original fear reactions. Therefore, PTSD can be viewed as a failure of recovery caused in part by a failure of fear extinction following trauma. Based on translational models of the consolidation of fear memories, we examine the effects of early interventional extinction training in an ultimate effort to know when it is best to intervene with humans following exposure to trauma to prevent the development of PTSD. The existing evidence suggests that 1) the debriefing literature is equivocal at best with some studies indicating it can cause harm, 2) there are no good candidates for immediate intervention; 3) the animal evidence suggests that some immediate extinction training can result in decreases in spontaneous recovery and renewal and reinstatement; 4) the animal evidence suggests that incomplete extinction training may cause sensitization, and finally; 5) the timing of extinction training after exposure/conditioning is crucial.

Deficient Extinction Retention in Posttraumatic Stress Disorder

Milad, Orr, Shin, Rauch & Pitman

Retention of fear extinction is thought to aid in recovery from a traumatic event. In the first study of this phenomenon, pairs of monozygotic twins discordant for combat exposure underwent a fear conditioning and extinction procedure. On Day 1, subjects viewed colored light stimuli, some of which were paired with mild electric shock, followed by extinction of the conditioned responses. On Day 2, recall of extinction learning was assessed. PTSD veterans had larger residual skin conductance responses than their own co-twins, and than the non-PTSD combat veterans and their co-twins, suggesting that retention of extinction of conditioned fear is deficient in PTSD, and that this deficit is acquired as a result of combat trauma leading to PTSD. In a second study, PTSD and non-PTSD singletons underwent the same procedure in a functional magnetic resonance imaging scanner. Extinction retention was again impaired in PTSD subjects. There was decreased

ventromedial prefrontal cortical (vmPFC), and increased dorsal anterior cingulate cortical (dACC), activation in the PTSD group during extinction recall. vmPFC activity was positively correlated, and dACC negatively correlated, with magnitude of extinction retention. The findings suggest that a hyperactive dACC and a hypoactive vmPFC underlie the deficient extinction recall capacity in PTSD.

Interpersonal Victimization: Predictors, Consequences, and Clinical Intervention

(Abstract #196269)

Symposium/Panel (Practice, Clin Res)

Wabash Room, 3rd Floor

Iverson, Katherine, MA¹; Resick, Patricia, PhD²; Weatherill, Robin, PhD³; Vogt, Dawne, PhD⁴; Taft, Casey, PhD⁵; King, Lynda, PhD⁶; King, Daniel, PhD⁷; Dutton, Mary Ann, PhD⁸; Kilpatrick, Dean, PhD⁹; Cogle, Jesse, MSC⁸; Resnick, Heidi, PhD⁸; Cloitre, Marylene, PhD⁹

¹National Center for PTSD, Boston VA Health Care System, Boston, Massachusetts, USA

²National Center for PTSD, Boston VA Healthcare System and Boston University, Boston, Massachusetts, USA

³National Center for PTSD, Boston VA Healthcare System, Jamaica Plain, Massachusetts, USA

⁴Boston University, Boston, Massachusetts, USA

⁵National Center for PTSD, Boston VA Healthcare System, Boston, Massachusetts, USA

⁶National Center for PTSD/VA Boston HealthCare System & Boston University, Boston, MA, USA

⁷Georgetown University, Washington, District of Columbia, USA

⁸Medical University of South Carolina, Charleston, South Carolina, USA

⁹NYU Child Study Center, New York, New York, USA

This symposium will focus on the emotional and physical health consequences of interpersonal aggression victimization, as well as issues related to violence revictimization and intervention. Data will be presented on predictors of sexual harassment among Marine recruits, emotional and physical health consequences of intimate relationship aggression, revictimization correlates among women from the National Women's Study, and treatment response of battered women to Cognitive Processing Therapy.

Military Sexual Harassment and Sex-Role Egalitarianism Among Marine Recruits

Military sexual harassment significantly affects the mental health and morale of troops. Sex-role egalitarianism, or beliefs about male and female roles, is predictive of attitudes toward interpersonal violence, including male to female partner violence. Individuals with more traditional, less egalitarian attitudes tend to be more tolerant of interpersonal and partner aggression. We examined whether sex-role egalitarianism was related to tolerance of military sexual harassment, victimization, and mental health outcomes in 1,489 Marine recruits (658 women and 831 men) who completed boot camp training at Parris Island. Sexual harassment was reported by 24% of men and 28% of women. Analyses indicated that greater egalitarianism was associated with less tolerance of harassment for both men ($r = -.31, p < .01$) and women ($r = -.16, p < .05$), and also with less victimization (men: $r = -.15, p < .01$; women: $r = -.26, p < .01$). Greater egalitarianism was also associated with fewer mental health symptoms (depression, anxiety, and PTSD). Results suggest that beliefs about sex roles are important to consider in efforts to reduce rates of military sexual harassment and possibly improve overall mental health. A model to test multivariate associations among these variables will be presented.

Long-Term PTSD Trajectories and Physical Health for Women Exposed to Intimate Partner Violence

The link between physical health and PTSD is well recognized. Three classes of 18-month trajectories of posttraumatic symptoms (PSS) were used to predict 18-month health outcomes in low-income, predominately African-American women exposed to intimate partner violence. SF-36 health outcomes are physical functioning (PF), pain (PP), role functioning (PRF) and global health

perception (GHP). Three PSS trajectories were (1) Recovery (high initial PSS followed by rapid and sustained recovery), (2) Resilient (initial and sustained sub-threshold PSS), and (3) Chronic (high initial and sustained PSS). Baseline level of IPV was used as a covariate. The Resilient group reported significantly better health outcomes compared to the Chronic group across all health measures ($t = 4.67, p < .000, PF; t = 2.84, p < .005, PP; t = 4.10, p < .000, GHP; t = 1.97, p < .05, PRF$). There were no differences between the Resilient and Recovery groups. In spite of early and large attenuation of PSS, the Recovery and the Chronic groups did not significantly differ on any health outcomes, except health perception ($t = 2.00, p < .05$). These data have implications for the long-term health effects of those with PSS, in spite of large and early symptom recovery.

Violent Victimization, PTSD Symptom Clusters

This longitudinal study addressed the question of whether exposure to potentially traumatic events (PTEs) involving interpersonal violence (IPV), other types of PTEs, and different PTSD symptoms clusters at baseline predict subsequent exposure to different types of PTEs at two year followup. Data from 3359 adult participants in the National Women's Study (NWS) were used. At baseline, we measured history of IPV victimization, exposure to other PTEs, current PTSD, and other risk factors. Subsequent IPV victimization by non-intimate partners was predicted by previous IPV victimization and PTSD reexperiencing symptoms, but subsequent IPV victimization by intimate partners was predicted only by prior exposure to IV victimization. Subsequent exposure to other types of PTEs was predicted by history of IPV victimization and other PTEs as well as PTSD avoidance/numbing symptoms. Findings suggest that efforts to prevent exposure to new PTEs must understand different risks posed by different types of violence perpetrators and how different clusters of PTSD symptoms might influence risk in different situations.

Treatment Response of Battered Women With PTSD to Cognitive Processing Therapy

Few studies have examined the efficacy of interventions in reducing the negative mental health consequences of intimate partner violence (IPV) (Johnson & Zlotnick, 2006; Kubany et al., 2004). This study examined Cognitive Processing Therapy (CPT; Resick & Schnicke, 1992) for PTSD in a subset of women who endorsed past or current IPV ($N = 90$), and who were taking part in a larger evaluation of CPT (Resick et al., in press). In addition, predictors of treatment compliance were examined. Participants demonstrated significant reductions in PTSD symptoms, $F(1, 69) = 73.28, p < .001$, and depressive symptoms, $F(1, 69) = 57.24, p < .001$. These gains were maintained at a 6-month follow-up. Women who reported current IPV were more likely to drop out of treatment before the first session compared to those who did not endorse current IPV even after accounting for pretreatment PTSD and depressive symptoms. Additionally, the frequency of previous partner violent relationships was negatively predictive of treatment completion above and beyond pretreatment PTSD and depressive symptoms. The implications of these and other findings, including revictimization rates, will be discussed.

Mental Health in Children Following Hurricanes Katrina and Rita

(Abstract #196413)

Symposium/Panel (Child, Disaster) State Ballroom, 4th Floor

Jaycox, Lisa, PhD¹; Walker, Douglas, PhD²; Cohen, Judith, MD³; Mannarino, Anthony, MD³; Jones, Russell, PhD⁴; Langley, Audra K., PhD⁵

¹RAND Corporation, Arlington, Virginia, USA

²Mercy Family Center, Metairie, Louisiana, USA

³Allegheny General Hospital, Pittsburgh, Pennsylvania, USA

⁴Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA

⁵UCLA, Los Angeles, California, USA

Despite reports of widespread mental health problems following hurricanes Katrina and Rita, there is little information about children's mental health needs or service delivery options. This panel draws from experiences in conducting research and delivery services to school children in New Orleans.

Hurricane and Trauma Exposure and Symptoms 15 Months Post-Hurricane

More than a year after the 2005 hurricanes, we assessed 195 school children about their hurricane experiences, other trauma exposure, PTSD and depressive symptoms, and also asked their parents and teachers to report on their behavior. Experiences of children in our sample included low rates of actual exposure to the hurricane dangers (e.g., having to walk through flood waters or get out by boat), but high rates of seeing upsetting things, separation from caregivers, and of loss. Our assessment of lifetime history of exposure to other traumas showed these were fairly common, particularly exposure to community violence and traumatic loss. We asked children which event bothered them the most: 38% reported it was the hurricanes, 26% reported it was a different traumatic event, and 15% reported that both the hurricane and a different event bothered them equally (21% reported that neither bothered them). In this presentation, we relate these trauma exposures to symptoms of PTSD and depression, as well as behavior problems, to elucidate which exposures are most related to mental health and behavioral problems. We discuss implications for identification of children at risk in the wake of future disasters.

A Stepped-Care Service Delivery Approach to Meeting Mental Health Needs of Children Post-Disaster

Project Fleur-de-lis™, created in October 2005, provides mental health services to children and families as a way to both heal and rebuild our community. The overall structure of Project Fleur-de-lis™ is a need-based stepped-care model with three tiers: early intervention for school-aged children, identification and provision of services to children in need within their schools, and increased access to best practices within our community mental healthcare system. Interventions include Classroom-Camp-Community-Culture Based Intervention (Macy, Macy, Gross & Brighton, 2006), Cognitive Behavioral Intervention for Trauma in Schools (Jaycox, 2003), and Trauma Focused – Cognitive Behavioral Therapy (Cohen, Mannarino & Deblinger, 2006). This collaborative program with 23,000 students beneath its umbrella of care will be described, including its implementation in 55 New Orleans area schools. Results of weekly Classroom – Community Consultation meetings for 678 children will be presented to show the types of problems that are being detected and the treatments ultimately received. The specific services offered at Mercy Family Center (\$321,540 in free psychological or psychiatric care since September 1st 2006) will also be described. We discuss this innovative care system in terms of its potential applicability following other natural or man-made disasters.

Comparison of Two Approaches to Bringing Evidence-Based Care to School Children Post-Disaster

In a school-based intervention project conducted 15 months after hurricane Katrina, we identified 118 children with elevated

symptoms of PTSD and randomized them to either receive Cognitive Behavioral Intervention for Trauma in Schools (CBITS) or Trauma-Focused Cognitive Behavioral Therapy (TF-CBT). These two interventions have many elements in common, but differ in some key aspects as well. In this study, both were offered free of charge. CBITS was delivered at school in groups, during the school day; whereas TF-CBT was offered at a local mental health clinic in parent-child dyads, by appointment. Despite intensive engagement and outreach efforts, only 21 of 60 students were evaluated for TF-CBT, and of those 14 were determined to be appropriate and began treatment, and XX of the initial 60 completed treatment. In contrast, 53 of 58 students completed CBITS at school. In this presentation, we discuss issues related to school-based screening and accuracy of PTSD identification, trade-offs in terms of intensity of treatment versus access, as well as thoughts about overcoming the barriers to clinic-based treatment that were so apparent in this project. We discuss these results in terms of disaster planning for long-term recovery for children.

Papers

Post-Deployment Adjustment in Veterans

Adams Ballroom, 6th Floor

Chair: Jenifer Strauss, PhD,
Duke University, Durham VA Medical Center, VISN 6 MIRECC, Durham, North Carolina, USA

Treating Veterans and Their Families: Are Practitioners Utilizing Evidence-Supported Practice?

(Abstract #195842)

Paper Presentation (Mil Emer, Clin Res)

Halpern, James, PhD¹; Freeman, Phyllis R., PhD²
¹Psychology, Institute for Disaster Mental Health, State University of New York at New Paltz, New Paltz, New York, USA
²Psychology, SUNY New Paltz, New Paltz, New York, USA

Clinical knowledge, professional practice, confidence, training needs, and suggestions for future research were examined in a sample of 132 community-based practitioners working with military personnel, recent veterans, and their families. Survey results indicated that most clinicians did not believe they had a sufficient understanding of military culture to be effective, nor consider themselves as familiar with the appropriate research literature on assessment and treatment. These clinicians do not appear to practice according to established best-practice guidelines, nor think it is important for them or for new colleagues to use techniques identified by these guidelines. They generally are not even "somewhat confident" in their ability to deliver services across a range of potential modalities and treatment domains. When asked about gaps in the research literature, responses clustered around six meta-themes: assessment and treatment, specific symptoms in military personnel, aspects of military culture affecting treatment and symptomatology, community and ecological factors, training, and families. A focus group of clinicians provided additional information on training and research gaps for the treatment of recent veterans and their families. Results provide suggestions for how best to disseminate clinical research findings to community-based practitioners.

Peer Support for Canadian Injured Soldiers and Their Families: The Results of a Needs Analysis

(Abstract #196152)

Paper Presentation (Commun, Mil Emer)

Lebeau, Mariane, MA¹; Darte, Kathy, MN²; Cargnello, Juan, M.PS³
¹Department of National Defence, OSISS Co-Manager, Ottawa, Ontario, Canada
²Veterans Affairs Canada, OSISS Co-Manager, Charlottetown, Prince Edward Island, Canada
³Veterans Affairs Canada, Consultant Psychologist/ National Centre for Operational Stress Injuries, Sainte Anne-de-Bellevue, Québec, Canada

OSISS, a peer support program jointly sponsored by the Canadian Department of National Defence and Veterans Affairs Canada conducted a needs analysis of the social support required by Canadian soldiers seriously injured during operations in Afghanistan and their families. Using focus group methodology and structured interviews, a representative sample (33%) comprising of 26 of the seriously injured soldier population and a total of 8 family members participated in a needs analysis conducted in March 2007. The transcripts of the focus group meetings and interviews generated large quantities of qualitative data that addressed: (1) what source of social support they required, (2) what would be the structure of the support; and, (3) who would provide peer support to injured soldiers and their families. Ten main themes (peer support, family support, home coming and recovery, assisting officers, medical care, and additional issues such as reservists, decompression, and the prioritizing of injuries) evolved from the content analysis along with 17 recommendations. This presentation will primarily focus on the process of the needs analysis utilized to obtain information on peer support as identified by injured soldiers and their families and discusses the recommendations and developments of the program that addresses their needs.

The Impact of Childhood Abuse and Combat-Related Trauma on Soldiers' Post-Deployment Adjustment

(Abstract #196168)

Paper Presentation (Mil Emer, Practice)

Mishkind, Matt, PhD¹; Reger, Mark, PhD¹; Gahm, Gregory, PhD¹
¹Madigan Army Medical Center, Tacoma, Washington, USA

The ongoing combat operations in Iraq and Afghanistan have given rise to a new generation of research examining the development of psychiatric difficulties following combat experiences as well as pre-military factors such as childhood physical abuse (CPA) that may affect post-deployment adjustment (Cabrera et al., 2007; Iverson, et al., 2007). This retrospective review study examined the additive and independent effects of CPA and combat-related trauma on post-combat psychiatric difficulties in an outpatient clinical sample (N =1045) of active duty Iraq and Afghanistan veterans. A one-way multivariate analysis of variance (MANOVA) was performed to examine trauma exposure group (i.e., no trauma, CPA only, combat only, or both) differences on four psychiatric outcome variables. Veterans exposed to both CPA and combat had the highest reported concerns for alcohol use, anxiety, depression, and PTSD symptoms (F(12,2747) = 16.15, p<001). Veterans exposed to either CPA or combat reported similar levels of concern for alcohol use, anxiety, and PTSD, with depression scores significantly higher for those exposed only to CPA. These findings support recent research examining the relationship between pre-military and combat traumas, and further elucidate the independent impact that CPA and combat may have on psychiatric concerns. Implications will be discussed.

A Novel Self-Management Intervention for PTSD Related to Military Sexual Trauma: Early RCT Findings

(Abstract #196106)

Paper Presentation (Clin Res, Mil Emer)

Strauss, Jennifer, PhD¹; Jeffreys, Amy, MSTAT¹; Almirall, Daniel, PhD¹; Marx, Christine, MD, MA¹; Morey, Rajendra, MD, MS¹; Oddone, Eugene, MD, MHSC¹

¹Duke University, Durham VA Medical Center, VISN 6 MIRECC, Durham, North Carolina, USA

Purpose: Military sexual trauma (MST) entails harassment or sexual assault during military service. Over 50,000 women with MST have been identified, with more expected from current conflicts. To address this growing need, we developed the clinician-facilitated, self-management Guided Imagery for Trauma (GIFT) intervention. We report findings from an ongoing RCT in women veterans with PTSD related to MST.

Methods: The GIFT group receives audio instructions for relaxation, emotion regulation, and the creation of positive mental imagery, beliefs, and feelings. Controls receive relaxing music audios. All have regular contact with a clinician facilitator (2 sessions + weekly phone). The Clinician Administered PTSD Scale (CAPS) is the primary outcome.

Findings: As enrollment is ongoing (current N=20), no inferential statistics are reported here. Average age = 44.51(10.63); 60% African American, 35% Caucasian; average years since trauma = 22.3 (10.76). For GIFT, average pre-post reduction on the CAPS is 32.17 (d = 1.64). For Controls, average pre-post reduction is 17.67 (d = 0.95). We anticipate reaching our target enrollment (N = 38) by the 2008 ISTSS meeting.

Conclusions: Initial results indicate that GIFT reduces PTSD symptoms. If shown efficacious, this novel intervention may improve our ability to provide needed care to women with MST.

Papers

Trauma Treatment in Conflict Zones

Crystal Room, 3rd Floor

Chair: Pim Scholte, MD,

Dept. of Psychiatry, University of Amsterdam, Academic Medical Center, Amsterdam, Netherlands

Community Based Socioterapy in Rwanda; Its Effects on Mental Health

(Abstract #196299)

Paper Presentation (Clin Res, Civil Ref)

Verduin, Femke, MD¹; Scholte, Pim, MD¹

¹Dept. of Psychiatry, University of Amsterdam, Academic Medical Center, Amsterdam, Netherlands

From 1990 to 1994, Byumba region in the North of Rwanda was terrorized by war and a subsequent genocide. Its population still suffers from the sequelae of collective traumatization. Since January 2006, a community based sociotherapeutic intervention is carried out in the region, aiming to reduce mental suffering and to restore safety and dignity. 3800 individuals have participated in sociotherapy groups so far. We studied the intervention's effects on mental health by use of the Self Reporting Questionnaire 20 item version (SRQ-20). As the SRQ-20 is not commonly used as an instrument to follow up respondents, we not only established its local validity as a screener but also its longitudinal validity. We then followed a prospective randomized controlled design to study a sample consisting of 90 sociotherapy group participants, 83 closely related individuals and 94 controls. Measures were taken at group entry (T0, October 2007), after termination of the meetings

(T1, January 2008), and at 6 months follow-up (T2, August 2008). The intervention seems to positively impact mental health. In group participants there is a slight but significant drop of SRQ scores at T1. In those who at T0 score above the locally established cut-off point of 10, scores dropped with 3.2 to below cut-off at T1. In this presentation outcomes of the 6 months follow-up will be presented as well.

Community Based Socioterapy in Rwanda; Its Effects on Social Functioning and Social Capital

(Abstract #196293)

Paper Presentation (Clin Res, Civil Ref)

Scholte, Pim, MD¹; Verduin, Femke, MD¹

¹Dept. of Psychiatry, University of Amsterdam, Academic Medical Center, Amsterdam, Netherlands

From 1990 to 1994, Byumba region in the North of Rwanda was terrorized by war and a subsequent genocide. Its population still suffers from the sequelae of collective traumatization. Since January 2006, a community based sociotherapeutic intervention is carried out in the region, aiming to reduce mental suffering and restore social bonds. 3800 individuals have participated in series of 15 weekly sociotherapy group meetings so far. Following a prospective randomized controlled design, we established the intervention's effects on social functioning by use of the MOS SF-36 and a locally informed structured interview (BSFQ), and its effects on social capital by use of the short adapted version of the Social Capital Assessment tool (SA-SCAT). Instruments were adapted and validated locally. We studied a sample consisting of 90 sociotherapy group participants, 84 closely related individuals and 91 controls. Measurements were carried out at group entry (T0, October 2007), and after termination of the meetings (T1, January 2008); a 6 months follow-up (T2) will take place in September 2008. In this presentation the concept of social capital and the adaptation and validation process of instruments will be discussed, as well longitudinal outcomes, and the seeming value of this intervention for the healing process at individual and community level in war-affected populations.

Traumas and Transformational Coping Mechanisms Among Japanese American Hiroshima/Nagasaki Survivors

(Abstract #195971)

Paper Presentation (Disaster, Cul Div)

Ikeno, Satoshi, PhD¹; Nakao, Kayoko, MSW²

¹Department of Social Work, Kwansai Gakuin University, Nishinomiya, Japan

²Department of Social Welfare, University of California, Los Angeles, Los Angeles, California, USA

This study examines the consequences of coping with A-bomb traumas and long-term transformational effects among Japanese American Hiroshima/Nagasaki survivors. We analyzed 23 transcribed life review interviews with self-identified Japanese American A-bomb survivors in Southern California. We first identified shared experiences across the participants that were unique to 'Japanese-American' A-bomb survivors. Immigration patterns emerged as the group-specific life event that consequently exposed them to the A-bomb trauma. The microanalysis of the transcripts identified culturally-specific coping mechanisms that helped them with enduring multi-dimensional hardships throughout the life-course. "Shikataganai (It cannot be helped)" emerged as the most recurring coping style that embraces negative emotions such as loss, grief, and anger derived from the traumatic event. Remorse for being helpless during the A-bomb attack and feelings of guilt as a survivor surfaced as the event-specific emotions attached to the lucid memory of the war. Spiritual and political meaning attribution to the A-bomb experience was notable, suggesting symbolic transformation of

the A-bomb trauma to an all-encompassing life event with age. We will discuss practice implications for assisting immigrant disaster survivors, particularly those in old age, and implications for future research.

Posttraumatic Growth Following the Disengagement: A Longitudinal Study of the Gaza Settlers

(Abstract #196328)

Paper Presentation (Civil Ref, Disaster)

Hall, Brian, MA¹; Palmieri, Patrick, PhD²; Halperin, Eran, PhD³; Canetti-Nisim, Daphna, PhD⁴; Hobfoll, Stevan, PhD⁵

¹Psychology, Kent State University and the Kent/Summa Center for the Treatment and Study of Traumatic Stress, Stow, Ohio, USA

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

³Department of Psychology and Stanford Center on International Conflict and Negotiation, Stanford University, Stanford, California, USA

⁴Political Science, University of Haifa and Yale University, Haifa, Israel

⁵Kent State University and the Kent/Summa Center for the Treatment and Study of Traumatic Stress, Kent, Ohio, USA

Prospective investigations have shown that posttraumatic growth (PTG) increases over time and that PTG is related to less psychological distress. This was investigated in a longitudinal study of 103 Israeli settlers assessed in the process of, and one year following, the Gaza disengagement. PTG was assessed in relation to terrorism exposure and disengagement stressors at both time points. Significant PTG was reported (T1=93%, T2=84%). Greater intimacy with family (T1=69%, T2=59%) and greater meaning (T1=63%, T2=40%) were the most commonly reported types of growth. Results of paired t tests indicated that a significant decrease in PTG occurred between baseline and follow-up assessment, $t(102) = 4.80, p < .001$. Four PTG groups were created using the median of PTG at T1 and T2: always low PTG, increased PTG, decreased PTG, and always high PTG. Results of one way ANOVAs indicated significant group differences for post-disengagement PTSD symptoms ($F(3, 99) = 7.89, p < .001$) and depression symptoms ($F(3, 99) = 5.16, p < .001$). Post-hoc tests indicated that settlers in the increased PTG group reported significantly greater PTSD and depression than settlers in the always low PTG and decreased PTG groups. Contrary to prior studies, PTG decreased and settlers who used PTG to cope following the disengagement experienced greater distress.

Papers

Emotion, Sensitivity, and Regulation

Salon 1, 3rd Floor

Chair: Matthew Kimble, PhD,

Psychology, Middlebury College, Middlebury, Vermont, USA

Emotion Regulation Difficulties in Survivors of Type I and Type II Traumas

(Abstract #196235)

Paper Presentation (Clin Res, Asses Dx)

Ehring, Thomas, PhD¹

¹Department of Clinical Psychology, University of Amsterdam, Amsterdam, the Netherlands, Netherlands

Emotion regulation difficulties have been suggested to be common sequelae of traumatic experiences, especially type II traumas. However, empirical evidence for this hypothesis is limited. Two studies investigating emotion regulation difficulties in trauma survivors will be presented.

In study 1, survivors of different types of traumatic events (n = 483) and non-traumatized controls (n = 48) filled in questionnaires assessing difficulties in emotion regulation. Results showed that survivors of type II traumas reported significantly higher levels of

emotion regulation difficulties than type I trauma survivors and controls. In addition, regardless of the type of trauma experienced, a diagnosis of PTSD was related to more severe emotion regulation problems. Study 2 assessed self-reported emotion regulation characteristics in 95 motor vehicle accident survivors 1 month post-trauma and symptom levels of PTSD at 1, 3, and 6 months. Difficulties in emotion regulation were significantly correlated with PTSD symptom severity and predicted symptom levels at follow-up.

Taken together, the results support the idea that emotion regulation difficulties are a common consequence of traumatic experiences and are correlated with PTSD symptom severity. Implications for theoretical models of trauma-related disorders and future research will be discussed.

Attention Bias Among Interpersonal Violence Survivors: A Comparison of Stroop and Dot Probe Paradigms

(Abstract #196479)

Paper Presentation (Asses Dx, Clin Res)

Scher, Christine D., PhD¹; Ellwanger, Joel, PhD²

¹California State University, Fullerton, California, USA

²California State University, Los Angeles, California, USA

Background: Attention biases have been repeatedly demonstrated among PTSD survivors. However, the literature examining such biases has typically utilized a single assessment paradigm (i.e., Stroop). This study builds upon current knowledge by examining attention biases using two paradigms and extending the literature to trauma survivors with subsyndromal symptom levels. Method: Participants were 33 Criterion A interpersonal violence (IV) survivors and 27 persons who had not experienced IV. Participants completed a Stroop task with acoustic startle probes occurring 60 and 3500 ms following word onset and a dot probe task with startles occurring at 300 and 3500 ms following picture onset. Results: MANOVAs examined group x stimulus valence interactions. For the Stroop, there were significant interactions for reaction time, $F(1,55) = 4.84, p = .03$, and startle modification, $F(3,45) = 3.47, p = .02$, indicating greater attention to trauma-related and negative words among the IV group. For the dot probe, there was an interaction trend for startle modification, $F(2,42) = 3.06, p = .06$, indicating greater attention to trauma-related and negative words in the IV group. Results suggest the Stroop may more sensitively assess processing biases and that the biases found among PTSD survivors are also found among those with subsyndromal symptoms.

Does the Modified Stroop Effect (MSE) Exist in PTSD?

(Abstract #195900)

Paper Presentation (Asses Dx, Res Meth)

Kimble, Matthew, PhD¹; Frueth, Chris, PhD²; Marks, Libby, BACANDIDATE¹

¹Psychology, Middlebury College, Middlebury, Vermont, USA

²Psychology, University of Hawaii, Hilo, Hawaii, USA

The modified Stroop effect (MSE), in which participants show delayed color naming to trauma-specific words, is one of the most established findings pertaining to the cognitive effects of PTSD. Yet, the actual effect may not be as robust as has been suggested. The current study used a novel approach (Dissertation Abstract Review; DAR) to review the presence or absence of the MSE in published dissertation abstracts. DAR has the advantage of minimizing selection bias associated with the "file drawer effect" in which studies with null effects are rarely published. A review of all dissertations that used the MSE in a PTSD sample revealed that only 8% (1 of 12) of the studies found delayed reaction times to trauma-specific words in participants with PTSD. The most common finding (75%) was for no PTSD-specific effects in color naming trauma-relevant words. This ratio is significantly different

than the ratios found in peer-reviewed journals. Within the peer reviewed literature, studies reporting "positive" MSE effects were published in higher impact journals than those reporting "negative" findings—a bias we refer to as the "top drawer effect." These data suggest a re-evaluation of the modified Stroop effect in PTSD is warranted.

The Relation Between PTSD and Sensitivity to Emotional Context

(Abstract #196288)

Paper Presentation (Asses Dx, Clin Res)

Milanak, Melissa E., BA¹; Berenbaum, Howard, PhD²

¹Psychology, University of Illinois at Urbana-Champaign, Champaign, Illinois, USA

²Psychology, University of Illinois at Urbana-Champaign, Champaign, Illinois, USA

The relation between PTSD and sensitivity to emotional context was examined in 90 university students (72% female) with trauma histories, of whom 18% had PTSD. Participants completed a facial affect recognition task in which faces displaying emotional expressions were superimposed upon emotionally valenced and neutral images (e.g., happy – a parade; sad – a coffin; neutral – a lamp). Participants decided which emotion the facial display was expressing. A 3 (Context Condition: Matching vs. Mismatching vs. Neutral) x 2 (PTSD: Present vs. Absent) repeated measures ANOVA revealed a significant Context Condition x PTSD interaction, $F(2,87) = 3.70, p < .05, \eta^2 = .08$. Both groups were more accurate at recognizing facial expressions when the context emotion matched the face emotion than when the context emotion did not match the face emotion. However, individuals with PTSD were more strongly affected by the emotional context than were individuals without PTSD. Specifically, individuals with PTSD performed better than controls when context and face emotion matched ($t(88) = -2.09, p < .05$) and performed worse than controls when context and face emotion mismatched ($t(88) = 1.75, p = .08$). These results suggest that individuals with PTSD have heightened sensitivity to emotional context.

Participant Alert: Some images that are negatively emotionally valenced (e.g., a gun or an angry dog) may be upsetting to some viewers.

Papers

Sexual Assault

Salon 3, 3rd Floor

Chair: William F. Flack, Jr., PhD,

University, Lewisburg, Pennsylvania, USA

Are Different Types and Tactics of Sexual Assault Associated With More Deleterious Outcomes?

(Abstract #195905)

Paper Presentation (Res Meth, Clin Res)

Zayed, Maha, MA¹

¹Northern Illinois University, DeKalb, Illinois, USA

Using a modified version of the Sexual Experiences Survey (SES), we examined whether the consequences of adult sexual assault (ASA) vary depending on the type of ASA (contact, attempted intercourse, intercourse) and the tactics used by the perpetrator (arguments/pressure, authority, alcohol/drugs, physical force) after controlling for a history of trauma. College women ($N = 654$) completed a modified SES and self-report measures of depression, anxiety, PTSD, fear, self-blame, self-efficacy, and shame and guilt. Intercourse was associated with highest symptom levels of any form of ASA, and attempted intercourse was associated with the lowest symptom levels of any form of ASA. Attempted intercourse

was associated with greater self-efficacy for potential ASA situations, compared to intercourse. ASA involving authority was associated with the highest levels of mental health symptoms and the highest levels of self-blame, of all the perpetrator tactics, whereas ASA involving force was associated with the lowest levels of anxiety, depression, and self-blame but the second highest levels of PTSD. Implications for theory, research, and treatment are discussed.

Posttraumatic Symptoms Related to Unwanted Sexual Experiences Among College Students

(Abstract #195869)

Paper Presentation (Clin Res, Sos Ethic)

Flack, Jr., William F., PhD¹

¹Bucknell University, Lewisburg, Pennsylvania, USA

This study was designed to examine the relationship between unwanted sexual experiences (USE) and posttraumatic symptoms (PTS) in the collegiate "hook-up" culture (characterized by sexual encounters without future relational commitment). A representative sample of 205 undergraduate students (121 women, 84 men) completed a survey on their experiences of unwanted sexual touching (UST), attempted unwanted sex (AUS; anal, oral, or vaginal), and completed unwanted sex (CUS; anal, oral, or vaginal) based on the revised Sexual Experiences Survey (Koss, Bachar et al., 2004), and PTS related to their worst or only USE based on the PTSD Checklist-Civilian Version (Weathers et al., 1994). Among women (men reported very few UST, no other USE, and almost no PTS), 29.8% reported UST, 8.3% of whom reported minimum diagnostic criterion PTS levels (ratings of "3/moderate" or higher for at least 1 B, 3 C, and 2 D cluster symptoms); 25.6% reported AUS, of whom 9.7% reported criterion PTS; and 9.9% reported CUS, of whom 16.7% reported criterion PTS, all during a reference period of less than two years. Almost all USE occurred during hook-ups, underscoring the importance of further examining this currently popular context of intimacy.

Sexual Abuse and Help Seeking Patterns in Turkey

(Abstract #196499)

Paper Presentation (Practice, Cul Div)

Yuksel, Sahika, MD¹; Sezgin, Ufuk, PhD²; Bikmaz, Sevda, MD³

¹Istanbul Medical University, Istanbul, Turkey

²Kocaeli University, Izmit, Turkey

³Istanbul Medical Faculty, Istanbul, Turkey

Sexual abused (SA) women have difficulty to disclose their trauma. These late disclosure also are barriers for medical and legal help seeking.

Method: 80 women with a SA history were admitted to Istanbul PSTP and they were evaluated with Semistructured Trauma Assessment From PDS (Foa 995) and IES- R (Marmor et al 1996).

Findings: The patients were in between 15–59 years old ($m:25.8+10.2$), 35% of them were married. Although after SA some women have told their trauma immediately to their informal network, only 14% of them have reported and requested treatment in the first month. Most of them (73,6%) were admitted with their own will for treatment, 18,6% of them were admitted with the force of family 28.8 % of 4 them were requested a forensic report. During intake interview it was noticed that all needs treatment and have a diagnosis of at least one psychiatric disorder and were recommended treatment. But half of the group (48.2%) neither never started treatment nor left the treatment in the early stage.

Discussion: The barriers of low rate of medical and legal help seeking behaviors will be discuss in cultural context of a conservative country.

**Is Sexual Assault Disclosure Therapeutic?
Comparing Lab Versus Field Study Results**

(Abstract #195958)

Paper Presentation (Clin Res, Sos Ethic)

Ullman, Sarah E., PhD¹

¹*Criminal Justice, University of Illinois at Chicago, Chicago, Illinois, USA*

Trauma disclosure has been hypothesized to be therapeutic and lead to positive physical and psychological effects (Pennebaker et al., 1988). Few traumas in experimental studies of the effects of trauma disclosure involve sexual victimization. This presentation reviews and compares both lab and field studies on sexual assault disclosure to assess the evidence regarding the potential therapeutic effects of disclosure. Unlike the experimental lab studies of college students disclosing trauma in the lab, the few experimental studies of sexual assault and abuse disclosure have not shown positive effects. Results of field studies of sexual assault trauma disclosure show some positive effects of disclosure, contingent on timing, nature, and social context, including social responses to disclosure. Possible explanations for discrepant findings between lab and field studies are presented and suggestions are provided for future research in this area.

Papers

PTSD After Mass Shootings and Disasters

Salons 7 – 9, 3rd Floor

Chair: Holly Orcutt, PhD,

Northern Illinois University, De Kalb, Illinois, USA

**Anxiety Sensitivity and PTSD Symptom Severity
Following the NIU Shootings on February 14, 2008**

(Abstract #196238)

Paper Presentation (Disaster, Prev EI)

Stephenson, Katherine, BA¹; Valentiner, David, PhD¹; Orcutt, Holly, PhD¹; Rabenhorst, Mandy, PhD¹; Matuszewich, Leslie, PhD¹

¹*Psychology, Northern Illinois University, DeKalb, Illinois, USA*

Two weeks following a mass trauma, 416 female college students that had previously been assessed for PTSD symptoms completed questionnaires. These questionnaires included the Anxiety Sensitivity Index – 3 (ASI-3; Taylor et al., 2007), the Distressing Event Questionnaire (DEQ; Kubany et al., 2000), and measures of physical and psychological proximity. Ninety-six of these students reported having been in the building where the shootings took place, seeing the gunman or wounded or killed shooting victims, and experiencing fear, helplessness, or horror. Analyses will examine the unique association of ASI-3 scales in predicting PTSD symptom severity, controlling for prior PTSD symptoms. We will also examine whether DES avoidance symptoms are uniquely predicted by the interaction between total ASI-3 scores and DES physiological arousal scores. These analyses are expected to help us understand whether distinct facets of anxiety sensitivity are especially relevant to the development of acute stress symptoms, and whether avoidance and numbing symptoms can be understood as resulting from an avoidance of physiological symptoms among individuals who find such symptoms to be highly aversive.

Participant Alert: This paper includes a brief description of and references to the mass shooting trauma on the NIU campus on February 14, 2008.

**Experiential Avoidance as a Risk Factor for PTSD
Symptoms Following a Mass Shooting**

(Abstract #196526)

Paper Presentation (Disaster, Prev EI)

Orcutt, Holly, PhD¹; Varkovitzky, Ruth, BS¹; Hattula, Mandy, MA¹; Rabenhorst, Mandy, PhD¹; Valentiner, David, PhD¹

¹*Northern Illinois University, De Kalb, Illinois, USA*

Experiential avoidance (EA) involves an unwillingness to remain in contact with negative private events, as well as steps taken to alter the form or experience of these events. Theory and research suggest that EA may underlie symptoms of PTSD, and empirical evidence suggests that EA functions as a mediator of the relationship between traumatic experiences and distress. Previous research is limited by a lack of pre-trauma assessment of EA, which reduces the degree to which EA can be understood as a risk factor for PTSD. The present study aims to examine the prospective relationship between EA and PTSD symptoms among survivors of the mass shooting that occurred at Northern Illinois University on February 14, 2008. Previous trauma history and pre-trauma EA were assessed at Time 1 (pre-shooting) among 820 undergraduate females. Level of exposure to the mass shooting and traumatic stress symptoms were measured in a post-trauma assessment that was launched March 2, 2008. As of March 14, 2008, follow-up assessments were available for 446 participants, with data collection ongoing. Pre-shooting trauma history and EA are hypothesized to predict functioning post-shooting. Intensity of trauma exposure is predicted to moderate the relationship between EA and Time 2 traumatic stress symptoms.

**Impact of Exposure to Trauma on PTSD
Symptomatology in Swedish Tsunami Survivors**

(Abstract #196388)

Paper Presentation (Disaster, Clin Res)

Bergh Johannesson, Kerstin, PsyD¹; Michel, Per-Olof, MD, PhD²; Hultman, Christina, PhD³; Lundin, Tom, MD, PhD¹

¹*Department of Neuroscience, Uppsala University, National Center for Disaster Psychiatry, Uppsala, Sweden*

²*National Center for Disaster Psychiatry, department of Neuroscience, Uppsala, Sweden*

³*Karolinska institutet, Stockholm, Sweden*

The aim was to examine long-term mental health and posttraumatic stress symptomatology in a Swedish tourist population after exposure to the 2004 Southeast Asian tsunami. Data from 4822 returned questionnaires 14 months after the disaster were analysed. Respondents were categorised into three subgroups: (1) danger-to-life exposure group (having been caught or chased by the waves), (2) non- danger-to-life exposure group (exposed to other disaster-related stressors) and (3) low exposure group. Main outcome measures were GHQ-12 and IES-R. Danger-to-life exposure was an important factor in causing more severe Posttraumatic stress symptoms and in affecting mental health. Female gender, single status and former trauma experiences were associated with greater distress. Other factors related to more severe symptoms were loss of relatives, physical injuries, viewing many dead bodies, experiencing life threat and showing signs of cognitive confusion. Disaster exposure has a substantial impact on survivors, which stresses the need for long-lasting support.

A Community Psychology Program for Meeting the Needs of the Elderly Following the Kashmir Earthquake

(Abstract #196047)

Paper Presentation (Disaster, Commun)

Dodge, Gordon, PhD¹; Sarwar, Naeem, MS²

¹*Gordon R. Dodge, PhD, LP and Associates, Forest Lake, Minnesota, USA*

²*Merlin-Helpage, Islamabad, Pakistan*

The Kashmir earthquake killed an estimated 80,000 people and severely affected over 3 million others. Two NGOs, namely Merlin and Helpage, conducted a joint community-based program to meet the psychosocial recovery needs of the population they were serving, with emphasis on reaching the elderly. Utilizing community psychology principles and methods a range of services were provided, including training of local and NGO providers in psychosocial assessment and intervention methods, education, community mobilization, and capacity-building. Pre and post intervention measurements were conducted through the use of community analysis as well as screening instruments (BDI, IES-R, & GHQ-12), with significant improvements documented in the elderly, in the villages as well as in the IDP camps. The results of this program support the premise that significant psychological therapeutic benefits can be achieved with a large population following a disaster through the development and utilization of basic community resources, institutions, and activities. This program also provided an opportunity to conduct a range of evaluation procedures and develop recommendations for future similar disaster response programs and the evaluation of such.

The Core Concepts, Skills, and Components Curriculum: Increasing Trauma Expertise in Practitioners

(Abstract #196349)

Workshop/Case Presentation (Media Ed, Child)

Salon 2, 3rd Floor

Layne, Christopher, PhD¹; Gewirtz, Abigail, PhD²; Ghosh Ippen, Chandra, PhD³; Dominguez, Renee, PhD⁴; Abramovitz, Robert, MD⁵; Stuber, Margaret, MD⁶

¹*UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA*

²*Dept. of Family Social Science & Institute of Child Development, University of Minnesota, Minneapolis, Minnesota, USA*

³*Child Trauma Research Project, San Francisco General Hospital, San Francisco, California, USA*

⁴*Chicago Child Trauma Center (CCTC), La Rabida Children's Hospital, Chicago, Illinois, USA*

⁵*Jewish Board of Family and Children's Services, New York, New York, USA*

⁶*Semel Institute for Neuroscience and Human Behavior, University of California Los Angeles, Los Angeles, California, USA*

This workshop will provide an overview of the Core Concepts, Skills, and Components Curriculum (CCSCC), which is currently being developed by the Core Curriculum for Child Trauma Task Force of the National Child Traumatic Stress Network. Workshop content will include a description of (a) the aim and intended uses of the Curriculum in raising the standard of care provided to trauma-exposed children and adolescents; (b) the structure of the curriculum, as organized around core concepts (why we intervene as we do with our clients), intervention components (what we do with our clients), and skills (how we implement those components), in addition to cross-cutting issues including developmental factors, cultural factors, the empirical evidence base, and adaptation and implementation considerations. The workshop will also address (c) ways in which the Core Curriculum will use problem-based active learning methods to facilitate the acquisition of professional expertise in practitioners working with trauma-exposed youth and their families; and (d) presentation of a clinical case vignette that highlights the application of principles of problem-based learning to enhance expert knowledge and clinical judgment.

Participant Alert: Workshop authors will present clinical case vignettes that involve exposure to child and adolescent trauma, including sexual or physical abuse and witnessing serious physical injury.

Concurrent Session 9
Friday, November 14
3:30 p.m. – 4:45 p.m.

DSM-V
Should the Trauma Criteria be Retained or Revised?

The Criterion A Problem: On the Past, Present, and Future of the Stressor Criterion for PTSD

(Abstract #197922)

DSM-V (Asses Dx, Res Meth) **Grand Ballroom, 4th Floor**

Weathers, Frank, PhD¹

¹*Auburn University, Auburn, Alabama, USA*

Considerable controversy has surrounded Criterion A, the stressor criterion for posttraumatic stress disorder (PTSD), since PTSD was first introduced in *DSM-III* in 1980. This presentation will summarize the various issues, challenges, empirical findings, and proposed solutions regarding the appropriate role of Criterion A. The following points will be argued: First, psychological trauma is difficult to define, and the goal of achieving a succinct, unambiguous, universally accepted definition may be unrealistic. Second, although Criterion A has evolved considerably since *DSM-III*, the underlying conceptualization of trauma has remained stable. Third, when the criterion language and accompanying text are considered together, the *DSM-IV* version of Criterion A provides a practical definition of trauma that provides a sufficiently stringent threshold of stressor severity while allowing for requisite clinical judgment. Fourth, Criterion A is essential to the current conceptualization of PTSD as a stress-related disorder and crucial for differential diagnosis of PTSD, especially vis a vis adjustment disorder. Finally, many of the anomalous empirical findings concerning trauma exposure and PTSD are likely the result of insufficiently specific assessment methods. Suggestions will be offered regarding revision of Criterion A for *DSM-V* and methodological improvements in assessment of trauma and PTSD.

Defining Criterion A: Philosophical and Empirical Controversies

(Abstract #197593)

DSM-V (Asses Dx, Res Meth) **Grand Ballroom, 4th Floor**

Kilpatrick, Dean, PhD¹

¹*Medical University of South Carolina, Charleston, South Carolina, USA*

The stressor criterion, or Criterion A, plays a major gatekeeping role in the PTSD diagnosis because it determines which events qualify to be evaluated with respect to other PTSD criteria. How broadly or narrowly Criterion A should be defined has generated controversy since the birth of the PTSD diagnosis, and each revision of the diagnosis has included a different definition of Criterion A. In particular, the *DSM-IV* definition of Criterion A has been criticized as facilitating “bracket creep” (McNally & Breslau, 2008). This presentation will argue that the controversy over how Criterion A should be defined involves philosophical as well as empirical questions. The philosophical question is whether there is utility in excluding some types of stressor events from Criterion A if they are demonstrated to be capable of producing sufficient PTSD symptoms to meet Criterion B, C, D and F. The empirical question is whether “bracket creep” is a real or a pseudo problem. If there is a substantial increase of PTSD prevalence defined as meeting Criteria, B, C, D, E, and F when stressors do not meet the Criterion A1 and/or A2 definition, then there would be empirical support for the “bracket creep” argument. However, if there is little change in PTSD prevalence when such stressor events are included, “bracket creep” would be a pseudo problem from an empirical perspective. A second empirical question is how to

measure PTSD when an individual has been exposed to numerous potentially traumatic events and other stressors. These questions will be addressed using two large epidemiological national probability household samples of U.S. young adults and adolescents in which exposure to potentially traumatic events, other life stressors, and PTSD symptomatology were measured. Implications for changes in the Criterion A definition will be discussed.

Traumatic Events Should Meet Either Criterion A1 or A2 Not Both

(Abstract #197571)

DSM-V (Asses Dx, Bio Med) **Grand Ballroom, 4th Floor**

Brewin, Chris, PhD¹

¹*Clinical, Educational and Health Psychology, University College, London, United Kingdom*

Stressor criterion A2 was added to the *DSM-IV* so that in order to qualify for a diagnosis of PTSD potentially traumatic events had to fulfill both objective and subjective criteria. Research with crime victims has shown that extreme fear, helplessness or horror often but not invariably accompany events leading to PTSD. Delayed onset PTSD in military samples is associated with less extreme subjective responses to trauma than cases of immediate onset PTSD while otherwise being indistinguishable in terms of symptom profile. In contrast, A2 responses are sometimes associated with the full PTSD symptom profile in the absence of an event that would meet the objective criterion A1. This is to be expected given what is known about the ability of stress responses to be sensitised biologically by exposure to early or repeated trauma. A solution that could be implemented in *DSM-V* is for potentially traumatic events to be required to meet either criterion A1 or A2, rather than having to meet both criteria as they do at present.

Do We Need Criterion A2?

(Abstract #197592)

DSM-V (Asses Dx, Res Meth) **Grand Ballroom, 4th Floor**

Schnurr, Paula, PhD¹

¹*VA National Center for PTSD, White River Junction, Vermont, USA*

In *DSM-IV*, the stressor criterion was modified in order to ensure that an individual who qualified for a diagnosis of PTSD had experienced a potentially traumatic event as traumatic. In essence, the modification—A.2—was to serve a gate-keeping function by preventing overdiagnosis among trauma survivors who had not had a serious subjective reaction to an event. In practice, there has been little need for a gate. The *DSM-IV* Field Trial data showed prevalence varied little as a function of whether the A.2 Criterion was applied. Other data show that although meeting A.2 in the immediate aftermath of a trauma predicts the development of PTSD, it is the absence of A.2 that matters: although a number of people who meet A.2 do not go on to develop PTSD, relatively few who fail to meet A.2 will develop PTSD. This presentation will examine the argument that A.2 is unnecessary for diagnosis, and will include discussion of how the absence of a strong subjective reaction can be useful in other contexts, such as predicting the need for future services. The presentation will also include discussion of definitional issues, including whether other strong reactions such as shock or numbing should be included.

Constructing Terror: Traumatization of Detained Terror Suspects

(Abstract #195961)

Symposium/Panel (Sos Ethic, Mil Emer) Crystal Room, 3rd Floor

Aronson, Eric, PsyD¹; Conroy, John²; Fletcher, Laurel, JD³; Olson, Brad, PhD⁴; Smith, Stephen, MA⁵

¹Amnesty International USA, Chelmsford, Massachusetts, USA

²Freelance Journalist, Oak Park, IL USA

³Boalt Hall School of Law, University of California at Berkeley, Berkeley, California, USA

⁴Human Development and Social Policy, Northwestern University, Evanston, Illinois, USA

⁵Oakland, California, USA

New information obtained through investigative journalism, interviews and legal proceedings clarifies factors that contribute to detainee abuse and the role of health professionals; how detainees cope with Trauma, and immediate and long-term consequences for those involved – victims, perpetrators and bystanders – and for society.

The Torturer Speaks: A Journalist's Interviews With Former Torturers

Who becomes a torturer? How do torturers rationalize their acts? Do they feel for their victims? How might the behavior be prevented in the future? This presentation will address the individual perpetrator, presenting excerpts from interviews with torturers who look back on their acts and assess who is responsible for the trauma they inflicted.

Guantánamo and its Aftermath: A Study of Detainees Released From U.S. Custody at Guantánamo Bay

There has been a noticeable lack of systematic post-release studies of prisoners detained at Guantánamo Bay in Cuba. This two-year study of Guantánamo detainees who have left U.S. custody and returned to their countries of origin or other locations consists of: (1) in-depth, semi-structured interviews with approximately 60 former detainees from Europe, the Middle East, and Afghanistan; (2) key informant interviews with lawyers representing detainees, policy makers and former personnel working at Guantánamo; and (3) a database of over 1,000 newspaper articles regarding former detainees. It presents a factual record of the long-term impact of U.S. detention practices on detainees during their confinement at Guantánamo Bay and after their release. The study identifies problems with family reunification, reestablishing livelihood and changes in social status, and describes the meaning detainees ascribe to incarceration and the impact of incarceration on their views about their religion, identity, and relationship to their government. It also points to recommendations on appropriate legal mechanisms, detention practices, and policies to protect the human rights of detainees taken into U.S. custody in the "war on terror."

Ethical Issues Concerning the Role of Psychologists in the Interrogation of Detained Prisoners

Psychologists' participation in the interrogation of detainees raises significant ethical issues. In official policy statements, the American Psychological Association (APA) has approved the participation of psychologists in interrogations at settings such as Guantánamo Bay and CIA "black sites," and their involvement in "Behavioral Science Consultation Teams" has been documented. Since 2005, the APA has developed progressively stronger condemnations of torture and has banned psychologists from engaging in specific interrogation techniques. Nevertheless, the APA has not swayed from its initial support of psychologists' participation in activities that the International Committee of the Red Cross has described as "tantamount to torture." International agreements and the APA's own code of ethics may prohibit this involvement. The ethical conflict between some psychologists providing mental health treatment to detainees and other psychologists using their professional tools in the same settings to contribute to abusive interrogations has yet to be resolved. What

are the ethical implications of health care professionals acting as "safety monitors" and attempting to gauge when interrogation conditions are likely to lead to trauma? This presentation also examines ways that health professionals may facilitate trauma prevention through research and public policy on detainee treatment.

Participant Alert: Although presenters are asked to avoid graphic descriptions, some content will relate to the abusive treatment of detained prisoners.

Current Age and Assessment Issues for Different Types of Trauma in Children and Adolescents

(Abstract #196101)

Symposium/Panel (Child, Asses Dx) State Ballroom, 4th Floor

Nader, Kathleen, DSW¹; Cohen, Judith, MD²; Levendosky, Alytia, PhD³; Fletcher, Kenneth, PhD⁴

¹Director, Two Suns, for the Assistance of Traumatized Children and Adolescents, Cedar Park, Texas, USA

²Medical Director, Allegheny General Hospital, Pittsburgh, Pennsylvania, USA

³Department of Psychology, Michigan State University, East Lansing, Michigan, USA

⁴Department of Psychiatry, University of Massachusetts Medical School (Worcester), Worcester, Massachusetts, USA

Clinician-researchers will review findings regarding differences in youth trauma presentation 1) among three youth age groups (under 8, 8-13, 14-17), 2) from adult trauma, and 3) related to the type of trauma a youth endures. Data and a new complex trauma scale for children will be presented.

An Introduction to the Differences in Youth and Adult Trauma and a Review of Findings for Adolescents

Nader, K.

In recent years, researchers have discussed a number of difficulties related to applying adult PTSD criteria to children and adolescents. In addition to differences in trauma's manifestation among age groups, traumatic experiences can derail a youth's normal life trajectory by causing developmental disruptions (e.g., brain and age appropriate social, academic, and personal skill development), undermining of resilience factors, and altered information processing and patterns of interaction. Factors that are relevant to a youth's reactions vary across age groups (e.g., toddlers, children, early adolescents, and late adolescents). Even though older adolescents' traumatic reactions may be similar to those of adults, youths can have a decidedly different presentation and reporting style (Nader, 2008). A review of clinical and research findings related to adolescent trauma (ages 14-17) will be presented.

Assessment of Trauma in School Aged Children

Cohen, J. & Mannarino, A.P.

Purpose: Recent studies indicate that more than 60% of school-aged children experience potentially traumatic events (PTE) and of these about a quarter have significant symptoms of Posttraumatic Stress Disorder (PTSD), often unrecognized and untreated. This presentation will describe alternative ways of assessing PTSD in children ages 8-13 years old.

Methods: 197 children in 3 New Orleans schools were assessed in group settings at schools using the Child PTSD Symptom Checklist (CPSS). Teachers reported on children's internalized symptoms. A small number (20) of these children also received individual semi-structured interviews using the KSADS-PL.

Findings: Of the 197 children, 125 (63%) self-reported having significant PTSD symptoms. According to teacher report, only 10% of children met criteria for having significant internalizing symptoms. Of the 20 children receiving KSADS-PL, all had significant anxiety symptoms, but 6 (30%) did not report PTE. These children had a predominance of hyperarousal symptoms on the CPSS and were considered false positives for PTSD.

Conclusions: Significant numbers of children exposed to PTSD develop PTSD symptoms, and school-based assessment provides an important opportunity for identifying these children. Tips for optimizing school-based assessments are discussed during this presentation.

Current Findings on PTSD for Children Under 8: Domestic Violence as a Case Example

Levendosky, A. & Bogat, G. A.

Young children pose particular difficulties in assessment of trauma symptoms. First, parental report is required for very young children. Second, young children may exhibit different trauma symptoms than older children and adults, including development of new fears and Posttraumatic play. Current *DSM-IV* criteria do not adequately address issues related to trauma symptomatology in young children. Third, young children appear to have a neurobiological difference in response to trauma. Adolescents and adults with PTSD generally show elevated levels of basal cortisol. In contrast, in young children, both lowered and elevated levels of basal cortisol are found. Finally, young children may respond differentially to different traumatic events. Our own longitudinal study of the effects of domestic violence (DV) on women and children's functioning beginning during pregnancy will be discussed. We collected maternal report on mother's and children's PTSD and DV yearly, from ages 1 through 7. Half of the children exposed to DV at each time period developed some trauma symptoms. Maternal and child PTSD symptoms were correlated for the children ages 1-3, suggesting that young children may be particularly vulnerable to relational PTSD due to their close physical and emotional relationship with their parents.

A Measure to Assess Children's Reactions to Chronic Interpersonal Stressors

Fletcher, K.

Each year millions of children are victims of interpersonal violence: physically, sexually, or emotionally abused, witness to parental violence, victims of community violence, and so on. Many of the children involved with state departments of social services or the juvenile justice system have histories of extended and varied interpersonal violence. The consequences of such chronic stressors in a child's life go far beyond simple PTSD. Questions are now being raised about the utility and importance of diagnosing the more extreme and long-lasting reactions of children to such chronic, interpersonal trauma with a new diagnostic category of Complex PTSD or Developmental Trauma Disorder. In order to better identify and treat the symptoms of children with such histories of interpersonal violence, a new measure of Complex PTSD in Children has been developed that assesses symptoms of difficult problems of attachment insecurity, under- and poorly developed systems of affect and self-regulation, damaged self-esteem, and a potential for substance abuse, painful somatic problems that are resistant to treatment, increased depression, dissociative experiences, and a variety of other difficult behavioral and emotional problems associated with this disorder. The challenges to developing this measure and its rationale will be discussed.

Applying Mindfulness-Based Interventions for Trauma Across Diverse Populations

(Abstract #196206)

Symposium/Panel (Clin Res, Cul Div)

Monroe Ballroom, 6th Floor

La Bash, Heidi, BS¹; Follette, Victoria, PhD¹; Dutton, Mary Ann, PhD²; Niles, Barbara, PhD³; Ryngala, Donna, PhD³; Klunk-Gillis, Julie, PhD³; Paysnick, Amy, BA³; Silberbogen, Amy, PhD³; Elbert, Thomas, PhD⁴; Schauer, Elisabeth, MPH, MA⁵; Catani, Claudia, PhD⁵; Kohila, M., PhD⁶; Somasundaram, D., PhD⁷; Ruf, Martina, PhD⁴; Schauer, Maggie, PhD⁴; Neuner, Frank, PhD⁸; Ford, Julian, PhD⁹; Steinberg, Karen, PhD⁹; Moffitt, Kathie, PhD⁹; Zhang, Wanli, PhD⁹

¹University of Nevada Reno, Reno, Nevada, USA

²Georgetown University, Washington, District of Columbia, USA

³National Center for PTSD, Jamaica Plain, Massachusetts, USA

⁴University of Konstanz, Konstanz, Germany

⁵vivo international, Ancona, Italy

⁶Vallikamam Educational Zonal Office, Vallikamam, Sri Lanka

⁷University of Jaffna, Jaffna, Sri Lanka

⁸Centre for Psychiatry, Reichenau, Reichenau, Germany

⁹Univ of Conn Health Ctr Dept of Psych, Farmington, Connecticut, USA

Mindfulness, originally a construct used in Eastern spiritual and philosophical traditions, has found new utility in the treatment of Posttraumatic Stress Disorder. This symposium presents the results of mindfulness-based treatment packages evaluated in diverse populations, including US combat veterans, Sri Lankan school children, and low-income women of color.

Mindfulness-Based Trauma Interventions for Intimate Partner Violence

Mindfulness is described as "bringing one's complete attention to the present experience on a moment-to-moment basis" (Marlatt & Kristeller, 1999, p. 68). Mindfulness interventions have been developed to address an array of physical and mental health problems. However, none specifically address the needs of trauma populations. The goal of our mindfulness-based trauma intervention is to address the mental health care disparity for low-income, minority women exposed to intimate partner violence. Pilot data from a 3-day wellness retreat with ethnically-diverse battered women's shelter workers (n = 65) showed that although few women had previous experience with meditation practices (55.4%), among those who returned to the second retreat (n = 27), 58.3% reported engaging in at least one type of mindfulness practice (e.g., sitting, walking, eating, yoga) at least once a week over the 6-month period of the program. These data suggest the acceptability of mindfulness practice among an ethnic and cultural minority population. The focus of this discussion is on 1) safety issues, 2) adaptations of mindfulness interventions for this population, 3) acceptability of the intervention, 4) the role of self-management and 5) preliminary data from a comparison of battered women participating in mindfulness vs. psycho-education groups in a shelter setting.

Evaluation of a Mindfulness Telehealth Intervention for Veterans With PTSD

Ongoing military conflicts have spurred interest in innovative treatments for veterans with PTSD. Despite recent speculation that mindfulness meditation may be an effective component of treatment for Posttraumatic Stress Disorder, there are few empirical studies evaluating its feasibility and efficacy. Mindfulness treatments have been shown to ameliorate psychological symptoms that are common in veterans with PTSD: substance abuse, depression, hostility, and anxiety. Mindfulness Based Stress Reduction (MBSR; Kabat-Zinn, 1990) may be effective at promoting healing in veterans by reducing symptoms of PTSD and co-morbid disorders. Difficulties accessing treatment and concerns about stigma associated with mental health treatment have been identified as important barriers preventing veterans

118

Friday: 3:30 p.m. - 4:45 p.m.

from seeking available treatment for PTSD and other disorders. Telephone interventions have shown promise as accessible, cost-effective ways to deliver or extend treatments for a variety of disorders. As part of an investigation that compares two telehealth treatments for PTSD, we developed an 8-week mindfulness intervention based on MBSR specifically for combat veterans. In this presentation we will describe the intervention, and present preliminary findings about feasibility in this population, compliance with homework, and efficacy in ameliorating symptoms.

Treatment of Psychological Trauma in Children After War in North-Eastern Sri Lanka: A Randomised Controlled Trial Comparing NET vs. Mindfulness Meditation/Relaxation

Sri Lanka's civil war has now lasted more than two decades and has deeply impacted the local population; a quarter of the children in the war torn areas suffer from PTSD. A randomised controlled treatment trial in Jaffna and Vallikamam was conducted to test the feasibility of implementing a large-scale evidence-based mental health service in resource-poor setting. Trained local teachers interviewed 469 children aged 11-15 years under supervision. The most severely affected children (N= 48) were randomized to receive six sessions of either KIDNET (Narrative Exposure Therapy for Children) or a Mindfulness Meditation-Relaxation Protocol. PTSD remitted in all but one of the children in the KIDNET group and in two-thirds of the children in the Meditation group who were not exposed to additional traumatic stressors. Depression symptoms were also markedly at the 6-months post-tests and a 14-months follow-up. This study shows that large-scale evidence-based mental health service structures can be successfully implemented and utilized. It further shows that locally trained lay personnel can effectively apply trauma-focused exposure therapy techniques. The outcome suggests that a combination of meditation in groups and followed when necessary by individual NET-treatment might be an efficient way to assist survivors to regain mental well-being in the aftermath of large-scale disasters.

The Role of Mindfulness in a Randomized Clinical Trial of Affect Regulation and Social Problem Solving Psychotherapies for Low Income Mothers With PTSD

This study assessed the efficacy and trajectory of change in two therapies for PTSD with low-income, predominantly ethnorracial minority, young mothers. Trauma Affect Regulation: Guide for Education and Therapy (TARGET; Ford & Russo, 2006) and Present Centered Therapy (PCT; McDonagh-Coyle et al., 2005) were associated with significant improvements at post-test and 3-month and 6-month follow-up assessments, with TARGET associated with greater improvement in PTSD symptoms and affect regulation. Analyses showing differential patterns of within-treatment predictors of change are reported, which suggest that reductions in psychometric scores for PTSD, anxiety, depression and dissociation and improved affect regulation following treatment were predicted by: (a) lower initial negative affect, higher initial and session 4 positive affect, and reduced anxiety about PTSD at session 4 in PCT, but (b) by reduced anxiety about both trauma memories and PTSD and lower levels of both positive and negative affect at session 4 in TARGET. Session 10 predictors of positive outcomes included lower anxiety about trauma memories and higher hope in both treatments, but higher positive affect in PCT and lower anxiety about PTSD symptoms in TARGET. Results are interpreted as suggesting different change trajectories that may reflect remoralization in PCT and increased mindfulness in TARGET.

Risk and Resilience Following Mass Trauma: The Virginia Tech Campus Shootings

(Abstract #196471)

Symposium/Panel (Disaster, Sos Ethic) Salons 7-9, 3rd Floor

Littleton, Heather, PhD¹; Bye, Kimberly, BA¹; Axson, Danny, PhD²; Ullman, Sarah, PhD³; Langelier, Adrienne, BS³; Grills-Taquechel, Amie, PhD⁴

¹Psychology, Sam Houston State University, Huntsville, Texas, USA

²Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA

³Psychology, Sam Houston State University, Huntsville, Mississippi, USA

⁴Psychology, University of Houston, Houston, Texas, USA

⁵Criminal Justice Department, University of Illinois at Chicago, Chicago, Illinois, USA

The worst mass shooting in U.S. history occurred at Virginia Tech. Panelists will present findings from a prospective study of adjustment following the shootings. Findings support pre-trauma distress and prior trauma as risk factors and social support as a resiliency-promoting factor. Findings also examine the role of post-trauma experiences.

Examining Post-Shooting Distress From a Conservation of Resources Framework

Using a conservation of resources framework, predictors of adjustment two and six months after the shooting incident at Virginia Tech were evaluated. It was hypothesized that resource loss and reliance on avoidant and ruminative strategies in coping with the shooting would predict distress following the shooting. Further, it was hypothesized that pre-shooting distress and social support would predict both resource loss following the shooting and reliance on maladaptive coping strategies. 293 Virginia Tech women on whom data were collected with regard to their pre-trauma distress and social support completed an online survey about their adjustment, coping, and resource loss following the shooting. A total of 193 of these women completed a similar survey six months after the shooting. Results of structural equation models were consistent with hypotheses. Resource loss and maladaptive coping predicted distress two months after the shooting incident. Both resource loss and maladaptive coping were predicted by pre-trauma distress and social support. With regard to adjustment six months after the shooting, reported resource loss and maladaptive coping at two months emerged as significant predictors. Implications of the findings for identifying at-risk and resilient individuals following mass trauma are discussed.

Cumulative Effects of Multiple Traumas on Quality of Life: Benevolence Beliefs as a Potential Mediator

Past research has suggested that the effects of trauma may be cumulative. In particular, the deleterious impact of multiple traumas on culturally valued beliefs (e.g., belief in one's worth, beliefs about the benevolence of the world and others) has been described. To examine this possibility, data collected from multiple trauma victims (i.e., victims exposed to sexual trauma prior to the shooting and the Virginia Tech shooting) and single trauma victims (i.e., victims exposed to the shooting) were compared, in a sample of VT women who completed a survey prior to, and two months following, the shooting. It was hypothesized that, compared to single trauma victims, multiple trauma victims would report a lower quality of life following the shooting and less belief in benevolence, and that benevolence would act as a significant mediator. Results were consistent with hypotheses; multiple trauma victims reported lower quality of life in several domains (psychological, physical, and environmental) and less benevolence beliefs. Mediation analyses were then conducted following the three step procedure recommended by Baron and Kenny. Results supported the mediational role of benevolence beliefs with regards to all three quality of life constructs. Sobel tests indicated that the mediation was significant.

Social Support Following the Virginia Tech Shootings

Social support plays an important role in understanding reactions to traumatic events.

Mass traumas, compared to events such as rape, are unique in several respects relevant to social support; they affect many people simultaneously, are public in nature, and are often less stigmatizing to individuals affected. We examine changes in functional social support (assessed by the MSPSS) following the Virginia Tech shootings in a sample of female undergraduates from whom pre-event data had been collected for an unrelated study. Follow-ups 2 and 6 months post-shooting indicated a general increase in social support from baseline. There was also an interaction between time and support type (family vs friend), indicating that the increase primarily reflected a rise in family support, which, relative to friend support, was less strong prior to the shootings. Regression analyses controlling for pre-shooting social support indicated such factors as a belief in the benevolence of people and pre-shooting depression predicted social support 6 months post-event. These patterns were evident for friend but not family support, perhaps reflecting a difference in self vs other-initiated support. Findings are discussed in terms of the social ecology of campus shootings, with implications for theories of trauma-related social support and for post-trauma interventions.

Papers

Biological Issues in Veterans

Adams Ballroom, 6th Floor

Chair: Roger Pitman, MD, Psychiatry, Massachusetts General Hospital/Harvard Medical School, Charlestown, Massachusetts, USA

Headaches in Veterans Returning From Iraq/Afghanistan: Relation to Trauma and Combat-Related Injury

(Abstract #196463)

Paper Presentation (Mil Emer, Clin Res)

Afari, Niloofar, PhD¹; Harder, Laura H., BA²; Heppner, Pia S., PhD³; Madra, Naju J., MA²; Orcutt, Jodi L., PsyD²; Baker, Dewleen G., MD¹
¹Department of Psychology, Veterans Affairs San Diego Healthcare System/University of California San Diego, San Diego, California, USA
²Psychiatry Research Service, Veterans Affairs San Diego Healthcare System, San Diego, California, USA
³Department of Psychiatry, Veterans Affairs San Diego Healthcare System/University of California San Diego, San Diego, California, USA

Limited research has shown that stress and headaches may be similar in physiological mechanism. Additionally, psychological stress may mediate the onset and progression of a headache disorder. The present study investigated the relationship between Posttraumatic Stress Disorder (PTSD) and headaches in 343 newly registered Operation Iraqi Freedom (OIF) and/or Operation Enduring Freedom (OEF) veterans at the VA San Diego Healthcare System. Veterans completed a battery of standardized self-report questionnaires between March and October 2006. Data consisted of demographic, military, in-theater, psychiatric, and health-related variables. Results from logistic regression analysis indicated that PTSD and injury during combat were independent predictors of self-reported headaches. Individuals who endorsed PTSD were 4 times (95% confidence interval: 2.15-8.01; $p < 0.001$) more likely to report headaches than veterans without PTSD. Individuals injured during combat were nearly 3 times (95% confidence interval: 1.38-5.62; $p = 0.004$) more likely to report headaches compared to veterans who did not report injury during combat. Follow-up analyses demonstrated that PTSD and injury during combat could be differentially related to tension and migraine headaches. These findings have implications for a comprehensive approach to interventions with trauma exposed individuals.

Thinner Prefrontal Cortex in Veterans With Posttraumatic Stress Disorder

(Abstract #196215)

Paper Presentation (Bio Med, Res Meth)

Geuze, Elbert, PhD¹; Westenberg, Herman, PhD²; De Kloet, Carien, MD, PhD³; Heinecke, Armin, MSC⁴; Goebel, Rainer, PhD⁴; Vermetten, Eric, MD, PhD⁵
¹Research Centre, Military Mental Health Ministry of Defense, Utrecht, Netherlands
²Psychiatry, University Medical Center Utrecht, Utrecht, Netherlands
³Altrecht, Utrecht, Netherlands
⁴University of Maastricht, Maastricht, Netherlands
⁵University of Utrecht, Utrecht, Netherlands

Structural neuroimaging studies in posttraumatic stress disorder (PTSD) have focused primarily on structural alterations in the medial temporal lobe, and only a few have examined gray matter reductions in the cortex. Recent advances in computational analysis provide new opportunities to use semi-automatic techniques to determine cortical thickness, but these techniques have not yet been applied in PTSD. Twenty-five male veterans with PTSD and twenty-five male veterans without PTSD matched for age, year and region of deployment were recruited. All the subjects were scanned using MRI. Individual cortical thickness maps were calculated from the MR images. Regions of interest examined included the bilateral superior frontal gyri, bilateral middle frontal gyri, bilateral inferior frontal gyri, bilateral superior temporal gyri, and bilateral middle temporal gyri. Individual cortical thickness maps were calculated from the MR images. Veterans with PTSD revealed reduced cortical thickness in the bilateral superior and middle frontal gyri, the left inferior frontal gyrus, and the left superior temporal gyrus. Cortical thinning in these regions may thus correspond to functional abnormalities observed in patients with PTSD.

Resting Brain Metabolic Activity in Identical Twins Discordant for Combat Exposure

(Abstract #196286)

Paper Presentation (Bio Med, Res Meth)

Shin, Lisa, PhD¹; Mohammed, Milad, PhD²; Lasko, Natasha, PhD³; Fischman, Alan, MD⁴; Rauch, Scott, MD⁵; Pitman, Roger, MD²
¹Psychology, Tufts University, Medford, Massachusetts, USA
²Psychiatry, Massachusetts General Hospital/Harvard Medical School, Charlestown, Massachusetts, USA
³Research, VA Medical Center, Manchester, New Hampshire, USA
⁴Radiology, Massachusetts General Hospital/Harvard Medical School, Boston, Massachusetts, USA
⁵Psychiatry, McLean Hospital/Harvard Medical School, Belmont, Massachusetts, USA

Whether functional neuroimaging abnormalities in Posttraumatic stress disorder (PTSD) are acquired characteristics or pre-existing vulnerability factors is largely unknown. We used positron emission tomography and ¹⁸F-fluorodeoxyglucose (FDG) to examine resting regional cerebral metabolic rates for glucose (rCMRglu) in combat-exposed veterans with PTSD and their identical, combat-unexposed co-twins, as well as in combat-exposed veterans without PTSD (n=19) and their co-twins. PTSD veterans and their co-twins had significantly higher resting rCMRglu in dorsal anterior/mid cingulate cortex (dA/midCC) than non-PTSD veterans and their co-twins. Resting dA/midCC rCMRglu in unexposed co-twins predicted alcoholism in themselves, as well as severity of combat exposure and PTSD adjusted for severity of combat exposure in their exposed twins. Previous work has found that common additive genetic influences predict alcoholism, exposure to military combat, and PTSD upon such exposure. Enhanced resting metabolic activity in this region may represent an endophenotypic manifestation of these genetic influences.

120
Friday: 3:30 p.m. - 4:45 p.m.

Global and Regional Cortical Volumes in Combat-Related Posttraumatic Stress Disorder

(Abstract #196473)

Paper Presentation (Bio Med, Asses Dx)

Woodward, Steve, PhD¹

¹Department of Veterans Affairs, Palo Alto, California, USA

Introduction: Global brain volume appears to be smaller in adolescents with posttraumatic stress disorder (PTSD). Brain volume is moderately correlated with intelligence, and lower intelligence, in turn, is a risk factor for PTSD. Hence, it is surprising that only one study has observed smaller brain volume in adults with PTSD.

Methods: Subjects were 97 adult combat-related PTSD patients and combat-exposed controls. Tissue-weighted MR images collected at 1.5T were analyzed with FreeSurfer (v4.0.1) in order to extract the 2-D cortical sheet and compute its thickness. The cortical model was 'gyrographic' parcellated and volumes calculated.

Results: Cortical volume was smaller in adult combat-related PTSD. Robust associations were observed between PTSD and smaller cortical volumes in parahippocampal, superior temporal, lateral orbital frontal cortex, and inferior frontal cortex.

Discussion: Cortical volume was smaller in adult PTSD than in combat controls. The four regions that exhibited especially smaller cortical volumes share – along with hippocampus - involvement in mechanisms subserving "top-down" facilitation of object and word identification. Compromise of these regions suggests PTSD is characterized by impaired plasticity of these "top-down" functions, and may explain the difficulty PTSD patients have in reacquiring civilian function.

Papers

Treatment Issues in Combat-Related Stress

Salon 1, 3rd Floor

Chair: Shay Lee Belik, BSc (HONS),

Psychiatry and Community Health Sciences, University of Manitoba, Winnipeg, Manitoba, Canada

Acupuncture for Posttraumatic Stress Disorder: A Randomized Trial in a Military Population

(Abstract #196398)

Paper Presentation (Clin Res, Mil Emer)

Engel, Charles C., MD, MPH¹; Harper Cordova, Elizabeth, MA²; Benedek, David, MD³; Jonas, Wayne, MD⁴; Ursano, Robert, MD³

¹Department of Psychiatry, Uniformed Services University of the Health Sciences, Deployment Health Clinical Center, Walter Reed Army Medical Center, Washington, District of Columbia, USA

²Deployment Health Clinical Center, Walter Reed Army Medical Center, Washington, District of Columbia, USA

³Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA

⁴Samueli Institute for Information Biology, Alexandria, Virginia, USA

10-17% of soldiers returning from the Iraq War experience PTSD in the year following deployment. Stigma and lack of confidence in existing treatments often prevents soldiers from seeking care. We sought to assess the efficacy of acupuncture for PTSD among military personnel. Four weeks of twice weekly manualized Chinese medicine acupuncture were administered. Soldiers diagnosed with PTSD (CAPS) were randomized to acupuncture (ACU) or usual care (UC) with 12 weeks of follow-up. Primary outcome was PTSD symptom severity (PCL). Secondary outcomes were depression (BDI) and functioning (SF-36). 42 of 55 (76%) randomized soldiers provided complete follow-up data. Compared to UC, ACU was associated with a significantly greater decrease in

PTSD symptoms, which was maintained through the 12-week follow-up (treatment X time, $F(3, 128) = 10.92, p < .001$); mean PCL decreases were 19.4 (± 11.7) at end treatment and 19.8 (± 13.6) at 12-week follow-up in ACU vs. 4.0 (± 12.3) at end treatment and 9.7 (± 13.1) at 12-week follow-up in UC. Similar patterns of improvement were seen with symptoms of depression and psychological functioning. Brief acupuncture offers short-term benefit over usual care for military personnel with PTSD. Future studies should evaluate longer follow-up and acupuncture components.

Pilot Study of a Mindfulness-Based Cognitive Therapy for Combat Veterans Seeking Treatment for PTSD

(Abstract #195972)

Paper Presentation (Mil Emer, Clin Res)

King, Anthony, PhD¹; Giardino, Nicholas, PhD²; Erickson, Thane, PhD¹; Kulkarni, Madhur, MS³; Perkins, Suzanne, PhD¹; Liberzon, Israel, MD¹

¹Psychiatry, University of Michigan, Ann Arbor, Michigan, USA

²Psychiatry, University of Michigan/ VAAHCS, Ann Arbor, Michigan, USA

³Psychology, University of Michigan, Ann Arbor, Michigan, USA

We are studying the feasibility, acceptability, and efficacy of Mindfulness-based Cognitive Therapy adapted for combat veterans seeking treatment at a VA outpatient PTSD clinic. 21 consecutive veterans were recruited, $n=15$ into MBCT groups, $n=6$ to a comparison group (PTSD psycho-ed). MBCT involved 8 weekly group sessions of mindfulness exercises with PTSD-specific content for managing intrusive thoughts and feelings, and daily home practice with audio CDs. We collected pre- and post therapy psychiatric assessments, circadian cortisol & response to awakening, and attentional control (ANT). Four patients dropped MBCT; but completers showed strong compliance in home practice. MBCT showed significant improvement in the Clinician Administered PTSD Scale ($p < .05$) explained by "avoidant" symptoms (reduced from 32 to 18, $p < .005$, Hedges $g=1.09$ compared to control). Improvements ($p < .05$) were also seen in self-report PTSD symptoms, and self-blame cognitions (Posttraumatic Cognitions Inventory). These data suggest MBCT appears clinically acceptable to veterans seeking treatment for PTSD, and potentially beneficial, and may have relatively specific effects on symptoms (i.e. avoidant) and cognitions (guilt), which may make it a useful adjunct. Analyses of psychophysiological, cognitive/attentional, and HPA axis measures are ongoing, and an fMRI neuroimaging study is underway.

Relationship Between Traumatic Events and Suicide Attempts in Canadian Military Personnel

(Abstract #196418)

Paper Presentation (Mil Emer, Clin Res)

Belik, Shay-Lee, BSc (HONS)¹; Stein, Murray, MD²; Asmundson, Gordon, PhD³; Sareen, Jitender, MD⁴

¹Psychiatry and Community Health Sciences, University of Manitoba, Winnipeg, Manitoba, Canada

²University of California, San Diego, La Jolla, California, USA

³University of Regina, Regina, Saskatchewan, Canada

⁴Psychiatry, University of Manitoba, Winnipeg, Manitoba, Canada

The aim of the current study was to determine whether exposure to particular types of traumatic events was differentially associated with suicide attempts in a representative sample of active military personnel. Data came from the Canadian Community Health Survey Cycle 1.2 Canadian Forces Supplement ($N=8,441$; response rate 81.1%). Respondents were asked about exposure to 28 traumatic events that occurred during their lifetime. The prevalence of lifetime suicide attempts for currently active Canadian military men and women was 2.2% and 5.6%,

respectively. Sexual and other interpersonal traumas (e.g., rape, sexual assault, child abuse) were significantly associated with suicide attempts in men, even after adjusting for sociodemographics and mental disorders. In women, sexual and other interpersonal traumas also demonstrated the strongest association with suicide attempts; however, the majority of these relationships appeared to be accounted for by development of a mental disorder. Additionally, the number of traumatic events experienced was positively associated with increased risk of suicide attempts, indicating a dose-response effect of exposure to trauma. The current study is the first to demonstrate that sexual and other interpersonal traumatic events are associated with suicide attempts in a representative sample of active Canadian military men and women.

Posttraumatic Stress Disorder and Health Related Quality of Life in Canadian Peacekeeping Veterans

(Abstract #195879)

Paper Presentation (Mil Emer, Asses Dx)

Richardson, Don, MD, FRCPC¹

¹*Operational Stress Injury Clinic-Parkwood Hospital, University of Western Ontario, London, Ontario, Canada*

Objectives: to examine the health-related quality of life (HRQoL) in deployed Canadian Forces peacekeeping veterans, addressing associations with posttraumatic stress disorder (PTSD) and depression severity.

Methods: Participants were 125 consecutive male veterans who were referred for a psychiatric assessment. Instruments administered included the Clinician-Administered PTSD Scale (CAPS), Hamilton Depression Scale, Short-Form-36 Health Survey (SF-36) and sociodemographic characteristics.

Results: Mental HRQoL was significantly lower for peacekeepers with than without PTSD. Using univariate analyses, PTSD and depression severity were each significantly negatively related to mental HRQoL. In sequential regression analyses controlling for age, we found that PTSD and depression severity significantly predicted both mental and physical HRQoL. **Conclusions:** Veterans with PTSD have significant impairments in mental and physical HRQoL. This information is useful for clinicians and VA administrators working with the newer generation of veterans as it stresses the importance of including measures of quality of life in the psychiatric evaluation of veterans in order to better address their rehabilitation needs.

Papers

Basic Research in PTSD

Salon 3, 3rd Floor

Rajendra Morey, MD, Psychiatry,
Duke University, Durham, North Carolina, USA

Effects of Repeated Stress on Cannabinoid Receptor Type 1 mRNA Expression in Rat Brain

(Abstract #196456)

Paper Presentation (Bio Med, Res Meth)

Carlton, Janis, MD, PhD¹; Xing, Guoqiang, PhD²; Zhang, Lei, MD²; Li, He, MD, PhD³; Ursano, Robert, MD⁴

¹*Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA*

²*Department of Psychiatry, Uniformed Services University of the Health Science, Bethesda, Maryland, USA*

³*Uniformed Services University of Health Sciences, Bethesda, Maryland, USA*

⁴*Psychiatry, Uniformed Services University of Health Sciences, Kensington, Maryland, USA*

Purpose: The endogenous cannabinoid system is involved in emotion, memory, cognition, and pain perception by activation of the presynaptic cannabinoid receptor type 1 (CBR1) that is highly expressed in several brain regions and serves to inhibit release of neurotransmitters including GABA, glutamate, acetylcholine, and monoamines.

Methods: Adult male Sprague-Dawley rats were exposed to repeated immobilization and tail-shock stress. Brain region specific mRNA were determined by quantitative real-time polymer chain reaction.

Findings: There was a marked increase in CBR1 mRNA in the brain stem and cingulate cortex of stressed rats but not in other regions examined.

Conclusions: These results indicate a role of CBR1 receptors in stress-induced alterations in brain neurotransmission and behavioral change. We are currently working to replicate and extend these findings with ongoing studies involving the cerebellar cannabinoid receptors which may mediate altered time sense, spatial memory and fear extinction, critical features of per-traumatic dissociation, acute stress reactions, and initiation of Posttraumatic Stress Disorder (PTSD). Implications for understanding PTSD related phenomena including cognitive changes and increased risk of substance abuse will also be discussed.

Stress-Induced Regional and Sex Differences in Adrenergic Receptor mRNA in Rat Brain

(Abstract #196469)

Paper Presentation (Bio Med, Res Meth)

Xing, Guoqiang, PhD¹; Carlton, Janis, MD, PhD²; Fullerton, Carol, PhD¹; Zhang, Lei, MD¹; Li, He, MD, PhD³; Ursano, Robert, MD¹

¹*Psychiatry, Uniformed Services University of Health Sciences, Bethesda, Maryland, USA*

²*Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA*

³*Uniformed Services University of Health Sciences, Bethesda, Maryland, USA*

Purpose: Dyregulation of adrenergic pathways is thought to be critical in the etiology of PTSD. The role of adrenergic receptor subtypes is unknown. We hypothesized that receptor subtypes could play a distinct role in stress-induced changes related to PTSD.

Methods: Adult rats were exposed to repeated stress. mRNA was extracted from amygdala, hippocampus, hypothalamus and prefrontal cortex. The mRNA expression for receptor subtypes alpha-1A, 1B, 1C, 2A, 2B, 2C, and beta-1, 2 and 3 were determined by qPCR.

Findings: Stressed male rats showed a decrease in alpha 1A and beta-1 mRNA in all brain regions and an increase in alpha 1B, 1C, 2A, 2B, and 2C in hypothalamus, amygdala and prefrontal cortex. Beta 3 mRNA was increased in hypothalamus but decreased in hippocampus. Stressed female rats had increased alpha 1B, 1C, 2B, 2C, and beta 2 in hypothalamus and prefrontal cortex and decreased alpha 1A, 2A, and beta 1 mRNA in amygdala. Beta 3 mRNA was increased in prefrontal cortex and decreased in hippocampus.

Conclusions: Our data show a complex pattern of adrenergic receptor mRNA induction after repeated stress. The data support important roles of adrenergic receptor subtypes in stress-induced changes in brain through divergent changes in expression patterns in different brain regions in both males and females. Behavioral correlates will be discussed.

Serotonin Transporter Gene Modulates Neural Systems for Working Memory in PTSD

(Abstract #196489)

Paper Presentation (Bio Med, Asses Dx)

Morey, Rajendra, MD¹; McCarthy, Gregory, PhD²; Munger, Heidi, BS³; Rimmier, Jacqueline, MS³; Seth, Srishti, BA³; Schmidt, Silke, PhD³

¹Psychiatry, Duke University, Durham, North Carolina, USA

²Yale University, New Haven, Connecticut, USA

³Duke University, Durham, North Carolina, USA

Purpose: Variants of the serotonin transporter gene have been shown to influence amygdala activation in response to emotional faces and also expression of PTSD. We examined the role of the serotonin transporter gene on activation of brain regions implicated in PTSD.

Methods: We used functional MRI to examine neural activity in a PTSD group (n=21) and a trauma-exposed control group (n=21) who were asked to maintain information in working memory while simultaneously distracted by trauma-related material not relevant to the ongoing task. We assayed two polymorphisms of the serotonin transporter gene (i) SNP 16965628 (CG, GG) and (ii) 5HTTLPR-RS25531 (high, low, reference serotonin expression).

Findings: Activation levels in regions of interest were derived by contrasting the most and least distracting conditions in all participants. Emotion processing and working memory brain activity was differentially modulated by the serotonin transporter gene in the PTSD group. Variants of RS16965628 modulated the ventrolateral PFC [F(3,38)=7.7, P<.0005] and the dorsolateral PFC [F(3,38)=2.8, P=.05]. Variants of 5HTTLPR-RS25531 modulated the ventrolateral PFC [F(5,36)=4.2, P<.005] and fusiform gyrus [F(5,36)=4.1, P<.005].

Conclusions: Functional MRI may identify dimensions of PTSD that are more closely related to susceptibility genes than current clinical categorizations.

Low BDNF and Childhood Physical Neglect Impacting Verbal Memory in Depression

(Abstract #195851)

Paper Presentation (Bio Med, Asses Dx)

Grassi-Oliveira, Rodrigo, MS, MD, PhD¹; Stein, Lilian, PhD¹; Lopes, Rodrigo, MS²; Teixeira, Antonio, MD, PhD³; Bauer, Moises, PhD²

¹Psychology, Pontifical Catholic University of Rio Grande do Sul, Porto Alegre, RS, Brazil

²Molecular and Cellular Biology, Pontifical Catholic University of Rio Grande do Sul, Porto Alegre, RS, Brazil

³Internal Medicine, Federal University of Minas Gerais, Belo Horizonte, MG, Brazil

Animal models of repeated maternal separation have been shown reduced brain-derived neurotrophic factor (BDNF) levels in specific brain regions implicated with memory formation. The aim of this preliminary study was to investigate whether childhood physical neglect (CPN) and plasma BDNF levels would impact on memory performance in adults. Recurrent MDD females with CPN (MDD + CPN, n=17) and without CPN (MDD, n=17), and healthy controls (n = 15) were assessed for plasma BDNF and verbal memory performance. MDD patients showed low plasma BDNF concentrations than healthy controls (p < 0.001). MDD + CPN had even lower BDNF levels compared with controls and MDD (p < 0.05). BDNF levels were negatively related to psychological morbidity and positively correlated to memory performance. Regression models showed that severity of self-reported CPN and low plasma BDNF predicted impairment on immediate verbal recall. Delayed recall impairment was predicted by severity of CPN and depression, and memory retention by PTSD severity symptoms. Our data suggest that CPN and plasma BDNF are important factors associated with depression and verbal memory performance.

Teaching Trauma

(Abstract #195726)

Workshop/Case Presentation (Media Ed, Sos Ethic) Salon 2, 3rd Floor

Kimble, Matthew, PhD¹; Flack, William, PhD, PHARM²; Elhai, Jon, PhD³; Davis, Joanne, PhD⁴; Krause, Elizabeth, PhD⁵

¹Psychology, Middlebury College, Middlebury, Vermont, USA

²Bucknell University, Lewisburg, Pennsylvania, USA

³University of South Dakota, Vermillion, South Dakota, USA

⁴University of Tulsa, Tulsa, Oklahoma, USA

⁵Psychology, University of Pennsylvania, Philadelphia, Pennsylvania, USA

This workshop will focus on how to effectively teach the topic of trauma in the classroom. The workshop will be led by five instructors who have all taught courses on "Psychological Trauma" either at the undergraduate level, graduate level, or both. Dr. Kimble will introduce the topic and discuss challenges that are specific to teaching a course on trauma. Dr. Krause will present on how to sensitively address gender, culture, and vulnerability in a course on traumatic stress. Dr. Elhai will discuss using the classroom as a springboard for debate and discussion of controversial and topical traumatic stress issues. Dr. Davis will discuss the use of film as a valuable teaching tool and Dr. Flack will discuss service-learning as a pedagogical strategy that highlights the complex realities of trauma, particularly in comparison to the simplified picture presented in scholarly research. Sample syllabi and associated class assignments will be made available at the workshop. Talks will be limited to 10 minutes to allow for ample discussion/interaction with the audience.

Utilization of EMDR With Traumatic Bereavement

(Abstract #195773)

Workshop/Case Presentation (Practice, Disaster) Salons 4-6, 3rd Floor

Solomon, Roger, PhD¹; Rando, Therese A., PhD²

¹Buffalo Center for Trauma and Loss, Buffalo, New York, USA

²The Institute for the Study and Treatment of Loss, Warwick, Rhode Island, USA

Traumatic bereavement is the state of having suffered the loss of a loved one when grief is overpowered by the traumatic stress brought about by its circumstances. Trauma can disable the ability to cope, impair functioning, and compromise the ability to adapt. Trauma also complicates the mourning by interfering with the processes the mourner has to go through for assimilation and accommodation of the loss.

Eye Movement Desensitization and Reprocessing (EMDR), an integrative psychotherapeutic approach, is an effective treatment for trauma. The underlying theoretical model (Adaptive Information Processing Model) posits that trauma can lead to experiences becoming "frozen" in the brain in state specific form, unable to process. EMDR processing involves the forging of new associations, with adaptive information from other memory networks able to link in to the memory network holding the dysfunctionally-stored information.

EMDR can be integrated into treatment of traumatic bereavement to process the trauma complicating the bereavement, and enable the mourner to complete the necessary processes involved in mourning the loss.

This presentation will discuss grief and bereavement, the processes the mourner has to go through for adaptive assimilation and accommodation of the loss, and how EMDR can be integrated into an overall treatment plan.

**Immigrants and Domestic Violence (DV):
Adjusting the Clinical Lens**

(Abstract #195837)

Workshop/Case Presentation (Cul Div, Practice) Wabash Room, 3rd Floor

Woollett, Nataly, MA¹

¹Lutheran Family Health Centers, Brooklyn, New York, USA

As the immigrant population continues to grow in this country, there is an increased demand to understand the special needs of this group as they interface with mainstream mental health systems. Immigrants often experience trauma before, during and after immigration; traumatic events that professionals may overlook. These traumas frequently occur in early life and are compounded over time by psychosocial stressors leading to a more complex form of trauma. With regards to interpersonal trauma, immigrant women and children are particularly at risk to the terrifying experience of DV and are thus over represented in the mental health system dealing with DV. Psychoeducation will be provided on culturally competent assessment and clinical variables that affect treatment of immigrant families that deal with DV. Some clinical variables to discuss include the conflict that occurs between first and second-generation immigrants that reside in the same family, particular barriers undocumented immigrants face, low retention rates of immigrants in treatment etc. We will share the knowledge we have gained from working directly with immigrants who have informed us of the nuances of trauma and how it is experienced in individuals and families. Unaddressed needs of immigrant DV victims constitute a major public health concern.

Participant Alert: Some discussion topics related to domestic violence can be distressing to individuals.

Concurrent Session 10

Saturday, November 15

8:00 a.m. – 9:15 a.m.

The Biology of PTSD

**Making Relevant Animal Models for PTSD:
Looking for Phenotypic Variation, Rather Than
Typical Response to Stress**

(Abstract #198302)

Featured (Res Meth, Bio Med) Grand Ballroom, 4th Floor

Yehuda, Rachel, PhD¹

¹Mount Sinai School of Medicine Medical School, Bronx, New York, USA

The theoretical link between exposure to extreme stress and the development of PTSD provided the rationale for early hypotheses that PTSD-related biological alterations would be similar in direction to those observed acutely in animals exposed to stressors. When subsequent findings indicated that only a minority of trauma-exposed individuals develop PTSD an alternative hypothesis was generated proposing that PTSD involves a failure of mechanisms involved in recovery and restitution of physiological homeostasis, possibly resulting from individualistic predisposition. It has been challenging to interpret the extent to which biological alterations that are consistent with normative consequences of stress exposure in PTSD reflect pathogenesis.

This presentation will focus on attempts to develop animal models for PTSD based on the premise of examining individual differences to a uniform provocation that yields long-lasting biobehavioral consequences, analogous to those in PTSD. These strategies generally involve examination of biological underpinnings in phenotypic variation of differences in response to fear conditioning and other provocations and yield information addressing why only some persons exposed to trauma fail to recover.

**Animal Models in PTSD:
Their Contribution to Pharmacotherapy**

(Abstract #198555)

Featured (Bio Med, Prev EI) Grand Ballroom, 4th Floor

Zohar, Joseph, MD¹; Cohen, Hagit, ²

¹Psychiatric Department, The Chaim Shiba Medical Center Israel, Herzlia, Israel

²Mental Health Center, Beer-Sheva, Israel

Although animal models of psychiatric disorders are limited to the assessment of measurable and observable behavioral parameters and cannot assess complex psychological symptoms such as thought, meaning and dreams, they are in some ways advantageous. Valid and reliable animal models may provide a means for researching biomolecular, pathophysiological and pharmacological features of the disorder in ways which are not feasible in human studies. PTSD provides a unique basis for an animal model, since in PTSD the trigger is well-known and universal – exposure to a traumatic event – and hence the center of gravity shifts from how to induce it to how to "diagnose" those animals who develop PTSD versus those who do not. The behavioral cut-off criteria were introduced, and based on this concept – setting apart the affected – we can isolate and study those animals who developed "PTSD-like behavior", comparing them to those who did not develop (although they were exposed) and to those who were not exposed.

Researchers who work with animals have long been aware that individual study subjects tend to display a varying range of responses to stimuli, certainly where stress paradigms are concerned. This heterogeneity in responses was accepted for many