Resilience After Trauma: From Surviving to Thriving

Session Abstracts

November 7-9, 2013
Pre-Meeting Institutes and Opening Keynote, November 6
Philadelphia Marriott Downtown
Philadelphia, PA USA

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Wednesday, November 6

Pre-Meeting Institute (PMI) #1
Wednesday, November 6
8:30 a.m. to 5:00 p.m.
Grand Ballroom A

Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)
(Practice/Child/Adol/I/Global)

Cohen, Judith, MD¹, Mannarino, Anthony, PhD²
¹Allegheny General Hospital, Pittsburgh, Pennsylvania, USA
²Allegheny General Hospital/Drexel University College of Medicine, Pittsburgh, Pennsylvania, USA

OBJECTIVE: This PMI provides a brief introduction to Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) for child mental health professionals. METHODS: Drs. Anthony Mannarino and Judith Cohen, two of the TF-CBT developers, describe three underlying principles of TF-CBT: that this is a components-and phase-based model; the use of gradual exposure throughout TF-CBT; and the importance of proportionality throughout treatment. They describe the TF-CBT phases (stabilization, trauma narration and consolidation) and components, summarized by the acronym "PRACTICE" that includes Psychoeducation; Parenting component; Relaxation skills; Affective modulation skills; Cognitive processing skills; Trauma narrative; In vivo mastery of trauma reminders; Conjoint child-parent sessions; and Enhancing safety. Case examples are included throughout to illustrate how TF-CBT helps children and families gain resilience after trauma, including complex trauma experiences. RESULTS: TF-CBT has been tested in 13 randomized controlled trials including for children who have experienced sexual abuse, domestic violence, war, commercial sexual exploitation, and multiple traumas. In these studies TF-CBT was superior to comparison or control conditions in improving children's PTSD symptoms and a variety of other difficulties. CONCLUSIONS: TF-CBT is an evidence-based treatment for treating traumatized children.

Pre-Meeting Institute (PMI) #2
Wednesday, November 6
8:30 a.m. to 5:00 p.m.
Grand Ballroom B

Taking Your Prolonged Exposure (PE) Practice to the Next Level: How and When to Use PE with Complicated PTSD Patients
(Practice/Violence/M/Global)

Yusko, David, PsyD¹, Foa, Edna, PhD¹, Nacsach, Nitsa, MD²
¹University of Pennsylvania, Philadelphia, Pennsylvania, USA
²Tel-Aviv Brull Community Mental Health Center, Tel Aviv, Israel,

Despite the comprehensive research that exists using prolonged exposure therapy (PE) there are still questions about it being a potentially harmful treatment for certain patients with PTSD. Even though PE is the most widely studied therapy for PTSD, with the most evidence supporting its efficacy in a broad range of PTSD populations (e.g.
variety of target traumas, demographic diversity, various types of comorbidity, and wide dissemination), there is still more to learn. This institute will begin with a brief review of the evidence supporting the efficacy and effectiveness of PE. From there, a review of the basic components involved in PE, followed by a combination of actual treatment videos and real case vignettes that illustrate how PE experts have implemented PE in these complicated treatment cases. Case presentations will demonstrate the use of PE with the following populations: comorbid substance dependence, comorbid borderline personality, early childhood sexual abuse, repeated and/or prolonged traumas, and comorbid OCD. The institute encourages participants to present their own difficult PTSD cases for consultation. In summary, the institute will focus on the following aspects: 1) an overview of PE treatment literature, 2) a review of PE treatment components; 3) actual patient illustrations of PE being used in difficult trauma populations, 4) institute participants bringing in their own case material for consultation from PE experts, and 5) instruction on when and how to modify PE procedures in complicated PTSD populations.

Pre-Meeting Institute (PMI) #3
Wednesday, November 6
8:30 a.m. to 5:00 p.m.
Grand Ballroom C

Acceptance and Commitment Therapy: Mindfulness and Compassion in the Treatment of PTSD
(Practice/N/A/M/Industrialized)

Walser, Robyn, PhD
1 National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Palo Alto, California, USA

Acceptance and Commitment Therapy (ACT) is a principle-based behavioral intervention that is designed to address human suffering in a mindful and compassionate way. ACT also aims to support individuals in engaging commitments to behavior change that are consistent with personal values and well-being. While ACT has been applied to a wide variety of problems, it is well suited to the treatment of trauma. Individuals who have been diagnosed with PTSD and trauma related problems are often disturbed by traumatic memories, nightmares, unwanted thoughts and painful feelings. They are frequently working to avoid these experiences and the trauma-related situations or cues that occasion them. In addition to the symptoms of PTSD, the painful emotional experience and aftermath of trauma can often lead the traumatized individual to view themselves as “damaged” or “broken” in some important way. These difficult emotions and thoughts are associated with a variety of behavioral problems ranging from substance abuse to relationship problems. ACT seeks to reduce rigid and inflexible attempts to control negative emotions by fostering acceptance through mindfulness and defusion techniques. The client is guided to experience internal events without effort in unworkable control. The ultimate goal is psychological and behavioral flexibility in the service of a more workable life. In this presentation we will briefly explore the theoretical underpinnings of ACT in addition to the six core components of ACT and how they are used to treat experiential avoidance and problematic rule following found in PTSD. A broad overview of the intervention techniques will also be presented.
Treatment of Complex Childhood Trauma: Comparative Application of Case Material to Four Leading Intervention Models

Pre-Meeting Institute (PMI) #4
Wednesday, November 6
8:30 a.m. to 5:00 p.m.
Grand Ballroom D

Brown, Adam, PsyD¹, Ford, Julian, PhD², Blaustein, Margaret, PhD³, Habib, Mandy, PsyD⁴, Saxe, Glenn, MD⁵
¹New York University School of Medicine, New York, New York, USA
²University of Connecticut Health Center, Farmington, Connecticut, USA
³Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA
⁴Adelphi University, Garden City, New York, USA
⁵New York University Langone Medical Center, New York, New York, USA

This full-day pre-meeting workshop will begin with an Introductory-level morning session introducing participants to four leading evidence-based models for complex trauma intervention developed by members of the NCTSN over the past decade: ARC (Attachment, Self-Regulation and Competency), SPARCS (Structured Psychotherapy for Adolescents Responding to Chronic Stress) TARGET (Trauma Affect Regulation: Guide for Education and Therapy) and TST (Trauma Systems Therapy). Model developers will describe key facets of each model, including the processes and techniques through which each model addresses the core components of complex trauma intervention. The afternoon session will feature an Intermediate-level application of each intervention model to the same case, the "James" clinical vignette from the NCTSN’s Core Concepts Curriculum. Presentations will be followed by integrative comments from the Program Chair from a Core Components perspective. Ensuing panel discussion will be audience-driven, and will focus on examination of the shared and unique elements of each treatment model, and consider model fit based on client-specific and contextual factors, including developmental stage, treatment setting, care-giving system and cultural considerations.

Pre-Meeting Institute (PMI) #5
Wednesday, November 6
8:30 a.m. to 5:00 p.m.
Franklin 6

Problem-Solving Therapy to Enhance Recovery and Resilience

Pre-Meeting Institute (PMI) #5
Wednesday, November 6
8:30 a.m. to 5:00 p.m.
Franklin 6

Problem-Solving Therapy (PST) is an evidenced-based, cognitive-behavioral intervention, based on research demonstrating the mediating and moderating role of social problem solving (SPS) regarding stress and psychopathology. SPS is the process whereby people direct their coping efforts at altering the problematic nature of stressful events, as well as their negative reactions to such occurrences (i.e., emotional regulation). If one’s problem-solving attempts are ineffective, significant negative emotional reactions are likely to occur. The overarching treatment goal of PST is to foster adoption and implementation of adaptive problem-solving attitudes.
and behaviors as a means of effectively minimizing the negative effects of stressful events. More specifically, PST is geared to increase optimism, improve emotional regulation, enhance resilience, and foster successful coping with ongoing stressors. Several meta-analytic reviews of the PST outcome literature strongly support its efficacy for the treatment of a wide range of emotional disorders across ages and clinical populations. This workshop also represents recent updates to the theory and therapy based on advances in the neurobiological understanding of the relationships among chronic stress, coping, and emotional distress (Nezu, Nezu, & D'Zurilla, 2013). The two presenters are co-developers of this approach. This workshop will provide participants with (a) an overview of the conceptual and empirical underpinnings of the problem-solving model of stress and psychopathology upon which PST is predicated, and (b) clinical guidelines to conduct PST for two specific populations. These include: (a) individuals experiencing a chronic medical illness, and (b) previously deployed Veterans. Scores of well-controlled outcome studies support the efficacy of PST with medical patients across a variety of illnesses, including cancer, heart disease, stroke, chronic pain, and diabetes. Recent findings regarding the evaluation of an ongoing open trial of a PST-based, group prevention program that includes 621 U.S. Veterans provides support for its efficacy in reducing depression, psychiatric symptomatology, as well as improving overall problem-solving skills and psychological resilience. Of particular interest regarding the acceptability and perceived user-friendliness of this approach for a Veteran cohort is represented by a retention rate that exceeded 76% of such participants. In addition to lectures, we will demonstrate various PST intervention strategies, engage workshop participants in relevant role-plays, and provide consultations regarding how to apply PST to these two populations. Training materials will also be provided.

Pre-Meeting Institute (PMI) #6
Wednesday, November 6
8:30 a.m. to 12:00 p.m.
Franklin 7

New Evidence Supported Approaches to First Responder Behavioral Health: Implementing NFFF Firefighter Life Safety Initiative 13
(Prevent/EmergWrkrs/I/Industrialized)

Gist, Richard, PhD¹, Watson, Patricia, PhD²
¹Kansas City (Missouri) Fire Department, Kansas City, Missouri, USA
²National Center for PTSD, Executive Division, White River Junction, Vermont, USA

Firefighters and other first responders face stressful situations every day that can contribute to PTSD, depression, and other behavioral health complications. Evolving research and emerging best practices have opened new possibilities to help responders remain healthy, resilient, and successful in their chosen work. This half-day session provides an overview of current research and best practices, and introduces a new system of easily accessed, readily learned, and low cost resources that emergency responders, their organizations, and the professionals who assist them can employ immediately to ensure the best possible support for America's hometown heroes. These approaches were developed across a three year series of consensus workshops led by the National Fallen Firefighters Foundation that joined leading researchers and practitioners with fire service constituency organizations to: (a) assess needs, review current research, and generate consensus models for organizational response; (b) identify current best practices to be adapted, refined, or developed to work effectively in emergency response organizations; (c) create easily accessible, low cost web, workshop, and print materials to support implementation; and (d) disseminate those processes and materials widely to facilitate ready application. A fast-paced, interactive, team approach is used to present five segments; each supported by both PowerPoint and written materials with video and active web demonstrations included where indicated (e.g., After Action Review, Curbside Manner; Helping-Heroes; Stress First Aid). NFFF produced materials will be provided to add additional
depth in each major content area. Segments include: (1) Occupational behavioral health in fire and emergency services: History, current research, identified best practices (2) Knowledge translation: Consensus models for bridging research, practice, and organizational application (3) Tools for the organization: (a) After Action Review: web based inservice program introducing a military adaptation for daily use to both enhance organizational performance and build foundation for difficult episodes: (b) Curbside Manner: web based inservice program supporting daily application of principles from Stress First Aid to routine citizen encounters, enhancing service and building foundation. (4) Tools for behavioral health providers: (a) Evidence based screening tools: (b) Helping-Heroes.org: Web training for clinicians in providing CBT to emergency response personnel (in conjunction with MUSC/NCVRTC) (5) Tools for peer support: (a) Stress First Aid: a direct adaptation of Navy/Marine Corps COSFA for fire service environment (in conjunction with NCPTSD).

**Pre-Meeting Institute (PMI) #8**
**Wednesday, November 6**
8:30 a.m. to 12:00 p.m.
Franklin 9/10

The Sanctuary Model: What It Takes to Create and Sustain Trauma-Informed and Resilient Organizations
(Train/Ed/Dis/Diverse Pop/M/Global)

Bloom, Sandra, MD¹, Farragher, Brian, MBA², Foderaro, Joseph, MSW, LCSW¹, Harrison, Landa, MEd, LPC, NCC², Ryan, Ruth Ann, MSN, APRN², Yanosy, Sarah, MSW, LCSW²

¹Drexel University School of Public Health, Philadelphia, Pennsylvania, USA
²Andrus, Yonkers, New York, USA
³Drexel University School of Public Health, Fort Washington, Pennsylvania, USA

For the last thirty years, the field of traumatic stress studies has been growing rapidly and methods for addressing the needs of trauma-survivors have burgeoned. This knowledge provides all social service delivery professionals with a much more effective means of assessment, treatment planning and implementation than we have previously had available. But in those same three decades, the U.S. mental health and social service systems have been under relentless assault, with dramatically rising costs and the fragmentation of service delivery often rendering them incapable of ensuring the safety, security, and recovery of clients. Healing is possible for these clients if they enter helping, protective environments, yet toxic stress has frequently destroyed the sanctuary that our systems are designed to provide. These parallel processes among clients, staff, organizations, and communities can be understood within a trauma-informed framework, laying the groundwork for parallel processes of recovery for our caregiving systems as well as the staff who work within them and the clients we serve. In this pre-meeting institute Dr. Sandra Bloom, the developer of the Sanctuary Model, and her colleagues from the Sanctuary Institute will describe what has developed into a three-year implementation and certification process for organizations that intend to become truly trauma-informed and summarize the research that has thus far accumulated about the Sanctuary Model. After introductions to the faculty and the participants, the group will learn about and practice Community Meeting, one of the key elements of the Sanctuary Model. The day will then be broken into three key components of Creating, Destroying and Restoring Sanctuary. In Creating Sanctuary, participants will learn about the origins and the key theoretical underpinnings of the Sanctuary Model as well as “lessons learned”. Destroying Sanctuary will focus on the multiple ways in which organizational stress creates destructive parallel processes, often outside of the conscious awareness of managers. Restoring Sanctuary then focuses on the organizational training and consultation approach that has developed into the development and expansion of a training institute that has wide dissemination in the United States and other countries worldwide. Teaching methods used will include didactic presentations, discussion, and small group activities throughout the day.
Pre-Meeting Institute (PMI) #9  
Wednesday, November 6  
8:30 a.m. to 12:00 p.m.  
Franklin 11

**Imagery Rescripting Therapy for Military Populations: An Introduction**  
(Practice/Mil/Vets/M/N/A)

O’Reilly, Holly, PhD, Brim, William, PsyD  
1Center for Deployment Psychology & Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA

The course provides a cognitive-behavioral treatment to alleviate the frequency and distress associated with frequent nightmares. The course will begin with information regarding common sleep events providing information to help discern nightmares from night terrors that occur during sleep. This course will focus on military populations. The course will present data examining the efficacy of this technique with military populations in individual and group formats. The course will include role plays so that clinicians may practice new skills and will review session by session agendas for utilizing this protocol with service members. As many clinicians are trained in a cognitive-behavioral therapy for PTSD (i.e., PE, CPT and EMDR) this course will provide them with an targeted strategy to treat nightmares should nightmares persist following cognitive-behavioral therapy for PTSD. It is recommended that attendees have prior experience with PE, CPT, EMDR or work with trauma populations. This course is intended for work with adult patients only. The course will provide information regarding nightmare assessment and specific questions to use during assessment. This course will allow clinicians to role play and practice restructuring nightmares and provide resources for additional research or instruction.

Pre-Meeting Institute (PMI) #10  
Wednesday, November 6  
8:30 a.m. to 12:00 p.m.  
Franklin 12

**How Understanding the Neurobiology of Post-Traumatic Stress Disorder Can Inform Clinical Practice: A Social Cognitive and Affective Neuroscience Approach**  
(Practice/Adult/Cmplx/M/Global)

Frewen, Paul, PhD, Lanius, Ruth, MD, PhD  
University of Western Ontario, London, Ontario, Canada

The objective of this workshop will be to examine the relevance of the social cognitive and affective neuroscience (SCAN) paradigm for an understanding of the psychology and neurobiology of complex post-traumatic stress disorder (PTSD) and its effective treatment. We suggest that SCAN offers a novel theoretical paradigm for understanding psychological trauma and its numerous clinical outcomes, most notably problems in emotional/self-awareness, emotion regulation, social emotional processing and self-referential processing. A core set of brain regions appear to mediate these collective psychological functions, most notably the cortical midline structures, the amygdala, the insula, posterior parietal cortex and temporal poles, suggesting that problems in one area (e.g.
emotional awareness) may relate to difficulties in another (e.g. self-referential processing). We further propose, drawing on clinical research, that the experiences of individuals with PTSD related to chronic trauma often reflect impairments in multiple social cognitive and affective functions. Implications for assessment, treatment, and the intergenerational transmission of trauma will be discussed.

Pre-Meeting Institute (PMI) #11
Wednesday, November 6
1:30 p.m. to 5:00 p.m.
Franklin 7

Assessing PTSD According to DSM-5
(Assess Dx/N/A/M/Industrialized)

Schnurr, Paula, PhD¹, Friedman, Matthew, MD, PhD², Weathers, Frank, PhD³, Marx, Brian, PhD⁴
¹VA National Center for PTSD, Executive Division, White River Junction, Vermont, USA
²National Center for PTSD, Executive Division, White River Junction, Vermont, USA
³Auburn University, Auburn, Alabama, USA
⁴National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

The diagnostic criteria for PTSD were changed in DSM-5. Perhaps the most significant change is that PTSD is no longer classified as an anxiety disorder, but there are other important changes too, such as a separation of avoidance and numbing symptoms. This premeeting institute is designed to help participants learn the new criteria and how to apply them when diagnosing PTSD and assessing PTSD symptom severity. The session will begin with an overview of the similarities and differences between DSM-IV and DSM-5. This material will be followed by more in-depth presentation of the DSM-5 criteria in order to provide a thorough foundation for conducting assessments. Examples of specific issues to be covered include the stricter definition of A1, elimination of A2, and mandatory endorsement of at least one avoidance symptom. Next, we will move on to diagnostic interviewing using the Clinician-Administered PTSD Scale, which has been revised according to the new criteria. An important feature of the new CAPS is that the separate frequency and intensity scales have been combined into a single severity scale. We will provide guidance about how to translate information about frequency and intensity into a single measure. The session will end with information about self-reported assessment using the PTSD Checklist. Throughout we will use a combination of lecture, discussion, and role-playing to explain concepts and demonstrate techniques. The presentation is aimed at an audience that is familiar with current PTSD criteria and diagnostic interviewing.
Pre-Meeting Institute (PMI) #13
Wednesday, November 6
1:30 p.m. to 5:00 p.m.
Franklin 9/10

Psychological First Aid – Keeping Providers Skills Up
(Prevent/EmergWrks/M/Global)

Brymer, Melissa, PhD, PsyD1, Walker, Douglas, PhD2, Reyes, Gilbert, PhD3, Watson, Patricia, PhD4
1National Center for Child Traumatic Stress at UCLA, Los Angeles, California, USA
2Mercy Family Center, New Orleans, Louisiana, USA
3Fielding Graduate Institute, Santa Barbara, California, USA
4National Center for PTSD, Executive Division, White River Junction, Vermont, USA

Psychological First Aid (PFA) is an acute intervention to help children, adolescents, adults, and families in the immediate aftermath of disasters, terrorism and other emergencies. The National Child Traumatic Stress Network (NCTSN) and the National Center for PTSD published a comprehensive PFA Field Operations Guide that has 8 core actions: 1) Contact and Engagement; 2) Safety and Comfort; 3) Stabilization; 4) Information Gathering; 5) Practical Assistance; 6) Connection with Social Supports; 7) Information on Coping; and 8) Linkage with Collaborative Services. They have also recently released the second edition of PFA for Schools. After the recent tragedies that have impacted our nation, lessons learned have highlighted the need to have PFA refresher courses for those providers who have been previously trained. This PMI will simulate a PFA refresher course followed by participants practicing different PFA intervention skills including stabilization strategies, working with groups, and assisting survivors with acute grief issues. At the end of the session, participants and presenters will conduct an after-action review and address lessons learned. For those individuals who have not taken a course in PFA, it is recommended that they take the free PFA Online course at http://learn.nctsn.org prior to coming to this session.

Pre-Meeting Institute (PMI) #14
Wednesday, November 6
1:30 p.m. to 5:00 p.m.
Franklin 11

Ethnocultural Variation in Traumatic Stress in the United States: Epidemiology, Assessment, and Treatment
(CulDiv/Diverse Pop/M/Industrialized)

Pole, Nnamdi, PhD1, Hinton, Devon , MD, PhD2
1Smith College, Northampton, Massachusetts, USA
2Harvard, Boston, MA, Massachusetts, USA

We will examine ethnic and cultural factors that influence traumatic stress outcomes. We will review studies involving special populations (e.g., veterans, police, disaster survivors, clinical samples) and representative community samples that document disparities in traumatic stress exposure, PTSD prevalence, and mental health service utilization. We will discuss the latest theoretical and empirical explanations of these ethnoracial disparities including an examination of the role of discrimination. We will also review studies bearing on the cross-cultural validity of the PTSD diagnosis highlighting the aspects of the diagnosis that are relatively invariant across cultures.
and those that seem particular sensitive to ethnocultural variation. To aid in the important work of achieving valid cross-cultural diagnosis, we will review findings from basic cross-cultural emotion research and examine culture-bound idioms of distress that contribute to atypical post-trauma symptom presentation. We will provide guidance about how to appropriately assess the culture bound syndromes that are most relevant to traumatic stress and highlight other sources of cross-cultural assessment variance. We will also include a brief training in culturally adapted cognitive behavior therapy (CA-CBT) for PTSD. This model, which has shown efficacy in randomized trials, modifies mainstream cognitive- and exposure-based models to include components that directly address common challenges that arise with some ethnocultural minority populations (e.g., limited familiarity with mainstream mental health concepts, prominent somatic complaints, and poor tolerance of conventional exposure techniques). Finally, we will include time for case consultation on cross-cultural challenges that are raised by our audience. We particularly welcome discussion of racism, religion, acculturation, bilingualism, identity development, multiracial identity, intersectionality with other social identities, and other issues that are particularly likely to arise with minority clients. We aim to enhance cross-cultural competence in understanding risk for trauma and PTSD, assessment challenges, and potential treatment modifications.

Pre-Meeting Institute (PMI) #15
Wednesday, November 6
1:30 p.m. to 5:00 p.m.
Franklin 12

Mindfulness Based Stress Reduction: Theory and Practice of an Approach to Foster Resilience in Trauma Survivors and Their Clinicians
(Practice/N/A/I/Global)

Davis, Louanne, PsyD, Luedtke, Brandi, PsyD
Roudebush VA Medical Center, Indianapolis, Indiana, USA

The overall goal of this presentation is to provide an experiential introduction to a program called Mindfulness-Based Stress Reduction (MBSR) that includes the research evidence of benefits for both trauma survivors and clinicians. Mindfulness meditation involves training the mind to relate to internal and external experiences in a particular way: intentionally, while suspending judgment, moment to moment. Mindfulness meditation, in the form of MBSR, has generally been shown to decrease anxiety, depressive rumination, physiological arousal and stress reactivity, as well as enhance empathy, psychological flexibility and well-being. More specifically, MBSR has been found to reduce symptoms of PTSD in patients and of burnout/compassion fatigue in clinicians and equips participants with skills that can be applied to difficult life situations in the future. This four hour presentation is divided into 3 segments. The first hour involves an introduction to MBSR which participants will experience as if they were attending a briefer version of the typical MBSR program orientation session. MBSR orientation includes the history of MBSR, definition of mindfulness, experience of a brief mindful breathing practice, theoretical base/research, and discussion that includes program structure, home practice expectations, group guidelines risks/benefits, and sharing of what brought participants to the program. This segment concludes with discussion of screening issues and use of pre/post measures. The middle segment, approximately 2 hours, will provide an overview of each of the 8 MBSR sessions and the all day practice, while including brief experiences and discussion of the remaining three meditation practices integral to MBSR: eating meditation, body scan and yoga. The final segment describes how mindfulness practiced in daily life, including within the therapeutic relationship, can promote resilience. The concluding discussion addresses clinical considerations when teaching mindfulness to trauma survivors and recommended MBSR teacher training.
Keynote Address
Wednesday, November 6
6:15 p.m. to 7:30 p.m.
Grand Ballroom E/F

Healing Through Resilience and Forgiveness
(Global/Violence/I/Global)

Lindhout, Amanda
Global Enrichment Foundation, Canmore, Alberta, Canada

In this 60 min keynote address, kidnap survivor Amanda Lindhout inspires audiences as she shares her experience as a hostage in Somalia. Lindhout doesn’t dwell on the conditions of her 460 days in captivity but relates moments where personal transformation occurred and she had the opportunity to turn suffering into growth. She explains how her journey through regret, anger, and pain ultimately led her to discover that as long as she retained her ability to feel compassion, her humanity could never be taken from her. During her weakest moments, she found the ability to experience her greatest power: the power to forgive. "The process of forgiveness is not easy," Lindhout says, "but the decision to engage in it is the single most liberating experience a person can have." Following her release in 2009, Lindhout has embarked on an incredible journey of healing and she shares her astonishing discoveries about post traumatic growth. A captivating, unforgettable speaker, Lindhout alights on the positive and leaves the audience with a fuller understanding of the freedom we can all experience when we choose to embrace compassion and puts into perspective the challenges that we all face. What emerges is a celebration of resilience - a powerful portrait of the strength of the human spirit.
Thursday, November 7

Keynote Panel

Thursday, November 7
9:00 a.m. to 10:15 a.m.
Grand Ballroom E/F

Resilience as Related to Definition, Theory, and Challenges
(Train/Ed/Dis/N/A/M/ N/A)

Southwick, Steven, MD\textsuperscript{1}, Bonanno, George, PhD\textsuperscript{2}, Masten, Ann, PhD\textsuperscript{3}, Panter-Brick, Catherine, Other\textsuperscript{4}, Yehuda, Rachel, PhD\textsuperscript{5}

\textsuperscript{1}VA Connecticut Health Care System, West Haven, Connecticut, USA
\textsuperscript{2}Teachers College, Columbia University, New York, New York, USA
\textsuperscript{3}University of Minnesota, Minneapolis, Minnesota, USA
\textsuperscript{4}Yale University, West Haven, Connecticut, USA
\textsuperscript{5}J. J. Peters Veterans Affairs Medical Center; Mount Sinai School of Medicine, Bronx, New York, USA

Resilience is a complex construct that is multidimensional and dynamic in nature. The American Psychological Association defines resilience as “the process of adapting well in the face of adversity, trauma, tragedy, threats and even significant sources of stress...” This panel of experts will approach resilience from a range of vantage points. Steven Southwick will introduce the construct of resilience; Ann Masten will discuss developmental perspectives; George Bonnano longitudinal course and methodological approaches to operationalizing resilience; Rachel Yehuda potential biological risk and protective factors; and Catherine Panter Brick will describe social and anthropological perspectives. The session will focus on definitions and theories of resilience; developmental, psychological, biological and social factors that contribute to resilience; and challenges to the field.
Concurrent Session One
Symposium
Thursday, November 7
10:30 a.m. to 11:45 a.m.
Grand Ballroom A

Extending Access to Patients and Providers through New Web-Based PTSD Resources and Programs - Do They Really Work?
(Tech/Mil/Vets/M/Industrialized)

Chair: Greene, Carolyn, PhD¹, Discussant: Weingardt, Ken, PhD²
¹Office of Mental Health Services, Department of Veterans Affairs, Menlo Park, California, USA
²Department of Veteran Affairs, Menlo Park, California, USA

Increasingly, given time, cost, and geographical constraints as well as preferences for accessing materials online, patients and providers are being directed to the internet for education, treatment resources and interventions, and professional training. Web-based resources have become particularly important in addressing the large influx of returning combat veterans, coupled with limited in-person resources and numerous barriers to accessing specialty mental health care. During the first presentation, Dr. Greene will describe and evaluate the preliminary success of an online life coaching program that teaches problem-solving skills to help veterans and service members overcome life’s challenges. The second presenter, Dr. McCaslin, will describe the development and utility of an online Community Provider Toolkit that makes military culture education and key PTSD assessment and treatment resources easily accessible to providers in the community. Third, Dr. Seal will present promising results of a new online PTSD training program for primary care providers to increase competency in detecting, assessing, and initiating management of PTSD in primary care. Finally, discussant, Dr. Weingardt will reflect on advantages and disadvantages of online PTSD resources and programs and offer suggestions for how these resources can best serve patients and providers.
**Symposium**  
**Thursday, November 7**  
**10:30 a.m. to 11:45 a.m.**  
Grand Ballroom A

**Moving Forward: A Web-Based Self-Help Program for Veterans and Service Members**  
(Tech/Mil/Vets/Industrialized)

**Greene, Carolyn, PhD**, **Nezu, Arthur, PhD, ABPP**, **Nezu, Christine, PhD, ABPP**, **Stern, Jessica, BA**, **Diaz, Christopher, Undergraduate**, **Tenhula, Wendy, PhD**

1. **Office of Mental Health Services, Department of Veterans Affairs, Menlo Park, California, USA**  
2. **Drexel University, Philadelphia, Pennsylvania, USA**  
3. **Department of Veteran Affairs, Washington, District of Columbia, USA**

Of the 1.2 Million individuals that became newly eligible for VA services during the last 10 years, only 600,000 have chosen to use them. A significant number of Veterans returning from wars in Iraq and Afghanistan experience emotional distress or readjustment difficulties, but face significant barriers to receiving help. Web-based self-help programs may mitigate these barriers by providing free, 24-hour a day, anonymous access to CBT-based interventions. Moving Forward is one such program (www.startmovingforward.org). Launched on Veterans Day 2012, the website has had over 10,000 visitors in its first 4 months. This online course is an adaptation of a successful live Moving Forward workshop developed by Nezu and Nezu (2012). Both the web course and the live workshop are based on highly efficacious Problem Solving Therapy (PST). PST focuses on resilience by teaching skills to cope with stressful problems and overcome life’s obstacles. For many, this approach is more engaging than traditional mental health interventions. Initial program evaluation of the workshop (N=248) revealed impressive completion rates (76.2%) with significant improvements in depression, overall quality of life, problem-solving ability, and resilience. Results from a planned pilot evaluation of the web course (N=20) will assess web analytics, user satisfaction, and perceived utility.

**Symposium**  
**Thursday, November 7**  
**10:30 a.m. to 11:45 a.m.**  
Grand Ballroom A

**Outcomes of a New Web-Based PTSD Training for Primary Care Providers**  
(Tech/Mil/Vets/Industrialized)

**Seal, Karen, MD, MPH**, **Samuelson, Kristin, PhD**, **McCamish, Nicole, MA**, **Koenig, Christopher, PhD**, **Choucroun, Gerard, MA**

1. **San Francisco VA Medical Center and UCSF, San Francisco, California, USA**  
2. **Alliant International University, San Francisco, California, USA**  
3. **San Francisco VA Medical Center (VAMC-SF), San Francisco, California, USA**  
4. **University of California, San Francisco and San Francisco VAMC, San Francisco, California, USA**

Veterans with PTSD symptoms frequently present first to primary care providers (PCPs) and are often reluctant to seek mental health care. Most PCPs have not been trained to assess for and manage PTSD symptoms despite caring for trauma- exposed patients. The aim of this study was to develop, disseminate, and evaluate the effectiveness of a 70-minute web-based accredited PTSD training for community-based PCPs. The training
consisted of 4 modules: (1) Detection and Assessment; (2) Comorbid Conditions; (3) Pharmacological Interventions, and (4) Psychotherapeutic Interventions. Among 73 PCPs who completed the training and study assessments, PTSD-related knowledge was significantly increased at post-training and at 30-day follow-up compared to baseline (p's < .001). In addition, PCPs reported significantly increased comfort with 11 of 12 PTSD-related skills (e.g., explaining evidence-based psychotherapeutic options, prescribing appropriate medications, etc.); after 30 days, 47% reported having applied training concepts in clinical practice. Many PCPs preferred the flexibility of asynchronous, self-paced online modules as opposed to scheduled web-casts. This is the first evaluation of online PTSD training for PCPs and demonstrates that increasing PTSD competency has the potential to increase detection and symptom management in patients who might not otherwise receive care.

Symposium
Thursday, November 7
10:30 a.m. to 11:45 a.m.
Grand Ballroom A

Getting the Word Out: Enhancing the Care of Veterans with PTSD through the Community Provider Online Toolkit
(Tech/Mil/Vets/Industrialized)

McCaslin, Shannon, PhD1, Ruzek, Josef, PhD1, Kemp, Jan, PhD2, Batten, Sonja, PhD2

1National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA
2VA Office of Mental Health Services, Washington, District of Columbia, USA

Logistical barriers such as proximity to a VA Medical Center, limited time, and the stigma of seeking mental health care are all factors that can lead a veteran with PTSD symptoms to seek services within the community or primary care setting. Emphasizing the importance of treatment access and quality to non-VA providers, the VA and the National Center for PTSD developed the Community Provider Online Toolkit which brings key veteran-relevant educational, assessment, and treatment resources to mental health and primary care providers in the community. The Toolkit includes educational content on PTSD, comorbid mental health conditions, and military culture. For example, within the online mental health component, “mini-clinics” organize key resources addressing PTSD and associated conditions. By increasing the availability of these tools and resources, as well as fostering a deeper appreciation and understanding of the military cultural context, we aimed to strengthen the capacity of providers to provide quality care for veterans within their local communities. We will describe the development and formative evaluation of the Toolkit. Finally, we will evaluate the utility and web analytics of the various online components of the Toolkit.
Psychiatric Sequelae of Traumatic Physical Injury: Challenges and Novel Interventions
(Clin Res/Acc/Inj/M/Industrialized)

Chair: Cukor, Judith, PhD
Discussant: Roy, Michael, MD MPH

1 New York Presbyterian Hospital/Weill Medical College of Cornell University, New York, New York, USA
2 Uniformed Services University, Bethesda, Maryland, USA

The sequelae of trauma are further complicated when physical injury is sustained in the context of the trauma. This symposium will focus on exploring challenges for individuals with traumatic injury, and describe results of treatments directed at this population from a variety of perspectives including a geographically and clinically diverse range of populations. The first presentation describes rates of traumatic amputation in service members returning from Iraq and Afghanistan. It identifies comorbid conditions and challenges in recovery. The second presentation describes the results of a longitudinal multisite study of 332 civilians that illustrates the relationship between compensation claims, psychiatric symptoms, and later disability. The next presentation describes a protocol addressing PTSD along with the psychosocial sequelae of burn injury including scarring, disfigurement and community reintegration. Initial data will be presented. Finally, results of three separate trials comprised of 1,205 traumatically injury individuals are presented, illustrating effectiveness of stepped collaborative care trials on PTSD symptoms, violence risk behaviors, and alcohol consumption. The discussant will review these findings in the context of the broader literature, highlighting the unique challenges of treating psychiatric symptoms that co-occur with severe physical injury.

Policy Relevant Pragmatic Stepped Collaborative Care Trials Successfully Targeting PTSD, Alcohol and Violence Risk Behaviors after Injury
(Prevent/Diverse Pop/Industrialized)

Zatzick, Douglas, MD
University of Washington/Harborview Medical Center, Seattle, Washington, USA

This presentation will review the results of 3 effectiveness-implementation spectrum randomized comparative effectiveness trials that have targeted reductions in PTSD and related alcohol and violence risk behaviors among injured trauma survivors. The first single site trial randomized 207 patients ages 18 and older to either stepped collaborative care or usual post-injury care. This trial demonstrated significant reductions in PTSD (CAPS PTSD treatment response criteria, Odds Ratio = 1.93, 95% CI = 1.00, 1.73) among stepped collaborative intervention patients when compared to control patients over the course of the year after injury. The second stepped collaborative care trial successfully reduced the violence risk behavior of carrying a weapon (Relative Risk = 0.31,
95% CI 0.11, 0.90) among a random sample of injured adolescents ages 12-18 (N = 120). The third 20 site/trauma center adult randomized trial (N = 878) employed the collaborative care motivational interviewing element to successfully reduce alcohol consumption that risked recurrent injury by 8% over the course of the year after injury (AUDIT Relative Risk = 0.88, 95% CI= 0.79, 0.98). US national trauma center and emergency department policy implications of these findings will be discussed.

Symposium
Thursday, November 7
10:30 a.m. to 11:45 a.m.
Grand Ballroom E

Compensation and Disability: The Role of Claim-Related Stress and Psychiatric Disorder
(Clin Res/Acc/Inj/Industrialized)

O'Donnell, Meaghan, PhD¹; Grant, Genevieve, PhD²; Studdert, David, PhD², Creamer, Mark, PhD¹, Bryant, Richard, PhD³, Silove, Derrick, MD, PhD³, McFarlane, Alexander, MD³, Forbes, David, PhD¹
¹Australian Centre for Post-traumatic Mental Health, University of Melbourne, East Melbourne, Victoria, Australia
²University of Melbourne, Melbourne, Victoria, Australia
³University of New South Wales, Sydney, NSW, Australia
⁴The University of Adelaide, Adelaide, South Australia, Australia

Each year millions of people around the world who are injured in transport and workplace accidents seek compensation. Previous research suggests that injured claimants have worse recovery outcomes than injured non-claimants but little is understood about why this may be the case. The aim of this study was to investigate the role of stress associated with engaging with a compensation scheme and long term disability. In this longitudinal, multisited cohort study 332 injury patients who made a compensation claim were followed over 6 years. They were assessed during hospitalization, at 12 months and 72 months. A structural equation model utilizing four latent variables (injury characteristics, claim-related stress, premorbid disability, 72-month disability) and 3 measured variables (12-month post-traumatic stress disorder (PTSD) severity, 12-month depression severity, 12-month anxiety severity) was tested. Results showed a significant positive relationship between claim-related stress and long-term disability. Model fit was excellent. Claim-related stress significantly mediated the relationship between 12-month PTSD and long-term disability; and between 12-month depression severity and long-term disability. Stress associated with engaging with compensation schemes independently contributed to long term disability both directly, and indirectly through mediating relationships.
An Intervention for the Psychiatric and Psychosocial Sequelae of Traumatic Burn Injury

(Clin Res/Acc/Inj/Industrialized)

Cukor, Judith, PhD1, Wyka, Katarzyna, PhD2, Peskin, Melissa, PhD3, Olden, Megan, PhD1, Leahy, Nicole, RN, MA1, Yurt, Roger, MD1, Difede, JoAnn, PhD1

1 New York Presbyterian Hospital/Weill Medical College of Cornell University, New York, New York, USA
2 Weill Cornell Medical College, New York, New York, USA
3 New York Presbyterian Hospital, New York, New York, USA

High rates of psychiatric disorders have been established in the aftermath of burn injury, with prevalence rates of post-traumatic stress disorder (PTSD) and depression ranging from 31% - 45% and 7% - 54%, respectively. The physical injury sustained causes numerous psychosocial challenges, including scarring, pain, physical dysfunction, and community integration. This presentation describes a 14 session cognitive-behavioral intervention designed to address the numerous psychiatric and psychosocial sequelae of this traumatic injury. The results of a feasibility study will be presented. Ten patients were enrolled; 9 patients completed the protocol while 1 dropped out. Mean age was 41 yrs, 60% were female, burn size was 4% - 65% total body surface area, and time from burn was 6 weeks - 9 months. Participants were evaluated by an independent assessor prior to and immediately following treatment. Post-treatment assessment (n=9) revealed a mean decrease of 36% on the Clinician Administered PTSD Scale (CAPS), a 30% decrease in self-reported PTSD symptoms (PCL), and a 47% decrease in self-reported depressive symptomatology (BDI). Psychosocial adjustment also showed improvement at posttreatment with significant improvements in the domains of community integration (CIQ) and body image (BSHS). Implications of these results will be discussed.
to optimize functional recover, community integration and improve quality of life. New treatment paradigms have been established along with novel technology to help achieve optimal outcomes. This presentation will provide the attendee with a better understanding of the current challenges currently facing war veterans as well as discuss treatment options which will likely benefit all individuals with limb loss.

**Symposium**  
**Thursday, November 7**  
**10:30 a.m. to 11:45 a.m.**  
**Grand Ballroom F**

**Advances in PTSD and Neuroimaging**  
(Bio Med/Mil/Vets/M/Industrialized)

**Chair:** Bryant, Richard, PhD  
*University of New South Wales, Sydney, NSW, Australia*

Neuroimaging techniques continue to provide considerable insights into the mechanisms for the development, maintenance, and recovery from PTSD. This symposium provides an overview of four studies that address topical issues of how neuroimaging is enhancing our understanding of trauma response across civilian and military populations. Dr Felmingham will present findings on a study that identifies the neural pathways implicated in attempted suppression of unwanted memories in PTSD. Dr Lanius will present a study of EEG biofeedback on default mode network connectivity in PTSD. Dr Yan will present findings of resting state fMRI patterns in those with PTSD in the context of OEF/OIF personnel. Finally, Dr Vermetten will present findings of a prospective study of Dutch military that indexes the impact of combat stress on brain function and structure. Across these studies, the theme of brain dysfunction will be discussed as critical in understanding some of the core phenomenological features of PTSD.

**Symposium**  
**Thursday, November 7**  
**10:30 a.m. to 11:45 a.m.**  
**Grand Ballroom F**

**Neural Mechanisms Underlying Memory Suppression in PTSD**  
(Bio Med/Violence/Industrialized)

**Felmingham, Kim, PhD**  
*University of Tasmania, Hobart, TAS, Australia*

Difficulty suppressing negative memories is a central feature of Post-traumatic Stress Disorder (PTSD), yet the neural mechanisms associated with memory suppression have not been investigated following trauma. Recent functional magnetic resonance imaging (fMRI) studies in healthy controls using a Think-No Think paradigm have revealed that dorsolateral and medial prefrontal cortical networks inhibit hippocampal and amygdala networks during memory suppression. This study investigated neural networks associated with memory suppression in 14 patients with PTSD, 13 trauma-exposed controls and 15 non-trauma exposed controls using fMRI responses in a Think-No Think paradigm. We found evidence that attempted suppression of emotional memories in PTSD specifically activates insula cortex, and a distributed parietal-occipital network relative to trauma-exposed and non-trauma exposed controls, who display more prominent frontal activity during suppression. These results
indicate that patients with PTSD fail to activate frontal inhibitory networks during memory suppression that is seen in controls, but activate a divergent network when attempting memory suppression that is associated with greater arousal and somatosensory processing.

Symposium
Thursday, November 7
10:30 a.m. to 11:45 a.m.
Grand Ballroom F

Direct Modulation of the Salience and Default Mode Networks Following EEG Neurofeedback in Post-Traumatic Stress Disorder
(Clin Res/Adult/Cmplx/Global)

Lanius, Ruth, MD, PhD1, Kluetsch, Rosemarie, MA2, Ros, Tomas, PhD3, Frewen, Paul, PhD1, Theberge, Jean, PhD1
1University of Western Ontario, London, Ontario, Canada
2Central Institute of Mental Health, Dept. of Psychosomatic Medicine, Mannheim, Germany, London, Ontario, Canada
3University of Geneva, London, Ontario, Canada

OBJECTIVES: Studies have reported alterations in functional connectivity within neural networks involved in attention and arousal and emotional/self-awareness, including the salience (SN) and default mode networks (DMN). Electroencephalographic (EEG) neurofeedback training, specifically reduction of the alpha rhythm, has been shown to produce plastic modulations in SN and DMN connectivity in healthy individuals. We therefore investigated whether similar neurofeedback training could influence the SN and DMN networks in PTSD.

METHODS: The effects of a 30-minute session of voluntary reduction of alpha rhythm (8-12 Hz) were examined on EEG patterns, network functional connectivity, and subjective measures in a group of individuals (n=21) with PTSD.

RESULTS: Alpha rhythm desynchronizing neurofeedback was associated with decreased alpha amplitude during training, followed by a significant increase (or ‘rebound’) in resting alpha synchronization after the training sessions. This rebound was linked to increased calmness, greater SN connectivity with the right insula, and enhanced DMN connectivity with bilateral posterior cingulate, right middle frontal gyrus, and left medial prefrontal cortex.

CONCLUSIONS: This study represents a first step in elucidating the neurobehavioral mechanisms potentially mediating the effects of neurofeedback treatment on regulatory systems in PTSD.
Symposium  
Thursday, November 7  
10:30 a.m. to 11:45 a.m.  
Grand Ballroom F

**HPG-axis Alterations in Relation to Combat Exposure and PTSD - a Prospective Cohort Analysis**  
(Bio Med/Mil/Vets/Industrialized)

*Vermetten, Eric, MD, PhD*  
*Military Mental Health Research/UMC Utrecht, Utrecht, Netherlands*

**BACKGROUND:** Circulating testosterone levels are suppressed by stress. Plasma levels of testosterone can increase during stressful events and may be elevated in combat-related post-traumatic stress disorder (PTSD). While the knowledge on functioning of the HPA-axis has been well understood in PTSD, the hypothalamic-pituitary-gonadal (HPG) system has received much less attention. We assessed several neurohormones in a longitudinal cohort study in soldiers prior to deployment to a combat zone.  

**METHOD:** We recruited 1032 servicemen and collected blood prior to deployment to a combat zone. Participants were followed up for 2 additional time points post deployment (1 month and 6 months post deployment). RESULTS: We analyzed testosterone in plasma and correlated these to the developmental trajectory of PTSD symptoms.  

**CONCLUSION:** Mean concentration of testosterone in the sample was 18.7 nmol/l (SD 6.2 nmol/l). PTSD symptoms occurred in approx 5% of the sample; depressive and fatigue symptoms were higher. The comparison plasma testosterone levels at the three different time points may indicate alterations in testosterone levels after combat as an acute stress response of the HPG axis, in contrast to an adaptation of the HPG axis under chronic psychological stress. These data are unique and will be presented.

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Grand Ballroom F

**Functional Connectivity of the Fear Circuitry and Default Mode Network in PTSD**  
(Bio Med/Mil/Vets/Industrialized)

*Yan, Xiaodan, PhD; Marmar, Charles, MD*  
*New York University School of Medicine, New York, New York, USA*

**Objective:** Existing neuroimaging studies on the neurobiology of PTSD have focused on the abnormal activation in brain structures belonging to the “fear circuitry” during emotion related tasks, including the amygdala, hippocampus, MPFC etc. Our previous study with resting state fMRI also identified “hyperactivity” in the amygdala and ventral medial prefrontal cortex, and “hypoactivity” in the precuneus, a critical structure of the “default mode network” (DMN) in resting state brain. However, little studies have been conducted to evaluate the connectivity between them, which is the focus of the present study.  

**Method:** Resting state fMRI data was acquired from OEF/OIF combat veterans, with fifty two in each group (PTSD & control). Functional connectivity (FC) analysis was conducted using the preprocessed fMRI signal extracted from the above structures. RESULTS: PTSD subjects compared controls showed strengthened FC-s within the fear circuitry, but weakened FC-s between the fear circuitry and the DMN. The strength of FC-s showed significant association with the amounts of symptoms.
Conclusion: Brain structures involved in PTSD should not be considered in isolation, and the functional connectivity between these structures are critical for understanding PTSD neurobiology.

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Franklin 5

Resilience Following Trauma Exposure: Identifying Malleable Risk and Protective Factors
(Prevent/Diverse Pop/I/Industrialized)

Chair: Walsh, Kate, PhD
Columbia University, New York, New York, USA

Although the majority of the population will experience at least one lifetime traumatic event, only a small proportion will develop post-traumatic stress disorder (PTSD). To better understand this differential vulnerability, the current symposium focuses on risk and protective factors for PTSD in longitudinal studies with a variety of samples. The first presentation examines self-blame, self-esteem, and social support as risk and protective factors for PTSD in a longitudinal study of college students. The second examines degree of stressor exposure and social resources associated with PTSD in a longitudinal study of Palestinian household residents. The third examines unit support and psychosocial support as risk and protective factors for PTSD in a longitudinal study of US soldiers deployed to the recent conflicts in Iraq and Afghanistan. The last presentation examines peritraumatic dissociation and physiological responses to trauma in conjunction with prior history of trauma as predictors of response to a brief early intervention in a longitudinal study of adult rape victims presenting to the emergency room. These presentations are expected to illuminate important and potentially malleable risk and protective factors for PTSD in a variety of populations, and each will comment on implications for trauma-focused interventions and prevention programs.

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Franklin 5

Prospective Examination of Pre-Trauma Predictors of Post-Traumatic Stress
(Prevent/N/A/Industrialized)

Grasso, Damion, PhD1, Moser, Jason, PhD2, Hajcak, Greg, PhD3, Foa, Edna, PhD4, Simons, Robert, PhD5
1University of Connecticut Health Center, Farmington, Connecticut, USA
2Michigan State University, East Lansing, Michigan, USA
3Stony Brook University, Stony Brook, New York, USA
4University of Pennsylvania, Philadelphia, Pennsylvania, USA
5University of Delaware, Newark, Delaware, USA

Malleable pre-trauma risk and protective factors may serve as targets for primary prevention efforts to reduce risk of post-traumatic stress (PTS) before trauma occurs, but only few prospective studies exist. The current study
examined the association between pre-trauma maladaptive appraisals and PTS in undergraduates who reported being exposed to potential trauma between baseline and a 2-year follow-up. This subsample of 214 students was part of a larger sample of students who participated in a longitudinal survey for course credit. At baseline, 58.4% had reported lifetime exposure to trauma, but less than mild PTS. Data analysis included 153/214 participants due to missing data. A multiple block regression analysis was conducted with sex (block 1), anxiety and Post-traumatic Cognitions Inventory scales (PTCI; block 2), and three Sex x PTCI interaction variables (block 3). Block 3 best fits the data. Reporting greater anxiety (B = 1.21, SE = 0.28, t = 4.39, p < .001), negative cognitions of world (B = -0.22, SE = 0.08, t = -2.73, p = .007), and self blame (B = 0.33, SE = 0.13, t = 2.45, p = .016) significantly predicted greater PTS severity at follow-up. Negative cognitions of world were more predictive of PTS for males than females (B = 0.22, SE = 0.09, t = 2.41, p = .017). Results are discussed in the context of developing primary prevention efforts before trauma occurs.

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Franklin 5

Moderators of Natural and Treatment Facilitated Recovery after a Trauma  
(Clin Res/Acc/Inj/Industrialized)

Price, Matthew, PhD¹, Houry, Debra, MD, MPH², Rothbaum, Barbara, PhD, ABPP²  
¹University of Vermont, Burlington, Vermont, USA  
²Emory University School of Medicine, Atlanta, Georgia, USA

Recent work has suggested that a behavioral intervention administered within hours of trauma exposure reduces PTSD symptoms as compared to standard of care, which involves no additional treatment. The present study explored a comprehensive model to identify predictors of treatment response to the early intervention as well as factors associated with natural recovery. Participants (N= 137) were recently exposed trauma victims admitted to the emergency department of a Level 1 Trauma Center. Participants were randomly assigned to the early intervention condition (n = 68) or assessment only condition (n = 69) with follow up data collected 4 and 12 weeks post trauma. Findings suggested that dissociation at the time of the first treatment session was associated with reduced response to the early intervention. No other predictors were associated with treatment response. For the control group cortisol level at the time of acute care and dissociation at the time of the traumatic event were associated with poorer recovery. Dissociation at the time at which treatment starts may identify those who are more likely to respond to an early intervention for PTSD. However, dissociation at the time of the event did not serve as a predictor of recovery in those who did not receive an early intervention.
The Role of Social Resources in the Prediction of Incident Cases of PTSD Within the Palestinian Authority

(Murray, Sarah, MS (PhD Student)1; Hall, Brian, PhD1; Canetti-Nisim, Daphna, PhD2; Galea, Sandro, MD, DrPH3; Hobfoll, Stevan, PhD4
1Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA
2University of Haifa, , Haifa, Israel
3Mailman School of Public Health, New York City, New York, USA
4Rush Medical College, Chicago, Illinois, USA

Exposure to political violence is associated with an increased risk of post-traumatic stress disorder (PTSD); however, only a relatively small proportion exposed develop PTSD. Prevalence studies identified risk and protective factors for PTSD but few studies have prospectively examined factors associated with diagnostic onset. We evaluated risk and protective factors for incident probable PTSD in a national sample of 1196 Palestinians living in the Palestinian Authority. Five types of risk and protective factors were included in multivariable logistic models: compositional (sex, age, income, education, marital status, health status), direct and indirect exposure (political violence and socio-political stressors, media exposure), fear of future violence, social resources (social support, support seeking), and loss of social resources. PTSD incidence was 11% at 6-month follow-up. Results suggest that baseline media exposure (OR=1.27, p<.05; [95% CI, 1.05-1.56]), fear of future violence (1.23, p<.001; 1.09-1.38), and greater social resource loss (1.11, p<.05; 1.02-1.21) increased the odds of probable incident PTSD at 6-month follow-up. Participant health (0.71, p<.001; 0.57-0.89), support seeking (0.80, p<.05; 0.67-0.96) and quality of support from family (0.76, p<.05; 0.59-0.99) reduced the odds of probable incident PTSD. Implications for community interventions are discussed.

2011 Norway Attacks: Longitudinal Patterns and Predictors of Health Care Utilization and Academic Attainment among Survivors of the Utøya Massacre

(Stene, Lise, MD; Dyb, Grete, MD, PhD
Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway

Due to its unforeseen and devastating effects, a terrorist attack constitutes a major challenge for health services. Adequate treatment is essential to prevent future health problems and reduced function, yet prospective studies of health care utilization among young survivors of terrorism are lacking. The proposed study will present longitudinal data on the delivery of health care to survivors of the Utøya massacre, and their performance and thriving at school. Altogether 495 persons survived, and the majority of survivors were younger than 18 years.
Individual face-to-face interviews with young survivors and their parents were performed at two waves from 5 to 15 months after the attack. Overall 325 (66%) survivors were interviewed at the first wave; preliminary response rate for the second wave was 60%. The majority were students and lived with their parents. Overall 463 parents of survivors participated. The parental survey is an important collateral source of information of children’s reactions and function. The study can inform us whether survivors’ health service utilization corresponded to their course of disaster-related pathology. The presented results may increase our understanding of health care needs in the aftermath of terrorism and advance future prevention and treatment policies.

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Franklin 6

Resilience in Parental Functioning among Mothers and Fathers Exposed to Trauma and Loss
(Clin Res/Adult/Cmplx/M/Industrialized)

Chair: Huth-Bocks, Alissa, PhD
Eastern Michigan University, Ypsilanti, Michigan, USA

Four studies conducted by clinical researchers examine protective factors that promote resilience among parents exposed to different types of trauma and loss, including child maltreatment, spousal loss, and military deployment and reintegration. The first two longitudinal studies describe trajectories of PTSD symptoms among two samples of women exposed to child maltreatment; trajectories from pregnancy to 2 years and 4 to 18 months after birth, respectively, are examined. Several protective factors that predict resilient trajectories (low PTSD symptoms) are identified, including absence of co-morbid depression and close, supportive relationships. In turn, resilience is related to better parenting and child outcomes. The third study examines different coping strategies following spousal loss and identifies active coping strategies that promote parental resilience, as defined by adaptive grief reactions and fewer PTSD symptoms. The final study presents data from a group intervention for military families with young children during reintegration. Pre-post pilot data suggest that the intervention decreases PTSD symptoms, and improves parenting and child outcomes. Collectively, these studies highlight a variety of factors that promote parental resilience; this knowledge is critical for the development of trauma intervention programs to enhance parenting and child well-being.
Trajectories of PTSD Symptoms across the Transition to Parenthood among Women Reporting Childhood Maltreatment: Protective Factors and Parenting Outcomes Associated with Resilience
(Prevent/Adult/Cmplx/Industrialized)

Ahlfs-Dunn, Sarah, MS (PhD Student); Harris, Katherine, BA, Huth-Bocks, Alissa, PhD
Eastern Michigan University, Ypsilanti, Michigan, USA

PTSD symptoms resulting from childhood maltreatment can be activated by various parenting experiences (Schechter et al., 2004). Therefore, promoting parenting resilience is important, particularly during the early years when parent-child relationships are developing and child well-being is heavily influenced by caregiver well-being. Latent class growth analysis was used to examine trajectories of PTSD symptoms from pregnancy to 2 years postpartum (3 time points) among a community sample of 78 primarily low-income women who experienced physical and/or sexual abuse during childhood. Based on fit indices and theoretical expectations, a two-class model was chosen. The two identified classes included women with steady-high levels of PTSD symptoms (n = 15) and women with steady-low levels of PTSD symptoms (n = 63) across time. Independent t-tests examining differences between groups revealed that low PTSD symptoms were related to better romantic relationship quality, more family support, and less intimate partner violence over time. Additionally, women with steady-low PTSD symptoms endorsed lower parenting stress and interpreted daily parenting hassles as less problematic at 2 years postpartum. These results suggest that, across the transition to parenthood, close, supportive relationships are important in promoting parenting resilience in the context of childhood maltreatment.

Post-Traumatic Stress Symptoms across Postpartum in Women Exposed to Childhood Maltreatment: Parenting Resilience despite PTSD symptoms
(Clin Res/Adult/Cmplx/Industrialized)

Muzik, Maria, PhD, Bocknek, Erika, PhD, Alfafara, Emily, BA, Busuito, Alex, BS, Broderick, Amanda, BA, McGinnis, Ellen, BS, Bohnert, Kipling, PhD, Blow, Fred, PhD
University of Michigan, Dept of Psychiatry, Ann Arbor, Michigan, USA

We describe PTSD symptom trajectories across postpartum (4 months to 18 months) among women oversampled for childhood maltreatment histories, and study their predictors and consequences. (n=250). We identified four distinct groups: women with low levels of PTSD symptoms across the peripartum (groups 1 and 2), differentiated from each other on demographics. Women in group 3 had fluctuating, high-low PTSD symptom patterns, whereas, women in group 4 showed consistently high PTSD symptoms across time. We tested maternal predictors of group membership and found childhood maltreatment and meeting criteria for lifetime PTSD diagnosis were equal.
predictors for membership in groups 3 and 4. Women in group 4, however, were more likely to have comorbid depression and poor bonding to their infants, and their children showed behavior problems in toddlerhood. By contrast, women in group 3 presented less bonding problems and their children showed less problem behaviors in toddlerhood. All groups also differed on observed parenting measures: group 1 showed best, while group 4 the worst parenting skills. Group 3, despite relative high PTSD symptom load across time, tended to show better parenting compared to group 2. Findings from this study highlight mothers’ resilience around parenting practice despite presence of PTSD symptoms.

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Involuntary and Active Coping Strategies Following Spousal Loss: The Protective Role of Continuing Bonds
(Clin Res/Adult/Cmplx/Industrialized)

Barrett-Becker, Ellen, PhD¹; Issner, Jaclyn, PhD¹; Howell, Kathryn, PhD, LP², Kaplow, Julie, PhD, ABPP³

¹Department of Psychiatry, University of Michigan Medical School, Ann Arbor, Michigan, USA
²University of Memphis, Memphis, Tennessee, USA
³University of Michigan Medical School, Ann Arbor, Michigan, USA

Losing a spouse and co-parent is among the most challenging stressors an individual can encounter. The extant literature has tended to focus on bereavement in elderly widows, often neglecting the grief reactions of younger parents. Research examining the impact of adversity on psychological functioning suggests that the use of involuntary coping strategies, such as dissociation, can be detrimental to mental health. In contrast, active coping strategies, (e.g., religious and spiritual coping) may be more beneficial. Very few studies to date have examined these mechanisms in conjugal bereaved parents of young children. The current study evaluated relations between involuntary coping (dissociation) and active coping (religious and spiritual coping) and symptoms of complicated grief, post-traumatic stress, and depression in a sample of 47 bereaved parents, ages 22-64. Results suggest that dissociation is related to maladaptive grief reactions and more symptoms of PTSD, but is unrelated to depression. Use of overall religious and spiritual coping was unrelated to psychological functioning. However, maintaining a spiritual connection to one’s deceased partner is related to adaptive grief reactions and fewer symptoms of PTSD, but unrelated to depression. Implications for intervention and protective mechanisms that can be fostered in the wake of co-parent loss are discussed.
STRoNG Military Families: Enhancing Parenting and Mental Health in Families with Young Children during Reintegration
(Clin Res/Mil/Vets/Industrialized)

Rosenblum, Katherine, PhD\(^1\), Muzik, Maria, PhD\(^1\), Smith, Karen, MSW\(^1\), McDonough, Susan, PhD\(^1\), Kees, Michelle, PhD\(^1\), Raveau, Hasti Ashtiani, BA\(^2\)
\(^1\)University of Michigan, Dept of Psychiatry, Ann Arbor, Michigan, USA
\(^2\)Wayne State University, Detroit, Michigan, USA

Although military families display remarkable resilience, deployment is a significant stressor. Approximately 2 million children in US military families have been impacted by service member deployment, and many of these children are under the age of 6. In focus groups military families indicated a desire for help in learning effective parenting strategies, opportunities to connect with other military families, and support for parenting young children during reintegration. In response, we developed STRoNG Military Families, a 10-week multifamily psychoeducational group that aims to enhance parents’ confidence in parenting, reduce parenting stress and strengthen family bonds. Data for the first 3 STRoNG Families feasibility pilot groups are available (n=28); participants presented with high levels of PTSD symptoms and low parenting efficacy scores at baseline, and children were rated high on behavior problems. Analysis of pre-post data show reductions in PTSD symptoms (p<.05), improvements in parenting efficacy (p<.05), and trend-level reductions in child behavior problems (p<.10). Analysis of parental qualitative data indicates significant gains in their feelings of competence to help their children manage feelings associated with deployment. A follow-up NIH-funded RCT trial is currently underway, and we will present both pilot data and preliminary RCT findings.

Emotion Regulation in the Context of Traumatic Stress
(Clin Res/Child/Adol/M/Industrialized)

Chair: Fainsilber Katz, Lynn, PhD
The University of Washington, Seattle, Washington, USA

Difficulties with emotion regulation (ER) have been identified as a central mechanism through which post-traumatic stress symptoms (PTSS) may develop and persist (Tull, Barrett, McMillan & Roemer, 2007). The ability to regulate emotion may also contribute to the development of negative psychological outcomes in addition to PTSS. However, research has only recently begun to examine how individual differences in ER may exacerbate or buffer psychosocial adjustment in the context of traumatic stress. There is also little research on ER and traumatic stress exposure in families or with children and adolescents. The current symposium examines ER under a broad range of traumatic exposures, including women and children exposed to intimate partner violence, families whose child has cancer, and child maltreatment. Relations between ER and traumatic stress are examined at multiple
developmental stages, including young childhood, adolescence and early adulthood. Studies use multi-source/multi-method assessments of ER, including self-report, physiological and observational methodologies. Studies also examine traumatic stress both concurrently and longitudinally. This new body of research will describe important implications of how ER can exacerbate or buffer individuals from significant risk and psychopathology in the context of traumatic stress.

Symposium
Thursday, November 7
10:30 a.m. to 11:45 a.m.
Franklin 7

Emotion Regulation following Psychosocial Stress as a Mechanism linking Child Maltreatment to Internalizing Psychopathology
(Bio Med/Child/Adol/Industrialized)

McLaughlin, Katie, PhD; Alves, Sonia, BA; Sheridan, Margaret, PhD
Harvard Medical School/Children’s Hospital Boston, Boston, Massachusetts, USA

Introduction: The ability to regulate emotional responses during stress may be a central risk factor for the development of psychopathology. We investigated whether child abuse is associated with maladaptive emotional and physiological responses to psychosocial stress and whether stress reactivity was associated with adolescent psychopathology.

Method: Data on emotional and physiological reactivity to stress were collected from a diverse community sample of adolescents (ages 13-17; N=168). Adolescents participated in the Trier Social Stress Test (TSST). We collected measures of sympathetic and parasympathetic nervous system reactivity and a measure of cardiac efficiency, applying a biopsychosocial theory of challenge and threat to differentiate adaptive and maladaptive responses.

Results: Child abuse was associated with a maladaptive pattern of stress reactivity, characterized by blunted vagal withdrawal and notably reduced cardiac efficiency during the TSST. This pattern of maladaptive stress reactivity partially mediated the association of child abuse with internalizing symptoms.

Conclusions: Child maltreatment is associated with maladaptive emotional and physiological responses to psychosocial stress in adolescents. Child maltreatment may sensitize youths to developing a maladaptive pattern of stress reactivity, heightening risk for internalizing psychopathology.

Symposium
Thursday, November 7
10:30 a.m. to 11:45 a.m.
Franklin 7

Maternal Post-Traumatic Stress Symptoms and Child Adjustment in Survivors of Intimate Partner Violence: The Mediating Role of Mother’s Emotion Regulation
(Clin Res/Violence/Industrialized)

Gurtovenko, Kyrill, Doctoral Student; Maliken, Ashley, Doctoral Student; Fainsilber Katz, Lynn, PhD
The University of Washington, Seattle, Washington, USA

Children of parents experiencing post-traumatic stress symptoms (PTSS) are at increased risk for emotional and behavioral problems. However, little is known about the factors that may explain this relation. Difficulties with
emotion regulation (ER) have received attention as a mechanism through which PTS symptoms may develop. Mother’s ER difficulties have also been associated with poor adjustment in their children. We examine whether mother’s ER mediates the relation between maternal PTSS and child adjustment. Sixty-four female survivors of intimate partner violence and their 6-12 year old children participated. Mothers reported their own post-traumatic stress symptoms using the Post-traumatic Stress Diagnostic Scale (PTDS; Foa, 1995). Mother’s ER was measured from observer coding of the Meta-Emotion Interview (Katz & Gottman, 1986), which asked mothers about their awareness and regulation of emotion. Mothers also completed the Child Behavior Checklist (Achenbach & Rescorla, 2001). Mothers’ total trauma symptom severity had significant standardized or mediated indirect effects of 0.08 (p<.05) on child Total Problems and on child Internalizing problems (p<.05) via mothers’ emotion regulation. Results suggest that mothers’ ER is one mechanism by which maternal PTSS is associated with child adjustment problems.

**Symposium**
**Thursday, November 7**
**10:30 a.m. to 11:45 a.m.**
**Franklin 7**

**Post-Traumatic Stress and Emotion Regulation in Parents of Children Diagnosed with Cancer**
(Clin Res/Child/Adol/Industrialized)

Fainsilber Katz, Lynn, PhD¹, Gurtovenko, Kyrill, Doctoral Student¹, Kawamura, Joy, Doctoral Student¹, Lavi, Iris, PhD², Heleniak, Charlotte, Doctoral Student¹
¹The University of Washington, Seattle, Washington, USA
²Haifa University, Haifa, Israel

Parents of childhood cancer survivors are at increased risk for PTSD, with 10-25% qualifying for a PTSD diagnosis and 33-44% exhibiting subclinical post-traumatic stress symptoms (PTSS) in the moderate to severe range. However, little is known about factors that predict who is at greatest risk for PTSS/PTSD. We examine individual differences in respiratory sinus arrhythmia (RSA) – a psychophysiological index of emotion regulation – as a predictor of increases or decreases in PTSS from initial diagnosis to 6 months later. 105 primary caregivers and their newly-diagnosed child (Mean age=5.42 years) participated. Caregivers reported on their own PTSS (Impact of Events Scale Revised) and child and family adjustment on a monthly basis for six months following child’s diagnosis. Caregiver RSA was computed from recordings of heart rate obtained during parent-child and family interaction at Time 1. Multi-Level Modeling (MLM) analyses indicated that caregivers’ RSA significantly predicted between-individual differences in slopes of hyper-arousal symptoms over time (family interaction RSA: B = -.12, p<.01; parent-child interaction: B = -.10, p<.05). Caregivers with high RSA showed a decrease in hyper-arousal symptoms over time; those with low RSA showed elevated levels of hyper-arousal over time. Relations between caregivers’ PTSS and child and family outcomes will also be explored.
Symposium
Thursday, November 7
10:30 a.m. to 11:45 a.m.
Franklin 7

Trauma Appraisals and Emotion Regulation Difficulties Mediate Associations between Childhood Abuse and Adult Avoidance Symptoms
(Clin Res/Adult/Cmplx/Industrialized)

Goldsmith, Rachel, PhD1; Barlow, M., PhD2
1Mount Sinai School of Medicine, New York, New York, USA
2Boise State University, Boise, Idaho, USA

Research has highlighted the roles of cognitive appraisals and difficulties with emotion regulation in the development and maintenance of post-traumatic stress symptoms. However, few conceptualizations have addressed a full spectrum of post-traumatic appraisals. Using the Trauma Assessment Questionnaire (TAQ; DePrince, Zurbriggen, Chu, & Smart, 2010), 466 college students (322 female) provided information regarding levels of shame, fear, anger, self-blame, alienation, and betrayal, as well as exposure to childhood abuse (CAT; Sanders & Becker-Lausen, 1995), post-traumatic symptoms (IES; Horowitz, Wilner, & Alvarez, 1979), and emotion regulation difficulties (DERS; Gratz & Roemer, 2004). Child abuse was strongly related to DERS scores (p < .001). Both CAT and DERS total scores had significant positive associations with IES intrusion and avoidance scores, and with all TAQ subscales (ps < .001). DERS and TAQ scores mediated the relationship between childhood abuse and adult avoidance symptoms. Specifically, childhood emotional and sexual abuse predicted IES avoidance. Adding TAQ subscale scores of shame and betrayal appraisals improved the regression model; adding DERS scores improved it further. Results have clinical and research implications for understanding the role of trauma appraisals and emotion regulation difficulties in post-traumatic stress symptoms.

Symposium
Thursday, November 7
10:30 a.m. to 11:45 a.m.
Franklin 11/12

Resilience in Families Following Trauma: The Critical Role of Parenting
(Assess Dx/Diverse Pop/I/Global)

Chair: Freedman, Sara, PhD
Bar-Ilan University, Ramat Gan, Israel

This symposium will examine the impact of PTSD on parenting, looking at three different, but complementary studies. The first examines the interaction between an increase in PTSD symptoms, parenting and couple adjustment in a military setting (Gewirtz et al, 2010). The second looks at the impact of ongoing rocket attacks on parenting in a civilian Israeli population (Zamir et al). The final study evaluates the impact of PTSD on parenting and marital satisfaction in civilian PTSD patients (Freedman et al).
Factors Associated with Children's Resilience in National Guard and Reserve Families with a Parent Deployed to War: the Role of Parenting.
(Clin Res/Mil/Vets/Industrialized)

Gewirtz, Abigail, PhD LP\textsuperscript{1}; Davis, Laurel, MA\textsuperscript{2}, McMorris, Barbara, PhD\textsuperscript{3}, Hanson, Sheila, PhD\textsuperscript{3}
\textsuperscript{1}University at Albany, State University of New York, St Paul, Minnesota, USA
\textsuperscript{2}Uni du Quebec à Montréal, St Paul, Minnesota, USA
\textsuperscript{3}University of Minnesota, St Paul, Minnesota, USA

An increasing body of literature is emerging to document the potentially detrimental impact of a parent’s deployment to war and subsequent reintegration on family relationships: child adjustment, couple functioning, and parenting (e.g. Chandra et al., 2010; Gewirtz et al., 2010). This study examines family and context correlates of children’s resilience among military families. We report findings from a sample of 400 National Guard/Reserve families (i.e. parents and an index child between 5-12) in which a parent served in Iraq or Afghanistan. Multi-method, multi-informant data were gathered on children’s resilience (child behavioral, emotional, academic and, social functioning), deployment characteristics (number and length of deployments, gender of deployed parent), parenting and couple relationships. We used latent growth modeling to examine family correlates of children’s resilience. Parenting and couple functioning were significantly associated with children’s resilience; deployment context (i.e. length and number of deployments, as well as combat exposure) and parent psychopathology also was associated with key outcomes. Results are discussed in terms of implications for prevention, and the opportunity for family-based prevention programs to promote resilience among military families.

Risk and Resilience in Families Affected by Missile Attacks: Observations of Parents and Children
(Prevent/Child/Adol/Industrialized)

Zamir, Osnat, PhD, MSW\textsuperscript{1}, Gewirtz, Abigail, PhD, LP\textsuperscript{2}, Dekel, Rachel, PhD\textsuperscript{3}, Lavi, Tamar, PhD\textsuperscript{4}, Tangir, Gali, PhD Candidate\textsuperscript{3}
\textsuperscript{1}University of Minnesota, St. Paul, Minnesota, USA
\textsuperscript{2}University at Albany, State University of New York, USA
\textsuperscript{3}Bar-Ilan University, Ramat Gan, Israel
\textsuperscript{4}Psychotraum Center - Psychiatric Clinic, Sderot, Israel

Parenting quality is a significant factor for children’s resilience in the context of adversity (Masten, 2001) and traumatic events, but research has yet to delineate the mechanisms by which this might occur (Gewirtz, Forgatch & Wieling, 2008). Social interaction learning theory (SIL; Patterson, 1982) accounts for how parenting practices mediate the relationship between external stressors and children’s adjustment: stressful life events amplify
coercive parent-child interactions and reduce positive parenting. Coercive interchanges with parents and peers predict youths’ adjustment problems (Capaldi, 1991). This presentation reports data from a preliminary study of families who are living close to the border between Gaza and Israel and are exposed to ongoing threat of missile attacks. Child and parent adjustment, and mother-child observational data (to assess parenting) were gathered from 100 families with children ages 5-12. Hierarchical regression was used to examine predictors of children’s adjustment. In this context of threat, mothers appear to provide strong warmth and positive involvement with their children, but lower levels of effective discipline relative to other samples exposed to traumatic stress. These tendencies were significantly associated with children’s adjustment. Implications for research and practice with families affected by traumatic stress are discussed.

Symposium
Thursday, November 7
10:30 a.m. to 11:45 a.m.
Franklin 11/12

Parenting and PTSD: The Effects of Attachment, Depression and Post-Traumatic Growth
(Assess Dx/Diverse Pop/Global)

Freedman, Sara, PhD; Hershkowitz, Michal, BSW, MA; Dekel, Rachel, PhD
Bar-Ilan University, Ramat Gan, Israel

Background: there is extensive research on the impact of post-traumatic stress disorder on a variety of behaviors. However, few studies have examined the impact of PTSD on parenting, specifically in civilian populations. The aim of this study was to examine the relationship between parental behavior and parenting satisfaction with PTSD, taking into account the contribution of depression, attachment and post-traumatic growth on this relationship.

Method: The study population includes 100 parents of children aged 2-18, with and without PTSD. Subjects were Israeli civilians, exposed to mixed traumatic events, who answered questionnaires relating to PTSD, parental behavior and satisfaction, depression, post-traumatic growth and attachment. Results: Preliminary analyses indicate that PTSD has a negative effect on parenting skills in this population. The impact of depression, attachment and growth will be examined. Conclusions: PTSD can impact parenting skills, expanding the effects of this disorder to the family of those suffering. Interventions may need to address these issues.

Panel Presentation
Thursday, November 7
10:30 a.m. to 11:45 a.m.
Grand Ballroom D

An Ecological Perspective on Teacher Self-Care and Resiliency Following Disasters
(Train/Ed/Dis/Caregvs/M/Industrialized)

Demaria, Thomas, PhD1; Schonfeld, David, PD, MD2; Wong, Marleen, PhD2; Newgass, Scott, ACSW4

1LIU CW Post, Brookville, New York, USA
2Drexel University College of Medicine, Philadelphia, Pennsylvania, USA

The prompt return of children to schools following disasters has been recommended. The strain on school staff to support a return to normalcy can be quite daunting. Teachers must balance classroom management and academic instruction along with new goals of emotional recovery and resiliency in a post-disaster environment. Because of their commitment to children in their care, teachers can neglect self-care needs leading to a depletion of personal resources and professional focus. The panel will explore the delivery of self-care with teachers from many levels of an "ecological interventional perspective" including individual consultations, group workshops, family interventions, information dissemination about trauma and bereavement through teacher unions and school district policy changes. Illustrative teacher self-care interventions will be provided using examples from the Hurricane Sandy, Sandy Hook School Shooting and Aurora Theater Shooting. In addition, creative educational efforts with the American Federation of Teachers and cultural changes brought about in a metropolitan school district will be discussed. The panel will include a discussion about the benefits and complications involved in each level of intervention. Recommendations about the role of teacher self-care efforts in the promotion and restoration of resiliency in children will be offered.

Panel Presentation
Thursday, November 7
10:30 a.m. to 11:45 a.m.
Franklin 8

The System-wide Impact of Philadelphia’s Integrated Network of Trauma-informed and Trauma-focused Interventions
(Practice/Diverse Pop/M/Industrialized)

Evans, Arthur, PhD¹, Berkowitz, Steven, MD², Foa, Edna, PhD³, Bloom, Sandra, MD⁴, Valdes, Antonio, MBA¹
¹City of Philadelphia, Philadelphia, Pennsylvania, USA
²University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA
³University of Pennsylvania, Philadelphia, Pennsylvania, USA
⁴Drexel University School of Public Health, Philadelphia, Pennsylvania, USA

Building on the growing national body of knowledge concerning integrated systems of care (Harris & Fallot, 2001; White, 2008), Philadelphia has crafted a framework for addressing the reality of trauma in its diverse population through a public health approach that: focuses on resilience, empowerment and recovery; offers an integrated network of empirically supported trauma intervention/treatment approaches; and provides multiple points of intercept. In this panel, five leaders describe the combined impact of essential elements of the City's network of responses, including: adoption of Child and Family Traumatic Stress Intervention; enhancement of trauma-focused treatment through training and supervision of clinicians in Prolonged Exposure; widespread dissemination/implementation of the Sanctuary model as a framework for establishing trauma-informed care throughout the City’s multi-system public health response; the pioneering work of providers such as the Children’s Crisis Treatment Center, whose comprehensive use of trauma-informed and trauma-specific intervention and treatment models offers an example of agency-wide adoption of effective responses to trauma; and the City’s leadership in fostering, supporting and integrating the full range of efforts by partners in the Philadelphia’s trauma initiative, in the context of a resilience- and recovery-oriented system of care.
Panel Presentation
Thursday, November 7
10:30 a.m. to 11:45 a.m.
Franklin 9/10

We Shall Overcome: Urban Narratives of the Struggle to Heal From Personal and Structural Violence
(Commun/Child/Adol/I/Industrialized)

Stolbach, Bradley, PhD1, Watson, Aran, MA, PhD Student2, Smith, Jocelyn, MS, PhD Student3, Purtle, Jonathan, MPH4

1 University of Chicago, Chicago, Illinois, USA
2 Ryse Center, Richmond, California, USA
3 University of Maryland School of Public Health, College Park, Maryland, USA
4 Drexel University College of Medicine/Drexel University School of Public Health, Philadelphia, Pennsylvania, USA

Homicide is the leading cause of death for Black males 15-34 in the United States. In urban communities, structural violence and chronic adversity perpetuate the risk for violence and trauma exposure. Little research has been conducted to understand the effects of this violence for youth of color and even less has focused on the adaptations and strengths that enable them to survive and cope. In this panel, community-based researchers from Baltimore (Smith), Richmond (Watson), and Philadelphia (Purtle) present findings of qualitative research focused on these questions: 1) How do young men construct meaning about their experience of violence and the loss of their peers to homicide? 2) What are the characteristics of trauma exposure and distress amongst youth facing multiple types of violence? and 3) What resources and strategies do young men employ or create to facilitate healing and post-traumatic growth while facing chronic threats to their safety and mortality? Implications for clinicians and researchers working with young people of color in urban contexts are discussed. The session will be chaired by the director of a program serving urban African American children living in poverty in Chicago and the discussant will be a survivor-client of a hospital-based violence intervention program providing psychosocial services to violently injured individuals in Philadelphia.

Workshop Presentation
Thursday, November 7
10:30 a.m. to 11:45 a.m.
Grand Ballroom B

Program Evaluation of Military Suicide Prevention and Resilience Programs
(Prevent/Mil/Vets/M/Industrialized)

Cato, Colanda, PhD1, Moore, Monique, PhD1, Roberts, Miguel, PhD1, Bates, Mark, PhD2

1 Defense Centers of Excellence for Psychological Health & Traumatic Brain Injury, Silver Spring, Maryland, USA
2 Defense Centers of Excellence for Psychological Health & Traumatic Brain Injury, Arlington, Virginia, USA

In response to the psychological impact of the wars in Iraq and Afghanistan, the military services have developed and implemented numerous initiatives, programs, and tools to promote psychological resilience and prevent
adverse psychological health outcomes. However, the effectiveness of these efforts is not well known, due to limited evaluation efforts and a lack of metrics to validate programs. This talk will provide an overview several resilience and suicide prevention program evaluations in the Department of Defense (DoD). Systematic program evaluation of several prominent DoD resilience and suicide prevention programs will be discussed, including: 1) Army-wide Ask, Care, Escort Suicide Intervention program (ACE SI); 2) the Marine Corp Never Leave a Marine Behind (NLMB) Suicide prevention Program; 3) the Air force’s Defenders Edge (DEFED); and 4) the Army’s Soldier 360 Comprehensive Leader Fitness program. Systematic program evaluations inform our understanding of large-scale training interventions that may be effective at reducing risks of suicide and for strengthening resilience in the US military. As such, results of program evaluations can help inform both military and federal policies and approaches for reducing risks of suicide as well as psychological health injuries.

Workshop Presentation
Thursday, November 7
10:30 a.m. to 11:45 a.m.
Grand Ballroom C

The Clinician-Administered PTSD Scale for DSM-5 (CAPS-5): Overview of Features, Administration, and Scoring
(Assess Dx/N/A/M/N/A)

Weathers, Frank, PhD
Auburn University, Auburn, Alabama, USA

The Clinician-Administered PTSD Scale is one of the most widely used structured diagnostic interviews for post-traumatic stress disorder (PTSD). The CAPS was recently revised to assess DSM-5 PTSD criteria. Major changes include adding items to assess new DSM-5 symptoms; adopting a single rating scale for symptom severity; and revising the wording, sequence, and visual layout of prompts to improve flow, increase efficiency, and facilitate standard administration. This workshop will consist of an overview of CAPS-5 features, discussion of guidelines for standard administration and scoring, and role-played CAPS administrations. Previous experience with the CAPS is helpful but not essential.
Brown Bag Lunch Movie

Thursday, November 7
12:00 p.m. to 1:15 p.m.
Franklin 5

Refuge: Caring for Survivors of Torture, a Documentary Film
(Media/Civil/Ref/I/N/A)

Achtenberg, Ben, MA
The Refuge Media Project, Jamaica Plain, Massachusetts, USA

It's been estimated that 500,000 to a million immigrants, refugees, and asylum seekers in the United States are victims of politically motivated torture. They come here from Africa, Eastern Europe, Latin America, Southeast Asia — some legally, some undocumented, some with families and some very much alone. They live in major American cities and in small towns. Some survivors bear visible scars, but many more have been wounded in ways that remain hidden. Throughout the United States, healthcare and social service professionals and students have mobilized to respond to their needs. REFUGE documents the work of five treatment programs, in four metropolitan areas, that offer compassionate care to survivors needing health, mental health, and social services. Through the moving stories of nine survivors (out of more than 20 interviewed) and the physicians, nurses, social workers, psychologists and psychiatrists who work with them, audiences gain a vivid perspective on this hidden crisis. REFUGE will increase awareness and understanding of the needs of torture survivors and their families; help providers recognize survivors among their immigrant clients; demonstrate ways that providers can effectively confront issues unique to immigrant torture survivors; and motivate, inspire and empower clinicians and students to meet the needs of this growing and increasingly vulnerable population.

Featured Roundtable

Thursday, November 7
12:00 p.m. to 1:15 p.m.
Franklin 9/10

What is the Role, if any, of Journalists in Promoting Individual Community Risk and Resiliency?
(Media/N/A/I/N/A)

Newman, Elana, PhD¹, Shapiro, Bruce, Other², Dissell, Rachel, BA³, MacMillan, Jim, BS⁴, Scott, Maiken, MA⁵, Snyder, Susan, BA⁵

¹University of Tulsa, Tulsa, Oklahoma, USA
²Dart Center for Journalism and Trauma, New York, New York, USA
³The Cleveland Plain Dealer, Cleveland, Ohio, USA
⁴Independent Journalist, New York, New York, USA
⁵WHYY, 91 FM, Philadelphia, Pennsylvania, USA
Journalists play important roles in both breaking news and in depth stories about trauma and its social impact. Journalists can provide information, break silences, foster connectivity, but at times, newsgathering can also isolate and take control away from community members. This conversation will discuss best practices in reporting on trauma-exposed individuals and communities, dilemmas for journalists, and ways clinicians and journalists can further collaborate.

Concurrent Session Two

Master Methodologist
Thursday, November 7
1:30 p.m. to 2:45 p.m.
Grand Ballroom E

DNA Methylation Mediating the Life Long Impact of Early Life Adversity
(Bio Med/Surv Hist/Global)

Szyf, Moshe, PhD
McGill University, Montreal, Quebec, Canada

A body of epidemiological data has suggested that childhood stress is associated with a variety of physical and mental health vulnerabilities including post-traumatic stress later in life. The critical question is what is the mechanism? How could experience early in life be registered in the genome and affect phenotypes later in life? We suggest that DNA methylation, a chemical modification of the DNA, mediates the long-term effects of early life environmental exposures. Basic principles of DNA methylation and how DNA methylation sculpts the genome during differentiation to create cell type specific identity for DNA will be discussed. It will be suggested that the same mechanism generates exposure-specific identity to DNA. The social and physical environments acting through signaling pathway target changes in DNA methylation to particular gene networks. The alterations in the state of methylation of these gene networks stably reprogram gene expression and alter the phenotype. We propose that modulation of DNA methylation in response to environmental cues early in life serves as a mechanism of life-long genome “adaptation” that molecularly embeds the early experiences of a child (“nurture”) in the genome (“nature”). Data that supports this hypothesis from rodent, non-human primates, humans and population studies will be discussed.
Featured Panel
Thursday, November 7
1:30 p.m. to 2:45 p.m.
Grand Ballroom F

ISTSS at the United Nations: Victim/Survivors of Mass Sexual Violence in International and National Courts In the Process of Recovery
(Global/Civil/Ref/I/Global)

Danieli, Yael, PhD1, Sirkin, Susannah, MEd2, Kivlahan, Coleen, Other3, Candeias, Sofia, JD4
1 Director of the Group Project for Holocaust Survivors and their Children, New York, New York, USA
2 Physicians for Human Rights, Cambridge, Massachusetts, USA
3 American Association of Medical Colleges, District of Columbia, USA
4 International Center for Transitional Justice, New York, New York, USA

Supporting access to justice as a path toward recovery from the trauma of sexual violence, especially in the context of mass rape in armed conflicts, cannot be seen as one-dimensional strategy. Recovery needs to occur at the community level through truth-seeking and acknowledgment processes. First responders, health and legal professionals, governments and donors must address stigma and discrimination against victims, support intra-familial and communal recovery, develop economic strategies for financial assistance to victims and reparation. There is no predictable pattern for recovery, and the effort to support successful criminal prosecution must be seen in the larger context of these complementary strategies. In this session, a multi-disciplinary panel representing the fields of psychology, medicine, law and human rights will address specific recent examples of resilience and recovery through local and international justice mechanisms to prosecute sexual violence in conflict and post-conflict situations. Experts will discuss obstacles and successes for victims seeking justice through the International Criminal Court and the mobile courts in the Democratic Republic of the Congo, among others, and will assess the role of health professionals in supporting recovery through justice.

Symposium
Thursday, November 7
1:30 p.m. to 2:45 p.m.
Grand Ballroom D

Psychotherapy Use in the Veterans Health Administration: Assessing the Penetration of Evidence-Based Treatments for PTSD
(Train/Ed/Dis/Mil/Vets/M/Industrialized)

Chair: Mott, Juliette, PhD1, Discussant: Seal, Karen, MD, MPH2
1 Michael E. DeBakey VA Medical Center; Baylor College of Medicine, Houston, Texas, USA
2 San Francisco VA Medical Center and UCSF, San Francisco, California, USA

This symposium features a series of four presentations highlighting recent research on the use of psychotherapy for post-traumatic stress disorder (PTSD) within the Veterans Health Administration (VHA). In particular, presenters will address utilization rates for evidence-based psychotherapies (e.g., CPT, PE) in an effort to
investigate the impact of recent VHA dissemination initiatives supporting the widespread use of these protocols. Presentations will describe trends in evidence-based psychotherapy use at a national level, and will distinguish between rates of evidence-based psychotherapy use within a variety of VHA care settings, including specialized PTSD clinics and primary care. To augment utilization data, patient- and system-level barriers and facilitators to evidence-based psychotherapy use will be highlighted. Overall, results indicate that an increasing number of Veterans are initiating and completing evidence-based psychotherapy, suggesting that initiatives to promote engagement in these treatments are making inroads.

Symposium
Thursday, November 7
1:30 p.m. to 2:45 p.m.
Grand Ballroom D

Influence of Collaborative Care on Psychotherapy Service Utilization in VA Community Based Outpatient Clinics (CBOCs)
(Clin Res/Mil/Vets/Industrialized)

Grubbs, Kathleen, PhD¹, Fortney, John, PhD², Lunsford, Amanda, MA³, Kimbrell, Timothy, MD⁴, Pyne, Jeffrey, MD⁴, Hudson, Teresa, PhD², Robinson, Dean, MD³, Otero, Jay, MD⁴, Moore, William, PhD²; Custer, Paul, PhD⁵, Schneider, Ronald, PhD⁵, Schnurr, Paula, PhD⁶

¹Mental Illness Research, Education and Clinical Center, Little Rock, Arkansas, USA
²Central Arkansas Veterans Healthcare System, North Little Rock, Arkansas, USA
³Southeast Louisiana Veterans Health Care System, New Orleans, Louisiana, USA
⁴Loma Linda Department of Veterans Affairs, Loma Linda, California, USA
⁵Southeast Louisiana Veterans Health Care System, Shreveport, Louisiana, USA
⁶National Center for PTSD/White River Junction VA, White River Junction, Vermont, USA

Collaborative care (CC) models are designed to improve delivery of and adherence to evidence-based practices. Few studies have evaluated the effectiveness of CC for PTSD and no prior research has examined whether CC increases engagement in evidence-based psychotherapies (EBPs) such as CPT, PE, EMDR or ACT. Veterans diagnosed with PTSD were recruited from 11 VA satellite clinics (n=265) and randomized to CC or treatment as usual (TAU). Veterans randomized to CC had access to CPT via interactive video and engagement in CPT was encouraged by the care manager. Chart reviews assessed psychotherapy utilization during the 12-month treatment. Preliminary results indicate that there were no differences in the total number of psychotherapy encounters between the CC and TAU groups (p = .11). However, 62% of Veterans randomized to CC received at least one session of EBP compared with 17% of Veterans in TAU. Moreover, 30% of Veterans randomized to CC group completed at least 8 sessions of an EBP compared to 8% of those in TAU. Veterans randomized to CC attended an average of 4.9 sessions of EBP compared to 1.9 sessions in TAU (p < .01). Findings suggest that CC was effective in engaging CBOC Veterans with PTSD in EBP.
Symposium
Thursday, November 7
1:30 p.m. to 2:45 p.m.
Grand Ballroom D

Trends in Psychotherapy Use among Veterans with PTSD
(Practice/Mil/Vets//Industrialized)

Hundt, Natalie, PhD¹, Mott, Juliette, PhD², Sansgiry, Shubhada, MA¹; Mignogna, Joseph, PhD¹, Cully, Jeffrey, PhD¹
¹MEDVAMC, Houston, Texas, USA
²Michael E. DeBakey VA Medical Center; Baylor College of Medicine, Houston, Texas, USA

Psychotherapy has been historically underutilized in both the community and the Veterans Health Administration (VHA). The VHA has recently invested heavily in the expansion of psychotherapy, and this study examined changes in psychotherapy use during this time. VHA national databases were used to identify patients who received a new onset diagnosis of PTSD during fiscal years 2004 to 2010, and patients’ psychotherapy use during the 12 months following diagnosis was assessed. Although the proportion of Veterans receiving psychotherapy for PTSD did not change, the absolute numbers increased dramatically: 2004 (n = 27,907), 2007 (n = 41,151), and 2010 (n = 56,729) due to rapid increases in the number of Veterans enrolled in VHA. Administrative databases do not contain information on which patients received an evidence-based psychotherapy, but only patients receiving 8 or more sessions may have feasibly received a minimally adequate dose of evidence-based psychotherapy for PTSD (Lu et al., 2011; Seal et al., 2010; Spoont et al., 2010). These results indicate that only 8.9% of patients newly diagnosed with PTSD could have potentially completed an evidence-based protocol in VA in 2010, pointing to the need for continued efforts aimed at improving patient initiation and completion of evidence-based care.

Characteristics of Veterans who Engage in Prolonged Exposure and Cognitive Processing Therapy for PTSD
(Clin Res/Mil/Vets//Industrialized)

Mott, Juliette, PhD¹, Mondragon, Sasha, PhD³, Hundt, Natalie, PhD², Beason-Smith, Melissa, PhD¹, Grady, Rebecca, BA¹, Teng, Ellen, PhD²
¹Michael E. DeBakey VA Medical Center; Baylor College of Medicine, Houston, Texas, USA
²MEDVAMC, Houston, Texas, USA
³MEDVAMC, Houston, Texas, USA

Although the Veterans Health Administration (VHA) mandates that Veterans with PTSD have access to evidence-based psychotherapy (EBP), little is known about the characteristics of Veterans who actually receive these treatments. This chart-review study sought to identify the clinical profile of Veterans who engage in EBP, and to examine how this population differs from Veterans who receive alternative forms of psychotherapy. We identified all patients enrolled in a large VHA PTSD clinic who attended at least one individual psychotherapy appointment with an EBP-trained provider (N = 796). Four independent raters reviewed the medical records of EBP patients (n = 91) and a provider-matched sample of patients who received another form of individual therapy (n = 66). The overall rate of EBP initiation was 11.4%. The dropout rate was 57% for Cognitive Processing Therapy and 29% for
Prolonged Exposure. Logistic regression analyses revealed that Iraq and Afghanistan Veterans were less likely than Veterans from other service eras to initiate EBP (odds ratio [OR] = 0.48), and Veterans receiving service connection for PTSD were more likely to initiate EBP (OR = 2.33). Among those who initiated EBP, recently returning Veterans (OR = 0.10) and those with a prior psychiatric inpatient stay (OR = 0.12) were less likely to complete treatment. Implications of these findings will be discussed.

Symposium
Thursday, November 7
1:30 p.m. to 2:45 p.m.
Grand Ballroom D

The Effect of Local Factors on Uptake in a National Implementation Program for Evidence-based Psychotherapy
(Practice/Mil/Vets/Industrialized)

Watts, Bradley, MD, MPH1, Shiner, Brian, MD, MPH1; Zubkoff, Lisa, PhD1, Carpenter-Song, Elizabeth, PhD2
1Dartmouth Medical School, White River Junction, Vermont, USA
2Dartmouth Medical School, Lebanon, New Hampshire, USA

Objective: To examine how local factors influenced the uptake of evidence-based psychotherapies for PTSD during a national implementation program in the U.S. Department of Veterans Affairs (VA). Introduction: The VA sponsored national implementation of 2 psychotherapies for PTSD, prolonged exposure (PE) and cognitive processing therapy (CPT). Our measurement efforts in one region found variation in the uptake of PE and CPT across 6 outpatient PTSD clinics, ranging from 3.7% to 13.5% of new patients receiving at least one session of either treatment. Methods: To better understand how local factors contributed to this variation, we conducted qualitative interviews focusing on clinicians’ valuation of 3 major domains: 1) evidence supporting PE and CPT, 2) their local contexts, and 3) national facilitation efforts. Each domain contained 6 elements, which we rated using pre-defined rubrics. We entered element scores from each site as independent variables into a Poisson linear regression equation where the percentage of patients at each site receiving any PE or CPT was the dependent variable. Results: Positive predictors included clinical experience and utilization, sustained involvement with the implementation team, and customization of the training. Conclusions: Accounting for these factors in the improvement of implementation efforts could help improve uptake.
Uncovering Trajectories of Post-Traumatic Stress and Resilience:
Implication for Clinicians and Researchers
(Res Meth/Violence/I/Global)

Chair: Shalev, Arieh, MD
Hadassah Hospital, Jerusalem, Israel

Understanding the time course of PTSD and resilience is essential for interventions, service delivery and research. Many studies have shown that trauma-exposed individuals follow different time courses and outcomes, extending from resilience and full recovery to intractable disorders. To properly understand these longitudinal trajectories one must go beyond traditional statistical approaches, which mainly look at population means. Without requiring prior skills in statistics, this symposium will introduce the participants to the power and flexibility of latent variable modeling methods for uncovering individual trajectories, including Latent Growth Mixture Modeling (LGMM), its extensions, and generalizations. The presenters will demonstrate the flexibility of this approach in studying a broad range of topics associated with risk and resilience, and discuss new findings that identify cognitive and emotional processes that promote resilience, predict the likelihood of post-traumatic stress disorder, and inform basic research on fear extinction and learning. The richer picture that is made available by this approach reverberates throughout all aspects of research on post-traumatic stress and resilience. Our symposium will provide an opportunity to gain more fluent understanding of current and future achievements, follow their broad implications, and gain specific clinical insights.

Diverging Trajectories of PTSD Symptoms Following Trauma and Differential Effect of CBT
(Res Meth/Acc/Inj/Global)

Galatzer-Levy, Isaac, PhD¹, Shalev, Arieh, MD², Ankri, Yael, MA³, Freedman, Sara, PhD⁴, Gilad, Moran, MA³; Israeli-Shalev, Yossi, MA³
¹New York University School of Medicine, New York, New York, USA
²Hadassah Hospital, Jerusalem, Israel
³Hadassah University Hospital, Jerusalem, Israel
⁴Bar-Ilan University, Ramat Gan, Israel

PTSD symptom trajectories following trauma differ between individuals. However, common data analytic approaches focused on describing average group progression. To challenge this barrier, the current study, evaluated 957 trauma exposed individuals who were identified in the emergency department, demonstrated significantly elevated PTSD symptoms at 10-days and were followed through 14-months, with n=125 receiving
trauma focused early cognitive behavior therapy. The entire group showed significant mean symptom decline over 14-months. Latent Growth Mixture Model based analysis revealed three distinct symptom trajectories: rapid recovery (56%), slow and partial recovery over 14-months (27%), and non-recovery with persisting symptoms over 14-months (17%). Individuals who received treatment were equally likely to be members of these three groups. Further analysis revealed that treatment accelerated the recovery in the Slow Recovery trajectory, but did not affect the other trajectories. The use of modeling techniques that capture heterogeneity paints a clearer picture of distinct clinically meaningful trajectories of stress response and strengthens the ability to examine predictors and treatments of individuals in these trajectories. With regard to treatment our work suggests that members of the non-remitting trajectory are not responsive to CBT, and might need other interventions.

**Symposium**  
**Thursday, November 7**  
**1:30 p.m. to 2:45 p.m.**  
**Franklin 5**

**Beyond PTSD and Resilience: Mapping the Heterogeneity of Responses to Potential Trauma**  
(Res Meth/N/A/Global)

**Bonanno, George, PhD**  
*Teachers College, Columbia University, New York, New York, USA*

Until recently, reactions to potentially traumatic events (PTE) have been understood almost exclusively using a simplistic, binary distinction of pathology versus health. Alternatively, PTEs have sometimes been examined by comparing average differences between exposed and non-exposed groups, or by examining average levels of trauma symptoms across time. Although both approaches have been useful, neither fully captures the true heterogeneity of responses to these events. Moreover, both approaches have underestimated the prevalence of human resilience in the normal population. I this talk I will review these issues and then provide some background to a more flexible trajectory approach that better captures the heterogeneity of trauma reactions. I will briefly summarize data from our research program describing prototypical trajectories of adjustment in response to PTEs, such as terrorist disaster, combat, traumatic injury, cancer surgery, and a campus mass shooting disaster. I will place special emphasis on resilient outcomes and describe some of the many factors that predict resilient outcomes.

**Symposium**  
**Thursday, November 7**  
**1:30 p.m. to 2:45 p.m.**  
**Franklin 5**

**Temporal Association between Alcohol Use and PTSD**  
(Prevent/Acc/Inj//Industrialized)

**Nickerson, Angela, PhD; Bryant, Richard, PhD**  
*University of New South Wales, Sydney, New South Wales, Australia*

Alcohol use and PTSD symptoms are highly comorbid following trauma exposure, however little is known about the temporal association between these symptoms following the establishment of comorbidity. This study
employed bivariate latent difference score structural equation modeling to examine the temporal relationship between PTSD symptom clusters and alcohol use amongst 1152 injured patients admitted to hospital following a traumatic event. Over 24 months, avoidance and hyperarousal symptoms influenced subsequent changes in alcohol use, such that greater severity of avoidance and hyperarousal symptoms were associated with increase in alcohol use. There was no association between either re-experiencing symptoms and changes in alcohol use, or alcohol use and subsequent changes in PTSD symptoms. These findings provide support for the self-medication hypothesis of the association between alcohol use and PTSD, and have implications for the prevention and alleviation of comorbidity.

Symposium
Thursday, November 7
1:30 p.m. to 2:45 p.m.
Franklin 5

The Trajectory of Post-Traumatic Stress Disorder Following Traumatic Injury: A Longitudinal Six-Year Follow-Up
(Assess Dx/Acc/Inj/Industrialized)

Bryant, Richard, PhD, Nickerson, Angela, PhD, Galatzer-Levy, Isaac, PhD, Creamer, Mark, PhD, O'Donnell, Meaghan, PhD, Forbes, David, PhD, Silove, Derrick, MD, PhD, McFarlane, Alexander, MD

1University of New South Wales, Sydney, New South Wales, Australia
2New York University School of Medicine, New York, New York, USA
3Australian Centre for Post-traumatic Mental Health, University of Melbourne, East Melbourne, Victoria, Australia
4The University of Adelaide, Adelaide, South Australia, Australia

Traumatic injuries affect millions of patients each year, and PTSD arising from the injury contributes to much impairment. We used latent growth mixture modeling to identify distinctive trajectories of PTSD response in injury survivors in over the six years after injury. 1084 traumatically injured patients were assessed during hospital admission and followed up at 3 months, 12 months, 24, and 72 months (N = 613; 54% of the initial sample) after injury. PTSD severity was assessed at each time-point using the Clinician Administered PTSD Scale. Lifetime psychiatric history was assessed using the MINI International Psychiatric Interview (MINI). Functioning was assessed with the World Health Organisation Quality of Life scale. There were five distinct trajectories: a Chronic group (4%), a Recovery group (6%), a Worsening/Then Delayed Recovery (8%) Group, a Worsening group (10%), and a Resilient group (73%). By following patients for 6 years, we noticed that patients who were worsening initially then recovered after two years. Prior psychiatric history and mild traumatic brain injury characterized those who did not adapt after trauma.
Symposium  
Thursday, November 7  
1:30 p.m. to 2:45 p.m.  
Franklin 6

Mental Health Care Utilization for PTSD Distress in US Veterans  
(Practice/Mil/Vets/A/N/A)

Chair: Blais, Rebecca, PhD¹, Discussant: Seal, Karen H., MD, MPH²
¹Department of Veterans Affairs, Puget Sound Health Care System, Seattle, Washington, USA  
²San Francisco VA Medical Center and UCSF, San Francisco, California, USA

Though many veterans return from combat deployment with symptoms of PTSD and other distress, most will not seek psychological treatment, follow-up on mental health referrals, or receive an adequate dose of treatment. Engagement in mental health care following traumatic experiences can boost post-war resilience and improve post-deployment functioning. The purpose of the current symposium is to discuss correlates of treatment engagement for PTSD among veterans. Dr. Blais and colleagues will present data examining how the unique PTSD symptom clusters of re-experiencing, avoidance, numbing, anxious arousal, and dysphoric arousal relate to psychotherapy and medication use in a community sample of Viet Nam and pre-Viet Nam era veterans. Dr. Kehle-Forbes and colleagues will present data examining rates and correlates of engagement in cognitive processing therapy and prolonged exposure therapy among treatment seeking Veterans. Dr. Maguen and colleagues will discuss time to and predictors of time to initiation of a first primary care visit, first mental health outpatient visit, and minimally adequate mental healthcare among Iraq and Afghanistan veterans. Discussant Dr. Karen Seal will discuss the need to boost resilience and improve post-deployment functioning through increasing mental health care utilization in these veterans. She will also discuss areas for future research.

Symposium  
Thursday, November 7  
1:30 p.m. to 2:45 p.m.  
Franklin 6

Time to Treatment among Iraq and Afghanistan Veterans with Mental Health Diagnoses: Implications for Care  
(Clin Res/Mil/Vets/Industrialized)

Maguen, Shira, PhD¹, Madden, Erin, MPH², Cohen, Beth, MD, MAS¹, Bertenthal, Daniel, MPH², Seal, Karen, MD, MPH¹  
¹San Francisco VA Medical Center and UCSF, San Francisco, California, USA  
²San Francisco VA Medical Center (VAMC-SF), San Francisco, California, USA

Early mental health treatment may reduce chronic mental health problems after military deployment. Our aim was to describe time to and predictors of time to initiation of a first primary care visit, first mental health outpatient visit, and minimally adequate mental healthcare among Iraq and Afghanistan veterans. We conducted a retrospective cohort analysis using existing medical records from Iraq and Afghanistan veterans who enrolled in VA healthcare, received a mental health diagnosis, and utilized either primary or mental health outpatient care (N = 314,717). The median time to engagement in mental healthcare was over two years from the end of the last deployment. After over three years post-deployment, 75% of those with mental health diagnoses had not engaged
in minimally adequate mental healthcare. There was a median lag time of nearly 7.5 years between an initial mental health session and seeking minimally adequate mental healthcare. Male veterans waited nearly two years longer to initiate minimally adequate mental healthcare compared to female veterans. Younger age and racial/ethnic minority status were also associated with greater times to initial and minimally adequate mental healthcare. These findings highlight the importance of addressing individual- and system-level barriers that may create delays in care.

Symposium
Thursday, November 7
1:30 p.m. to 2:45 p.m.
Franklin 6

Dropout from Prolonged Exposure Therapy and Cognitive Processing Therapy in a VA Outpatient PTSD Clinic
(Clin Res/Mil/Vets/Industrialized)

Kehle-Forbes, Shannon, PhD1, Erbes, Christopher, PhD LP2, Meyers, Laura, PhD1
1Minneapolis VA Health Care System, Minneapolis, Minnesota, USA
2Minneapolis VAHCS, Center for Chronic Disease Outcome Research, University of Minnesota Medical School, Minneapolis, Minnesota, USA

Prolonged exposure (PE) and cognitive processing therapy (CPT) are recommended as first-line treatments for PTSD by the Department of Veteran Affairs (VA). Recent data suggest that dropout rates may be high among Veterans. Veterans at an outpatient PTSD clinic who received PE/CPT completed an average of 6.1 sessions, well below the 8-12 sessions called for by the treatment protocols (Shiner 2012). The goal of this project is to examine rates and predictors of dropout among Veterans who initiated a course of PE or CPT at an outpatient PTSD clinic within a large VA Medical Center. In the clinic, a course of PE / CPT begins with a screening session during which appropriateness for PE/CPT is assessed and the treatment rationale is presented (Session 0). Preliminary results suggest that 17% of Veterans who completed Session 0 did not continue with PE/CPT (declined further treatment or no-showed Session 1). Among Veterans who attended Session 1, 35% prematurely dropped out of treatment. Thus, only 54% of Veterans for whom PE / CPT was indicated completed treatment. The average number of sessions attended was 8.0 (SD = 5.39). Dropouts had higher pre-treatment Post-traumatic Checklist (PCL) scores, were more likely to be Iraq or Afghanistan Veterans, and were more likely to have been seen via telemedicine than completers. Implications and future research directions will be discussed.
Unique PTSD Symptom Clusters Predict Mental Health Care Utilization in Older Veterans

(Practice/Mil/Vets//Industrialized)

Blais, Rebecca, PhD; Pietrzak, Robert, PhD, MPH

1 Department of Veterans Affairs, Puget Sound Health Care System, Seattle, Washington, USA
2 National Center for PTSD, West Haven, Connecticut, USA

PTSD is a chronic mental health problem for many Viet Nam and pre-Viet Nam era veterans, but many veterans do not seek mental health care. Previous research in this population has shown that higher PTSD severity is related to a greater likelihood of seeking mental health services, but it is not clear which symptoms drive this association. Recent research in Iraq/Afghanistan veterans demonstrates that the unique PTSD symptom clusters of higher re-experiencing and lower avoidance symptoms predict mental health care utilization. Using a novel 5-factor model of PTSD, re-experiencing, avoidance, numbing, anxious arousal, and dysphoric arousal were examined as correlates of mental health care utilization in a community sample of 2,025 Viet Nam and pre-Viet Nam era veterans. After accounting for relevant covariates, higher dysphoric arousal (OR: 1.16, 95%CI: 1.02 – 1.32) and higher numbing (OR: 1.10, 95%CI: 1.00 – 1.19) symptoms were positively associated with mental health care utilization. Re-experiencing (OR: .90, 95%CI: .81 – 1.00) symptoms were negatively associated with mental health care utilization. Avoidance and anxious arousal symptoms were unrelated to mental health care utilization. Implications of these findings and ways to increase treatment utilization in this population will be discussed.

Positive Change Following Trauma: Controversies and New Directions

(Global/N/A/I/Global)

Chair: Zalta, Alyson, PhD; Discussant: Tennen, Howard, PhD

1 Rush University Medical Center, Chicago, Illinois, USA
2 University of Connecticut, Farmington, Connecticut, USA

Recent evidence suggests that trauma not only has potential negative consequences, but positive effects as well. Theories of post-traumatic growth propose that coping successfully with severe stress can serve a transformational function such that individuals are changed in positive ways. However, there is considerable controversy around the causes of perceived benefits, the accuracy of these beliefs, and their impact on mental health and well being. This symposium seeks to address these critical questions to develop a more complete understanding of the function of growth beliefs following severe stress. The four presentations in this symposium examine the relationship between growth beliefs and trajectories of PTSD among Israeli Jews and Arabs exposed to terrorism; different trajectories of self-reported life changes following exposure to two earthquakes in New
Zealand and predictors and outcomes of those trajectories; the extent to which perceived positive changes are corroborated by significant others among war-affected Sri Lankans; and how adaptive emotions following chronic stress, such as gratitude, foster positive social processes. Together, these presentations provide a snapshot into the latest research seeking a more complete understanding of post-traumatic growth and transformational coping in the context of trauma.

Symposium
Thursday, November 7
1:30 p.m. to 2:45 p.m.
Franklin 7

Corroboration of Reports of Personality Change and Post-Traumatic Growth among Victims of Political Violence in Northeastern Sri Lanka
(Clin Res/Disaster/S Asia)

Jayawickreme, Eranda, PhD\textsuperscript{1}, Blackie, Laura, PhD\textsuperscript{1}, Forgeard, Marie, MA\textsuperscript{2}, Roepke, Ann Marie, MA\textsuperscript{2}
\textsuperscript{1}Wake Forest University, Winston-Salem, North Carolina, USA
\textsuperscript{2}University of Pennsylvania, Philadelphia, Pennsylvania, USA

While the theme of “strength from adversity” is attractive and central to the theory of post-traumatic growth (PTG), empirical evidence remains mixed. Specifically, it is unclear from the data whether the positive retrospective changes that individuals report following adversity are associated with concurrent positive behavioral changes (Ford, Tennen, & Albert, 2008). We examine whether self-reported beliefs of post-traumatic growth are associated with actual behavioral change using a newly developed checklist of relevant social behaviors among victims of political violence in Northeastern Sri Lanka. We identify which self-reported domains of growth-beliefs are related to behavioral change in a wide range of behaviors, including increases in prosocial, creative, and spiritual behaviors. We collect both self and observer reports of behavioral change to increase accuracy, as acquaintance-reports of recent behavior are arguably one of the best direct reflections of actual behavior. Each participant nominated a close friend or family member who reported his or her perception of the participant’s behavior, as well as information on behavioral changes. These findings speak to the veracity of self-reported post-traumatic growth and post-traumatic growth theory.
Growth and Loss as Predictors of PTSD Trajectories in Terror-Exposed Israeli Jews and Arabs
(Global/Surv/Hist/Industrialized)

Zalta, Alyson, PhD1, Hall, Brian, PhD2, Canetti-Nisim, Daphna, PhD3, Gerhart, James, PhD3, Hobfoll, Stevan, PhD4
1Rush University Medical Center, Chicago, Illinois, USA
2Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA
3University of Haifa, Haifa, Israel
4Rush Medical College, Chicago, Illinois, USA

We examined post-traumatic growth (PTG) and psychological loss as predictors of trajectories of post-traumatic stress disorder (PTSD) symptoms. A nationally representative sample of Israelis (N = 1622) was assessed for PTG, psychological loss, and PTSD at 3 time points during a period of ongoing violence. PTSD scores were submitted to latent class growth analysis with ethnicity (Jewish vs. Arab) as a covariate. Analyses revealed 4 latent trajectories: a resistant group with low PTSD at all times (80.7%); a resilient group with high initial PTSD and decreasing scores over time (12.6%); a delayed distress group with low initial PTSD and increasing scores over time (4.7%); and a chronic group with high PTSD at all times (2.0%). Multinomial logistic regressions were then conducted to examine PTG and loss as predictors of group membership with trauma exposure and demographic variables as covariates. Loss and PTG were associated with lower odds of being in the resistant group versus other groups. Loss was a more consistent predictor than PTG. The interaction between loss and PTG at time 1 was associated with greater odds of being in the chronic and resilient groups such that for individuals with extremely high loss, higher PTG increased the odds of being in the resistant group. Findings suggest that PTG is generally associated with greater distress except in cases of extreme loss.
hypothesized role of ego-transcendence in feeling gratitude rather than negative emotions upon receipt of a benefit from another person. As predicted, in a second set of analyses, grateful responding to received benefits predicted an increase in perceived social support over three months, but only for women low in ambivalence over emotional expression. These findings add to evidence regarding the social causes and consequences of gratitude, focusing on situational features that may impact positive change during major life disruptions. Focusing on specific emotions following traumatic stress and their impact on growth may be beneficial in identifying important characteristics of resilience.

Symposium
Thursday, November 7
1:30 p.m. to 2:45 p.m.
Franklin 7

Different Trajectories of Self-reported Life Changes Following Exposure to Two Earthquakes in New Zealand and the Predictors and Outcomes of those Trajectories (Assess Dx/Disaster/Industrialized)

Marshall, Emma, PhD Candidate1, Kuijer, Roeline, PhD1, Frazier, Patricia, PhD2
1University of Canterbury, Christchurch, Canterbury, New Zealand
2University of Minnesota, Minneapolis, Minnesota, USA

Individuals follow different dysfunction trajectories post-trauma (Bonanno et al. 2010); however, these trajectories have not been examined in the post-traumatic growth literature. This study aimed to identify (a) different trajectories of post-traumatic life change in personal strength and (b) outcomes and predictors of these trajectories. Residents of Christchurch New Zealand (N = 182) completed questionnaires pre-trauma, 1 month after a 7.1 magnitude earthquake (EQ) in 2010, and 3 and 12 months after a more severe 2011 EQ. Group-based trajectory modeling identified three distinct patterns of post-traumatic change: no change (69%), positive change (18%), and negative change (13%) post-EQ. No slopes were significant, suggesting that levels of self-reported change remained stable over 1-year post-EQ. The three groups differed significantly at 1-year post-EQ on three distress measures, with the negative change group reporting substantially more distress than the other two groups. The group reporting positive change did not report less distress than the group reporting no life change; thus, positive life change conferred no benefit. We investigated three predictors of trajectories: pre-EQ optimism, EQ life threat and pre-EQ mental health. The negative change group had significantly lower pre-EQ mental health; however, the groups did not differ in optimism or EQ life threat.
Narrow Focus, Wide Effects: Beyond PTSD Symptom Reduction in Trauma-Focused Therapy
(Clin Res/Diverse Pop/M/Industrialized)

Chair: Bovin, Michelle, PhD¹, Discussant: Resick, Patricia, PhD, ABPP²
¹VA - National Center for PTSD, Boston, Massachusetts, USA
²National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

Post-traumatic stress disorder (PTSD) is highly comorbid with a number of psychological disorders (e.g., Brown et al., 2001) as well as a range of other problems (e.g., Tarrier & Gregg, 2004). Because PTSD comorbidity is the norm rather than the exception, it is important to identify treatments that reduce both PTSD symptoms as well as the range of comorbid problems that often accompany this disorder. Research has demonstrated that several trauma-focused therapies are effective in decreasing PTSD as well as several Axis I disorders (e.g., Foa et al., 1999; Resick et al., 2008). However, little research has examined whether these interventions are also effective at reducing other problems that are often comorbid with PTSD. The current symposium will provide evidence that these treatments can decrease several additional impairments which are not directly targeted in the treatment. Dr. Gutner will present data examining the effect of CPT, CPT-C, and written accounts on changes in anxiety sensitivity. Dr. Baker will discuss how a PTSD treatment for motor vehicle accidents impacted driving behaviors that were not directly targeted. Dr. Bovin will explore the effect of CPT and PE on personality disorder features. Dr. Wisco will present data on the impact of CPT and PE on suicidal ideation. The implications of these findings will be addressed by our discussant, Dr. Resick.

The Effect of Trauma-Focused Therapy on Personality Disorder Features in Rape Survivors with Post-traumatic Stress Disorder
(Clin Res/Violence/Industrialized)

Bovin, Michelle, PhD¹, Wolf, Erika, PhD², Resick, Patricia, PhD, ABPP³
¹VA - National Center for PTSD, Boston, Massachusetts, USA
²National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA
³National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

This study evaluated the effect of trauma-focused therapy on personality disorder (PD) features in women diagnosed with post-traumatic stress disorder (PTSD). Fifty-three female rape survivors (mean age = 32.32 years) who met criteria for PTSD completed either Cognitive Processing Therapy (CPT; Resick & Schnicke, 1993) or Prolonged Exposure (PE; Foa & Rothbaum, 1998). Participants’ PTSD symptom severity and PD features were
assessed at pre-treatment and between 5-10 years after completing treatment. Multiple regression analyses revealed that PTSD symptom improvement was related to improvement in PD severity for paranoid, schizotypal, avoidant, and dependent PD, after controlling for baseline level of these PDs (βs ranged from -0.28 to -0.37; all ps < 0.05). In addition, for borderline, schizotypal, and antisocial PDs, longitudinal stability of the PD was attenuated as a function of PTSD symptom improvement (i.e., individuals with greater PTSD symptom improvement showed greater reductions in PD severity compared to individuals with less PTSD symptom improvement; βs ranged from -0.28 to -0.36; all ps < 0.05). These effects remained even after controlling for additional therapy received during the follow-up period. These findings suggest that trauma-focused therapy can be effective at reducing both PTSD symptoms and the severity of comorbid PDs.

Symposium
Thursday, November 7
1:30 p.m. to 2:45 p.m.
Franklin 8

Does Anxiety Sensitivity Change the Course of PTSD Treatment?
(Clin Res/Violence/N/A)

Gutner, Cassidy, PhD1, Nillni, Yael, PhD2, Suvak, Michael, PhD3, Resick, Patricia, PhD, ABPP4
1VA Boston Healthcare System, Women’s Health Sciences Division, National Center for PTSD, Department of Psychiatry, Boston University School of Medicine, Boston, Massachusetts, USA
2National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA
3Suffolk University, Boston, Massachusetts, USA
4National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

Anxiety sensitivity (AS) has been proposed as a vulnerability and maintenance factor for PTSD, yet its role in treatment for PTSD remains understudied. Of the original sample, 70 participants (25 CPT, 20 WA, 25 CT) completed the anxiety sensitivity index (ASI) pre- or post-treatment. Through multilevel regression analyses we examine: a) changes in ASI during treatment, and b) whether pre-treatment ASI scores predicted PTSD treatment response. On average, participants exhibited a 9.69 reduction in total ASI scores from pre- to post-treatment (t=-5.26, p<.01, d=1.46), with no differences emerging among the treatment conditions. Growth curve modeling revealed slightly different trajectories of PTSD symptoms as a function of pre-treatment ASI levels. While overall decreases during treatment was not associated with pre-treatment ASI levels (i.e., ASI x linear change interaction was not significant), individuals with higher levels of pre-treatment ASI showed larger initial decreases in PTSD that flattened out over time compared to participants with lower pre-treatment ASI, who exhibited a shallower but more persistent decreases in PTSD during treatment (i.e., significant ASI x quadratic change interaction). The presentation will allow us to fully depict these findings and present analyses examining separate dimensions of ASI and how they impact PTSD symptom clusters.
Trauma-Focused Treatment Reduces Suicidal Ideation
(Clin Res/Violence/Industrialized)

Wisco, Blair, PhD1, Gradus, Jaimie, ScD2; Suvak, Michael, PhD3; Marx, Brian, PhD1; Resick, Patricia, PhD, ABPP1

1National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA
2VA Boston Health Care System/Boston University, Boston, Massachusetts, USA
3Suffolk University, Boston, Massachusetts, USA

Post-traumatic stress disorder (PTSD) is a well-established risk factor for suicidal ideation (SI), suggesting that successful PTSD treatment might reduce SI. However, no study has examined whether PTSD treatment decreases suicidal thoughts. This study examines changes in SI over the course of a randomized clinical trial which compared two widely used treatments for PTSD – Cognitive Processing Therapy (CPT) and Prolonged Exposure (PE). Data from 163 trial participants over 5 time points (pre- and post-treatment, 3 & 9 months post-treatment, and 5-10 years post-treatment) were examined using multilevel growth curve analyses to determine if reductions in PTSD during treatment were associated with reductions in SI. SI decreased sharply during treatment with continued, but smaller decreases, during the follow-up period. These decreases were associated with changes in PTSD over the course of treatment. The PTSD and SI association was stronger for participants in the CPT condition than for participants in the PE condition. These associations were not accounted for by depression diagnoses or hopelessness. These findings indicate that trauma-focused treatment for PTSD also reduces SI, and that CPT may exhibit a greater influence on SI than PE. These findings indicate that inclusion of PTSD screening and treatment could enhance suicide prevention efforts.
PTSD functional impairment. In a RCT of Written Exposure Therapy for MVA-related PTSD (Sloan et al., 2012), the Driving Behavior Survey (DBS) was given at pre, post, and 6-week follow. It assessed three areas of functional impairment: anxiety-based performance deficits, exaggerated safety/caution, and hostile/aggressive driving behaviors. This study aims to show the sensitivity of DBS subscales to PTSD intervention, and explore the relationship between the subscales, clinical symptoms, and cognitions. This sample is particularly interesting, as the driving behaviors measured were not targeted by the intervention. Using HLM (n=40) we found a significant group x time interaction for all 3 DBS scales (r=.32-.39). Performance deficits were related to Post-traumatic cognitions about the self (r=.38), and hostile behaviors were related to cluster D symptoms (r=.36) and Post-traumatic cognitions about others (r = .29). Findings suggest that driving behaviors are sensitive to exposure-based treatment for MVA-related PTSD, the DBS to be useful measure of functional impairment.

Symposium
Thursday, November 7
1:30 p.m. to 2:45 p.m.
Franklin 9/10

Assessing Risk Factors Associated with Mental Health Problems after Exposure to Traumatic Stress
(Assess Dx/N/A/I/Industrialized)

Chair: Carlson, Eve, PhD1, Discussant: O'Donnell, Meaghan, PhD2
1National Center for PTSD, VA Palo Alto Health Care System, Menlo Park, California, USA
2Australian Centre for Post-traumatic Mental Health, University of Melbourne, East Melbourne, Victoria, Australia

If those at risk for persistent post-traumatic (PT) psychological problems can be identified early, interventions may be able to foster their resilience to trauma. While early PT symptoms are not good predictors of who will develop persistent problems, assessing risk factors for PT disorder is a promising approach to identifying those in need of intervention. The challenge is to create a measure that can survive cross validation and accurately identify those who are at risk for developing disorder, but still be practical for use in busy settings. In this symposium, researchers will present three different statistical approaches to developing measures of risk to predict PT outcomes in samples of people exposed to injury and other traumatic stressors. Two studies focus on assessing psychosocial risks and one study includes assessments of both psychosocial and genetic risks. If screens can be developed, maintain their predictive capacity upon cross validation, and be implemented in real-world settings, emotional suffering and the economic burden to society could be minimized by early intervention with those at risk.
Development and Initial Validation of a Risk Factor Screen for PTSD and Depression
(Assess Dx/Acc/Inj//Industrialized)

Carlson, Eve, PhD; Ruzek, Josef, PhD; Spain, David, MD
1 National Center for PTSD, VA Palo Alto Health Care System, Menlo Park, California, USA
2 National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA
3 Stanford University School of Medicine, Stanford, California, USA

Screens to identify those at risk for PTSD or depression following exposure to traumatic stress could help prevent disorder. We studied the capacity of pretrauma (sex, SES, age, childhood home environment, past trauma exposure), time of trauma (psychological disorder, life stress, home environment, subjective severity of trauma, early symptoms of PTSD, dissociation, and depression), and post-trauma (life stress, social support, and social constraints) risk factors to predict PTSD and depression at two months and one year post-trauma in hospital trauma patients and trauma-exposed family members. The risk factors accounted for 73% of the variance in PTSD symptoms at 2 months and 90% at one year and 65% of the variance in depression symptoms at 2 months and 84% at one year. Multivariate data analyses and ROC methods were used to select items for a measure of risk. The preliminary set of items showed sensitivity = .88 and specificity = .76 to predict high PTSD at two months post-trauma and a sensitivity = 1.00 and specificity = .80 to predict high PTSD one year post-trauma. Depression at two months post-trauma was predicted with sensitivity = .83 and specificity = .80. Depression one year post-trauma, was predicted with sensitivity = 1.00 and specificity = .80. Cross-validation is needed to establish the screen’s predictive accuracy.

Predicting PTSD Using the New York PTSD Risk Score with Genetic Risk Information
(Assess Dx/Acc/Inj//Industrialized)

Boscarino, Joseph, PhD, MPH, Kirchner, H., PhD, Hoffman, Stuart, DO, Erlich, Porat, PhD, MPH
1 Gesinger Clinic, Danville, Pennsylvania, USA

We previously developed a PTSD screener – the New York PTSD Risk Score (NYPRS) – that was effective. The objective of the current study was to assess a version of NYPRS that included genetic information. Utilizing diagnostic methods, we hierarchically examined different prediction variables identified in NYPRS research, including genetic risk information among 412 trauma-exposed adults. We found that the area under the ROC curve (AUC) for lifetime PTSD for the Primary Care PTSD Screener (PCPS) alone was 0.865. When we added psychosocial predictors from NYPRS to the model, including depression, sleep disturbance, and healthcare access, the AUC increased to 0.902 (p=0.0021). When genetic information was added in the form of a count of PTSD risk alleles within FKBP5, COMT, CHRNA5, and CRHR1 genetic loci, the AUC increased to 0.920 (p=0.0178). The results for
current PTSD were similar. In the final model for current PTSD with PCPS and psychosocial factors included, genotype (scored 0-6+) resulted in a weight of 17 for each risk allele, indicating a patient with 6+ genetic risk alleles would receive a PTSD score of $17 \times 6 = 102$, the highest of any predictor. Genetic risk information added to the NYPRS improved the accuracy for a screening instrument that already had high AUC results. This improvement was achieved by increasing PTSD specificity. Further research is underway.

**Symposium**
**Thursday, November 7**
**1:30 p.m. to 2:45 p.m.**
**Franklin 9/10**

**Screening for Risk of Persistent PTSD following Physical Injury**
(Assess Dx/Acc/Inj/Industrialized)

**Marshall, Grant, PhD, Schell, Terry, PhD, Miles, Jeremy, PhD**

*RAND, Santa Monica, California, USA*

The aim of this study was to develop and validate a screening tool to aid identification of adults at high risk for persistent PTSD following serious physical injury requiring hospitalization. During hospitalization, physical injury survivors (N=677) were administered an interview that included the 17-item PTSD Symptom Checklist (PCL) and 178 items drawn from several scales assessing psychological constructs linked theoretically and empirically to PTSD vulnerability (e.g., peritraumatic dissociation, optimism, social support, rumination, causal attributions, post-traumatic cognitions, alexithymia). Participants were re-interviewed at 6- and 12-mos after the initial assessment. In a series of analyses conducted in a cross-lagged structural equation modeling framework, we examined the utility of each of the individual survey items in predicting 6- and 12-month PCL scores while controlling for initial PTSD symptom severity. The process resulted in the selection of the 12 survey items that best predicted respondents’ symptom trajectory between baseline and the follow-up waves. This 12-item screener—which includes items originally designed to assess causal attributions, anxiety sensitivity, and negative cognitions—provides a clinically useful tool for identifying injury survivors who are at higher risk for persistent PTSD than would be expected based on initial PTSD symptoms.
Panel Presentation  
Thursday, November 7  
1:30 p.m. to 2:45 p.m.  
Franklin 11/12

**Trauma-Informed Substance Abuse Services in Cyprus: Efforts to Evaluate, Expand, and Disseminate Trauma-Informed Practice Lessons Drawn from the WCDVS project**  
(Global/N/A/M/Industrialized)

*Brady, Loretta, PhD*¹, *Adonis, Marios, PhD*², *Triantos, Alicia, Undergraduate*¹, *Pavlidou, Andromachi, BA*²; *Ervipidou, Christina, BSc Hons Psychology*², *Papadimitriou, Chrysostomos, BA*², *Kamberi, Stavroula, BSc*², *Andronikou, Zina, MSc*², *Hadjichristofi, Constantinos, BSc*²  
¹Saint Anselm College, Manchester, New Hampshire, USA  
²University of Nicosia, Nicosia, Cyprus

This panel discusses four areas that will address the need, availability, and expansion of resources for trauma-informed substance abuse and co-occurring services within the Republic of Cyprus, a small multi-lingual country with unique service needs. Session 1: Focuses on the effort to identify existing trauma-informed substance abuse resources within Cyprus, reports on barriers to availability and access to such services, and describes the process of building collaborations to enable expansion of trauma-informed approaches within clinical training, substance abuse, mental health, prison, and social welfare service systems. Session 2: Describes results of a prevalence and incidence study carried out within substance abuse service settings to establish a baseline for trauma exposure, trauma symptoms, general mental health, addiction severity, and coping resources (including self-compassion, resilience, and post-traumatic growth) specific to Cyprus. Session 3: Reviews measures created or forward/back translated for Greek language audiences that might be useful to researchers within Cyprus as well as other communities with Greek language needs. The panel will conclude with a discussion of the process, pitfalls, and promises similar efforts might yield for scientist-practitioners seeking to expand resources stemming from the 1999-2005 WCDVS into non-English language communities.

Workshop Presentation  
Thursday, November 7  
1:30 p.m. to 2:45 p.m.  
Grand Ballroom A

**Using Assessment Information to Drive Treatment Planning: A Comprehensive Trauma-Informed Mental Health Assessment Process for Children Involved in the Child Welfare System**  
(Assess Dx/Child/Adol/M/Industrialized)

*Killen-Harvey, Al, MSW, LCSW, Crandal, Brent, PhD*  
Chadwick Center for Children and Families, Rady Children’s Hospital – San Diego, California, USA
A comprehensive trauma-informed MH assessment is critical in assisting the clinician in determining the child’s diagnosis and driving the treatment plan. Unfortunately, a comprehensive trauma-informed MH assessment may not be conducted in many cases, which can lead to misdiagnosis and the over diagnosis of various disorders. This presentation will highlight the Chadwick Center’s “Trauma-Informed Mental Health Assessment Protocol” (TI-MHAP). TI-MHAP involves a multifaceted assessment process to enable clinicians to gain an in-depth understanding of the child’s Unique Picture, including the child’s developmental level, traumatic experiences, and cultural values. TI-MHAP’s multifaceted process includes the use of clinical interviewing and standardized measures that, when taken together, guide and inform case planning and selection of evidence-based practices, where indicated. TI-MHAP includes a re-assessment component whereby standardized assessments are re-administered in periodic intervals and interview information is updated to track progress. After providing audience members with information on the TI-MHAP model, the presenters will highlight an effort in which this model will be disseminated across California to ensure that children involved in the child welfare system receive a comprehensive trauma-informed MH assessment and treatment planning.

Workshop Presentation
Thursday, November 7
1:30 p.m. to 2:45 p.m.
Grand Ballroom C

Helping Traumatized Families: The Family Adaptation to Trauma Model for Clinical Practice
(Practice/N/A/M/ N/A)

Figley, Charles, PhD¹, Kiser, Laurel, PhD, MBA², Connors, Kathleen, MSW, LCSW²
¹Tulane University, New Orleans, Louisiana, USA
²University of Maryland School of Medicine, Baltimore, Maryland, USA

This practical, practitioner-oriented workshop will present and apply a Model of Family Adaptation to Trauma that helps practitioners determine what can be done to promote family resilience under the shadows of both chronic and on-going traumatic stress. For the most part, families are the social contexts for managing trauma, although most models and treatments take an individualized approach. In this workshop, the presenters will encourage participants to apply this family model to their provision of trauma interventions. We will discuss the Model of Family Adaptation to Trauma with particular emphasis on the family’s (a) systemic responses; (b) stress reactions; (c) current stressor context; (d) family’s perceptions of their current situation, and; (e) the family’s healing resources associated with resilience. The latter part of the workshop will provide specific strategies based on this model that helping families develop the coping skills and resources needed to move from failing/struggling to thriving. Clinical case examples will illustrate the model and the use of these strategies in practices.
Longitudinal Trajectories of Risk and Resilience

The Utility of Mixture Modeling in Disaster Research: Practical Findings from Latent Transition Analysis
(Res Meth/Disaster/M/Industrialized)

Wyka, Katarzyna, PhD, Verkuilen, Jay, PhD, Mello, Brittany, BA, Cukor, Judith, PhD, Olden, Megan, PhD, Difede, JoAnn, PhD

1 Weill Cornell Medical College, New York, New York, USA
2 City University of New York, New York, New York, USA
3 New York Presbyterian Hospital/Weill Medical College of Cornell University, New York, New York, USA

Sophisticated statistical methodologies are needed in order to analyze large, population-based datasets following disasters. Mixture models with latent variables (e.g., latent transition analysis, LTA) have versatile applications that may provide additional insight into psychiatric outcomes and capture population heterogeneity that is usually overlooked. These models are well suited for the analysis of psychiatric screening data, as they allow individuals to be grouped into classes based on their symptomatology and examine the course of symptoms over time by modeling group-based trajectories. This paper applied LTA to longitudinal screening data from 9/11 disaster workers. Upholding hypothesized patterns of response to disasters (Norris et al., 2009), the model provided evidence of great resistance and resilience to post-traumatic stress. The model also identified high rates of chronic dysfunction for all subgroups with elevated post-traumatic stress symptoms (Symptomatic, Intermediate-Avoidance, and Intermediate-Numbing classes) as well as the detrimental effect of co-morbid MDD on lack of remission at any time point. Lastly, transition probabilities explicitly delineated prognostic differences between classes with distinct symptom profiles. The implications for theoretical models of response to disasters, post-disaster interventions, and treatment for PTSD are discussed.

Post-Traumatic Stress Symptom Trajectories in Children: Latent Growth Mixture Models of Recovery Trajectories Following Trauma
(Assess Dx/Child/Adol/M/Global)

Le Brocque, Robyne, PhD, MSc, Hendrikz, Joan, BSc, PGDip, Kenardy, Justin, PhD, Kassam-Adams, Nancy, PhD

1 University of Queensland, Brisbane, Queensland, Australia
2 University of Queensland Schools of Psychology and Medicine, Herston, QLD, Australia
3 Children’s Hospital of Philadelphia, Philadelphia, Pennsylvania, USA
Examination of post-traumatic stress symptoms (PTSS) over time suggests that, on average, symptoms are highest in the immediate acute period and expected to decline over time. Few studies have explored individual recovery patterns, especially in children. With the use of advanced statistical modeling it is now possible to isolate and examine these trajectories. The objective of this paper is to examine the course of PTSS in children as well as the role of acute risk factors in predicting PTSS course and recovery. This paper utilizes data from the ‘PTSD after Acute Child Trauma’ data archive which brings together data from studies in the US, UK, and Australia assessing more than 2500 children following acute trauma including unintentional injury, medical events, motor vehicle accidents, interpersonal violence, and disasters. Using secondary analysis of the existing data, latent growth mixture modelling was conducted to examine self-report and parent-report of child post-traumatic stress symptom patterns following trauma. The effect of demographic and acute risk factors on trajectory patterns was examined. Results are discussed in terms of both clinical and research methodological implications.

**Paper Presentation**
**Thursday, November 7**
**1:30 p.m. to 2:45 p.m.**
**Grand Ballroom B**

**Post-Traumatic Growth, Post-Traumatic Depreciation and Recovery in Psychological Distress – a Six Year Longitudinal Study after a Natural Disaster**
(Assess Dx/Disaster/M/Industrialized)

**Therup Svedenlöf, Charlotte, Doctoral Student; Michélsen, Hans, PhD, Cpsych; Schulman, Abbe, MD, PhD**
*Karolinska Institutet, Huddinge, SE-14183, Sweden*

Many studies show that after a natural disaster, most survivors recover psychologically. Some develop post-traumatic growth after certain types of trauma. Studies taking a longitudinal approach or focus on negative developments post-trauma have been uncommon. The General Health Questionnaire (GHQ12) and Impact of Event Scale-Revised (IES-R) were used to evaluate psychological distress and post-traumatic stress symptoms of 848 Stockholm residents who survived the 2004 tsunami disaster in Southeast Asia. Data was gathered 14 months, 3 years, and 6 years post-disaster. The third survey included Post-traumatic Growth Inventory of 21 questions (PTGIpos), with the same questions negatively formulated regarding depreciation (PTGIneg). Survivors were grouped into different exposure combinations (presence in water, serious injury, life threat, loss). Changes were analysed using logistic regression for proportional odds, controlled for sociodemographic data and exposure. Spearman rank order correlation was used for outcome variables. Significant recovery emerged in GHQ12 and IES-R. For IES-R, exposure groups showed parallel recovery, but not for GHQ12. Results for PTGIpos and neg varied -- multiple-exposure groups showed greater change. PTGIpos and PTGIneg were significantly correlated by 0.7. Symptom changes (GHQ12, IES-R) and positive versus negative life views (PTGI) will be addressed.
Resilience in the Aftermath of Child Maltreatment: Findings from LONGSCAN
(Res Meth/Child/Adol/M/Industrialized)

Lauterbach, Dean, PhD, McCloskey, Wilfred, BS, Iwanicki, Sierra, MA, PhD Student, Poehacker, Stefanie, BS, Savoy, Samantha, BS; McConaughey, Ashley, BS
Eastern Michigan University, Ypsilanti, Michigan, USA

Representative probability studies of adolescents indicate that child maltreatment occurs with alarming frequency (Hussey et al., 2006). Relatively little is known about the trajectories of internalizing symptoms among these children. The current study had three objectives. First, the number and shape of internalizing symptom trajectories were examined in a large ($N = 1354$) sample of children (48.5% boys) who were either abused or at elevated risk for abuse. Second, potential predictors of trajectory class membership were examined. Third, the relationship between trajectory class membership and later-life academic performance was examined. The current paper used data from the LONGSCAN study, a longitudinal investigation of risk and protective factors for child maltreatment. Latent class symptom trajectories for internalizing symptoms were examined across five assessment points (4, 6, 8, 10, and 12 years of age). Preliminary analyses supported a four-class model with the following symptom patterns: low-stable, low-increasing, moderate-decreasing, and moderate-increasing. Data will be presented on factors predictive of resilient symptom patterns (i.e., childhood temperament, peer support, and functional support received by parents) and the relationship between trajectory class membership, growth factors (i.e., slope and intercept), and academic performance at age 14.
Concurrent Session Three

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Grand Ballroom A

Efficacy of Prolonged Exposure Therapy in Patients with Complex Comorbidities
(Clin Res/Violence/M/Industrialized)

Chair: Kehle-Forbes, Shannon, PhD; Discussant: Yusko, David, PsyD

1 Minneapolis VA Health Care System, Minneapolis, Minnesota, USA
2 University of Pennsylvania, Philadelphia, Pennsylvania, USA

Prolonged exposure therapy (PE) is an evidence-based treatment for post-traumatic stress disorder (PTSD) and is recommended as a first-line treatment for Veterans and civilians. Individuals with complex comorbidities (e.g. substance use, active self-harm, psychosis) have typically been excluded from PE trials, and clinicians have been reluctant to utilize PE in these populations due to concerns about symptom exacerbation. Given the high rates of comorbidity among individuals with PTSD, these perceived contraindications have limited the reach of PE. This symposium presents PE efficacy and effectiveness data for individuals with PTSD and comorbid substance use, psychotic, and borderline personality disorders.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Grand Ballroom A

Concurrent Treatment of Co-morbid Alcohol Dependence and Post-Traumatic Stress Disorder with Naltrexone and Prolonged Exposure Therapy: A Randomized Control Trial
(Clin Res/Violence//Industrialized)

Foa, Edna, PhD; Yusko, David, PsyD, McLean, Carmen, PhD, Suvak, Michael, PhD, Volpicelli, Joseph, MD PhD

1 University of Pennsylvania, Philadelphia, Pennsylvania, USA
2 University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA
3 Suffolk University, Boston, Massachusetts, USA
4 Institute of Addiction Medicine & Temple University, Plymouth Meeting, Pennsylvania, USA

In this lecture I will present the results of a treatment study with 165 individuals who suffered comorbid alcohol dependence and post-traumatic stress disorder. Participants were randomly assigned to 1) prolonged exposure (PE)/naltrexone; 2) PE/pill placebo; 3) naltrexone; 4) pill placebo. All participants received supportive counseling. Dose of naltrexone was 100/mg/day. PE comprised 12-18 90-minute sessions. The results indicated that drinking and post-traumatic stress disorder symptom severity decreased significantly in all conditions. Six months after
treatment discontinuation, participants in the PE/naltrexone condition reported fewer days-drinking during than the remaining 3 groups. Also, six months after treatment discontinuation, 70.0% participants in the PE/naltrexone condition, 55.0% in the PE/placebo, 43.9% in the supportive counseling/naltrexone, and 37.2% in the supportive counseling/placebo condition, scored 10 or lower on a measure of post-traumatic stress symptoms, indicating low level of post-traumatic stress symptom severity. Importantly, the results indicated that PE and its combination with naltrexone does not increase alcohol use or post-traumatic stress disorder symptom severity in patients with comorbid alcohol dependence and post-traumatic stress disorder; rather, the combined treatment enhances maintenance of treatment gains.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Grand Ballroom A

The Treating Trauma In Psychosis (T-TIP) Study: A Randomized Clinical Trial of the Effects of Prolonged Exposure and EMDR in PTSD Patients with Comorbid Psychotic Disorders.
(Clin Res/Adult/Cmplx//Industrialized)

van Minnen, Agnes, 1, van den Berg, David, MA2, de Bont, Paul, MA1, van der Vleugel, Berber, MA3, de Jongh, Ad, MA1; van der Gaag, Mark, MA5
1 Radboud University, Nijmegen, Gelderland, Netherlands
2 ParnassiaBavoGroup, den Haag, Zuid-Holland, Netherlands
3 Universiteit van Amsterdam, Amsterdam, Noord Holland, Netherlands
4 University of Amsterdam, Amsterdam, Noord-Holland, Netherlands
5 VU University, Amsterdam, Noord Holland, Netherlands

Many patients with psychosis suffer from co-morbid PTSD. However, these patients are typically excluded from trauma-focused treatments, because it is feared that given their severe comorbidity, patients may suffer adverse events during trauma-focused treatments (e.g. symptoms exacerbation, drop-out). The study’s objective was to study the effects and safety of trauma-focused treatments for these patients. Patients with a psychotic disorder and PTSD (n = 150) were randomly assigned to three conditions: 8 weekly 90-minute treatment sessions of Prolonged Exposure or EMDR or to a waiting list condition. Primary outcome measure was PTSD-symptom severity (interview- CAPS and self-report (PSS-SR), secondary outcome measures were psychotic symptoms, (social) functioning and adversities (e.g. drop-out, hospitalization, crisis contacts, suicide rates, non-suicidal self-injury, increase in psychotic symptoms). The main results of the study will be presented. Both PE and EMDR were found to be effective, and were more effective than waiting list. During the treatments, there were no more adversities in the treatment groups than in the waiting-list group, and drop-out was low. It can be concluded that PTSD-patients with co-morbid psychosis can be treated successfully and safely with trauma-focused treatments that have been found to be effective in other populations of PTSD patients.
Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Grand Ballroom A

Prolonged Exposure Therapy and Motivational Enhancement Therapy for the Treatment of Comorbid PTSD and Substance Use Disorders in Veterans
(Clin Res/Mil/Vets//Industrialized)

Kehle-Forbes, Shannon, PhD¹, Polusny, Melissa, PhD², Drapkin, Michelle, PhD³, Yusko, David, PsyD⁴, Van Horn, Deborah, PhD⁵, Koffel, Erin, PhD⁶, Foa, Edna, PhD⁷, Oslin, David, MD⁸
¹Minneapolis VA Health Care System, Minneapolis, Minnesota, USA
²Minneapolis VAHCS, Center for Chronic Disease Outcome Research, University of Minnesota Medical School, Minneapolis, Minnesota, USA
³University of Pennsylvania; Philadelphia VAMC, Philadelphia, Pennsylvania, USA
⁴University of Pennsylvania, Philadelphia, Pennsylvania, USA

Post-traumatic stress disorder (PTSD) and substance use disorders (SUD) are two of the most commonly co-occurring mental health problems among Veterans. We will present preliminary data from a clinical trial examining the efficacy and program effectiveness of a treatment program consisting of four weekly sessions of motivational enhancement therapy (MET) and 12 weekly sessions of prolonged exposure therapy (PE). To date, we have enrolled 51 Veterans who met criteria for PTSD and a SUD (abuse or dependence) and we have pre- and post-treatment data for 35 Veterans. Pre-to post-treatment analyses of the intent-to-treat (ITT) sample showed a significant reduction in PTSD symptoms as measured by the PTSD Symptom Scale Interview (PSSI; t(30) = 4.08, p < .001) and a reduction in alcohol use as measured by the Brief Alcohol Monitor (BAM; t(33) = 3.54, p = .001). Contrary to our hypotheses, the preliminary results with the ITT sample do not show a significant difference in self-reported PTSD (d = .33) or depressive symptoms (d = .03). Completer analyses and pre-treatment predictors of dropout will also be presented. These preliminary results suggest that Veterans with comorbid PTSD and SUD can benefit from a 16 week treatment protocol consisting of PE and MET.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Grand Ballroom A

Treatment of Veterans with Concurrent Prolonged Exposure Therapy and Dialectical Behavior Therapy in an Intensive Outpatient Program
(Clin Res/Mil/Vets//Industrialized)

Meis, Laura, PhD, Meyers, Laura, PhD, Velasquez, Tina, BS, Voller, Emily, PhD, Thuras, Paul, PhD, Kehle-Forbes, Shannon, PhD
Minneapolis VA Health Care System, Minneapolis, Minnesota, USA

Rates of comorbidity between borderline personality disorder (BPD) and post-traumatic stress disorder (PTSD) are high in Veteran populations (Southwick et al., 1993). Clinicians are often hesitant to deliver prolonged exposure therapy (PE) to Veterans with BPD due to concerns about self-harm. Moreover, when these individuals are accepted into PE, they are more likely to drop out and less likely high end-state functioning than patients without...
BPD (Feeny et al., 2004). Given promising results of integrating PE and Dialectical Behavior Therapy (DBT; Harned et al., 2012), we implemented an intensive outpatient program that integrates DBT and PE. The 12-week program involves concurrent individual DBT sessions, skills group training, and individual PE sessions. To date, 7 Veterans with PTSD and clinically significant BPD symptoms have completed the program. Veterans were administered the PTSD Checklist (PCL), DBT Ways of Coping (WoC), the Depression Anxiety Stress (DASS), and the Post-traumatic Cognitive Inventory (PTCI) at pre- and post-treatment. The magnitude of change as measured by the PCL (d = 2.29), WoC (d = -1.30), DASS (1.39), and PTCI (1.56) was large. We anticipate full data for 30 individuals by November 2013. Preliminary findings suggest integrating DBT and PE in an intensive outpatient setting may be an effective means of treating Veterans with PTSD and BPD.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Grand Ballroom D

Acceptance and Commitment Therapy (ACT) for PTSD: Treatment development and preliminary outcomes
(Clin Res/Mil/Vets/M/Global)

Chair: Meyer, Eric, PhD1, Discussant: Batten, Sonja, PhD2
1VISN 17 Center of Excellence for Research on Returning War Veterans, Waco, Texas, USA
2VA Office of Mental Health Services, Washington, District of Columbia, USA

This symposium will provide a brief overview of Acceptance and Commitment Therapy (ACT) and how ACT is applied in treating PTSD, particularly with military Veterans. ACT is a transdiagnostic, evidence-based, acceptance and mindfulness-based approach to psychotherapy. Data presentations will include preliminary treatment outcome data from several studies conducted with military Veterans: 1) A pilot study of individual ACT for PTSD; 2) A pilot study of individual ACT for co-occurring PTSD and substance use disorders; 3) A review of uncontrolled studies of group ACT for PTSD; and 4) A randomized controlled trial of individual ACT for a range of mental health problems, focusing particularly on outcomes for participants with PTSD. Issues related to treatment manual development and therapist training will be addressed. Findings across presentations will be integrated and discussed in the context of the literature on evidence-based psychotherapy for PTSD.
Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Grand Ballroom D

Acceptance and Commitment Therapy for the Treatment of PTSD: Two Pilot Studies
(Practice/Mil/Vets/Industrialized)

Walser, Robyn, PhD\textsuperscript{1}, Sears, Kathrine, PhD\textsuperscript{2}, Young, Katherine, MA\textsuperscript{3}
\textsuperscript{1}National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Palo Alto, California, USA
\textsuperscript{2}Academic Medical Center, Palo Alto, California, USA
\textsuperscript{3}Academic Medical Center, Menlo Park, California, USA

Acceptance and Commitment Therapy (ACT) is a principle-based behavioral intervention designed to address human suffering in a mindful and compassionate way. ACT also aims to support individuals in engaging commitments to behavior change consistent with personal values and well-being. While ACT has been applied to a wide variety of problems, it is well suited to the treatment of trauma, but has only begun to be investigated for its effectiveness with this population. Furthermore, current drop-out and refusal rates for exposure-based therapies, the main empirically supported intervention for the treatment of post-traumatic stress disorder (PTSD), necessitate the development of alternative treatments. The current pilot studies evaluated a 12-session individual and group ACT intervention with 11 and 6 Veterans, respectively, diagnosed with PTSD. Significant differences in assessment of PTSD symptoms from pre to follow-up were found (n = 8; \(d=1.17\)) for the individual intervention. Non-significant decreases were found for the group. Decreases in thought suppression as well as increases in aspects of mindfulness and psychological flexibility were also found, but differed by individual versus group. This paper will provide a brief overview of ACT and present the findings from this pilot work. Discussion will include future directions of ACT as a treatment for PTSD.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Grand Ballroom D

Acceptance and Commitment Therapy for Co-occurring PTSD/SUD: Manual Development and Pilot Outcomes
(Clin Res/Mil/Vets/Industrialized)

Hermann, Barbara, PhD\textsuperscript{1}, Meyer, Eric, PhD\textsuperscript{2}, Schnurr, Paula, PhD\textsuperscript{3}, Batten, Sonja, PhD\textsuperscript{3}, Walser, Robyn, PhD\textsuperscript{4}
\textsuperscript{1}VA National Center for PTSD, Executive Division, White River Junction, Vermont, USA
\textsuperscript{2}VISN 17 Center of Excellence for Research on Returning War Veterans, Waco, Texas, USA
\textsuperscript{3}VA Office of Mental Health Services, Washington, District of Columbia, USA
\textsuperscript{4}National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Palo Alto, California, USA

Background: Substance abuse disorders (SUD) and post-traumatic stress disorder (PTSD) are frequently comorbid and confer worse outcomes when co-occurring than when presenting individually. Acceptance and Commitment Therapy (ACT) is a mindfulness-informed behavioral therapy that sees PTSD and SUD as functionally related and
has been suggested as a potential integrated treatment. Objective: This trial involved the development and pilot
testing of an ACT-based treatment targeting PTSD/SUD. Methods: An individual 12-session ACT protocol targeting
PTSD/SUD was drafted, administered within a VA setting, and revised based on weekly consultation calls. Results:
Preliminary analyses during the trial on data from 7 treatment completers indicated pre-post decreases in PTSD,
substance use, and experiential avoidance, a possible ACT mechanism, although changes were not statistically
significant. Ratings of treatment credibility and satisfaction were high. In this presentation, analyses on data from
all 9 treatment completers and 3-month follow-up data will be presented. How the consultation process and
outcomes data were used to revise the manual will also be discussed. Conclusions: A transdiagnostic therapy for
PTSD/SUD like ACT may increase treatment efficiency. This preliminary study yielded a manual and suggests that
ACT for PTSD/SUD is feasible and potentially effective.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Grand Ballroom D

Effectiveness of Group ACT Interventions in the Treatment of PTSD
(Clin Res/Mil/Vets/Industrialized)

Kirby, Angela, 1 Ulmer, Christi, PhD 1, Dennis, Paul, PhD 1, Roberts, Sushma, PhD 2, Beckham, Jean, PhD 3
1 Veterans Affairs Medical Center, Durham, North Carolina, USA
2 Department of Defense, Falls Church, Virginia, USA
3 Durham VAMC, Mid-Atlantic MIRECC, Duke University, Durham, North Carolina, USA

Acceptance and Commitment Therapy (ACT) is a therapeutic intervention with the theoretical underpinning that
experiential avoidance underlies psychopathology. Because avoidance and numbing symptoms are inherent in
post-traumatic stress disorder (PTSD), ACT may be uniquely suited to treat the disorder. Initial research
investigating the effectiveness of ACT for veterans with PTSD has been promising, but evidence of the
effectiveness of group ACT interventions is lacking. The purpose of this pilot study was to examine the
effectiveness of a 12-week group ACT intervention in treatment of PTSD and associated symptoms in veterans. A
total of 25 veterans participated in the group intervention; 18 completed the intervention (76% completion rate).
Veterans who completed the intervention experienced significant decreases in PTSD as measured by the Davidson
Trauma Scale, t(8) = 2.77, p = .02, and in comorbid depression symptoms as measured by the Beck Depression
Inventory t(16) = 2.63, p = .02. Effect sizes ranged from medium (for BDI, d = .64) to large (for DTS, d = .92).
Experiential avoidance and inaction, as measured by the Acceptance and Action Questionnaire, significantly
decreased, F(1, 10) = 5.73, p = .04, with a medium effect size (d = .44). Preliminary results suggest that group ACT
intervention may be an effective and implementable treatment for veterans with PTSD.
Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Grand Ballroom D

A Randomized Trial of Acceptance and Commitment Therapy (ACT) in OEF/OIF/OND Veterans with PTSD
(Clin Res/Mil/Vets//Industrialized)

Schnurr, Paula, PhD, Lang, Ariel, PhD, Raman, Rema, PhD, Walser, Robyn, PhD, Bolton, Elisa, PhD, Benedek, David, MD, Norman, Sonya, PhD, Sylvers, Patrick, PhD, Flashman, Laura, PhD, Strauss, Jennifer, PhD, Chard, Kathleen, PhD

1VA National Center for PTSD, Executive Division, White River Junction, Vermont, USA
2UC San Diego / VA San Diego Health Care System, San Diego, California, USA
3National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Palo Alto, California, USA
4Banner Behavioral Health, Providence, Rhode Island, USA
5Center for the Study of Traumatic Stress, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA
6Veterans Affairs Puget Sound Health Care System; Department of Psychiatry and Behavioral Sciences, University of Washington, Seattle, Seattle, Washington, USA
7Dartmouth Medical School, Hanover, New Hampshire, USA
8Durham VA Medical Center, Durham, North Carolina, USA
9Cincinnati VA Medical Center & University of Cincinnati, Cincinnati, Ohio, USA

Most evidence-based treatments for PTSD involve trauma focus through techniques such as exposure or cognitive restructuring. Acceptance and Commitment Therapy (ACT) is a transdiagnostic psychotherapy that offers an alternative to trauma-focused treatment. Although trauma is not avoided in ACT, therapy focuses on mindfulness and behavior change techniques to help individuals modify their behavior to reflect their values and goals. Prior open trials suggest that ACT is effective for PTSD. We conducted a randomized clinical trial comparing ACT to Present Centered Therapy (PCT) in 160 Veterans from 5 VA sites; we also conducted an open trial of ACT with 20 Servicemembers. Participants had either anxiety disorder, depressive disorder, or persistent postconcussive symptoms. Treatment was delivered over 12 individual sessions by trained clinicians. Participants were assessed before, during, and after treatment and at 3-12 month follow-up. Distress measured by the Brief Symptom Inventory-18 was the primary outcome. This presentation will focus on PTSD and other outcomes in the subgroup of 106 Veterans with PTSD. Data analysis is ongoing. Mixed effects modeling will be used to examine differences between the treatment groups over time on the outcomes of interest. Next steps in evaluating ACT and transdiagnostic treatment for trauma survivors will be discussed.
Understanding PTSD Risk in Children: Recent work on Incidence, Risk Factors, and Validation of Screening Measures
(Assess Dx/Child/Adol/M/Industrialized)

Chair: Kassam-Adams, Nancy, PhD
Children’s Hospital of Philadelphia, Philadelphia, Pennsylvania, USA

Understanding risk for PTSD in children exposed to acute trauma undergirds efforts to support optimal recovery and resilience. This symposium will present the results of recent research that addresses prevalence and risk factors for PTSD in trauma-exposed children, and advances the development of validated screening measures that can facilitate intervention. Two presentations draw from multiple studies of trauma-exposed children to examine (a) the incidence of PTSD via meta-analysis and (b) risk factors for PTSD via analyses of individual-level data from an international data archive. Two presentations present recent work to validate screening measures for PTSD risk or PTSD symptoms in new languages and populations. Symposium presentations will highlight implications of these findings for clinical practice with trauma-exposed children and for a future research agenda.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 5

A Meta-Analysis of PTSD Rates after Potential Trauma: How Many Children Are at Risk?
(Assess Dx/Child/Adol//Global)

Alsic, Eva, PhD\(^1\), Zalta, Alyson, PhD\(^2\), van Wesel, Floryt, PhD\(^3\), Larsen, Sadie, PhD\(^4\), Hafstad, Gertrud, PhD\(^5\), Hassanpour, Katayun, MD\(^6\); Smid, Geert, MD, PhD\(^7\)

\(^1\)Monash University, Melbourne, Australia, Australia
\(^2\)Rush University Medical Center, Chicago, Illinois, USA
\(^3\)Vrije Universiteit, Amsterdam, Netherlands, Netherlands
\(^4\)Clement J. Zablocki VA Medical Center, Milwaukee, Wisconsin, USA
\(^5\)Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway
\(^6\)University Hospital Zurich, Zürich, Switzerland
\(^7\)Centrum 45, Arq Research, Diemen, Netherlands

Post-traumatic stress disorder (PTSD) has been linked to long-term and serious consequences in children, including academic impairment, social difficulties, adverse health outcomes, and diminished quality of life. Yet, the percentage of children who are likely to develop PTSD following a traumatic experience remains unclear: prior research shows incidence rates varying from 0 to 100%. Our aim was to a) estimate the proportion of children who develop PTSD after exposure to potential trauma as diagnosed with well established clinical interviews, b) examine nature of the trauma (interpersonal vs. non-interpersonal), gender, informant (parent vs. child), and choice of
interview (e.g., CAPS-CA vs. ADIS-C/P) as potential moderators of this estimate, and c) if found to be relevant, report separate estimates for the identified subgroups. Via a systematic search in PsychInfo, PubMed, EMBASE, PILOTS and reference lists of systematic reviews, we identified 41 independent eligible studies. Approximately 16% of the children developed full PTSD after exposure, with significant differences related to nature of the trauma and gender. In the presentation, we will report on the characteristics of the studies and the weighted incidence of PTSD for the subgroups. This study originates from the 'Paper in a Day' workshop for young international researchers at the ISTSS conference in 2012.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 5

Using an International Data Archive to Understand Predictors of PTSD
(Assess Dx/Child/Adol/Industrialized)

Kassam-Adams, Nancy, PhD1, Kenardy, Justin, PhD2, Delahanty, Douglas, PhD3, Palmieri, Patrick, PhD4, Nixon, Reginald, PhD5, Meiser-Stedman, Richard, PhD6, Landolt, Markus, PhD7
1 Children’s Hospital of Philadelphia, Philadelphia, Pennsylvania, USA
2 University of Queensland Schools of Psychology and Medicine, Herston, QLD, Australia
3 Kent State University & Northeast Ohio Medical University, Kent, Ohio, USA
4 Center for the Treatment and Study of Traumatic Stress, Summa Health System, Akron, Ohio, USA
5 Flinders University, School of Psychology, Adelaide, South Australia, Australia
6 Cambridge, Cambridge, United Kingdom
7 Zurich University, Zurich, Switzerland

The PTSD after Acute Child Trauma (PACT) Archive contains existing datasets from more than 20 prospective studies conducted since 1999 in the US, Australia, and Europe. Together, these studies assessed more than 3000 children exposed to acute traumatic events. The archive represents a unique resource for examining child traumatic stress after acute events in non-clinical samples. Half of the studies assessed children within 24 hours of a traumatic event; all assessed PTS outcomes (usually 6 to 12 months post-trauma). Studies were conducted in industrialized countries but half of the children included were of ethnic minority status. Integrative data analysis of individual-level data from these combined datasets complements meta-analytical approaches, but also presents new challenges. We will describe potential early predictors of PTSD risk available in this large combined sample (e.g., acute stress reactions, pre- and peri-trauma variables), identify key potential predictors that are not well-represented in the available data, and report on the association of potential predictors with PTSD outcomes. The presentation will discuss characteristics of existing studies and datasets, challenges associated with examining multi-item prediction tools in data drawn from multiple studies, and implications for future research on early risk factors and PTS symptom development in children.
A Screening Tool for PTSD in Children
(Assess Dx/Child/Adol//Industrialized)

Verlinden, Eva, MS, PhD Student, van Meijel, Els, MS, PhD Student, Boer, Frits, MD, MBA, Lindauer, Ramón, MD, PhD
Academic Medical Center, University of Amsterdam, Amsterdam, Noord-Holland, Netherlands

Early identification of PTSD in children is important in order to offer them appropriate and timely treatment. The Children’s Revised Impact of Event Scale (CRIES) is a brief self-report measure designed to screen children for PTSD. The purpose of this study was to evaluate the reliability and validity of the CRIES-8 (8-item version) and CRIES-13 (13-item version) and to determine the best cut-off score in a large clinically referred sample exposed to a wide variety of traumatic events. The CRIES was completed by 398 children (7-18 years) who had experienced various traumatic events. PTSD was assessed using a diagnostic interview (ADIS-C/P). According to the child diagnostic interview, 45% met DSM-IV diagnostic criteria for PTSD. A cut-off score of 17 on the CRIES-8 and 30 on the CRIES-13 emerged as the best balance between sensitivity and specificity, and correctly classified 78-81% of all children. The CRIES-13 outperformed the CRIES-8, in that the overall efficiency of the CRIES-13 was slightly superior. All in all, the CRIES appears to be a reliable and valid measure to screen for PTSD in children, which gives clinicians a brief and user-friendly instrument to identify children with PTSD and offer them appropriate and timely treatment.

Screening for Risk of Post-Traumatic Stress Disorder in Children, Adolescents and Parents following accidents: Evaluation of a Screening Tool
(Assess Dx/Child/Adol//Industrialized)

van Meijel, Els, MS, PhD Student, Gigengack, Maj, MSc, Verlinden, Eva, MS, PhD Student, Boer, Frits, MD, MBA, Lindauer, Ramón, MD, PhD
Academic Medical Center, University of Amsterdam, Amsterdam, Noord-Holland, Netherlands

Accidental trauma is an important cause of post-traumatic stress disorder (PTSD) in children, adolescents and their parents. Despite the fact that accidents are widespread, systematic attention in hospital for the psychological consequences of accidents is still not common practice. Screening for risk of PTSD is a method to effectively identify those who need monitoring and treatment, thus contributing to the prevention of chronic PTSD. In this study we validated the Screening Tool for Early Predictors of PTSD (STEPP) for the Netherlands. Participants were 161 children, aged 8-18, following accidental trauma, and one of their parents. The STEPP was administered within one week of the accident. PTSD was assessed after three months, using an interview (ADIS C/P), and self-report measures (CRIES and IES). After adjustment of the cut-off score, the Dutch version of the STEPP correctly identified 89% of the children and 92% of the parents at risk of PTSD. Due to low prevalence of PTSD, specificity was low but
Negative Predictive Value was .94 for children, and .96 for parents. Performance of the Dutch version of the STEPP (STEPP-NL) and implications for clinical practice in hospital will be discussed.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 6

Assessing Risk Factors to Predict Disorder and Violence in Military and Veteran Populations
(Practice/Mil/Vets/M/ N/A)

Chair: Elbogen, Eric, PhD, ABPP1, Discussant: Hoge, Charles, MD2
1University of North Carolina, Chapel Hill & VISN 6 MIRECC, Chapel Hill, North Carolina, USA
2Walter Reed Army Institute of Research (WRAIR), Silver Spring, Maryland, USA

Most military personnel who are deployed experience high levels of stress and one or more traumatic stressors, many experience anxiety and depression long after they leave military service, and a relatively small proportion later behave violently. But accurately identifying which individuals will suffer persistent depression and/or anxiety if untreated or which will later behave violently has proved challenging. This symposium will describe research in military and veteran populations focused on risk assessment. One study analyzes the capacity of a set of items assessing risk factors at the time of return from deployment to predict PTSD in military personnel 6-9 months later. The second measure uses items assessing risk factors in veterans seeking primary care at a VA medical center to PTSD 6 months later. The third study examines the association of risk and protective factors with future violent behavior to develop an empirically-supported risk screen for veterans.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 6

Using Risk Factors to Predict Chronic Mental Health Problems in Veterans Seeking Primary Care
(Assess Dx/Mil/Vets//Industrialized)

Carlson, Eve, PhD1, Palmieri, Patrick, PhD2, Eisen, Susan, PhD3, Vogt, Dawne, PhD4
1National Center for PTSD, VA Palo Alto Health Care System, Menlo Park, California, USA
2Center for the Treatment and Study of Traumatic Stress, Summa Health System, Akron, Ohio, USA
3Department of Veteran Affairs Medical Center, Bedford, Massachusetts, USA
4National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

To develop and validate the Veterans Mental Health Risk Screen (VMHRS), items to assess a wide range of risk factors (predeployment, deployment & warzone, and postdeployment psychosocial factors, including current life stress, moral injury, relationship stress, and current symptoms of PTSD, dissociation, depression, and anxiety) were selected based on analyses of data from a prospective study of 512 U.S. military studied soon after return from deployment in Iraq or Afghanistan and 6 months later (Susan Eisen, PI), a sample of 357 Gulf War veterans studied
10 years after deployment (Dawne Vogt, PI), a prospective study of 128 patients exposed to traumatic injury studied days after injury and 2 months later (Eve Carlson, PI), and a sample of 130 Iraq and Afghanistan vets who came to VA for primary care (Eve Carlson, PI). Items were administered to a new sample of veterans seeking VA primary care services and PTSD, depression, and alcohol use were assessed 6 months later. Analyses of data available to date (n=110) show that a set of seven risk factors assessed when seeking primary care had a sensitivity = .93 and specificity = .82 to predict PTSD 6 months later. If the performance remains strong when all data have been collected, the screen could be used to indicate which veterans are at risk for persisting mental disorder.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 6

Developing a Risk Screen for Violence in Veterans
(Practice/Mil/Vets/N/A)

Elbogen, Eric, PhD, ABPP1, Wagner, D. Ryan, PhD2, Beckham, Jean, PhD3
1University of North Carolina, Chapel Hill & VISN 6 MIRECC, Chapel Hill, North Carolina, USA
2Duke University Medical Center/Durham VAMC, Durham, North Carolina, USA
3Durham VAMC, Mid-Atlantic MIRECC, Duke University, Durham, North Carolina, USA

Violence toward others in the community has been identified as a serious problem in Iraq and Afghanistan Veterans. This study examines the association of risk and protective factors with future violent behavior in order to develop an empirically-supported risk screen for veterans. Using a national random sample, N=1090 Iraq and Afghanistan veterans, from 50 states and all military branches, completed two waves of data collection one year apart (retention rate=79%). Ten percent of veterans reported engaging in violent behavior in the previous year, indicating the majority of veterans did not report violence. History of violence was a strongest predictor in bivariate and multivariate analyses. This, combined with cumulative risk factors (younger age, high combat exposure, history of child abuse, PTSD, alcohol misuse, major depression) and protective factors (meeting basic needs, resilience, social support, employment, living stability, higher income) provided a robust screen for future violence in veterans (AUC=0.84). The data from this longitudinal study support use of such tools to help clinicians to help gauge a veteran’s level of risk as well as point to interventions that could potentially reduce veterans’ risk of community violence to others.
Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 6

Predicting Chronic Mental Health Problems in Military Personnel Following Deployment
(Assess Dx/Mil/Vets/Industrialized)

Palmieri, Patrick, PhD\(^1\), Carlson, Eve, PhD\(^2\), Eisen, Susan, PhD\(^3\), Vogt, Dawne, PhD\(^4\)

\(^1\)Center for the Treatment and Study of Traumatic Stress, Summa Health System, Akron, Ohio, USA
\(^2\)National Center for PTSD, VA Palo Alto Health Care System, Menlo Park, California, USA
\(^3\)Department of Veteran Affairs Medical Center, Bedford, Massachusetts, USA
\(^4\)National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

Identifying military personnel who will have chronic problems postdeployment has proved challenging because many who endorse symptoms upon return appear to recover within 3-6 months, and many who do not endorse symptoms upon return do report them 3-6 months later. We conducted analyses to identify a combination of current symptoms, predeployment, deployment, and postdeployment psychosocial risk factors that could predict post-traumatic mental health status 6 months postdeployment. In 512 military personnel who had recently returned from Iraq/Afghanistan, current symptoms were assessed with the BASIS and psychosocial factors were assessed with the DRRI. PTSD symptoms were assessed with the PCL 6-9 months later. For risk factors most strongly related to later PTSD, regression analyses determined the subset of items that accounted for ≥90% of the variance in the factor. ROC analyses examined the predictive capacity of combinations of risk factors as measured by the subsets of items. A 27-item screen assessing 6 risk factors predicted PTSD (PCL≥33) with sensitivity=.80 and specificity=.73 when respondents screened positive on ≥2 risk factors. If cross-validation in a new sample yields similar results, the Military Mental Health Risk Screen (MMHRS) could be a useful screen for risk of persistent post-traumatic mental health problems in military personnel returning from deployment.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 7

Social Ties, Social Bonds and Community Resilience: The Importance of Relationships in Post-trauma Mental Health in Low Resource Communities
(Global/Civil/Ref/I/Global)

Chair: Hall, Brian, PhD
Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA

Community social resources play a vital role in maintaining and promoting mental health within low-resource contexts. Measuring social networks offers a nuanced approach to identifying the role of social ecology in community resilience. Across different contexts and among diverse communities the complexities of social relationships and social support provision can be disentangled by evaluating social networks. This symposium
presents data from four unique contexts and populations, each providing information about the role of social networks to protect against the effects of trauma exposure. The first speaker will present data exploring the protective association between social capital on mental health and the social networks of war-exposed children in Burundi. The second speaker will present on the social network characteristics of forced and voluntary migrants from Western Africa. The third speaker will present on the role of religious organizations in fostering community resilience and as a foundation for social network ties in rural Kenya. The final speaker will draw on rich qualitative data to discuss how internally displaced persons in the Republic of Georgia create, navigate, and utilize social networks to seek support for mental health problems. The implications of these findings will be discussed with regard to leveraging social networks to promote community resilience.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 7

Mental Health Care-seeking and Connectedness among Long-Term Internally Displaced Persons in the Republic of Georgia
(Commun/Civil/Ref/C & E Europe & Indep)

Singh, Namrita , MSc
Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA

We examined mental health care-seeking behaviors among Georgian internally displaced persons (IDPs) living in protracted urban displacement. The study’s aims are 1) to describe mental health care-seeking trajectories and preferences and 2) to examine how care-seeking to formal services and informal support structures reflects perceptions of local integration and inter-connectedness. From 2010-12, we conducted in-depth interviews with local practitioners and IDPs who were living in urban shelters. Results demonstrated limited availability of formal mental health services and a preference for informal care, with emphasis placed on religious advisors. Regular socializing, sharing, and interpersonal support were found to be key modes of coping with everyday struggles and mental health problems. Participants expressed an interest in mental health counseling and psychosocial services but were mostly unaware of available providers. However, participants tended to link psychiatric care with serious mental illnesses such as schizophrenia and psychosis. Two conceptual models were developed. The first was of care pathways and modes of social support, and the second was of linkages between care-seeking and integration. Results will be discussed with regard to the development of community mental health services that build on existing social support mechanisms and treatment preferences.
Social Networks among West Africans in New York City: Comparing Refugees and Voluntary Immigrants
(Commun/Civil/Ref//Industrialized)

Rasmussen, Andrew, PhD, Kanji, Adam, Undergraduate, Roubeni, Sonia, MA
Fordham University, Bronx, New York, USA

Research on resettled refugees’ wellbeing is hampered by two limitations: (1) a focus on individual-level trauma responses at the expense of community-level social ecology – e.g., social networks – and (2) a lack of comparison to voluntary immigrants. We present data from a research project examining help-seeking networks among West African immigrants in New York City. Refugees and asylum seekers make up large proportions of these communities, making them appropriate populations for comparing the effects of forced and voluntary migration. Social networks are associated with help-seeking behavior among immigrants and health outcomes in general, and in many ways forced migrants’ networks should resemble those of voluntary migrants; alternatively, forced migrants’ trauma and migration history may attenuate the size and effectiveness of networks. Preliminary results from 93 families partially support the latter, with forced migrants reporting smaller networks of institutions that they rely upon for childcare. The association between forced migration and smaller networks was (1) associated with trauma exposure but not psychological distress; and (2) parallel to findings among undocumented immigrants within the sample. Models of forced migrants’ social ecological wellbeing must account for migration history as well as trauma exposure, and may not include post-traumatic stress.

Religion and Resilience: The capacity of the Church to Provide Psychosocial Support to Children and Families in a Community in Rural Kenya
(Global/Child/Adol//E & S Africa)

Puffer, Eve, PhD\(^1\), Green, Eric, PhD\(^1\), Broverman, Sherryl, PhD\(^1\), Pian, Jessica, MSc\(^2\), Sikkema, Kathleen, PhD\(^1\)
\(^1\)Duke University, Durham, North Carolina, USA
\(^2\)London School of Hygiene and Tropical Medicine, London United Kingdom

Religion and social networks within congregations are sources of strength for people around the world. In developing countries with little infrastructure and access to mental healthcare, religious organizations are often one of few sources of consistent social and emotional support. The first purpose of this mixed-methods study was to explore associations between adolescent trauma and support-seeking behavior in a rural Kenyan community with high rates of poverty, HIV, and trauma exposure due to parental death and domestic violence. The second was to examine the capacity of churches to provide emotional support to adolescents and their families. Participants were 210 adolescents aged 10 to 16 and 16 church leaders across 4 congregations. Higher levels of traumatic stress were associated with more emotional support seeking from the church, $\hat{\beta} = 0.51$, $t(198) = 2.60$, $p$
<.05. All leaders reported that teaching about and supporting emotional health was a role of the church and expressed moderate comfort addressing the topic; however, fewer than 15% reported feeling very qualified to do this. Quantitative and qualitative data suggest that adolescents and leaders are receptive to churches as settings for psychosocial support for trauma, but that interventions are needed to build the necessary knowledge and skills for the church to be able to deliver these services effectively.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 7

Evaluating the Longitudinal Association between Cognitive Social Capital, Social Support Networks and Mental Health Problems in a Sample of Children Affected by Armed Conflict in Burundi
(Global/Child/Adol/E & S Africa)

Hall, Brian, PhD¹, Tol, Wietse, PhD¹, Jordans, Mark, PhD², Komproe, Ivan, PhD³, de Jong, Joop, PhD⁴
¹Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA
²HealthNet TPO, London School of Hygiene and Tropical Medicine, Amsterdam, Netherlands
³HealthNet TPO/Utrecht University, Amsterdam, Netherlands
⁴Vrije Universiteit, Amsterdam, Netherlands

Exposure to war is associated with adverse mental health outcomes in children. Social capital may both protect against the impact of armed conflict and may promote positive mental health outcomes, but this has not yet been investigated in longitudinal studies. The current study evaluated the longitudinal relationship between cognitive social capital and mental health (post-traumatic stress disorder symptoms, depression, and functional impairment) and social support network size in 176 conflict-exposed children in Burundi. Cross-lagged path analytic models suggest a unidirectional association between these constructs over time such that social capital is associated with significantly lower depression and functional impairment at each measurement occasion (from baseline to 6-week follow-up (β=.27/β=.15), and 6-week to 4-months follow-up (β=.22/β=.20). Social capital was also associated with larger social network size from 6-weeks to 4-months follow-up (β=.22). Implications of these results for community mental health interventions within post-conflict settings will be discussed.
Integration of Mental and Behavioral Health Services Following Disasters to Support Resilience
(Commun/Disaster/M/Global)

Chair: Osofsky, Howard, MD, PhD
Discussant: Buckner, Ayanna, MD, MPH

1 LSU Health Sciences Center, New Orleans, Louisiana, USA
2 University of Pittsburgh, Pittsburgh, Pennsylvania, USA

Massive disasters such as hurricanes, earthquakes, tsunamis, tornadoes, flooding, and fires impact both physically and psychologically on adults and children due to destruction and loss, economic impact, forced separations from communities, and accompanying stresses. Disasters with slow recovery and multiple complexities (a combination of natural and technological disasters) can be especially difficult resulting in acute and chronic psychological effects. Families in the Gulf region have had to cope with multiple disasters with the latest being the devastation caused by the Deepwater Horizon Incident (Gulf Oil Spill) resulting in cumulative traumatization and indications of community corrosion. Early provision of mental and behavioral health services following disasters is a sustainable and cost-effective way to prevent exacerbation of negative mental health problems and promote well-being for individuals and strengthen communities. The symposium will emphasize the importance of applying scientific knowledge to disaster preparation and response and integrating mental and behavioral health services in order to build resilience and enhance recovery.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 9/10

Developmental Perspectives on Resilience
(Commun/Disaster/Global)

Masten, Ann, PhD
University of Minnesota, Minneapolis, Minnesota, USA

Research on human resilience emerged more than half a century ago as scientists studying risk in the origins of psychopathology recognized the striking variation among individuals exposed to trauma and adversity and the importance of understanding adaptive processes and pathways for intervening to promote resilience. Research on disasters as well as other catastrophic exposures with massive terror and destruction played a central role in shaping the models, methods, and conclusions in resilience science, continuing today. Grounded in this history, this presentation will summarize the most recent advances in developmental theory and findings on resilience, highlighting research pertinent to disaster, with a focus on lessons learned for a developmentally strategic approach to disaster preparedness and future research. Growing evidence indicates that developmental timing plays a crucial role in dose-response patterns, biological embedding of trauma, effective interventions, and
intergenerational transmission of consequences. It will be argued that developmental perspectives can inform research, policy and preparedness for disaster, across system levels, sectors, and the life course.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 9/10

Community Collaboration in Building Resilience and Sustainability
(Commun/Disaster/Global)

Palinkas, Lawrence, PhD
University of Southern California, Los Angeles, California, USA

Although several evidence-based practices are available for the treatment and mitigation of mental and behavioral health problems subsequent to a natural or technological disaster, the effectiveness and implementation of such practices require both a maximum of community engagement and support and a minimum of community conflict. Previous studies of disasters have documented increased levels of social conflict and reduced levels of social support which are related to increased rates of substance use and abuse, psychiatric disorders, stress-related chronic disease, and domestic violence. Further, communities characterized as socially “toxic” in the aftermath of a disaster are less likely to implement evidence-based interventions and practices, much less provide or equitably distribute resources and support necessary for the effectiveness of these interventions. Drawing from empirical investigations of disaster-impacted communities and theories of community coalitions that support the implementation and sustainability of evidence-based prevention practices, this presentation describes an approach to building community resilience and support prior to the occurrence of a disaster designed to reduce the incidence and impact of community conflict arising from the inevitable disparities in exposure to the disaster itself and access to services and resources subsequent to the event.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 9/10

Resilience Building Programs in Schools and Communities
(Commun/Disaster/Global)

Osofsky, Joy, PhD
LSU Health Sciences Center, New Orleans, Louisiana, USA

Trauma and disasters touch the lives of millions of children every year in many forms. It is not possible to be fully prepared for traumatic experience and disasters. Nevertheless, research findings suggest that individuals, families, and communities can take steps to support recovery and promote resilience in situations of overwhelming adversity. There are lessons learned for preventive intervention that can guide response. This presentation will present developmental perspectives from natural and technological disasters including the impact on young children, school age children and adolescents and consider the impact of both individual and cumulative disasters including the cascading effects and how they impact on response and recovery. Further emphasis will be placed on ways to build individual, family and community resilience following such adversities. Our team at LSU Health
Sciences Center has developed a nationally recognized youth leadership resilience building program with a highly impacted school system following Hurricane Katrina. The Mental and Behavioral Health Capacity Project, which is part of the Gulf Region Health Outreach Program, has collaboratively expanded efforts to culturally diverse rural school districts and community programs. Preliminary data and implications from these initiatives will be presented.

**Symposium**
**Thursday, November 7**
**3:00 p.m. to 4:15 p.m.**
**Franklin 9/10**

**Integrated Mental and Behavioral Health Care in Primary Care Clinics to Build Resilience**
(Commun/Disaster/Global)

**Ososky, Howard, MD PhD**
*LSU Health Sciences Center, New Orleans, Louisiana, USA*

The Louisiana Mental and Behavioral Health Capacity Project, part of the Gulf Region Health Outreach Program, is implementing a model to provide best-practice, sustainable mental health services to primary care clinics for underserved populations impacted by natural and technological disasters. Drawing from literature on integrated care initiatives, we developed a model for collaborative care culturally tailored to the needs of the unique communities of coastal Louisiana. On-site consultation and treatment in collaboration with primary care providers are offered to better understand their needs. As the geographical area is vast and often poorly accessible, tele-technology is provided by the same clinicians to offer best-practice psychiatric and psychological services for groups and individuals. Based on reports from primary care providers, this model is building resilience in the existing healthcare structure by allowing rapid mobilization in real time of mental health support services. The results are encouraging including one, three, six, and twelve month follow-ups on key measures and feedback from local clinical staff. The objectives are to demonstrate that this model positively impacts the mental health of community members, augments the ability and resilience of local clinics to monitor and sustain the public health of their communities, and is economically sustainable.
Mapping the Epigenetic Mechanisms and the Psychological and Clinical Phenotypes of the Intergenerational Transmission of Trauma
(Bio Med/Surv Hist/M/N/A)

Chair: Yehuda, Rachel, PhD
Discussant: Southwick, Steven, MD

1 J. J. Peters Veterans Affairs Medical Center; Mount Sinai School of Medicine, Bronx, New York, USA
2 VA Connecticut Health Care System, West Haven, Connecticut, USA

That the effects of trauma can be transmitted intergenerationally has been a working hypothesis in the field of traumatology for several decades. Parents exposed to extreme trauma share common psychological, medical, and biological traits with their offspring, but the mechanisms through which traumatic effects might “pass” remain unproven. This symposium presents new data to further our understanding of intergenerational transmission through the examination of biological and psychological mechanisms that suggest epigenetic effects, and by introducing a multidimensional assessment measure that can generate a detailed psychological, emotional and clinical picture of this complex phenomenon. In the first presentation, Dr. Flory will discuss the effects of parental Holocaust exposure on offspring health behaviors and outcomes, including metabolic syndrome, obtained from over two hundred Holocaust offspring and controls. Second, Dr. Lehrner will present recent data examining epigenetic markers such as cytosine methylation of the glucocorticoid receptor and FKBP5 genes in Holocaust offspring as well as developmental programming effects evidenced by cortisol metabolic measures. Third, Dr. Danieli will describe the development of a comprehensive new validated instrument to assess the intergenerational transmission of trauma. Dr. Steven Southwick will be the discussant.

Assessing Multigenerational Legacies of Trauma
(Train/Ed/Dis/Surv Hist/Global)

Danieli, Yael, PhD
Director of the Group Project for Holocaust Survivors and their Children, New York, New York, USA

This presentation will report on the history, the development and validation process of a comprehensive questionnaire that assesses multigenerational legacies of trauma, in particular, Yael Danieli’s typology of family adaptation to trauma. The paper will present the concept of (familial) post-trauma adaptational styles, describe the family typology, the process of developing and validating the questionnaire (both in English and in Hebrew), and present preliminary findings of the various stages of this study. While it was developed for and with (grand)children of survivors of the Nazi Holocaust, the resulting questionnaire will be applicable, with proper modifications, to the entire population of Holocaust survivors’ offspring. Furthermore, it will be applicable for use
by investigators, clinicians and others working with the myriad massively traumatized populations, past and future. Tragically, we are speaking of millions of people.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 11/12

Maternal PTSD Effects on Holocaust Offspring: Evidence for Epigenetic Mechanisms
(Bio Med/Surv Hist/Industrialized)

Lehrner, Amy, PhD\(^1\), Bierer, Linda, MD\(^2\), Bader, Heather, BS\(^2\), Makotkine, Iouri, MD\(^2\), Yehuda, Rachel, PhD\(^2\)
\(^1\)J. J. Peters Veterans Affairs Medical Center, Bronx, New York, USA
\(^2\)J. J. Peters Veterans Affairs Medical Center; Mount Sinai School of Medicine, Bronx, New York, USA

Holocaust offspring with maternal PTSD are at increased risk for the development of PTSD, implying epigenetic factors in the intergenerational transmission of risk. This study sought to examine epigenetic marks in Holocaust offspring lymphocytes. Cytosine methylation of two genes were examined in two samples: the glucocorticoid receptor (GR) gene was examined from 96 Holocaust offspring and demographically matched controls, and FKBP5 was examined in a sample of Holocaust survivors and their children. There was an overall effect of offspring status such that Holocaust offspring had fewer methylated GR sites than controls (t=2.456, p=.016, df=94). A finer grained analysis indicated that this effect was associated with maternal PTSD as well as offspring gender. Maternal PTSD predicted number of methylated sites (β=-1.486, p=.011), even controlling for age and paternal PTSD. The maternal PTSD effect is significant for female (β=-2.416, p=.000) but not male (β=-.470, p=ns) offspring. Percent methylation was strongly correlated with maternal enmeshment (r = .455, p=.000, n= 58) based on thematic coding of offspring interview data. Data for FKBP5 will also be available. Findings indicate that female offspring of female Holocaust survivors with PTSD have the lowest GR methylation, and suggest epigenetic mechanisms underlying the transmission of PTSD risk-related biology.

Symposium
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 11/12

Maternal Exposure to the Holocaust and Metabolic Outcomes in Offspring
(Bio Med Surv Hist/N/A)

Flory, Janine, PhD\(^1\), Bierer, Linda, MD\(^2\), Yehuda, Rachel, PhD\(^2\)
\(^1\)James J Peters VAMC/Mount Sinai School of Medicine, Bronx, New York, USA
\(^2\)J. J. Peters Veterans Affairs Medical Center; Mount Sinai School of Medicine, Bronx, New York, USA

Developmental programming refers to modifications in neuronal structure and function that are initiated by early environmental events and are modulated by glucocorticoids. Developmental programming has been linked with higher risk for the development of cardiometabolic disorders in adulthood. This is best supported by observations that maternal stress affects birth weight, and birth weight, in turn, predicts adult disease. In rats, higher 11β-HSD-II (an enzyme believed to protect the fetus from exposure to maternal glucocorticoids) is related to higher birth weight. Previously we reported that maternal but not paternal exposure to the Holocaust was associated with the
use of hypertensive and lipid lowering agents and with metabolic syndrome disorders in offspring. New data from a sample of Holocaust offspring and demographically similar controls demonstrated that maternal exposure was related to lower 11β-HSD-II. Moreover, although maternal exposure was not associated with fasting glucose levels, it was associated with higher glycosylated hemoglobin, a more stable measure of elevated blood glucose. Understanding the origins of these relationships should lead to better strategies for improving health and preventing the chronic illnesses of adulthood.

**Workshop Presentation**  
**Thursday, November 7**  
**3:00 p.m. to 4:15 p.m.**  
**Grand Ballroom C**

**Preventing Institutional Secondary Traumatic Stress: Building a Culture of Resiliency**  
(Prevent/Child/Adol/M/Industrialized)

**Pulido, Mary, PhD, MSW**¹, **Naturale, April, PhD, MSSW**²  
¹New York Society for the Prevention of Cruelty to Children, New York, New York, USA  
²ICF International, Fairfax, Virginia, USA

The workplace is often where we develop some of our strongest social bonds and also seek ways to recover from trauma and build our resilience. Child care and protection agencies inevitably encounter situations that increase the risk of staff experiencing secondary traumatic stress (STS). Unaddressed, these experiences can negatively affect an organization as a whole, evidenced by poor staff morale, high turnover rates and lack of effective treatment outcomes. Individually, staff can experience some of the same post-traumatic stress symptoms as their clients. Learn how to create a culture of resiliency. This workshop teaches organizational managers about STS that impacts their clinical, medical, legal and investigatory staff and what management can do to prevent and mitigate its effects. This workshop focuses on recognizing, responding and preventing STS targeting intervention strategies at the organizational level. Participants will receive an overview of stress, STS and burn-out; a ‘how to’ conduct an agency “stress audit”; hiring considerations to reduce attrition; and exercises to use in supervision. Case examples of a resiliency support program for child protection workers in NYC and mitigating STS in statewide foster care in LA will be presented.
Workshop Presentation
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Franklin 8

Imagery Rescripting Therapy for Service Members and Veterans: A Workshop
(Practice/Mil/Vets/M/N/A)

O’Reilly, Holly, PhD, Brim, William, PsyD
Center for Deployment Psychology & Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA

The course provides a cognitive-behavioral treatment to alleviate the frequency and distress associated with frequent nightmares. The course will begin with information regarding common sleep events providing information to help discern nightmares from night terrors and panic attacks that occur during sleep. This course will focus on military populations. The course will present data examining the efficacy of this technique with military populations in individual and group formats. The course will include role-plays so that clinicians may practice new skills and will review session by session agendas for utilizing this protocol with clients. As many clinicians are trained in cognitive-behavioral therapy for PTSD (i.e., PE, CPT and EMDR) this course will provide them with a targeted strategy to treat nightmares should nightmares persist following cognitive-behavioral therapy for PTSD. It is recommended that attendees have prior experience with PE, CPT, EMDR or work with trauma populations. This course is intended for work with adult patients only. The course will provide information regarding nightmare assessment and specific questions to use during assessment. This course will allow clinicians to role play and practice restructuring nightmares and provide resources for additional research or instruction.

Paper Presentation
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Grand Ballroom B

Innovative Approaches to Assessment in the Military

Independent Effects of PTSD, Depression, and Multiple Concussion on Persistent Postconcussive Symptoms and Cognitive Functioning
(Assess Dx/Mil/Vets/M/N/A)

Spira, James
National Center for PTSD, Pacific Islands, Honolulu, Hawaii, USA

646 US Marines were assessed using the DOD Defense Automated Neurobehavioral Assessment (DANA) containing six speed/accuracy tests and five psychological measures: PTSD, depression, insomnia, post-concussive symptoms, combat exposure and concussion history. Consistent with prior findings, prior concussion was not associated with persistent postconcussive symptoms (PPCSx) or cognitive functioning, independent of PTSD or depression. Recent concussion was associated with PTSD, depressive, and somatic symptoms (p<.000), and worse Simple Reaction Time (SRT, p<.04), yet SRT was not upheld when PTSD and depression were included as covariates (possibly due to
low cell sizes). However, number of lifetime concussions was associated with worse performance on several simple reaction time tests, independent of PTSD and depression (ANOVA, p<.01). 3 or more concussions had an odds-ratio of 3.6 for SRT being >20% above the mean, independent of PTSD or depression (p<.001, OR=3.6). ROC analysis revealed that 3 or more concussions predicted SRT>30% above average with a sensitivity of .91 and specificity of .96 and overall accuracy of 82%. Results contrast with earlier reports of improved speed in RT for returning combat troops, and is the first report of the independent impact of multiple concussions on cognitive and behavioral functioning independent of PTSD and depression.

Paper Presentation
Thursday, November 7
3:00 p.m. to 4:15 p.m.
Grand Ballroom B

Identification of Predictors of Post-Deployment PTSD in Combat Veterans
(Assess Dx/Mil/Vets/A/Industrialized)

Roy, Michael, MD, MPH, Costanzo, Michelle, PhD
Uniformed Services University, Bethesda, Maryland, USA

Background: PTSD is common in U.S. military service members (SMs) after war. There is often a "honeymoon" period for weeks after return when SMs often underreport symptoms, yet many subsequently develop PTSD. Effective methods for identifying those at high risk is important to enable early intervention to reduce symptoms, promote resilience and prevent progression to full PTSD. The objective of this prospective cohort study is to identify the best predictors of post-deployment PTSD. Methods: We conducted a detailed 2-day baseline evaluation on 81 SMs within 2 months post deployment, including fMRI, DTI, EEG, ERPs, SNPs, neuroendocrine measures and psychophysiology. We are now completing 12-month f/u on all participants Univariate and multivariate analyses will be conducted to determine the strongest predictors of the development of PTSD. Results: While conducting follow-up assessments, we compared those with subthreshold PTSD (PCL scores 28-49) vs those with lesser symptoms (PCL <28), finding that physiologic responses to fear conditioning and virtual reality sequences, as well as fMRI using an Affective Stroop paradigm, were most strongly associated with the presence of subthreshold symptoms. Full results of the primary outcome should be available by the time of the meeting. Conclusions: Psychophysiology and imaging are expected to be among the strongest predictors of PTSD.
All Symptoms Were Not Created Equal: An Item Response Theory Analysis of PTSD Checklist Responses in a U.S. Veteran Sample
(Assess Dx/Mil/Vets/M/Industrialized)

King, Matthew, PhD1, Street, Amy, PhD2, Gradus, Jaimie, ScD3, Vogt, Dawne, PhD4, Resick, Patricia, PhD, ABPP4
1VA Boston Healthcare System, Boston, Massachusetts, USA
2National Center for PTSD, Boston VA Medical Center and Boston University School of Medicine, Boston, Massachusetts, USA
3VA Boston Health Care System/Boston University, Boston, Massachusetts, USA
4National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

Clinicians and researchers who use DSM criteria for PTSD are accustomed to giving symptoms equal weight within their clusters in determining whether the diagnosis should be made. Given growing evidence that post-traumatic reactions constitute a continuum from adaptive to pathological however, there is value in investigating what information each symptom imparts about persons' dimensional level of severity and whether all symptoms truly are equally reliable indicators of PTSD. We conducted an item response theory analysis of PTSD Checklist responses among 2,341 U.S. Veterans who served in support of OEF/OIF, to explore symptom information in individuals exposed to military deployment-related stressors. The most informative symptoms generally reflected experience-specific maladaptations (e.g., flashbacks, avoidance of places), which were also among indicators of severe pathology. In contrast, hyperarousal symptoms and some numbing symptoms were associated with relatively lower severity and reliability, suggesting less specificity to PTSD and greater reflection of general dysphoria. Symptom severity and reliability varied within clusters, suggesting that assessments using equal weighting may have suboptimal precision. As the conceptualization of PTSD evolves, it is important to be aware of how differences in symptom characteristics may impact its reliable assessment.

Mild Traumatic Brain Injury is Associated with Health Problems Beyond the Impact of PTSD, Depression, and Anxiety Disorders
(Assess Dx/Mil/Vets/I/N/A)

McDonald, Scott, PhD1, Yoash-Gantz, Ruth, PhD, ABPP2, Walker, William, MD3, Pickett, Treven, PsyD1, Cifu, David, MD3, Tupler, Larry, PhD4
1Hunter Holmes McGuire VA Medical Center, Richmond, Virginia, USA
2Hefner (Salisbury) VA Medical Center, Salisbury, North Carolina, USA
3Virginia Commonwealth University, Richmond, Virginia, USA
4Durham VA Medical Center, Durham, North Carolina, USA
The relative impact of PTSD, depression, and mild TBI (mTBI) on post-deployment health remains a clinical conundrum. This study explored the relationships between PTSD, depressive and anxiety disorders (via SCID for DSM-IV-TR), and self-reported mTBI to self-reported health problems among 572 US OEF/OIF military veterans. Hierarchical multivariable logistic regression revealed that mTBI was associated with significantly greater frequency of 13 of 14 health problems commonly attributed to concussion and 6 of 7 health problems that are unlikely sequelae of concussion. After accounting for PTSD, depression, and anxiety disorders, mTBI was still associated with significantly greater frequency of 6 "postconcussive" (headaches, feeling tense, irritability, and 3 cognitive complaints) and 3 "non-postconcussive" (lower back pain, numbness/tingling, and sore muscles) health problems. In post-hoc analyses, deployment-related mTBI was the principal unique contributor to health problems (vs. childhood and other adulthood mTBI). Demographics, intellectual functioning, combat exposure, and number of past traumas did not impact the relationship between mTBI and health outcomes. Findings indicate that mTBI history is an independent contributor to health complaints for military veterans, although the pattern of symptoms suggests mTBI may serve as a proxy for musculoskeletal injuries as well.
Concurrent Session Four

Symposium
Thursday, November 7
4:30 p.m. to 5:45 p.m.
Grand Ballroom D

Enhancing Interpersonal Relationships and Quality of Life: Critical Outcomes of Evidence-based PTSD Treatments
(Clin Res/Mil/Vets/I/Industrialized)

Chair: Walter, Kristen, PhD, Discussant: Chard, Kathleen, PhD
1 Cincinnati VA Medical Center, Cincinnati, Ohio, USA
2 Cincinnati VA Medical Center & University of Cincinnati, Cincinnati, Ohio, USA

Interpersonal relationships can have an influential role in the development and maintenance of post-traumatic stress disorder (PTSD) symptoms. However, if symptoms develop, they can threaten the very interpersonal relationships that can assist with recovery. Increasingly, psychological treatments have started to address and assess factors that affect social functioning. The current symposium will focus on three evidence-based treatments for PTSD (cognitive-behavioral conjoint therapy, CBCT; Mindfulness-based cognitive behavioral couples therapy, MB-CBCT; and cognitive processing therapy, CPT) and the impact of these treatments on aspects related to social functioning and quality of life among veteran and community samples. The presentations involving couples treatments will show significant improvements in aggression, anger, relationship satisfaction, and depression, as well as highlight the impact of aggression on response to CBCT and MB-CBCT. The CPT presentation will demonstrate improvements in domains of quality of life following treatment, including social quality of life. Collectively, the symposium aims to extend treatment outcome by assessing other areas of functioning beyond symptom reduction, particularly social functioning, hoping to provide treatment options that alleviate trauma-related symptomatology and enhance resiliency.

Symposium
Thursday, November 7
4:30 p.m. to 5:45 p.m.
Grand Ballroom D

Quality of Life among Veterans receiving CPT for PTSD: Change Following Treatment and Association with Psychological Symptoms
(Clin Res/Mil/Vets/Industrialized)

Walter, Kristen, PhD, Dickstein, Benjamin, PhD Candidate, Chard, Kathleen, PhD
1 Cincinnati VA Medical Center, Cincinnati, Ohio, USA
2 Cincinnati VA Medical Center & University of Cincinnati, Cincinnati, Ohio, USA

The outcomes of psychological treatment research often focus on reducing psychological symptoms, which is important, but further understanding how change in psychological symptoms relates to quality of life (QOL) and
other resiliency factors is critical. The current study explored whether quality of life (QOL) improved among veterans who met diagnostic criteria for post-traumatic stress disorder (PTSD) and received cognitive processing therapy (CPT) at a VA specialty clinic. We also examined whether reductions in PTSD and depression severity predicted improvements in QOL domains. Preliminary results from ongoing data collection demonstrated that clinician-assessed and self-reported PTSD and depression symptom severity significantly decreased over the course of treatment. Additionally, all 4 QOL domains (health, psychological, social, and environmental) improved from pre- to post-treatment. Results also indicated that reduction in depression severity was more predictive of changes in QOL than decreased PTSD severity. Findings highlight the importance of assessing depression symptoms in the context of trauma-focused treatment as they may serve as a proxy for QOL.

Symposium
Thursday, November 7
04:30 p.m. to 05:45 p.m.
Grand Ballroom D

Cognitive-Behavioral Conjoint Therapy for Post-Traumatic Stress Disorder: Findings for Psychological Aggression
(Clin Res/N/A/Industrialized)

Pukay-Martin, Nicole, PhD¹. Macdonald, Alexandra, PhD², Wagner, Anne, PhD Candidate¹, Wanklyn, Sonya, PhD Candidate¹, Fredman, Steffany, PhD¹, Monson, Candice, PhD¹
¹Ryerson University, Toronto, Ontario, Canada
²National Center for PTSD and VA Boston Healthcare System, Boston, Massachusetts, USA

Post-traumatic stress disorder (PTSD) has many negative relationship sequelae, including increased aggression in intimate relationships (Taft et al., 2011). Cognitive-Behavioral Conjoint Therapy for PTSD (CBCT for PTSD; Monson & Fredman, 2012) is a trauma-focused conjoint treatment shown to improve PTSD symptoms and enhance relationship adjustment (Monson et al., 2012). The purpose of this study was to examine psychological aggression as both a treatment outcome and a moderator of CBCT treatment outcome in the domains of PTSD, depression, relationship satisfaction. Forty couples with a wide range of index traumatic events were randomized to CBCT treatment or waitlist (WL). Multilevel modeling results indicated that patient and partner psychological aggression decreased over time in both groups; that is, there were no differences between CBCT and WL over time with respect to psychological aggression as an outcome. With respect to moderation of treatment outcome, baseline psychological aggression did not interact with treatment to predict PTSD symptoms. However, baseline psychological aggression did interact with treatment over time such that patients in CBCT with high baseline psychological aggression experienced significant improvements in depression and relationship satisfaction over time, whereas those in WL did not improve. Clinical implications will be discussed.

Symposium
Thursday, November 7
4:30 p.m. to 5:45 p.m.
Grand Ballroom D

Mindfulness-Based Cognitive Behavioral Couples Therapy (MB-CBCT) for PTSD: Associations with Partner Aggression and Anger among Returning OEF/OIF Veterans
(Clin Res/Mil/Vets/Industrialized)
Birkley, Erica, MS, PhD Student¹, Luedtke, Brandi, PsyD², Eicher, Amanda, BS², Davis, Louanne, PsyD²
¹Purdue University, West Lafayette, Indiana, USA
²Roudebush VA Medical Center, Indianapolis, Indiana, USA

Strong empirical support exists for the relationship between anger and PTSD (Taft et al., 2012) such that OEF/OIF veterans with a PTSD diagnosis (and subthreshold PTSD symptoms) have markedly higher levels of anger and aggression than veterans without PTSD (Jakupcak et al., 2007). Furthermore, alarmingly high rates of partner psychological aggression have been observed among combat veterans seeking treatment for PTSD (Taft et al., 2009). In a randomized controlled trial of MB-CBCT, higher levels of baseline psychological partner aggression predicted poorer treatment outcome (more PTSD symptoms endorsed on PCL) at treatment end (R²=.64, F(1,7)=12.35, p=.01; n=9 couples) indicated by self (β=.80, p=.01) and partner (β=.83, p<.01) reports of veteran PTSD symptoms. However, significant reductions of partner psychological aggression were observed over the course of treatment for self-reports of veteran aggression (M=18.00, SD=11.86, t(8)=4.55, p<.01) but not veteran reports of partner aggression (M=11.89, SD=17.28, t(8)=2.06, p=.07). Significant reductions in key anger variables related to partner aggression were also observed over the treatment course including anger expression (M=3.00, SD=3.04, t(8)=2.96, p<.05), anger suppression (M=3.44, SD=3.97, t(8)=2.93, p<.05), and state and trait anger (M=7.78, SD=9.38, t(8)=2.49, p<.05; M=4.44, SD=4.56, t(8)=2.93, p<.05, respectively).

Symposium
Thursday, November 7
4:30 p.m. to 5:45 p.m.
Franklin 5

The Role of Family Interactions in Promoting Recovery Following Pediatric Injury
(Assess Dx/Child/Adol/I/Global)

Chair: Marsac, Meghan, PhD
Children’s Hospital of Philadelphia, Philadelphia, Pennsylvania, USA

It has been well-established that children with injury and their parents are at-risk for developing significant post-traumatic stress symptoms (PTSS). Preventive interventions are in the early stages of development, and are not yet considered efficacious. Given the role of parents in child recovery, understanding parental symptoms and parent-child interactions is key. However, the nature of early interactions and PTSS are not well documented. This symposium will review new assessment methods of parent-child interactions and the development and maintenance of PTSS within family members. Specifically, Dr. Marsac will review a Family Discussion Task as applied during the peri-trauma period of injury (i.e., during hospitalization). Dr. Alisic will present a new method of assessing family interactions in the two days following discharge from the hospital using iPod technology. Dr. Bakker will report on the relationship of mothers’ and fathers’ PTSS during the months following pediatric injury and how this relates to family dynamics following trauma. Dr. De Young will present data examining the bi-directional relationship of child-parent PTSS over time (2 weeks to 6 months). Taken together, results can be used to identify next steps for examining parents’ role in child recovery and to inform the refinement of current preventive interventions.
Ear for Recovery: Applying a New Method to Measure Family Interaction after Trauma
(Res Meth/Child/Adol/Industrialized)

Alisic, Eva, PhD¹, Bressan, Silvia, MD², Conroy, Rowena, PhD², Jowett, Helen, BSc², Babl, Franz, MD, MPH²,
McClure, Rod, PhD¹, Anderson, Vicki, PhD³, Mehl, Matthias, PhD⁴
¹Monash University, Melbourne, , Australia
²Royal Children's Hospital, Melbourne, , Australia
³Murdoch Children's Research Institute, Melbourne, , Australia
⁴University of Arizona, Tucson, Arizona, USA

Although we know that parents and siblings play an important role in children's recovery from trauma, it remains unclear what they actually do. For example, how much do they talk about the event? To what extent are the interactions positive or negative? Because these specific support behaviors may be infrequent, partly unconscious, and subject to response biases, measuring them via lab observations or self-report is a challenge. The Electronically Activated Recorder (EAR, developed at the University of Texas and the University of Arizona) provides an opportunity to conduct large observational studies of families' daily life after trauma. The EAR functions on iPod and records snippets of sounds (30 seconds every 5 minutes). Each snippet is transcribed and coded for location, activity, presence of others, interactions that take place, and valence of the interaction. We have conducted a pilot study in Australia with families of 20 children aged 3 to 16 year old who had been seriously injured. The children carried the EAR for two days after discharge from the hospital and families participated in a telephone interview to measure post-traumatic stress one month later. We will present families' evaluations, the preliminary results of the study, and discuss how this method can complement other measures to contribute to our understanding of family interactions after trauma.

Symposium
Thursday, November 7
4:30 p.m. to 5:45 p.m.
Franklin 5

Relationship between Child and Parent Distress following Medical Trauma
(Clin Res/Child/Adol/Industrialized)

De Young, Alexandra, PhD¹, Kenardy, Justin, PhD², Cobham, Vanessa, PhD³, Kimble, Roy, MD¹
¹University of Queensland, Herston, QLD, Australia
²University of Queensland Schools of Psychology and Medicine, Herston, QLD, Australia
³University of Queensland, Brisbane, QLD, Australia

Objectives: The current risk factor literature suggests that there is a significant positive association between child and parent post-traumatic stress (PTSS) following trauma. This longitudinal study aimed to investigate, and thus better understand, the direction of the relationship between child and parent distress following medical trauma.

Methods: Participants were 130 parents of young children (1-6 years) with unintentional burns. Data was collected within 2 weeks, 1 month and 6 months of burn injury using developmentally sensitive diagnostic
Background: The psychological impact of pediatric injury on mothers is well-known, but information on fathers and parent-couples is limited. We conducted a prospective study to examine traumatic stress reactions in couples following their child’s burn event. Methods: Participants were 186 mothers and 159 fathers from 198 young children (0-4 years) with acute burns. Parents’ self-reported symptoms were measured within the first month and subsequently at 3, 12, and 18 months postburn with the Impact of Event Scale (IES). Early risk factors included parental appraisal of life threat and emotions concerning the burn event. Results: Rates for clinically significant symptoms (IES ≥ 26) decreased from 50% within the first month to 18% at 18 months postburn for mothers and from 27% to 6% for fathers. The course of avoidance symptoms showed a parallel pattern within couples, whereas more variety between mothers and fathers was found regarding intrusion symptoms. Factors that may have contributed to differences and similarities within couples will be discussed. Conclusion: A pediatric burn event seriously affects the child’s parents. The similarity within couples that was noticed regarding avoidance symptoms may contribute to our understanding of post-trauma family dynamics and may provide suggestions for clinical aftercare.
A Novel Method of Assessing Parent-Child Interactions During the Peri-Trauma Period
(Assess Dx/Child/Adol/Industrialized)

Marsac, Meghan, PhD1; Barakat, Lamia, PhD1; Kohser, Kristen, MSW1; Morrongiello, Barbara, PhD2; Kassam-Adams, Nancy, PhD1
1Children's Hospital of Philadelphia, Philadelphia, Pennsylvania, USA
2University of Guelph, Guelph, Ontario, Canada

Little is known about parent-child interactions following pediatric injury and how these interactions influence child recovery. Understanding early parent-child interactions may help inform interventions to reduce or prevent the onset of psychological symptoms. To assess parent-child interactions following injury we created the Trauma-related Ambiguous Situation (TAS; adapted from the child anxiety literature). This presentation summarizes the feasibility of the TAS in a medical setting and describes patterns in child and parent interactions. Participants included children (ages 8-12 years) who were hospitalized for an injury and at least one of their parents. Child-parent dyads completed the TAS, which is comprised of individual interviews and a family discussion of trauma-relevant situations. Approximately 50% of families approached for the study elected to participate. On average, participants completed the TAS in 20 minutes, and 90% who started the TAS finished it. Preliminary results suggest that parents influence children’s appraisals and coping responses. TAS responses show adequate variability and allow for direct observation of parents’ influence on children’s appraisals and coping responses. Future research should examine how parent-child interactions assessed by the TAS relate to psychological symptoms to determine if results can inform preventive interventions.

Interventions for PTSD in Primary Care Medical Settings: Implementation and Early Effectiveness Outcomes
(Practice/N/A/M/Industrialized)

Chair: Meredith, Lisa, PhD1; Discussant: Zatzick, Douglas, MD2
1RAND Corporation, Santa Monica, California, USA
2University of Washington/ Harborview Medical Center, Seattle, Washington, USA

Though effective models to improve primary care are available to treat common chronic illnesses, including depression and anxiety, most information comes from academic health care settings that serve patients with commercial insurance. Much less is known about how these interventions may be adapted in other settings and types of patients. This symposium will describe early findings from studies that have attempted to adapt proven models of care for safety net settings that serve mostly uninsured minority patients and military settings that provide care for active duty service personnel. The first presenter will share early findings on 6-month
intervention effectiveness from the Violence and Stress Assessment (ViStA) Project which is evaluating a care manager intervention in community health centers that care for underserved, primarily Latino, minorities. The next presenter will describe fidelity of implementation of the ViStA intervention. The third presenter will report on implementation outcomes of the RESPECT-Mil system for treating active duty soldiers in military treatment facilities. The final presenter will explain the design, roll-out, and early lessons from the STEPS UP trial of collaborative care in the U.S. military. The discussant will synthesize common themes and highlight future considerations for improving the delivery of care for people with PTSD.

**Symposium**
**Thursday, November 7**
**4:30 p.m. to 5:45 p.m.**
**Franklin 6**

**Implementation Outcomes of ViStA: A Randomized Trial of PTSD Treatment in Federally Qualified Health Centers.**
(Clin Res/Diverse Pop/Industrialized)

**Eisenman, David, MD**
1, Meredith, Lisa, PhD
2, Wong, Eunice, PhD
2, Green, Bonnie, PhD
3, Kaltman, Stacey, PhD
4, Vaughan, Christine, PhD
2, Cassells, Andrea, MPH
2, Hickey, Scot, PhD
5

1 UCLA, School of Medicine, Los Angeles, California, USA
2 RAND Corporation, Santa Monica, California, USA
3 Georgetown University School of Medicine, Washington, District of Columbia, USA
4 Georgetown University Medical Center, Washington, District of Columbia, USA
5 Clinical Directors Network, New York, New York, USA

The Violence and Stress Assessment study is a testing a care manager (CM) based intervention to improve the care of PTSD in federally qualified health centers. This study examined the extent to which the program was implemented as planned. Patients who were determined to have PTSD based on the Clinician-Administered PTSD Scale were randomized to the CM intervention or to treatment as usual. The CM intervention included patient psychoeducation, continuity of CM-patient care, clinician education, structured communications from CMs to primary care and mental health, and assistance in accessing community services. The intervention called for CMs to speak with study patients by telephone within one week of their first in-person meeting, every two weeks for a month, and then once a month through the 12-month intervention period (total phone contacts = 15). During these calls, CMs assessed symptoms, provided psychoeducation, and answered patient questions. Data from an electronic patient tracking tool were used to examine CM contact. On average, patients completed only 32% of their assigned follow-ups with the CM. Under 40% of patients completed a follow-up contact at each of the 15 monthly follow ups and this diminished to less than 20% in the final four months. We conclude from this early analysis that the program was not carried out as planned.
Implementation Outcomes of RESPECT-Mil: Re-Engineering Systems of Primary Care Treatment in the Military
(Clin Res/Mil/Vets/Global)

Wong, Eunice, PhD1, Jaycox, Lisa, PhD2, Ayer, Lynsay, PhD2, Epley, Caroline, MBA, MPA2, Harris, Racine, BA2, Paddock, Susan, PhD1, Naftel, Scott, MA3
1RAND Corporation, Santa Monica, California, USA
2RAND Corporation, Arlington, Virginia, USA

RESPECT-Mil is a collaborative care program designed to screen, assess and treat PTSD and depression among U.S. active duty soldiers in Army primary care settings. RESPECT-Mil was rapidly rolled out in 37 military installation sites within 84 Army primary care clinics. This study examines implementation outcomes using data from monthly clinic reports and an electronic care manager patient tracking tool, from the period of August 2011 to March 2012. Findings indicate that the majority of sites were screening either 90% or more of their patients. Among patients who were not in treatment but had positive PTSD or depression screens, sites ranged from referring 21% to 80% of these patients to behavioral health care. Approximately 60% (N=1484) of patients had contact with a care facilitator with a mean of 3.6 contacts (SD=1.6). Of those who had been contacted by a care facilitator, nearly 40% (N=594) reported starting a medication and 23% (N=341) reported starting counseling while enrolled in RESPECT-Mil. Among patients with a PTSD follow-up assessment (N=751), 32% responded to treatment (i.e., 50% reduction in symptom severity). Among patients with a depression follow-up assessment (N=725), 39% responded to treatment. This large real-world implementation of RESPECT-Mil is comparable to other primary care collaborative efforts for the treatment of depression and PTSD.
STepped Enhancement of PTSD Services Using Primary Care (STEPS-UP) is a randomized comparative effectiveness trial of collaborative care for soldiers with PTSD and depression. The six-site study compares the impact on PTSD and depression symptom severity of 12 months of either RESPECT-Mil, a collaborative care approach used in Army primary care since 2007, or STEPS-UP, a model featuring added enhancements. RESPECT-Mil components include primary care provider training, routine PTSD/depression screening, nurse care facilitation, behavioral health specialist case review, online case management. STEPS–UP adds nurse care facilitator training in engagement strategies, centralized care management and telephone therapy options, and web-based PTSD and depression tools. We will describe the interventions and trial design, flow of patients, and baseline characteristics of soldiers from the complete enrolled sample (enrollment ends June 2013). As of this writing, 824 patients have been recruited (253 ineligible, 146 declined, 427 randomized). Participants are largely male (82%) and young (M=31.06), with moderate to severe baseline symptoms for PTSD (PCL-C; M=57.17) or depression (PHQ-9; M=14.51), and frequent symptom-related difficulties (56%) and ideas of self-harm (9%). Challenges implementing the care and the trial in the military will be discussed.

Symposium
Thursday, November 7
4:30 p.m. to 5:45 p.m.
Franklin 6

Early Impact of a Care Management Intervention in Safety Net Health Centers: The Violence and Stress Assessment (ViStA) Study
(Practice/N/A/Industrialized)

Meredith, Lisa, PhD1, Cassells, Andrea, MPH2,Eisenman, David, MD3, Green, Bonnie, PhD4, Han, Bing, PhD1, Kaltman, Stacey, PhD5, Sorbero, Melony, PhD1, Tobin, Jonathan, PhD2, Vaughan, Christine, PhD1, Wong, Eunice, PhD1
1RAND Corporation, Santa Monica, California, USA
2Clinical Directors Network, New York, New York, USA
3UCLA, School of Medicine, Los Angeles, California, USA
4Georgetown University School of Medicine, Washington, District of Columbia, USA
5Georgetown University Medical Center, Washington, District of Columbia, USA

Post-traumatic stress disorder (PTSD) is a common problem in primary care, particularly in limited-resource settings serving low-income populations with complex health and social problems. Though effective treatments exist, little is known about their use in safety net settings or whether providing resources for enhancing access to PTSD care can be effective in such settings. ViStA implemented a 1-year PTSD Care Management intervention (PCM) program in six health centers in New York and New Jersey. We randomized 355 patients with a CAPS-administered PTSD diagnosis to either the ViStA PCM intervention or to treatment-as-usual (TAU). This presentation will share early findings on the impact of our study intervention on PTSD diagnosis and symptoms; comorbid depression risk and symptoms; and mental and physical health functioning at six months post-intervention. These early results suggest that there is little to no significant difference between the groups even after controlling for study site and care manager (i.e., rates of PTSD dropped by about 50% and CAPS symptom scores dropped by about 20 points for both PCM and TAU conditions). We offer a number of explanations for the lack of intervention effects and suggest that the impact of the intervention may be seen in the period between six and 12 months when patients may have been exposed to higher dosages of the intervention.
Symposium  
Thursday, November 7  
4:30 p.m. to 5:45 p.m.  
Franklin 8

**Sexual Violence, Health Risk Behaviors, and Re-victimization Risk among Diverse Groups of Women**  
(CulDiv/Violence/M/Industrialized)

**Chair:** Littleton, Heather, PhD  
*East Carolina University, Greenville, North Carolina, USA*

Sexual victimization remains a major public health problem affecting women of all socioeconomic and ethnic backgrounds. Sexual victimization is associated with a number of negative outcomes including mental health problems. In addition, a growing research body supports that sexual violence is associated with health risk behaviors and risk for further victimization. However, research examining the association of sexual victimization with risky behavior among diverse groups of women remains limited, and the potential mechanisms that explain the association of victimization with risk behaviors largely remain unstudied. The four presentations in the current symposium focus on the experiences of diverse samples of community-recruited women, including African American women, Native American women, and sexual minority women. Presentations focus on potential mechanisms that may lead to health risk behaviors and re-victimization risk among these groups of women, including self-worth, sexual assertiveness, and partner choice. Risk behaviors investigated include engaging in one-time sexual encounters, engaging in sexual activity while impaired, engaging in sex without a condom, hazardous drinking, and having multiple partners. Implications of the findings for interventions to reduce health risk behaviors and reduce re-victimization risk are discussed.

Symposium  
Thursday, November 7  
4:30 p.m. to 5:45 p.m.  
Franklin 8

**Predicting Health Risk Behaviors Following Sexual Victimization: The Role of Self-Worth**  
(CulDiv/Violence/Industrialized)

**Dodd, Julia, MA, PhD Student**, Littleton, Heather, PhD  
*East Carolina University, Greenville, North Carolina, USA*

Experiencing sexual violence has been associated with a variety of negative outcomes, including greater likelihood of engaging in health risk behaviors such as hazardous drinking and risky sexual behavior. Given the potential consequences of these behaviors, identifying mediating variables that may explain these relationships is crucially important. Feelings of low self-worth may be one such factor. This study utilized a community sample of low to middle income women recruited from an OB-GYN waiting room. The sample was primarily African American (57.4%) and included women with a history of childhood sexual abuse (*n* = 180), adolescent or adult sexual assault (*n* = 156), or no sexual victimization history (*n* = 429). Mediation analyses with bootstrapping supported that a history of CSA and ASA both predicted lower self-worth. Lower self-worth emerged as a significant mediator of the
relationships between CSA and greater levels of hazardous drinking, having multiple partners, and engaging in one-time sexual encounters. The same findings emerged for ASA. These results support that the negative impact of sexual victimization experiences on survivors’ self-worth is a potentially important mechanism in leading to risky behavior. Thus, interventions targeted at reducing risk behaviors among survivors may need to address such variables as low worth and psychological distress.

**Symposium**
Thursday, November 7
4:30 p.m. to 5:45 p.m.
Franklin 8

**Are Friends with Benefits Always Beneficial? Sexual Trauma History and Emotional Reactions after Hooking Up among Young Lesbian and Bisexual Women**
(CulDiv/Diverse Pop/Industrialized)

Kaysen, Debra, PhD\(^1\), Lewis, Melissa, PhD\(^2\), Litt, Dana, PhD\(^2\), Hodge, Kim, BA\(^2\)

\(^1\)University of Washington, Seattle, Washington, USA  
\(^2\)University of Washington School of Medicine, Seattle, Washington, USA

“Hooking up” or casual, non-committed sexual relationships is increasingly common among young adults. Despite relationships between sexual trauma history and high risk sexual behavior, little research has examined sexual victimization history on prevalence or emotional consequences of hooking up. In addition, hooking up research has focused on heterosexual relationships. This study focused on sexual trauma history and reactions to recent hookups among sexual minority women. A national sample of lesbian and bisexual women, ages 18-25 (n=805, 57% bisexual) completed Web-based surveys measuring trauma exposure and sexual behavior. Past sexual assault (21% lesbian, 30% bisexual) was common. Women who had histories of sexual assault reported a significantly greater number of both male and female hookup partners one year later but did not report more frequent hooking up. We conducted a 2 (sexual orientation) x 2 (past adult sexual assault) MANOVA on problems and emotional reactions following hooking up. Bisexual women were more likely to report problems resulting from the hookup. Women with histories of sexual assault were more likely to report problems and negative emotional responses following hooking up. Results suggest bisexual and women with sexual trauma histories have higher risk for physical and emotional consequences from hooking up, which may be a target for prevention.
Sexual Risk Behaviors and Refusal Assertiveness as Mediators of CSA to Adult Revictimization Risk in Sexual Assault Victims

Ullman, Sarah, PhD, Vasquez, Amanda, MA, PhD Student
University of Illinois - Chicago, Chicago, Illinois, USA

Sexual assault is a significant public health problem affecting women. Sexual assault victims are also at elevated risk for revictimization (Messman-Moore et al., 2008), yet longitudinal research on risk and protective factors in community-residing victims remains limited. Thus, there is a clear need to identify factors that place women at risk, as well as protective factors. Potentially important variables are sexual risk behaviors and sexual refusal assertiveness. The current study examines whether a variety of sexual risk behaviors and sexual refusal assertiveness mediate the association of CSA and adult SA at a 1 year follow-up in a large community sample of women (N = 1189). Five parallel models were run in MPlus with CSA as the predictor, revictimization as the outcome, and sexual assertiveness and each of five sexual risk behaviors as mediators. CSA predicted less sexual assertiveness in all models and also directly predicted revictimization. Partial mediation was supported. With respect to the sexual risk behaviors, CSA only predicted exchanging sex for money, which predicted revictimization. CSA also directly predicted revictimization. Two additional sexual risk behaviors, number of sex partners and condom use predicted revictimization risk over 1 year. Sexual refusal assertiveness was related to reduced risk of revictimization.

Partnering Formation, Childhood Sexual Abuse, and HIV/STI Risk among Young Native Women

Pearson, Cynthia, PhD², Cassels, Susan, PhD, MPH¹, Smartlowit-Briggs, Lucy, MSW Candidate²
¹University of Washington, Seattle, Washington, USA
²Washington University in St Louis, Columbia, Missouri, USA

High rates of discrimination and traumatic events increase risk for Native American women at the individual and partnership levels. We sought to understand how partnerships differ in terms of trauma history, sexual risk behavior within partnerships, and place (e.g., where partners met, where they most often had sex, where the partner lives). We examined 189 unique sexual partnerships reported by 129 rural women. Women who experience sexual childhood abuse (compared to those that did not) were significant less likely to use condoms (10% vs. 37.7%). Women who reported >1 partner in the past 6 months (37%) reported significantly greater childhood sexual abuse (38.3% vs. 22.9%), 12-month binge drinking (58.3% vs. 25.9%) and alcohol use prior to sex (72.9% vs. 48.2%). Women reported higher levels of risk behavior within previous partnerships, as compared to the
most recent partnership, including significantly higher alcohol use prior to sex (65.0% vs. 51.9%), higher partner concurrency (55.0% vs. 17.8%), were less likely to live in the same town as the respondent (27.5 vs. 42.6), and had sex in “riskier” settings (i.e., car, bar, or outside: 35.0% vs. 10.1%). It is necessary to contextualize messaging campaigns that are sensitive to trauma histories and reflective of the community settings.

**Symposium**
**Thursday, November 7**
**4:30 p.m. to 5:45 p.m.**
**Franklin 11/12**

**How Sex and Sex-related Hormones may Affect Psychophysiological and Psychological Correlates of PTSD**
(Bio Med/N/A/M/Industrialized)

**Chair:** Pineles, Suzanne, PhD, **Discussant:** Rasmusson, Ann, MD

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

Women are twice as likely as men to meet criteria for PTSD. Yet, there is a striking lag in research on the psychobiology of PTSD in women. One reason for the dearth of research on women is the menstrual cycle. Specifically, there is variability in sex hormones across the menstrual cycle and these hormones influence psychobiological markers of PTSD. Thus, it is much more difficult to research these topics in women. However, this variability may be a key factor towards understanding women’s increased risk for the development and maintenance of PTSD. The proposed symposium aims to present data examining sex differences and menstrual phase effects on psychological symptoms and psychophysiological paradigms theoretically linked to PTSD. The role of estradiol and progesterone will be emphasized.

**Symposium**
**Thursday, November 7**
**4:30 p.m. to 5:45 p.m.**
**Franklin 11/12**

**Gender Effects in Fear Extinction in PTSD: An FMRI Study**
(Bio Med/N/A/Industrialized)

Shvil, Erel, PhD\(^1\), Schafer, Scott, PhD Candidate\(^2\), Sullivan, Gregory, MD\(^3\), Campeas, Miriam, BA\(^1\), Joyner, Emily, BA\(^1\), Wager, Tor, PhD\(^5\), Milad, Mohammed, PhD\(^3\), Neria, Yuval, PhD\(^1\)

\(^1\)Columbia University and New York State Psychiatric Institute, New York, New York, USA
\(^2\)University of Colorado at Boulder, Boulder, Colorado, USA
\(^3\)Massachusetts General Hospital, Harvard Medical School, Charlestown, Massachusetts, USA

While numerous epidemiological studies suggest gender differences in the risk for PTSD, the biological underpinnings of such differences are yet to be systematically examined. We used a 2-day fear learning and extinction paradigm together with functional magnetic resonance (fMRI) and skin conductance response (SCR) assessments to examine gender differences among 56 subjects: 23 men (11 PTSD; 12 trauma exposed healthy controls [TE-HCs]) and 33 women (20 PTSD; 13 TE-HCs). While SCR levels during Day 1 indicated no gender effects
during fear conditioning and extinction learning phases, during Day 2 extinction recall phase the SCR and fMRI data suggest significant differences. Specifically, compared to women with PTSD, men with PTSD exhibited significantly lower fear extinction recall magnitude than women with PTSD. fMRI data suggest that during this extinction recall phase, men with PTSD also demonstrated reduced BOLD activation in the left dorsal anterior cingulate cortex (dACC) and greater activation in left hippocampus, compared to women with PTSD. Conversely, TE-HC men showed significantly greater BOLD activation than TE-HC women in dACC. Taken together, our findings suggest that deficient extinction recall in PTSD men may potentially serve as a gender-related biomarker for PTSD. Theoretical and clinical implications will be discussed.

Symposium
Thursday, November 7
4:30 p.m. to 5:45 p.m.
Franklin 11/12

Menstrual Cycle Effects on Conditioned Fear Acquisition in Women with and without PTSD
(Bio Med/N/A/Industrialized)

Pineles, Suzanne, PhD, Nillni, Yael, PhD, Patton, Samantha, BA (Hons), Resick, Patricia, PhD, ABPP, Rasmusson, Ann, MD, Orr, Scott, PhD

1 National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA
2 National Center for PTSD and VA Boston Healthcare System, Boston, Massachusetts, USA
3 National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA
4 Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA

There are potential neurobiological factors that may help explain women’s increased risk for a diagnosis of PTSD. Specifically, there is growing evidence that sex-related hormones such as estrogen and progesterone are associated with the strength of conditioned fear acquisition as well as the ease with which individuals extinguish these conditioned fear responses (Lebron-Milad & Milad, 2012; Milad, Igoe, Lebron-Milad, & Novales, 2009). In the current study, non-medicated female trauma survivors with and without PTSD completed a differential fear conditioning task twice – once during the early follicular phase of the menstrual cycle when estrogen and progesterone are relatively low and once during the midluteal phase when estrogen and progesterone are both relatively high. Skin conductance, heart rate, and corrugator EMG were recorded throughout. There was a significant menstrual phase X PTSD status interaction on conditioned fear acquisition as measured with skin conductance response (F(1,22) = 4.56, p < .05). In women without PTSD, conditioned fear acquisition was lower during the midluteal phase than the early follicular phase. However, in the women with PTSD, conditioned fear acquisition did not vary across the menstrual cycle. Implications related to the development and maintenance of PTSD will be discussed.
Estrogen and Menstrual Cycle Effects on Fear Inhibition in Women
(Bio Med/Diverse Pop/Industrialized)

Glover, Ebony, PhD1, Norholm, Seth, PhD2, Mercer, Kristina, PhD1, Kerly, Kimberly, PhD1, Davis, Michael, PhD1, Duncan, Erica, MD2, Bradley, Bekh, PhD2, Ressler, Kerry, MD, PhD1, Jovanovic, Tanja, PhD1
1Emory University School of Medicine, Atlanta, Georgia, USA
2Atlanta VAMC/Emory University, Decatur, Georgia, USA

Women have a two-fold greater risk for developing post-traumatic stress disorder (PTSD) than men. The inability to inhibit fear responses in safe conditions may be a biomarker for PTSD. We examined the influence of menstrual cycle phase and estrogen levels on fear inhibition in women. We compared conditioned inhibition of fear-potentiated startle between women in the follicular and luteal phases of their menstrual cycle in an healthy community sample. In addition, we compared fear extinction between women with low vs. high estrogen levels from a traumatized clinical sample. We assayed serum estradiol (E2) levels and used a median split to divide the sample into High and Low E2 groups. In both samples, we found that lower estrogen in cycling women was associated with impaired conditioned inhibition and fear extinction. All groups had equivalent levels of fear acquisition. However, in the traumatized sample, we found significant interaction effects between High vs. Low E2 groups and PTSD diagnosis (F(1,71)=4.55, p<0.05 in extinction. Among women with low estrogen levels, fear-potentiated startle was higher during extinction in the PTSD group compared to traumatized controls (F(1,38)=5.04, p<0.05). This effect was absent in the High E2 group. These findings suggest that low estrogen may be a vulnerability factor for development of PTSD in women with trauma histories.

The Expression of Psychological Symptoms across the Menstrual Cycle in Women with PTSD
(Bio Med/N/A/Industrialized)

Nilini, Yael, PhD1, Pineles, Suzanne, PhD1, Patton, Samantha, BA (Hons)2, Rouse, Matthew, MA, PhD Student3, Sawyer, Alice, MA, PhD Student4, Rasmusson, Ann, MD1
1National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA
2National Center for PTSD and VA Boston Healthcare System, Boston, Massachusetts, USA
3Veterans Affairs Boston Healthcare System, Boston, Massachusetts, USA
4VA Boston Healthcare System, Boston, Massachusetts, USA

The menstrual cycle and its related hormones have been shown to influence the expression of symptoms for a variety of psychological disorders. However, little is known about the fluctuation of psychological symptoms among women with post-traumatic stress disorder (PTSD). The aim of the present study was to examine the
interactive effects of PTSD diagnosis and menstrual cycle phase on symptoms reported on the Symptom Checklist-90 (SCL-90). A community sample of trauma-exposed women completed the SCL-90 anchored to the past week during two different menstrual cycle phases (i.e., early follicular and mid-luteal). Significant PTSD × cycle phase interactions were found for total score (F(1,45)=4.86, p < .05), interpersonal sensitivity (F(1,45)= 4.29, p < .05), hostility (F(1,45)= 4.73, p < .05), and phobic symptoms (F(1,45)=6.82, p < .05). Specifically, women with PTSD reported more symptoms in the early follicular phase as compared to the mid-luteal phase, whereas women without PTSD did not exhibit any cycle phase differences. These results suggest that women with PTSD may experience an exacerbation of a variety of psychological symptoms when estrogen and progesterone are low. Implications of the role of the menstrual cycle and its underlying neurobiology in the maintenance of psychological symptoms will be discussed.

Panel Presentation
Thursday, November 7
4:30 p.m. to 5:45 p.m.
Franklin 9/10

Multidisciplinary Perspectives on the Challenge of Creating Trauma-Informed Juvenile Justice Systems
(Social/Child/Adol/M/Industrialized)

Ford, Julian, PhD¹, Bloom, Sandra, MD², Cruise, Keith, PhD³, Feierman, Jessica, JD⁴, Goldstein, Naomi, PhD⁵
¹University of Connecticut Health Center, Farmington, Connecticut, USA
²Drexel University School of Public Health, Philadelphia, Pennsylvania, USA
³Fordham University, New York, New York, USA
⁴Juvenile Law Center, Philadelphia, Pennsylvania, USA
⁵Drexel University, Philadelphia, Pennsylvania, USA

Creating trauma-informed juvenile justice systems poses complex challenges that require multidisciplinary collaboration to prevent unintended adverse legal consequences for youth and families and to ensure that effective trauma-specific services are accessible (Ford, Cruise, Chapman, & Connor, 2012). Julian Ford will overview traumatic stress epidemiology and evidence based interventions, and systems-wide dissemination initiatives led by the Center for Trauma Recovery and Juvenile Justice in the National Child Traumatic Stress Network. Sandra Bloom will describe the dissemination of a trauma-informed systems/organizational intervention, the Sanctuary Model, that addresses all levels of juvenile justice and related (e.g., child welfare) systems and organizations. Jessica Feierman will provide a multidisciplinary perspective based on her work as an attorney on systems reform in the Juvenile Law Center, and the Trauma and Resilience colloquium she organized. Naomi Goldstein will provide a forensic psychology perspective on juvenile justice system policy challenges based on her work with the Juvenile Law Center. Keith Cruise will address the role traumatic stress professionals can play in juvenile justice risk assessment and services for juvenile sexual offenders. Audience-presenter interactive discussion will address questions and highlight key opportunities and pitfalls.
Treatment of PTSD Over the Lifespan

Symptom Exacerbations in Cognitive Processing Therapy for PTSD: Barrier to Treatment?
(Clin Res/Violence/M/Industrialized)

Larsen, Sadie, PhD1, Wiltsey Stirman, Shannon, PhD2, Resick, Patricia, PhD, ABPP3
1Clement J. Zablocki VA Medical Center, Milwaukee, Wisconsin, USA
2Boston VA Healthcare System, Boston, Massachusetts, USA
3National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

Background: Although Cognitive Processing Therapy (CPT) and Prolonged Exposure (PE) have received significant empirical support as PTSD treatments that improve long-term quality of life (Foa et al., 2009; Resick et al., 2012), they are both under-utilized (Rosen et al., 2004). This is partially due to concerns that trauma-focused treatments may cause symptom exacerbations or increased dropout (e.g. Cook et al., 2013; Feeny et al., 2004; Kilpatrick & Best, 1984). However, only two studies have directly examined this question with PE (Foa et al., 2002; Hembree et al., 2003), and none with CPT. Objective: Examine whether symptom exacerbations are common in CPT and whether they lead to worsening or dropout. Method: We compared symptom exacerbations in 132 women who completed CPT, a cognitive treatment for PTSD that involves two written trauma accounts, versus CPT-C, a version of the treatment without the trauma accounts. Symptom exacerbations were calculated following Foa et al.’s (2002) definition. Results: Symptom exacerbations were more common in CPT (28.6% of participants) than in CPT-C (14.7% of participants), but this difference was not significant. Symptom exacerbations did not predict dropout or significantly worse post-treatment outcomes. Conclusion: Symptom exacerbations need not be barriers to receiving a highly effective treatment that promotes long-term recovery.
Developmentally Adapted Cognitive Processing Therapy for Adolescents with PTSD after Sexual or Physical Abuse – Results of a Pilot Study
(Clin Res/Child/Adol/M/Industrialized)

Rosner, Rita, PhD(c)¹, Matulis, Simone, Dipl Psych², Resick, Patricia, PhD, ABPP³; Steil, Regina, PhD⁴
¹Catholic University Eichstaett-Ingolstadt, Eichstätt, Germany
²Goethe-University, Frankfurt, Hesse, Germany
³National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA
⁴Goethe-University, Frankfurt, Hessen, Germany

Introduction: We adapted Cognitive Processing Therapy (CPT; Resick, Monson, & Chard, 2008) to the specific needs of adolescents suffering from childhood abuse (CA) related PTSD. We modified the treatment setting and added new treatment modules. The presentation will introduce Developmentally Adapted Cognitive Processing Therapy (D-CPT) and show the results of a pilot study. Method: To evaluate D-CPT’s feasibility and efficacy, we treated twelve adolescents suffering from CA-related PTSD. Patients were assessed prior to (t0), post (t1) and 6 weeks after treatment (t2). Assessments included Clinician Administered PTSD Scale (CAPS), UCLA PTSD Index (UCLA), Children’s Depression Inventory (CDI), Adolescent Dissociative Experiences Scale (A-DES), and Borderline Symptom List (BSL-23). Results: MANOVA’s revealed that post-traumatic stress measures as well as associated symptom measures differed statistically significant between time points. When comparing t0 and t2 Cohen’s d was large for CAPS (d = 1.45; p < .001) and UCLA scores (d = 1.91; p < .001). Cohen’s d was medium for CDI (d = .78; p < .001), A-DES (d = 0.64; p < .05), and BSL-23 scores (d = 0.74; p < .01). Discussion and Conclusion: D-CPT has the potential to reduce PTSD symptoms and comorbid psychopathology in adolescents with history of CA.

The Contributions of Maternal Depression, PTSD, and the Parent-Child Relationship to Young Children’s Adaptation Following Trauma Exposure
(Clin Res/Child/Adol/I/Industrialized)

Thakar, Dhara, PhD¹; Coffino, Brianna, PhD², Lieberman, Alicia, PhD³
¹Erikson Institute, Chicago, Illinois, USA
²Bayview Child Health Center, San Francisco, California, USA
³University of California, San Francisco - San Francisco General Hospital, San Francisco, California, USA

The current study examined prevalence and frequency of trauma among 216 ethnically and socioeconomically diverse mother-child dyads and the impact of maternal symptoms and parent-child functioning on child’s behavior following child’s trauma-exposure. Data were drawn from the intake assessment conducted at a child trauma clinic with mothers and children prior to their entry into child-parent psychotherapy, a dyadic treatment model for parents and children under age six. The Traumatic Events Screening Inventory-R and Child Behavior Checklist were...
used to assess child trauma history and behavior; the Life Stressors Checklist-R, Beck Depression Inventory-II, Davidson Trauma Scale, and Parenting Stress Index-SF were used to assess maternal depressive and PTSD symptomatology and parent-child relationship dysfunction. Children experienced an average of over five traumatic events prior to age six, and mothers had experienced an average of over 13 traumatic events during their lifetime. Controlling for child’s trauma history, maternal depressive symptomatology and parent-child dysfunction each uniquely predicted variance in children’s behavioral and emotional functioning. The findings of this study underscore the need for clinical interventions that address the parent-child relationship and parental symptomatology following young children’s exposure to trauma.

Paper Presentation
Thursday, November 7
4:30 p.m. to 5:45 p.m.
Grand Ballroom A

Differential Effects of Prolonged Exposure and Cognitive Therapy on PTSD Symptom Clusters: Findings from the Jerusalem Trauma Outreach and Prevention Study
(Clin Res/Disaster/M/Industrialized)

Horesh, Danny, PhD¹; Freedman, Sara, PhD²; Shalev, Arieh, MD³
¹New York University Langone Medical Center, Department of Psychiatry, New York, New York, USA
²Bar-Ilan University, Ramat Gan, , Israel
³Hadassah Hospital, Jerusalem, Jerusalem, Israel

Objectives: Although CBT is an efficient intervention for post-traumatic stress disorder (PTSD), the differential effect of exposure- versus non-exposure based CBT remains a question. This work compared the effect of prolonged exposure (PE) and cognitive therapy (CT) on specific PTSD symptom clusters. Methods: Trauma survivors who sought treatment in a general hospital emergency room and had acute PTSD symptoms one month later were randomly assigned to 12 weekly sessions of PE (n=63) or CT (n=40). The Clinician-Administered PTSD Scale (CAPS) provided continuous measures of PTSD symptoms before and after treatment. Results: Both interventions similarly reduced the total number of PTSD symptoms. PE and CT also had a similar effect on PTSD intrusion, avoidance, and hyper-arousal symptom clusters, as well as on individual avoidance symptoms. Conclusions: While technically targeting specific PTSD-related difficulties (i.e., cognition vs. avoidance), exposure- and non-exposure based CBT yield similar improvement across PTSD symptoms. Data from previous CBT, pharmacological, and longitudinal surveys similarly show an improvement across symptom clusters. This may suggest that PTSD symptoms evolve as one unit, and that the underlying fear- and cognitive learning abnormalities may mutually sustain the disorder’s persistence, such that the alleviation of one of them affects all others.
Treatment Needs and Approaches for Military Populations I

Stress Resilience Training System: A Randomized Controlled Trial of an iPad-Based Heart Rate Variability Biofeedback Application to Reduce Stress and Build Resilience among Military Service Members
(Clin Res/Mil/Vets/M/Industrialized)

Morrison, Theodore, PhD, MPH, Webb-Murphy, Jennifer, PhD, ABPP, Nikkhoy, Massoud, MPH, Johnston, CAPT Scott, PhD, ABPP
Naval Center for Combat and Operational Stress Control (NCCOSC), San Diego, California, USA

Military operations increasingly present adverse challenges that service members must adapt to and overcome. The Stress Resilience Training System (SRTS) is an innovative program combining psychoeducational skills training with heart rate variability (HRV) biofeedback to mitigate stress and its aftereffects through a game-based learning framework on an iPad. SRTS includes videos and self-quizzes, and users are trained to control HRV through cognitive and breathing exercises and progressively challenging games. Service members are randomized to 1 of 3 conditions: iPad-based SRTS, iPad-based Progressive Muscle Relaxation, or wait-list control. Participants receive training and daily use is encouraged for 8 weeks. Assessments are conducted at baseline, 2 and 4 months. Repeated-measures, between-groups MANOVA will evaluate effectiveness. Data from 2 US Navy and Marine Corps commands (N=125) is presented. We predict greater outcome change for SRTS condition as compared to PMR condition with both conditions demonstrating a decrease in mental health symptoms and perceived stress and an increase in sleep quality, coping scores and quality of life in comparison to controls. We anticipate a dose-response relationship with greater change among those more compliant. Unique data regarding the feasibility/utility of iPad-based applications with the military is presented.
Examining the Association between Self-reported Sleep Disturbances and Suicidal Ideation in a Sample of Treatment-seeking Canadian Forces Members and Veterans
(Clin Res/Mil/Vets/M/Industrialized)

Richardson, Don, MD, FRCP1, St. Cyr, Kate, MSc1, Nelson, Charles, PhD, Cpsych1, Elhai, Jon, PhD2, Sareen, Jitender, MD FRCP3
1St. Joseph's Healthcare London, London, Ontario, Canada
2University of Toledo, Toledo, Ohio, USA
3University of Manitoba, Winnipeg, Manitoba, Canada

Objective: This study examines the association between suicidal ideation and sleep disturbances in a sample of treatment-seeking Canadian Forces (CF) members and veterans. Methods: 316 CF members and veterans seeking treatment at the Parkwood Hospital Operational Stress Injury Clinic completed the Patient Health Questionnaire, the Alcohol Use Disorder Identification Test, and the PTSD Checklist - Military Version (PCL-M). Sleep disturbances were measured using the PCL-M. Regression analyses were used to determine the respective impact of sleep disturbances on suicidal ideation. Results: Trouble falling or staying asleep was a significant predictor of suicidal ideation (t = 4.479, p < 0.001); however, after controlling for self-reported PTSD, major depressive disorder (MDD), generalized anxiety disorder (GAD), and alcohol use disorders (AUD) symptom severity, self-reported MDD symptom severity emerged as the strongest predictor of suicidal ideation (t = 7.992, p < 0.001). In a second analysis, nightmares emerged as a significant predictor of suicidal ideation (t = -3.297, p = 0.001) after controlling for self-reported PTSD, MDD, GAD, and AUD. Conclusions: These findings support the importance of screening for sleep disturbances and related comorbidities as potentially modifiable conditions that are related to suicidal ideation among military members and veterans.

Somatic Symptoms and Health-Related Quality of Life among Treatment-Seeking Canadian Forces Personnel with PTSD
(Clin Res/Mil/Vets/M/Industrialized)

St. Cyr, Kate, MSc1, McIntyre-Smith, Alexandra, PhD, Cpsych1, Contractor, Ateka, MA2, Elhai, Jon, PhD2, Richardson, Don, MD, FRCP1
1St. Joseph's Healthcare London, London, Ontario, Canada
2University of Toledo, Toledo, Ohio, USA

Objective: This study examined the association between somatic complaints and health-related quality of life (HR-QoL) in treatment-seeking Canadian military personnel with military-related Post-traumatic Stress Disorder (PTSD). Methods: Current and former Canadian Forces (CF) members attending the Parkwood Hospital Operational Stress Injury Clinic in London, Ontario (N = 291) were administered self-report questionnaires
assessing number and severity of somatic complaints, PTSD and depressive symptom severity, and mental and physical health-related quality of life (HR-QoL) prior to commencing treatment. Results: Regression analyses were used to identify the role of somatic complaints on physical and mental HR-QoL, after controlling for PTSD and depressive symptom severity. Somatic symptom severity accounted for only a small amount of the variance in mental HR-QoL after accounting for PTSD and depressive symptom severity (R2 change = 0.035), but accounted for a larger proportion of the variance in physical HR-QoL after accounting for PTSD and depressive symptom severity (R2 change = 0.153). Conclusions: Understanding the role of somatization in the symptom-presentation of military personnel with PTSD may provide additional avenues for treatment with this population.

Paper Presentation
Thursday, November 7
4:30 p.m. to 5:45 p.m.
Grand Ballroom B

Preliminary Findings of Employment Outcomes from a Recent Multisite, Randomized Controlled Trial of Supported Employment for Veterans with Post-Traumatic Stress Disorder
(Clin Res/Mil/Vets/M/Industrialized)

Davis, Lori, MD
Tuscaloosa VA, Tuscaloosa, Alabama, USA

As follow-up to a recent single site pilot study of Individual Placement and Support (IPS) supported employment, a multisite, randomized controlled trial of IPS in Veterans with PTSD has concluded and these results will be presented. US Veterans with PTSD who were unemployed for a mean±sd of 20.0±34.7 months were randomly assigned to either IPS supported employment (N=48) or VA vocational rehabilitation programs (VRP: N=46). During the one-year follow-up period 52% of those receiving IPS gained competitive employment, compared with 33% of those who received VRP (χ2= 3.64, df=1, p=.056). Those who participated in IPS were 1.7 times more likely to gain competitive employment than those who received VRP. The number needed to treat was 5.26. While in the study, IPS participants worked in a competitive job an average of 23% of the eligible weeks and those assigned to VRP worked an average of 13% of the eligible weeks (Mann-Whitney z test, p=0.10). The IPS group achieved competitive employment significantly more quickly than the VRP group (log-rank χ2= 4.25, p=0.04). These results further support more research and programming of IPS for individuals with PTSD. A VA Cooperative Study (#589) of IPS for Veterans with PTSD has been awarded funding and the methods of this study will be presented.
Trauma and Resilience across Cultures

Post-conflict Intimate Partner Violence Risk and Resilience among Former Child Soldiers in Nepal
(CulDiv/Child/Adol/M/S Asia)

Bourey, Christine, MPH candidate¹, Kohrt, Brandon, MD, PhD², Magar, Jananee, Assistant¹, Worthman, Carol, PhD¹
¹Emory University, Atlanta, Georgia, USA
²George Washington University School of Medicine, Washington, District of Columbia, USA
³Transcultural Psychosocial Organization, Baluwatar, Kathmandu, Nepal

Although evidence suggests developmental, psychological, and social effects of childhood association with armed conflict may impact risk and resilience for post-conflict domestic violence (Annan & Brier, 2010; Catani et. al., 2008), little is known about how former child soldiers negotiate these experiences. This study used a participant-directed, culturally based narrative of escalating intimate partner violence (IPV) with 14 reproductive-aged female former child soldiers to explore IPV risk and resilience in post-conflict Nepal. Thematic analysis revealed that help seeking was limited by structural and association-specific stigma, codified in relationship experiences and expectations (including accepted boundaries of violence), socio-demographic realities, and limited familial and social support. Association-derived assets (maturity, exposure to egalitarian ideals, post-conflict employment skills) were protective where internalized stigma was limited. In families and communities with high felt-stigma (caste and association status), women less commonly enacted egalitarian beliefs in response to IPV. In addition to considering post-conflict IPV as a developmental risk, interventions should (1) consider personal histories of association and reintegration, including stigma and discrimination, when evaluating risk and resilience and (2) address structural risk factors for IPV.

"Making Peace in the Heart-Mind": Community and Cultural Pathways to Resilience among Bhutanese Refugees
(CulDiv/Civil/Ref/I/S Asia)

Chase, Liana, MSc
McGill University, Montreal, Quebec, Canada

This research project set out to complement the extensive body of literature on psychiatric morbidity among Bhutanese refugees through an exploration of cultural beliefs and values related to resilience. Data were gathered over two periods of ethnographic fieldwork: two months of immersion in a community of resettled refugees in Vermont, U.S. and ten months of fieldwork conducted in affiliation with the Transcultural Psychosocial
Organization-Nepal (a UNHCR implementing partner) in the refugee camps of eastern Nepal. This presentation will summarize qualitative data drawn from semi-structured interviews (n=62), focus groups with refugee stakeholders, and participant observation. All data were coded and analyzed using a qualitative data management software. Key findings include religio-cultural techniques for managing distress (such as yoga and meditation), idioms of vulnerability, distress, and wellbeing, and lay local wisdom around fostering resilient responses to adversity. In addition, the research revealed practices of psychosocial care embedded in the activities of community-based organizations and arts initiatives. Implications for promoting resilience and enhancing intervention in the context of the ongoing resettlement are elaborated.

Paper Presentation
Thursday, November 7
4:30 p.m. to 5:45 p.m.
Grand Ballroom C

A Qualitative Evaluation of Recovery and Resilience in Sri Lankan Adult Survivors after the Tsunami: Familial and Socio-Cultural Influences
(CulDiv/Disaster/M/S Asia)

Gunaratne, Charini, PhD¹; Kremer, Peter, PhD²; Lewis, Andrew, PhD³
¹Charles Sturt University, Wagga Wagga, NSW, Australia
²Deakin University, Geelong, VIC, Australia
³Deakin University, Burwood, VIC, Australia

Limited research has examined factors related to recovery and resilience following natural disasters among non-Western populations. The 2004 Tsunami impacted ~1.7 million South Asians. Interviews were conducted with 37 tsunami-affected adults (76% female, aged 20-71 years, M=39.1, SD=12.6) from southern Sri Lanka via an interview guide based on the MTRR-I, six years post-tsunami. Through qualitative analysis and utilizing an ecological framework, themes of resilience and impairment post-trauma, the cultural context influencing resilience, and inter-relations between individual, situational and environmental effects on resilience were explored. Results indicated that survivors experienced numerous trauma-related difficulties for years post-tsunami (e.g., economic difficulty, disruption to social roles) but despite these difficulties found means to overcome distress and resume daily functioning due to factors such as family cohesion, focusing on daily activities (children’s education, work, religion) and especially social resilience, where survivors found strength not only from social support, but also through being resilient on behalf of key persons in their lives. The results suggest resilience in collectivist cultures is strongly influenced by social aspects. Findings are discussed in relation to implications for informing culturally relevant theory, research and policy.
Recovering the Roots of Indigenous Resilience
(CulDiv/Diverse Pop/M/Industrialized)

Belcourt, Annie, PhD, Pearson, Cynthia, PhD, Schultz, Katie, MSW, Smartlow-Briggs, Lucy, MSW Candidate; Whitefoot, Patricia, MA
1 University of Montana, Missoula, Montana, USA
2 University of Washington, Seattle, Washington, USA
3 Washington University in St Louis, Columbia, Missouri, USA
4 Yakama Reservation Wellness Coalition, Toppenish, Washington, USA

Understanding resiliency and post-traumatic functioning are critical for communities and service providers to improve pathways to healing for indigenous women. The unique sociocultural context of indigenous communities have direct implications for adapting interventions. Using a community-based participatory approach, we conducted qualitative (n = 36) and quantitative interviews (n = 146) to identify resiliency and PTSD symptomology within a Pacific Northwest tribe. We identified culturally situated descriptions of PTSD symptoms (hyperarousal, hypervigilance, avoidance, and reexperiencing) and resiliency (culturally defined sources of strength such as community, spirituality, culture, and self-esteem). AI women (67%) reported PTSD symptoms. Lower PTSD severity scores were associated with community support (overall r = -0.16, emotional r = -0.18, tangible r = -0.21, social r = -0.15). Women with higher spirituality scores (77 versus 66, t = 2.3, p = 0.02) were less likely to have a diagnosis of PTSD. Cognitive Processing Therapy was identified as an intervention that resonated with community women. By addressing disruptions of trust, safety, power/control, respect/esteem, and emotional intimacy problems these domains of treatment complemented both symptoms of PTSD and community ways of understanding the traditional role of balance in health.

Trauma and Neurobiology

Consistency and Heterogeneity of PTSD Functional Neuroimaging Findings across Mental States
(Bio Med/Mil/Vets/A/Industrialized)

Yan, Xiaodan, PhD
New York University Langone Medical Center, Department of Psychiatry, New York, New York, USA

Existing functional neuroimaging studies have provided important insights on PTSD neural mechanisms using various experiment paradigms involving trauma recollection or other forms of emotion provocation, but it is not clear whether the observed abnormal brain activity was specific to the mental processes related to the experiment...
tasks or reflect general patterns across different brain states; thus studying intrinsic spontaneous brain activity without the influence of external tasks may provide valuable alternative perspectives. The present study evaluated the magnitudes of intrinsic spontaneous brain activity of male US combat veterans with fifty-two in each group (PTSD and controls) with matching on age, gender, and ethnicity. Amplitudes of low frequency fluctuation (ALFF), a data driven analysis method, were calculated on each voxel of the resting state fMRI data to measure the magnitude of spontaneous brain activity. Results revealed that PTSD subjects showed hyperactivity in the amygdala, ventral anterior cingulate cortex, insula, and orbital frontal cortex, as well as hypoactivity in the precuneus, dorsal lateral prefrontal cortex and thalamus. Among these, in comparison with previous findings, hyperactivity of the amygdala and anterior insula and thalamic hypoactivity are consistent patterns across emotion provocation states and resting state.

**Paper Presentation**
**Thursday, November 7**
**4:30 p.m. to 5:45 p.m.**
**Franklin 7**

**Neural Responses to Unpredictable Threat in Healthy Individuals with Childhood Maltreatment**
(Bio Med/N/A/M/Industrialized)

**Kirlic, Namik, Doctoral Student; Alvarez, Ruben, EdD, Hammond, Jordan, BA**
The University of Tulsa; Laureate Institute for Brain Research, Tulsa, Oklahoma, USA

Childhood maltreatment (CM), characterized by abuse and neglect, may produce long-lasting changes in neurobiological function, thereby putting these individuals at a greater risk for PTSD later in life. Anxious apprehension has been implicated in PTSD, but whether it is a risk factor or manifestation of psychopathology remains unclear. Substantial research in animals, and recently humans, suggests that the bed nucleus of the stria terminalis (BNST) plays an important role in mediating anxious apprehension. Using an instructed threat paradigm and high-resolution functional magnetic resonance imaging (fMRI), we investigated BNST responses to unpredictable threat in healthy subjects with low CM (n=22) and high CM (n=21). Subjects virtually navigated two computer-simulated contexts, one where unsignaled electric stimulations to the ankle could occur at any time (Threat), and one where no stimulation was ever delivered (Safe). Fear ratings and autonomic measures confirmed anxiety during contextual threat as compared to safety. Contextual threat was further associated with increased BNST activity in both groups. Group comparisons revealed greater BNST activity in the high CM group relative to the low CM group. The observed heightened anxiety during unpredictable and uncontrollable aversive events among healthy individuals with high CM may constitute a vulnerability factor for PTSD.
A Laboratory Test of Explicit Emotion Regulation in OEF/OIF Veterans with PTSD
(Bio Med/Mil/Vets/A/N/A)

Woodward, Steven, PhD1, Shurick, Ashley, MA, PhD Student2; Gross, James, PhD2
1Department of Veterans' Affairs National Center for Post-traumatic Stress Disorder, Palo Alto, California, USA
2Stanford University, Stanford, California, USA

Hyper-responsivity to trauma-related imagery is among the criteria for PTSD, and hyper-activation of the amygdala to generic aversive images has also been observed. Recent data point to the ability of healthy persons to moderate emotional responses to aversive stimuli, upregulating anterior cingulate activation and downregulating amygdala activation, through volitional or explicit “cognitive reappraisal”. The confluence of a cognitive strategy overlapping psychotherapies for PTSD with correlated brain responses in structures implicated in the disorder is promising, but raises the question of whether persons with PTSD can execute emotion regulation strategies. We tested this in a sample of 24 OEF/OIF Veterans and 23 controls who observed a mix of trauma-related and generic aversive and neutral images. After presentation of each image, participants executed either 1) explicit cognitive reappraisal, 2) a “notice” strategy borrowed from the mindfulness literature, or 3) responded “freely”. Overall, cardiac responses to aversive images were decelerative, in line with studies in normals, and compatible with sustained attention. PTSD participants’ decelerative cardiac responses were attenuated, and in contrast to controls’, accompanied by tilt (measured via accelerometer) away from the images. Potent withdrawal responses may interfere with more adaptive regulatory strategies in PTSD.
Friday, November 8
Concurrent Session Five

Master Clinician
Friday, November 8
9:00 a.m. to 10:15 a.m.
Grand Ballroom E

The Child and Family Traumatic Stress Intervention: Early Prevention for Youth at Risk for PTSD
(Practice/Child/Adol/M/Global)

Berkowitz, Steven, MD¹, Marans, Steven, PhD²
¹University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA
²Yale University School of Medicine Child Study Center, New Haven, Connecticut, USA

Prevention of the development of PTSD in youth after a potentially traumatic event has been elusive despite the recognition that most youth will recover independent of intervention. The Child and Family Traumatic Stress Intervention (CFTSI) has demonstrated effectiveness in prevention PTSD in at risk youth. In a randomized effectiveness trial CFTSI reduced the odds ratio of developing full PTSD by 65% and full and partial PTSD by 73%. It is a 4-6 session caregiver-child intervention and is a stepped model, in which youth 8-18 are screened for new onset symptoms before being invited to participate. This session will present the underlying principles of addressing modifiable factors during the peritraumatic phase and review how the CFTSI model’s protocol promotes recovery based on these principles.

Symposium
Friday, November 8
9:00 a.m. to 10:15 a.m.
Grand Ballroom B

Assessment and Treatment of Sexually Assaulted Men and Women Treated in Public Health Care Settings
(Social/Diverse Pop/M/Industrialized)

Chair: Bradley, Bekh, PhD
Atlanta VAMC/Emory University, Decatur, Georgia, USA

Multiple factors increase risk for sexual assault, including physical or mental health disability, incarceration, poverty, homelessness, and living in or being deployed to combat zones. Individuals who receive treatment in
public health care settings are disproportionately exposed to these risk factors. Thus, these populations have a particularly high rate of past sexual assault, which is associated with mental, and physical health symptoms that are often not identified or treated. Because of multiple factors (e.g., stigma of both sexual assault and mental health care; gender roles; gender and race-based discrimination) individuals treated in these settings may be less likely to report sexual assault or to engage in treatment. The proposed symposium will present data gathered from four groups: 1) Female Veterans treated in a VA Medical Center who experienced Military Sexual Trauma (MST); 2) Male Veterans enrolled in VA health care who experienced MST; 3) Low income, African American (AA) women being treated in public, primary care clinics; 4) Low income, AA men recruited while seeking treatment at an urban, public hospital. The symposia will include data gathered using qualitative and quantitative research. Implications for improving assessment, treatment engagement and development of treatments best matched to the needs of specific populations will be presented.

**Symposium**
**Friday, November 8**
**9:00 a.m. to 10:15 a.m.**
**Grand Ballroom B**

**Risk, Resilience and Treatment Engagement among Female Veterans with Military Sexual Trauma**
(Clin Res/Mil/Vets/Industrialized)

Patel, Meghna, PhD, ABPP<sup>1</sup>, Kelly, Ursula, PhD, RN<sup>2</sup>, Bradley, Bexh, PhD<sup>2</sup>

<sup>1</sup>Atlanta VA Medical Center, Decatur, Georgia, USA
<sup>2</sup>Atlanta VAMC/Emory University, Decatur, Georgia, USA

Military Sexual Trauma (MST) is reported by >20% of female veterans, and these women are at an increased risk physical and mental health problems, including post-traumatic stress disorder (PTSD). Despite the prevalence of MST and PTSD, little is known about the factors that influence risk and resilience as well as treatment seeking and engagement in this population. Both quantitative (N=100) and qualitative data (N=15) were gathered from women with a history of MST receiving treatment at a VA medical center. Data analytic methods include situational analysis, a modified version of grounded theory, and mixed methods. Findings indicate that multiple factors influence both risk/resilience as well as treatment engagement. These include current level of symptoms, past experiences (e.g., prior traumas, treatment history), higher order social processes (e.g., military culture, gender-roles, race and gender-based discrimination), and social roles and relationships (e.g., mothering, and relationship with romantic partners). Data analyses also highlighted the importance of beliefs about the meaning of and best ways to cope with sexual assault. Understanding the factors that influence and are related to PTSD treatment-seeking among female veterans who experienced MST is essential in the development of effective patient-centered outreach and treatment programs.
Male Veterans Who Have Experienced Military Sexual Trauma: Perceived Barriers, Provider Gender Preferences, and Informational Preferences
(Clin Res/Mil/Vets/Industrialized)

Turchik, Jessica, PhD1, Rafie, Samantha, MS, PhD Student2, Makin-Byrd, Kerry, PhD3, Rosen, Craig, PhD4, Kimerling, Rachel, PhD5
1National Center for PTSD, VA Palo Alto Health Care System/Stanford University School of Medicine, Menlo Park, California, USA
2Palo Alto University, Palo Alto, California, USA
3VA Mental Health Services/National Center for PTSD, Menlo Park, California, USA
4VA Palo Alto Health Care System, National Center for PTSD/Stanford University, Menlo Park, California, USA
5National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Palo Alto, California, USA

The majority of research on sexual victimization, including military sexual trauma (MST), has focused on female victims. Furthermore, recent evidence suggests that men are less likely to utilize MST-related mental health services than women. The goal of the current research was to examine perceived barriers and preferences associated with accessing MST-related care among male Veterans. Interviews with 20 male Veterans were conducted, followed by a mailed survey that was completed by an additional 153 male Veterans who had experienced MST. Knowledge-related barriers, stigma-related barriers, and gender-related barriers were identified during interviews as reasons why men may not seek VHA care for MST. No consistent gender provider preference emerged, although most men had a preference: 50% of men preferred a female provider, 25% a male provider, and 25% had no gender preference. Both interview and survey results found that male Veterans preferred a male-targeted informational brochure about MST compared to a gender-neutral MST brochure. These results highlight the importance of taking gender into consideration regarding Veteran barriers to and preferences for treatment. These results will be discussed in regards to both clinical treatment implications and future research directions for Veterans with MST.

"I stuffed it": A qualitative Analysis Revealing the Impact of Disclosure Response on Treatment Seeking among High-risk African American Women
(CulDiv/Diverse Pop/Industrialized)

Wrenn, Glenda, MD
Morehouse School of Medicine, Atlanta, Georgia, USA

Post-traumatic stress disorder is a debilitating condition affecting 7.8% of the population. Racial disparities in diagnosis and treatment of PTSD among African Americans are an additional concern that is poorly understood
Effective treatments for PTSD exist, including a range of psychological interventions and pharmacotherapy, but these options are not always accessed (Foia 2000). Major barriers to successful treatment include access to and utilization of existing resources, and attrition among those enrolled in treatment (Matthieu 2006). The purpose of this study is to begin to address this health disparity by elucidating the decision making process for managing post-traumatic symptoms from a patient perspective among a group of African American women. We developed a model informed by women participating in the Grady Trauma Project, an assessment project that identifies and characterizes trauma within medical settings. Using a research strategy called ethnographic decision modeling to examine the system and individual level factors that affect the decisions that African American women make in the process of recognizing the need for and seeking treatment for PTSD. This pilot study will result in a conceptual framework of patient decision-making that can be further developed, tested, and applied to guide strategies for increasing minority access to PTSD treatment.

Symposium
Friday, November 8
9:00 a.m. to 10:15 a.m.
Grand Ballroom B

Adult and Childhood Sexual Assault in a Sample of African American Men Seeking Treatment at a Public Hospital
(CulDiv/Diverse Pop/Industrialized)

Michopoulos, Vasiliiki, PhD, MSc1, Rothbaum, Alex, BS1, Bradley, Bekh, PhD2
1Emory University School of Medicine, Atlanta, Georgia, USA
2Atlanta VAMC/Emory University, Decatur, Georgia, USA

As compared to women, research on men who have experienced sexual assault (SA) is limited. Even more limited is research on men in African American (AA) men. We will present data on SA from a sample of 1500 AA men recruited from the primary care clinics of a public hospital. Data show that 13.7% report childhood SA and 2.4% report SA as an adult. Childhood was associated with higher rates of adult SA (p<.001) and higher rates of overall adult trauma (p<.001). Both child and adult SA were associated with increased risk for mental health and behavioral problems including suicide attempt, PTSD, substance use disorders, and number of incarcerations (all p<.01). Many men with a history of SA did not receive needed mental health treatment. Among male SA survivors with a lifetime diagnosis of PTSD, only 20% reported ever receiving treatment for this disorder. Nonetheless, many AA men with a history of SA displayed resilience. Resilience was positively associated with childhood family environment and extracurricular activities and negatively associated with experiences of race-based discrimination. Data highlight a need to raise awareness and provide training to health treatment providers serving this population. In addition, the development of educational materials tailored to AA men with a history of SA might increase likelihood of engagement in treatment when needed.
Symposium
Friday, November 8
9:00 a.m. to 10:15 a.m.
Grand Ballroom F

Understanding the Complexity of Trauma through Neuroimaging
(Bio Med/Diverse Pop/M/Industrialized)

Chair: Bryant, Richard, PhD
University of New South Wales, Sydney, NSW, Australia

Recent years has seen increasing attention being devoted to the nature of more complex PTSD reactions, which are commonly accompanied by marked emotional dysregulation and interpersonal difficulties. This symposium presents studies that have employed neuroimaging techniques to understand the nature of trauma response in populations often characterized by more complex trauma response. In the first study, Dr Bryant will present findings of a study that used fMRI to examines differences in emotion processing in civilians with PTSD following discrete adult trauma and adult survivors of childhood abuse with complex PTSD. Dr Liddell will present novel findings that map the distinct neural pathways recruited by individuals with individualistic or collectivist worldviews, and compliments this with data pertaining to refugees during emotion processing. In the third study Dr Marmar will present findings of structural MRI associations of PTSD in OEF/OIF personnel. The final study will present analyses of the heterogeneity of PTSD profile using fMRI. These studies highlight the variability of PTSD and progress our understanding of the neural underpinnings of the distinct profiles of different PTSD presentations.

Symposium
Friday, November 8
9:00 a.m. to 10:15 a.m.
Grand Ballroom F

The Neural Underpinnings of Complex PTSD
(Bio Med/Adult/Cmplx/Industrialized)

Bryant, Richard, PhD
University of New South Wales, Sydney, NSW, Australia

Complex PTSD has received much attention in recent times, and is being considered as a distinct form of PTSD in ICD-11. It is characterized by core PTSD symptoms in addition to emotion dysregulation, interpersonal difficulties, and identity disturbances. Despite the increasing clinical awareness of this condition, there is little data pertaining to the neural features that distinguish complex PTSD from other forms of PTSD. In this study we compared straightforward PTSD and complex PTSD participants (N =50); whereas the former had suffered adult trauma, the latter group were adult survivors of childhood abuse. Using fMRI, participants were presented with an emotion processing paradigm in which participants were shown suprimaliminal and subliminal presentations of differently valenced faces (happy, angry, fear, neutral). Participants with complex PTSD displayed distinct activation in relevant networks of emotion processing. These findings represent the first demonstration of a neural marker that distinguishes complex from straightforward PTSD.
Symposium
Friday, November 8
9:00 a.m. to 10:15 a.m.
Grand Ballroom F

Cultural Differences in the Neural Mechanisms of Emotion and Attention: Implications for Understanding Traumatic Stress Reactions in Refugees
(Bio Med/Diverse Pop/Global)

Liddell, Belinda, PhD¹, Felmingham, Kim, PhD², Das, Pritha, PhD³; Malhi, Gin, PhD⁴; Battaglini, Eva, PhD Candidate¹, Bryant, Richard, PhD¹

¹University of New South Wales, Sydney, NSW, Australia
²University of Tasmania, Hobart, TAS, Australia
³University of Sydney, Sydney, NSW, Australia
⁴University of Sydney, St Leonards, NSW, Australia

Little is understood about how culture impacts the mechanisms of PTSD. This is despite many studies demonstrating that cultural value frameworks fundamentally shape human information processing, including modulating attention, memory and emotion processes – the very systems disrupted in PTSD. We will report on two functional Magnetic Resonance Imaging (fMRI) studies that examined differences between healthy participants varying along the cultural value dimension of collectivism vs individualism. In the first study, collectivists (n=15) preferentially engaged both attentional control (dorsal and frontoparietal attention systems) and object-processing (temporo-occipital) sensory networks when attending culturally non-preferred aspects of composite shape stimuli, relative to individualists (n=15). In the second study, collectivists (n=16) showed stronger activation within contextualisation networks (left hippocampus, right parietal cortex) when processing negative scenes; individualists specifically activated threat detection networks (including the right amygdala). These findings suggest that cultural value modulates activity in attention and emotion networks, and have important implications for understanding the neural mechanisms of PTSD cross-culturally. Preliminary fMRI data examining dysregulated threat perception in a refugee sample with PTSD will also be discussed.
Symposium
Friday, November 8
9:00 a.m. to 10:15 a.m.
Grand Ballroom F

Structural Neuroimaging Markers for PTSD in OEF and OIF Veterans
(Bio Med/Mil/Vets/Industrialized)

Marmar, Charles, MD¹, Mueller, Suzanne, MD², Weiner, Michael, MD²; Sodickson, Daniel, MD, PhD³, Yehuda, Rachel, PhD⁴, Wolkowitz, Owen, MD²; Henn-Haase, Clare, PsyD⁵, Flory, Janine, PhD⁴, Yan, Xiaodan, PhD¹

¹New York University School of Medicine, New York, New York, USA
²Academic Medical Center, San Francisco, California, USA
³Academic Medical Center, New York, New York, USA
⁴J. J. Peters Veterans Affairs Medical Center; Mount Sinai School of Medicine, Bronx, New York, USA
⁵New York University Langone Medical Center, Department of Psychiatry, New York, New York, USA

The hippocampus is involved in memory and in the biological stress response, in particular, it has been shown that hippocampal subfield abnormalities, may be risk factors for, or consequences of, combat-related PTSD, which has been investigated by our Neuroimaging Core (Drs. Weiner, Mueller, and Schuff) with high resolution T2 MRI. Hippocampal subfields have been manually traced in 92 subjects (44PTSD+ and 48 PTSD-). Subfields of right and left sides are summed. Results are corrected for intracranial volume and covariates included age and Hispanic ethnicity. Initial findings revealed PTSD+ had significantly smaller CA1 volumes, but not total hippocampal volumes. Free Surfer v5.1 was also used to perform automatic whole brain parcellation in 139 participants which yielded cortical thickness, volumes and surface measurements of 72 cortical regions and 54 subcortical-regions. Regions of Interest (ROI) analysis were conducted with volume measures of right and left sides summed and covariates included age, race, BDI scores, scores on the Early Trauma Inventory, and duration of PTSD symptoms. A priori ROI analysis revealed that PTSD+ had significantly lower volumes in the RA cingulate, CM Frontal and insula. Exploratory ROI analysis revealed that PTSD+ had lower volumes in Post Cingulate, Precentral Gyrus, Pars Orbitalis and Transverse Temporal.
Disentangling Heterogeneity in Post-Traumatic Stress Disorder from the Perspective of Emotional Reactivity and Regulation

(Clin Res/Diverse Pop/Industrialized)

Goodkind, Madeleine, PhD1, Oathes, Desmond, PhD2, Weiss, Elizabeth, PsyD3; Rothbaum, Barbara, PhD, ABPP4; Etkin, Amit, MD, PhD5
1VA Palo Alto Health Care System / Stanford University, Palo Alto, California, USA
2Stanford University, Stanford, California, USA
3Stanford University/Palo Alto VA, Palo Alto, California, USA
4Emory University School of Medicine, Atlanta, Georgia, USA

PTSD is defined as the combination of symptoms across different clusters of dysfunction and thus is marked by significant clinical heterogeneity, which poses challenges for understanding the mechanisms of PTSD and developing treatments. To elucidate the relative influence of symptom clusters on emotional dysfunction, we assessed emotional reactivity and regulation, examining relationships with overall symptom severity and with different classes of PTSD symptoms. Patients with PTSD underwent functional MRI during an emotional conflict task that included behavioral and neural measures of emotional reactivity and regulation. Only distinct classes of symptoms, and not overall symptom severity, mapped onto behavior and brain activation. Specifically, greater emotional numbing was associated with more pronounced emotional reactivity and frontolimbic activation. Conversely, greater effortful avoidance was associated with better emotion regulation and pregenual anterior cingulate activation. Finally, numbing was associated with worse quality of life, whereas effortful avoidance was related to better functional status. Although considered part of a unitary diagnostic construct, these findings suggest that emotional numbing and effortful avoidance have distinct roles in determining emotional experience in PTSD, and question the utility of viewing PTSD as a unitary disorder.

How Do We Determine Resilience? Examining Multiple Definitions of Resilient Outcomes Following Psychological and Physical Trauma

(Assess Dx/N/A/M/Industrialized)

Chair: Stratton, Kelcey, PhD1, Discussant: Galea, Sandro, MD PhD2
1Hunter Holmes McGuire VA Medical Center, Richmond, Virginia, USA
2Columbia University, Mailman School of Public Health, New York, New York, USA

The term “resilience” is applied in numerous ways in the field of psychological research, and definitions of resilient outcomes may differ by population or type of trauma exposure. This symposium will examine how various definitions of resilient outcomes impact upon who may be considered “resilient” following trauma exposure. We
present findings from both clinical and epidemiological research to illustrate aspects of positive psychiatric and physical health outcomes following exposure to trauma and/or physical injury. Specifically, the presentations empirically examine the utility of defining resilience according to: 1) broad wellness/distress models (e.g., subjective, general well-being); 2) distinct psychiatric outcomes (e.g., post-traumatic stress disorder, acute stress disorder, depression); and 3) trajectories of physical and mental health functioning following traumatic injury. Our samples include U.S. adults, children and adolescents, and military service members and combat veterans. Discussion of the shared and unique factors of each definition of resilience will emphasize the importance of identifying multiple characteristics of positive functioning in distinct populations and age groups.

Symposium  
Friday, November 8  
9:00 a.m. to 10:15 a.m.  
Franklin 5

An Evaluation of Three Models of Resilience in a Sample of Military Service Members and Veterans  
(Assess Dx/Mil/Vets/Industrialized)

Stratton, Kelcey, PhD\(^1\), Amstadter, Ananda, PhD\(^2\), McDonald, Scott, PhD\(^1\)  
\(^1\)Hunter Holmes McGuire VA Medical Center, Richmond, Virginia, USA  
\(^2\)Virginia Institute for Psychiatric and Behavioral Genetics, VCU, Richmond, Virginia, USA

Three commonly used resilience definitions were evaluated among military personnel (N=879) reporting a Criterion A military trauma. We compared prevalence rates and classification agreement when resilience is defined as 1) absence of combat-related lifetime post-traumatic stress disorder (PTSD; Model 1); 2) absence of lifetime DSM-IV Axis I disorder (Model 2); or 3) absence of internalizing symptoms, measured by Symptom Checklist-90-Revised (SCL-90-R; Model 3). Statistical concordance of “resilient v. nonresilient” cases across definitions was determined using chi-square analyses. A quantitative resilience measure was also used, defined as the difference between actual and predicted SCL-90-R scores given lifetime trauma exposure, to distinguish resilient cases (lower than expected internalizing) from nonresilient cases (higher than expected internalizing). In Model 1, 34% of the sample were considered “resilient,” while resilience classification decreased to 24% in Model 2. Number of military traumas predicted SCL-90-R scores after controlling for pre-military traumas, $\beta=.16$, $t(855)=12.14$, p<.001; residual scores from this quantitative resilience measure classified 55% of the sample as resilient (i.e., lower than predicted internalizing given trauma load). Discussion focuses on how various definitions of resilience impact upon who may be considered resilient following trauma.
Symposium
Friday, November 8
9:00 a.m. to 10:15 a.m.
Franklin 5

Resiliency to Traumatic Experiences Predicts Decreased Likelihood of Axis I Disorders
(Res Meth/N/A/Industrialized)

Berenz, Erin, PhD¹, Overstreet, Cassie, BA², Hawn, Sage, BS¹, Roberson-Nay, Roxann, PhD¹, Amstadter, Ananda, PhD³
¹Virginia Institute for Psychiatric and Behavioral Genetics, Richmond, Virginia, USA
²Virginia Commonwealth University, Richmond, Virginia, USA
³Virginia Institute for Psychiatric and Behavioral Genetics, VCU, Richmond, Virginia, USA

Self-reported resiliency is retrospectively related to decreased likelihood of PTSD and other disorders in trauma-exposed populations (Green et al., 2010). However, trauma-focused models of psychiatric resiliency are lacking. Decreased PTSD symptom severity given an individual’s trauma load may represent one measure of broad-based psychiatric resiliency. The current study assessed relationships between trauma-focused resiliency (i.e., the difference between actual and predicted PTSD score based on trauma load) and axis I psychopathology. It was hypothesized that greater resiliency would predict decreased likelihood of lifetime anxiety, mood, and alcohol use disorders. Participants were 6,092 adults (52.8% women; Mage=46.7, SD=15.0) from the National Epidemiologic Study on Alcohol and Related Conditions endorsing lifetime PTSD Criterion A exposure. Logistic regressions were conducted to examine the relationship of trauma load-PTSD residual scores and axis I diagnoses, covarying for age, sex, and education level. Greater resiliency scores predicted decreased likelihood of lifetime major depression (OR=.59, p<.001), generalized anxiety disorder (OR=.60, p<.001), social anxiety disorder (OR=.71, p<.001), panic disorder (OR=.62, p<.001), and alcohol dependence (OR=.79, p<.001). Decreased traumatic stress reactivity likely represents a measure of general emotional resiliency.

Symposium
Friday, November 8
9:00 a.m. to 10:15 a.m.
Franklin 5

Predicting Resilience: Acute Stress Disorder and Post-Traumatic Stress Disorder in Children with Severe Injuries
(Clin Res/Child/Adol/Industrialized)

Brown, Ruth, PhD¹, Koenen, Karestan, PhD², Nugent, Nicole, PhD², Saxe, Glenn, MD⁴, Amstadter, Ananda, PhD¹
¹Virginia Institute for Psychiatric and Behavioral Genetics, VCU, Richmond, Virginia, USA
²Columbia University School of Public Health, New York, New York, USA
³Brown Medical School, Providence, Rhode Island, USA
⁴New York University Langone Medical Center, New York, New York, USA

The present study examined two classification models of resilience to ASD and PTSD in an urban sample of primarily minority injured youth (n=138) admitted to the hospital. Youth were classified into groups based on ASD diagnostic status at the acute hospital assessment and PTSD at 3-month follow-up. The 4-group model included Resilient (ASD-, PTSD-; n=73), Recovered (ASD+, PTSD-; n=40), Delayed Onset (ASD-, PTSD+; n=14), and Chronic
A 2-group model included: Resilient (ASD-, PTSD-) or Non-Resilient (either ASD or PTSD).

Demographic (SES, age, race), injury characteristics (violent/nonviolent, injury severity), and psychological factors (peritraumatic dissociation, internalizing/externalizing symptoms, maternal PTSD) were examined as predictors of transition status. Results of the 4-group model (ANOVA and chi-square) suggested that male sex (p=.03), higher SES (p=.015), lower externalizing symptoms (p=.001), lower peritraumatic dissociation (p<.001), and lower maternal PTSD symptoms (p=.20) were associated with resilient (versus chronic) transition status. Results of the 2-group model suggested that only male sex (p=.045), lower peritraumatic dissociation (p<.001), and lower maternal PTSD symptoms (p=.041) predicted resilience. The influence of resiliency definitions in the study of risk and resilience in youth will be discussed.

Symposium
Friday, November 8
9:00 a.m. to 10:15 a.m.
Franklin 5

Resilience is a Common Adjustment Trajectory after Traumatic Injury
(Clin Res/Mil/Vets/N/A)

McDonald, Scott, PhD 1, Mancini, Anthony, PhD 2; Pickett, Treven, PsyD 1, Kreutzer, Jeffrey, PhD, ABPP 3, Beckham, Jean, PhD 2, Ketchum, Jessica, PhD 5, Melanko, Shane, MS 1; Cifu, David, MD 3

1 Hunter Holmes McGuire VA Medical Center, Richmond, Virginia, USA
2 Pace University, Pleasantville, New York, USA
3 Virginia Commonwealth University, Richmond, Virginia, USA
4 Durham VAMC, Mid-Atlantic MIRECC, Duke University, Durham, North Carolina, USA

Resilience is an adjustment trajectory of minimal distress and stable functioning following adversity. It is a common response to potentially disturbing events such as warzone trauma, mass disasters, and the death of a spouse. However, little is known about resilience following traumatic physical injury. In addition to the risk of PTSD following trauma exposure, injuries such as traumatic spinal cord injury (SCI) and traumatic brain injury (TBI) are often followed by hardship such as physical disability, loss of employment, and changes in interpersonal relationships. Determining what personal and situational factors are associated with resilience in this population is important, as early detection of at-risk individuals can lead to targeted interventions during rehabilitation that improve resilience and thus long-term outcomes. This presentation will first demonstrate the applicability of a resilience model (Bonanno, 2004) to rehabilitation medicine. Next, data from a study of resilience at two US Veterans Affairs SCI and Polytrauma rehabilitation centers will illustrate the relationship of resiliency factors (e.g., optimism, coping skills, and social support) to outcomes of depression, anxiety, and quality of life. Finally, methodological considerations that are essential for successful resilience research in an inpatient rehabilitation setting will be presented.
**Symposium**

**Friday, November 8**

9:00 a.m. to 10:15 a.m.

Franklin 8

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**Novel Approaches for Overcoming Barriers and Improving Wellness for Returning Veterans**

(Commun/Mil/Vets/I/Industrialized)

**Chair:** Simon, Naomi, MD

*Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA*

Since 9/11, over two million U.S. service members have been deployed to Iraq or Afghanistan in support of Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF) and Operation New Dawn (OND). As a result, thousands of returning veterans, many of whom are members of the National Guard or Reserves, are suffering from post-traumatic stress disorder (PTSD), traumatic brain injury (TBI), deployment related stress and associated conditions. Further, the deployment cycle and the presence of post-traumatic stress in returning veterans who have often had multiple deployments also significantly impact their family members. Nonetheless, a majority of veterans and their families do not seek care due to a variety of barriers. This presentation brings together clinicians and researchers from four different groups funded through public private partnerships that have developed innovative initiatives to overcome barriers to care and improve health and wellness for returning veterans and their families. Approaches presented will include two different veteran and family outreach approaches (MGH and Michigan), health and wellness training with the National Guard (Cornell), and expansion of care through the training and certification of civilian community providers (Emory). These novel approaches and qualitative and quantitative data supporting them will be presented and discussed.

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**Overcoming Barriers to Care for Returning Veterans with Post-Traumatic Stress Disorder and Traumatic Brain Injury with a Veteran and Family Outreach Team**

(Commun/Mil/Vets/Industrialized)

**Simon, Naomi, MD**, Brendel, Rebecca, MD, Knight, Roger, BA; Clair-Hayes, Kathy, LICSW; Moore, Catherine, BA; Ohye, Bonnie, PhD, Allard, Michael, BA

1. *Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA*
2. *Massachusetts General Hospital, Boston, Massachusetts, USA*

The Red Sox Foundation and the Massachusetts General Hospital Home Base Program (HBP) was established to address gaps in clinical care, education and research for OEF/OIF/OND veterans and their families affected by PTSD, traumatic brain injury and deployment related stress. To help overcome barriers to care, we established a team of veteran and family outreach coordinators with former having served in Iraq or Afghanistan. Veteran outreach roles include: (i) peer support, including the initial phone intake coordinator, and an assigned contact for each veteran entering care; (ii) participation in outreach and education to the community to educate about PTSD.
and TBI, and guidance of affected veterans and families into care; and (iii) training and feedback about military culture and systems to HBP civilian clinicians in support of clinical care, research and educational efforts. Initial data suggest high rates of acceptance and completion of initial clinical evaluation with phone assessment and scheduling by a fellow veteran (close to 90%), and the utility of flexible outreach approaches for reaching patients who miss appointments. Additional qualitative and quantitative data illustrating the utility of this outreach approach including the use of social media, outreach to families, and integration of clinical support will be presented.

Symposium
Friday, November 8
9:00 a.m. to 10:15 a.m.
Franklin 8

BraveHeart: Welcome Back Veterans Southeast Initiative Collaboration with Georgia National Guard
(Commun/Mil/Vets/N/A)

Rothbaum, Barbara, PhD, ABPP, Gerardi, Maryrose, PhD. Galloway-Salazar, Qwynn, MA
Emory University School of Medicine, Atlanta, Georgia, USA

BraveHeart: Welcome Back Veterans Southeast Initiative is a partnership between Emory University School of Medicine and the Atlanta Braves. BraveHeart is an outreach, education and resource program for OEF/OIF/OND Veterans and their Families dealing with PTSD. BraveHeart offers a comprehensive, confidential website in which Veterans and Families can access information about PTSD, locate treatment resources, and utilize the SimCoach, an interactive avatar that can screen for PTSD symptoms. To address the needs of our Veterans, we have formed a partnership with the Georgia National Guard, Georgia Department of Behavioral Health & Developmental Disabilities, Center for Deployment Psychology, and the Military Family Research Institute at Purdue University to pilot the Star Behavioral Health Providers (SBHP) in Georgia. The SBHP program will provide training to behavioral health providers in military-specific culture and disseminate empirically-supported treatments that focus on the needs of military families. The program will offer an online registry of these specially trained providers to serve as a resource for Veterans and their Families in Georgia.
Developing a Psychological Health and Wellness Curriculum to Foster Resilience among National Guard Service Members
(Prevent/Mil/Vets/Industrialized)

Olden, Megan, PhD¹, Mello, Brittany, BA²; Cukor, Judith, PhD¹, Jayasinghe, Nimali, PhD¹; Cancellare, Mary Denise, PhD¹, Wyka, Katarzyna, PhD², Difede, JoAnn, PhD¹
¹New York Presbyterian Hospital/Weill Medical College of Cornell University, New York, New York, USA
²Weill Cornell Medical College, New York, New York, USA

We will discuss the development and implementation of a workshop series aimed at facilitating psychological health and well-being of the New York National Guard (NG). Begun in 2009 as a brief intervention focusing on basic stress management skills, the curriculum was expanded to its current six-session format due to its initial success. The purpose of the workshops is to teach resilience-building skills in the face of the unique responsibilities and challenges of service in the Guard (e.g., juggling civilian and military roles, trauma exposure). The curriculum integrates psychological health and wellness components, including anger management, communication, substance misuse, workforce readiness, nutrition, financial fitness, and yoga. These three-hour, clinician-led workshops provide skills to promote wellness, manage stress, and address mental health symptoms with this high-risk population. Since 2009, an estimated 250 individuals have attended at least one workshop, with most attending multiple sessions. Feedback data, to be presented, has been very positive, e.g., 79% of participants expressed confidence that the workshops enhanced their ability to cope with stress when preparing for deployment, during deployment, and re-integration into civilian life. The public health implications of offering educational workshops as a routine part of NG training are discussed.

Peer Outreach in a National Guard Organization: The BuddytoBuddy Program
(Commun/Mil/Vets//Industrialized)

Valenstein, Marcia,
SMITREC, HSR&D Center for Excellence, Ann Arbor, Michigan, USA

Background: National Guard (NG) soldiers returning from OEF/OIF conflicts report more mental health symptoms than active component soldiers. By three months following their return, 42% report mental health and psychosocial issues indicating a need for further evaluation. However, many do not initiate or stay in treatment long enough to receive evidence-based care. Proactive peer outreach may identify emerging problems, address stigma and facilitate appropriate treatment and services use. We are examining the implementation of a peer support/outreach program, the BuddytoBuddy (B2B) program in a large Midwestern NG Organization. This peer program was designed to improve linkage to services for NG Soldiers with need. Methods: We are using an embedded mixed methods design to assess implementation and are collecting longitudinal survey data to assess
the NG Soldiers’ symptoms and functional status over time. Results: There are currently 76 active community Volunteer Veterans in 35 armories across the NG Organization. To date, survey data has been collected on 1530 Soldiers, with longitudinal data on 444. We will report on Soldiers’ functional status, mental health symptoms, social support, and use of and satisfaction with the B2B program. Preliminary data on services use in units with and without active Buddies will also be presented.

Panel Presentation  
Friday, November 8  
09:00 a.m. to 10:15 a.m.  
Grand Ballroom A  

Beyond Session 1: How to Retain Patients in Evidence-based Care  
(Practice/Caregvr/M/Industrialized)  

Monroe, J., PhD\textsuperscript{1}, Collie, Claire, PhD\textsuperscript{2}, Norman, Sonya, PhD\textsuperscript{3}, Holohan, Dana, PhD\textsuperscript{4}  
\textsuperscript{1}Department of Veteran Affairs, Hines, Illinois, USA  
\textsuperscript{2}VA Office of Mental Health Services, Durham, North Carolina, USA  
\textsuperscript{3}UC San Diego / VA San Diego Health Care System, San Diego, California, USA  
\textsuperscript{4}Salem VA Medical Center, University of Virginia School of Medicine, Virginia Tech Carilion School of Medicine, Roanoke, Virginia, USA  

Recent years have shown a significant increase in the number of providers conducting evidence-based psychotherapies for PTSD and trauma-related disorders. However, attrition rates suggest that a significant number of patients discontinue therapy prior to completing a full course of care. Panelists from the US Department of Veterans Affairs will address practical considerations for maintaining patient engagement and compliance with evidence-based protocols. Panelists will review techniques for developing effective pre-treatment discussions with patients on therapeutic rationale, treatment expectations, and potential barriers to care. Techniques for incorporating motivational interviewing practices, fostering formative feedback, and encouraging between-session practice compliance will also be emphasized. The panel will address therapist concerns about employing these treatments with complex patient populations (e.g., multiple comorbidities, Axis II pathology, extensive/continuous trauma exposure). Practical considerations for tailoring Cognitive Processing Therapy and Prolonged Exposure will be examined specifically. Case examples to be reviewed for illustrative purposes.
Panel Presentation  
Friday, November 8  
9:00 a.m. to 10:15 a.m.  
Franklin 9/10

Veterans Integration to Academic Leadership (VITAL): An Initiative to Promote Student Veteran Resilience  
(Practice/Mil/Vets/I/Industrialized)

Wolfman-Charles, Jade, PhD¹; Santanello, Andrew, PsyD¹; Thiede, Jessica, PsyD²

¹VA Maryland Healthcare System, Baltimore, Maryland, USA  
²Cincinnati VA Medical Center, Cincinnati, Ohio, USA

Survey data indicate that the student veteran population is rising rapidly. According to the Veterans Benefits Administration Office of Education Services, students participating in VA education programs more than doubled since September 11th, from approximately 397,000 to over 900,000. Given declines in the job market, the reduction of military forces, and newly implemented education benefits, it is not surprising that many veterans enter academic institutions as they make the transition to civilian living. However, student veterans face challenges that the traditional student may not. The VA National Veterans Integration to Academic Leadership (VITAL) Initiative was designed to address these unique challenges while promoting student veteran resilience through partnerships with local colleges/universities. VITAL clinicians provide on-campus care coordination for medical and mental health needs, educational training for faculty and staff, and outreach to student veterans. This panel, comprised of VITAL clinicians from across the country, will address strategies and variability in implementing the initiative. Discussion will focus on the following: program development and evaluation, strategies for promoting resilience, post-trauma prevention and intervention, and program customization based on the unique cultural needs of the academic environment.
Fostering Resilience in Providers: Compassion Fatigue Prevention for Researchers, Clinicians, and Helpline Responders Working with Trauma Populations
(Self-Care/Caregivers/I/N/A)

Brancu, Mira, PhD, Kudler, Harold, MD, Mann-Wrobel, Monica, PhD, Robbins, Allison, BA, Swinkels, Cindy, PhD

1 Durham VAMC, Mid-Atlantic MIRECC, Duke University, Durham, North Carolina, USA
2 VISN 6 MIRECC and Duke University Medical Center, Chapel Hill, North Carolina, USA
3 Durham VA Medical Center/VISN 6 MIRECC, Durham, North Carolina, USA
4 Durham VA Medical Center, Durham, North Carolina, USA

What does resilience look like for trauma responders? Compassion fatigue has been defined as a significant problem for mental health professionals which results from exposure to trauma narratives and job burnout. Mental health providers have a professional mandate to maintain their own mental health in order to provide optimal care for others and many professional organizations have ethical guidelines regarding provider self-care and wellness but what practical steps support these principles? This workshop will provide specific programmatic approaches designed to foster resilience among providers in a variety of healthcare settings including a national Veterans helpline, a hospice and palliative care program, a multi-site trauma research study and a national trauma clinician support and supervision program. Discussion will focus on a number of key questions including: Who seems to be most resilient?; How do more resilient providers get and stay that way despite the stress/distress of work with trauma survivors?, and; Are there specific barriers to provider self-care that need to be recognized and avoided?

Adult Survivors of Complex Trauma

Secure Adult Attachment as an Indicator of Resilience
(Assess Dx/Adult/Cmplx/I/Industrialized)

Petretic, Patricia, PhD, Karlsson, Marie, MA, Calvert, Maegan, BA
University of Arkansas, Fayetteville, Fayetteville, Arkansas, USA

Interpersonal traumas have the highest incidence of PTSD. In addition, those who experience repeated interpersonal trauma have more problematic outcomes, including relational dysfunction (Charuvastra & Cloitre, 2008). Due to the relational nature of trauma, attachment theory provides a unique lens in which to study trauma.
and resilience. From this perspective, the current study uses secure adult attachment after a history of traumatic and potentially traumatic child abuse experiences as an indicator of resilience. Participants include 188 male and female undergraduates from a southeastern university who were primarily Caucasian and ranged from 18 to 33 years old. History of experiencing problematic parenting and/or maltreatment, adult attachment classifications, trauma sequelae, and cognitive distortions were assessed. There was a significant effect for attachment classification. Specifically, insecurely attached individuals reported experiencing more problematic parenting behaviors and emotional abuse than the secure group. However, of the securely attached group, 37% experienced some form of emotional abuse, and 12.2% experienced moderate emotional abuse. Of the secure group, emotional abuse did not predict trauma scores, feelings of self-worth, or cognitive distortions. Findings suggest secure attachment in adulthood may indicate resilience in the face of trauma.

**Paper Presentation**  
**Friday, November 8**  
**9:00 a.m. to 10:15 a.m.**  
**Grand Ballroom D**

**Association between Salutogenic Factors and Subjective Well-being among Adult Survivors of Childhood Trauma**  
(Assess Dx/Adult/Cmplx/A/ N/A)

Dube, Shanta, PhD, MPH  
*Centers for Disease Control and Prevention, Duluth, Georgia, USA*

The health consequences of childhood trauma are well documented. However, less is known about salutogenesis among adults who go on to survive childhood trauma. The associations between modifiable behaviors (smoking abstinence and physical activity) and personal resources (attaining education and social support) with self-rated health and depressed affect were examined among adult trauma survivors from the Adverse Childhood Experiences (ACE) Study. The presentation will focus on quality of life as an outcome for survivors of trauma and both modifiable behaviors and personal resources such as education level and social support in relationship to quality of life outcomes among survivors of childhood trauma. The presentation will include a discussion of the findings and insights into the health promotion paradigm for survivors of trauma.

**Paper Presentation**  
**Friday, November 8**  
**9:00 a.m. to 10:15 a.m.**  
**Grand Ballroom D**

**Examining the Relations among Traumatic Exposure, Resilience, and Physical Health in a Diverse OB-GYN Community Sample**  
(Assess Dx/Adult/Cmplx/I/Industrialized)

Petretic, Patricia, PhD, Chaisson, Elizabeth, PhD, Calvert, Maegan, BA, Karlsson, Marie, MA, Henrie, Joye, MA  
*University of Arkansas, Fayetteville, Arkansas, USA*

Recent trauma research investigating the construct of resilience has focused on factors that allow a person to achieve or maintain positive mental health, hypothesizing that life’s adversities primarily create a significant
psychological strain rather than imposing a significant threat to one’s physical well-being. As such, relatively few studies have focused on how resilience affects physical functioning. Similarly, few studies have examined the impact of trauma on the physical health of women and ethnic minorities, with more research needed among these populations. Women (N=209), diverse in age, ethnicity, and SES, who presented to a large obstetrical/gynecological practice serving east Alabama completed measures of trauma history (ITR-R, ACE), resilience (CD-RISC) and health (PILL, BRFSS) as well as other measures of psychological distress and healthcare utilization. Rates of trauma exposure, particularly IPV, were extremely high (76%). Regression analyses tested the role of resilience as a moderator in the relation between trauma exposure and physical health, with higher levels of resilience predicted to contribute to less health complaints following trauma. Although resilience was a significant predictor of health perceptions, it did not act as a moderator in reducing the variance contributed by trauma exposure when combined to predict physical health perceptions.

Paper Presentation
Friday, November 8
9:00 a.m. to 10:15 a.m.
Grand Ballroom D

Mental Health as a Mediator of Trauma Exposure and Criminal Offending in Women
(Assess Dx/Adult/Cmplx/I/N/A)

Lynch, Shannon, PhD¹, DeHart, Dana, PhD², Belknap, Joanne, PhD³, Green, Bonnie, PhD⁴, Johnson, Kristine, MS (PhD Student)¹
¹Idaho State University, Pocatello, Idaho, USA
²University of South Carolina, Columbia, South Carolina, USA
³University of Colorado at Boulder, Boulder, Colorado, USA
⁴Georgetown University School of Medicine, Washington, District of Columbia, USA

Previous research has identified a clear link between trauma exposure and criminal offending. However, potential explanatory mechanisms for this relationship are under explored. Given high rates of mental health problems in offenders, one important potential mediator of this relationship is offenders’ mental health. As part of a multisite study of the prevalence of serious mental illness in women in jail, we administered structured diagnostic interviews to assess current and lifetime prevalence of serious mental illness (SMI, including major depression, bipolar and psychotic spectrum disorders), post-traumatic stress disorder (PTSD), and substance use disorders (SUD) to a randomly selected sample (N = 491) of women in jail. 43% of participants met lifetime criteria for a SMI, 82% for a SUD, and 53% for PTSD. One in four met lifetime criteria for all three. Using SEM, we found that childhood trauma and adversity significantly predicted both adult victimization experiences and overall mental health. However, neither childhood nor adult victimization were directly associated with offending history. Instead, mental health mediated the relationships between both forms of victimization and offending. This finding suggests identifying mental health needs and providing effective treatments during incarceration represent important points of intervention in women’s pathways to offending.
Cultural Perspectives on Positive Adaptations to Trauma

Resilience in the Wake of Child Soldiering: A Collective Process
(Commun/Civil/Ref/M&E & S Africa)

Vindevogel, Sofie, PhD, Derluyn, Ilse, PhD, Broekaert, Eric, PhD
Ghent University, Gent, Belgium

Transition from military to civilian life involves change and adaptation, which is typically experienced as challenging because it may defy and even outweigh resources. This study aimed to explore how former child soldiers’ transition trajectories are shaped by the interplay between challenges and resources and how this fosters resilience. In-depth interviews, incorporating the Life-line Interview Method and Retrospective Interview Technique, were carried out with 48 northern Ugandan former child soldiers. Cluster analysis was performed to determine the types of trajectories. For each type, a case study was conducted by applying interpretative phenomenological analysis. The results displayed 4 types of trajectories that show an erratic course and may show either stability, improvement or decline over time. Unpacking these trajectories, the fit between encountered challenges and owned individual and communal resources appeared crucial for offsetting challenges, further resource gain, and resilient growth. This study highlights the importance of a comprehensive approach of the interconnected challenging and resourceful factors and of the intersecting internal and communal responses to challenges in the wake of child soldiering, rather than addressing challenges and resources in isolation since this risks decontextualising their value and disregarding their dynamic interaction.

Is Post-Traumatic Growth a Global Concept? The Collective Oriented Strength of Chinese Earthquake Survivors
(CulDiv/Disaster/A/E Asia & Pac)

Zang, Yinyin, PhD, MSc1, Hunt, Nigel, PhD1, Cox, Tom, PhD2
1The University of Nottingham, Nottingham, Nottingham, United Kingdom
2Birkbeck, University of London, London, United Kingdom

The topic of post-traumatic growth (PTG) has become the focus of much empirical and theoretical work. However, PTG is a theoretical concept that has been established within a Western cultural framework, and it is not clear how such this concept might be applied cross-culturally. This study applied a qualitative method to explore the nature of PTG among Chinese earthquake survivors. 60 participants were interviewed 1.5 years after the Sichuan earthquake, China. Data from individual interviews were audiotaped and transcribed. Three clusters of growth experience were emerged and summarized to: realization of the strengthened national power, appreciation of the
societal support, and the enhanced self-value. The results indicate that the themes of Chinese people’s PTG were different from Western people who experience growth in terms of changed perception of self, changed interpersonal relationships, and changed philosophy of life. The finding is of great importance for us to understand and frame PTG cross-culturally. This is the first study to explore PTG in Chinese people using qualitative methods. Chinese people are more relational and interdependent and emphasize the social context in comparison to their Western counterparts. Discussion focuses on how such differences play a role on the phenomenon of PTG, and more qualitative works are needed in worldwide.

Paper Presentation
Friday, November 8
9:00 a.m. to 10:15 a.m.
Franklin 6

The Role of Family Abroad in Post-Resettlement Acculturation and Mental Health of Unaccompanied Minor Asylum-Seekers
(Social/Civil/Ref/A/Industrialized)

Oppedal, Brit, PhD
Norwegian Institute of Public Health, Oslo, Norway

Research studies on the mental health of unaccompanied minor asylum seekers rarely pay attention to the resources that may explain individual variation in their mental health and that also may assist them in their psychosocial adaptation and acculturation after resettlement. Supportive networks are known to be an important factor in resilience processes of children facing adversities, and a necessary condition for the progress of acculturation. Social support may also reduce the impact of traumatic events on mental health. Nevertheless, there is a lack of knowledge about the role that transnational family networks may play in these processes. The present study tests a hypothetical path model of the combined effects of pre-migration war-related trauma, current perception of support from family abroad, culture competence, and acculturative stressors on depression. Questionnaire data were collected from 948 unaccompanied refugees. The structural model that fit the data show that mental health sustaining positive adaptation come into play after resettlement, as do also the harmful effects of pre-migratory traumas and current acculturation stressors. The study adds to our knowledge about how factors prior to migration and resources in the countries of origin impact on adaptation processes in the countries of resettlement in the case of unaccompanied minor refugees.
Fostering Resilience among Youth in Inner City Community Arts Centers: The Case of the Artists Collective
(Commun/Child/Adol/I/N/A)

Rhodes, Alison, PhD Candidate
Boston College, Chestnut Hill, Massachusetts, USA

Growing up in an inner city environment can inhibit healthy development and have detrimental consequences for children and adolescents such as increased risks for many social and psychological problems. This paper explores the role of community arts centers in fostering resilience among youth living in the inner city. A review of the literature of risk factors associated with growing up in an inner city environment provides a rationale for the need for interventions that promote resilience by creating a refuge from the surrounding poverty and violence, and which strengthen youth's personal and social resources. This paper examines the case of the Artists Collective, a community arts center located in Hartford, CT, and based on this analysis it is proposed that there are three components of community arts centers that contribute to youth’s resilience. First, features of the physical space promote resilience. Second, they are a place where prosocial relationships and social capital contributing to resilient functioning can be formed. Finally, it is hypothesized that learning about and participating in the arts fosters resilience by developing person-level protective factors such as self-efficacy, improved emotional regulation, social skills, coping skills, and ethnic pride.

Innovation in Research on Military Populations

Combat Stress Casualty Reduction: Development and Testing of a Predeployment Stress Inoculation Training Program
(Prevent/Mil/Vets/M/N/A)

Hourani, Laurel, PhD MPH
RTI International, Research Triangle Park, North Carolina, USA

The objective of this study was to evaluate a predeployment stress inoculation training (PRESIT) intervention to enable deploying personnel to cope better with combat-related stressors and mitigate the negative effects of trauma exposure. The PRESIT program consisted of three predeployment training modules: (1) educational materials on combat and operational stress control, (2) coping skills training involving focused and relaxation breathing exercises with biofeedback, and (3) exposure to a video multimedia stressor environment to practice knowledge and skills learned in the first two components. Psychophysiological measures including heart rate variability and a reaction time task assessed the degree to which participants learned the coping skills. Data on 348
Marines randomized into experimental (PRESIT) and control (current best practice [CBP]) groups were collected at predeployment and upon return from deployment. Findings showed that the PRESIT group reported better coping postdeployment than controls, especially among those with no baseline post-traumatic stress disorder (PTSD). Excluding participants with baseline mental health problems, the control group was seven times more likely than the experimental group to meet screening criteria for PTSD. This study marks the first evidence of the benefits of predeployment stress inoculation training in U.S. military personnel.

Paper Presentation
Friday, November 8
9:00 a.m. to 10:15 a.m.
Franklin 7

Development and Validation of a Computer-adapted Test to Facilitate Routine Assessment of PTSD Treatment Outcomes
(Assess Dx/Mil/Vets/M/Industrialized)

Eisen, Susan, PhD¹, Schultz, Mark, PhD², Spiro III, Avron, PhD³, Smith, Eric, MD, MPH⁴, Osei-Bonsu, Princess, PhD, MPH⁴, Jette, Alan, PhD³

¹Department of Veteran Affairs Medical Center, Bedford, Massachusetts, USA
²Bedford VAMC, Bedford, Massachusetts, USA
³Boston University School of Public Health, Boston, Massachusetts, USA

The study objective was to develop a computer-adapted test for PTSD (P-CAT) that will be useful for assessing PTSD treatment outcomes. Computer-adaptive tests, based on Item Response Theory (IRT), allow for brief, but highly sensitive and accurate assessments. We incorporated proposed DSM-V diagnostic criteria to identify possible PTSD domains for inclusion. We then conducted a systematic literature review of PTSD instruments, created an item database, performed qualitative item review and readability analysis, and conducted cognitive interviews with veterans with PTSD to develop a pool of 89 items for the PCAT. We administered these items to a national sample of 1,085 veterans. We conducted exploratory, confirmatory and IRT analyses to determine optimal structure for the PCAT and to develop the test. A bi-factor model with 1 general PTSD factor and 4 sub-factors (intrusion/re-experiencing, avoidance, negative mood and cognition, and hyperarousal/reactivity) yielded good model fit. A 12-item PCAT showed excellent discriminant validity, successfully discriminating veterans with PTSD from those with other mental health conditions and from those with medical, but no mental health conditions. Concurrent validity was also supported by high correlations with established PTSD measures. The PCAT seems to be a useful measure, but further validation in clinical settings is needed.
Paper Presentation  
Friday, November 8  
9:00 a.m. to 10:15 a.m.  
Franklin 7

**Efficacy of Group Delivered Cognitive Processing Therapy in Women Veterans with PTSD**  
(Practice/Mil/Vets/M/Industrialized)

Lacefield, Katharine, MS¹, Blankenship, Abby, PhD², Lisansky, Donna, MSN APRN³, Chee, Christine, PhD¹, C’ de Baca, Janet, PhD¹, Castillo, Diane, PhD¹  
¹New Mexico VA Healthcare System, Albuquerque, New Mexico, USA  
²Western Michigan University, Kalamazoo, Michigan, USA

Cognitive Processing Therapy (CPT) has been established as one of two evidence-based therapies with the largest effect sizes in reducing PTSD and has been disseminated throughout the VA as a first line of treatment. Although the components of CPT can be readily applied in a group setting, the majority of support in the literature has been derived from individual delivery of the intervention. The Women’s Stress Disorder Treatment Team (WSDTT) at the New Mexico VA Health Care System (NMVAHCS) has offered three versions of CPT in group: a more flexible, modified 8-session version (n = 40 groups), a 10-session CPT-C (without exposure; n = 5 groups), and the full 12-session version (n = 9 groups). Preliminary pre/post analyses on the total sample (n = 205, 54 groups) is showing significant (p < .001) decreases in PTSD. Full data analysis on the sample will be presented, including baseline data on CAPS, testing, and demographics, intent-to-treat analysis, and outcome comparisons between the three CPT versions. Findings validate the application of CPT in a group and may provide direction for optimally balancing treatment efficacy with increased access to care for women veterans with PTSD.

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Paper Presentation  
Friday, November 8  
9:00 a.m. to 10:15 a.m.  
Franklin 7

**Relationship Intimacy in Combat Injured Couples: Impact of Invisible Injuries, Early Adversities and Depression**  
(Res Meth/Mil/Vets/M/Industrialized)

Cozza, Stephen, MD, Holmes, Allison, PhD, Fullerton, Carol, PhD, Ursano, Robert, MD, Ridge Anderson, Abby, MA, Sullivan, Jamie, BA  
Center for the Study of Traumatic Stress, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA

The deleterious effects of invisible combat injury (TBI and PTSD) on family relationships due to resultant cognitive, behavioral, and interpersonal alterations have been shown (Cozza & Guimond, 2011; Resnick & Allen, 2007). Sustaining intimate relationships after invisible injury is taxing, particularly when couples are also coping with early life adversities or current distressing symptoms, such as depression. However, relationship intimacy has not been empirically examined in combat injured populations. This study describes 26 married couples recovering from combat-injury and reports their intimacy satisfaction. Hierarchical regression models of the effects of TBI, PTSD, early life adversities and depression on service member (SM) and spouse intimacy satisfaction are presented.
Despite injuries (TBI and PTSD) and significantly higher levels of depression, SM risk factors did not contribute to couples’ intimacy. Early adversities were also not associated with intimacy satisfaction. Spouse depression explained both SM and spouse intimacy dissatisfaction. SMs may require specific clinical treatment following injury, but given post-injury stress and caregiver challenges, spouse distress must be targeted to support relationship health. We discuss implications for conjoint treatment models and the opportunities for couples to sustain intimacy in the face of multiple adversities.

Paper Presentation
Friday, November 8
9:00 a.m. to 10:15 a.m.
Franklin 11/12

Trauma in Context

Predicting Trauma Related Coping Self-efficacy: The Role of Prospectively Measured Personality Traits
(Prevent/Diverse Pop/M/Industrialized)

Bosmans, Mark, MSc, van der Velden, Peter, PhD, MSc
Tilburg University, Tilburg, Noord-Brabant, Netherlands

Coping self-efficacy (CSE), the “perceived capability to manage one’s personal functioning and the myriad environmental demands of the aftermath occasioned by a traumatic event” (Benight & Bandura, 2004, p. 1130), has been shown to have an important effect of on post-traumatic recovery across a wide range of traumatic experiences in numerous studies. Despite its important role in the recovery process, there is a gap in scientific knowledge concerning CSE. We are currently unable to predict which individuals will exhibit high or low CSE after experiencing a traumatic event. The goal of this study is to investigate the role of prospectively measured personality traits on the development of trauma related CSE among 1430 victims of potentially traumatic events. The five factor model was used to assess personality traits (which recognizes five distinct traits: extraversion, neuroticism, conscientiousness, agreeableness, and openness). Additionally, we assessed the role of prospectively measured self-esteem on trauma related CSE. Results of the study will be discussed in the presentation.
Domestic Violence among Pregnant Women in South India: PTSD Resilience and Symptomology

(Assess Dx/Diverse Pop/M/S Asia)

Rao, Deepa, PhD¹, Frey, Sarah, MSW¹, Kumar, Shuba, PhD², Mohanraj, Rani, PhD², Manhart, Lisa, PhD MPH¹, Kaysen, Debra, PhD¹

¹University of Washington, Seattle, Washington, USA
²Samarth, Chennai, Tamil Nadu, India

Manifestations of Post-traumatic Stress Disorder (PTSD) vary by cultural context. Much research is conflicted regarding whether prevalence of PTSD in India is comparable in the West. However, PTSD studies in India were predominantly conducted after the 2004 Asian tsunami and did not examine other forms of traumatic stress. Gender based violence has been reported in India with a prevalence as high as 56%. Thus, we examined domestic violence-related PTSD among women seeking antenatal care in a semi-urban hospital in Tamil Nadu, South India. Seventy-five pregnant women in their second or third trimester completed open-ended interviews and the PTSD Checklist (PCL). Mean age was 25.8 (SD=4.0) years, and 59% had some college level education. Twenty-one percent reported some form of domestic violence, mean PCL severity score was 24.0 (SD=9.1), and 8% met criteria for PTSD diagnosis via the PCL. Domestic violence experiences correlated with PCL severity score (r=0.28, p<0.02). However, the relationship between domestic violence and PTSD diagnosis was not statistically significant (r=0.16, p=0.16). Interestingly, older age was correlated with a diagnosis of PTSD (r=0.33, p<0.01). The lack of correspondence between domestic violence experience and PTSD diagnoses may point to the resilience of young women in South India.

Education in the Resilience Process in a Post-genocide Context: Case of Rwanda

(Res Meth/Surv/Hist/A/E & S Africa)

Gasanabo, Jean-Damascène, PhD, Kantengwa, Odeth, MA
National Commission for the Fight Against Genocide, Rwanda, Kigali, Rwanda

The majority of research among orphaned youth survivors of the 1994 genocide against the Tutsis in Rwanda focuses on levels of post-traumatic stress disorder, while research on the risk and resilience of the youth is limited. This paper presents information that assesses the current psychosocial state of orphaned youth survivors. Qualitative participatory methods used 120 semi-structured in-depth interviews and four focus group discussions. The results indicated that many orphaned youth survivors are experiencing trauma symptoms, however, education was identified as the main hope for a brighter and productive future, and the best chance to give meaning and order to their lives. Youth survivors specifically cited positive school atmosphere, sense of belonging, and receiving benefits from the Genocide Survivors Students Association as contributing to resiliency gained from education.
Challenges to accessing education were also identified. For orphans, attending school invariably means overcoming economic problems, lack of housing, disability of ill-health, and coping with upsetting memories, prejudice, and loneliness. The results of this study will assist the National Commission for the Fight Against Genocide and other institutions to develop effective educational services for youth survivors and to continue advocacy work building educational empowerment among youth in Rwanda.

**Paper Presentation**  
Friday, November 8  
9:00 a.m. to 10:15 a.m.  
Franklin 11/12

(Social/N/A/M/N/A)

**Purtle, Jonathan, MPH**  
*Drexel University College of Medicine/Drexel University School of Public Health, Philadelphia, Pennsylvania, USA*

Many scholars of traumatic stress assert that the policy response to PTSD has been driven by political ideology, not research. This claim, however, has not been held to empirical scrutiny. The objective of this study was to systematically describe how federal legislation has, and has not, been used to address PTSD. The Library of Congress assigns indexing terms to every bill introduced in Congress. The term "PTSD" was created in 1989 and assigned to 159 bills before it was discontinued in 2009. A content analysis was conducted to systematically describe bills assigned the term PTSD, explore associations between their features, and temporal trends. Each bill section containing the term "PTSD," or variants, was coded by: target population (e.g., military veterans), traumatic event according to the Life Events Checklist (e.g., sexual assault), policy instrument (e.g., grants), consequences of PTSD (e.g., unemployment), and other features. Descriptive and inferential statistics were produced. Results indicate that the federal legislative response to PTSD has been almost exclusively focused on veterans and combat trauma. Research on PTSD in civilian populations and non-combat exposures does not appear to have sufficiently permeated the legislative realm. Strategic advocacy is needed to expand the discourse on PTSD among legislators and promote policy which reflects PTSD research.
Concurrent Session Six

Featured Panel

Friday, November 8
10:30 a.m. to 11:45 a.m.
Franklin 5

Competencies in Trauma Psychology: The Experts Agree
(Train/Ed/Dis/Caregvs/M/Global)

Newman, Elana, PhD¹, Cook, Joan, PhD², Fairbank, John, PhD³, Kassam-Adams, Nancy, PhD¹, Rothbaum, Barbara, PhD, ABPP⁴, Elmore, Diane, PhD MPH⁵, Courtois, Christine, PhD, ABPP⁶

¹University of Tulsa, Tulsa, Oklahoma, USA
²Yale School of Medicine, West Haven, Connecticut, USA
³Duke University School of Medicine, Durham, North Carolina, USA
⁴Children’s Hospital of Philadelphia, Philadelphia, Pennsylvania, USA
⁵Emory University School of Medicine, Atlanta, Georgia, USA
⁶UCLA/Duke University National Center for Child Traumatic Stress, Larton, Virginia, USA
⁷Courtois & Associates, PC, Washington, District of Columbia, USA

The field of traumatic stress studies has so rapidly advanced over the past three decades such that there is an extremely large amount of information available; it is difficult to cull what is essential for trauma-focused providers to know and what is not. Given this dilemma, one approach is to develop trauma competencies—a list of the essential knowledge, skills, attitudes, values and judgments that are necessary for skilled practice in the field at various levels of professional development. This approach can foster training trauma-focused workforce to meet the needs of survivors. In service of this goal, a national consensus conference entitled “Advancing the Science of Education, Training and Practice in Trauma” was held in April 2013. Multiple disciplinary experts working with a variety of trauma exposed groups from various theoretical perspectives developed core competencies. Results of this conference will be presented. Specifically consensus on the five broad core competencies in Scientific Knowledge, about Trauma; Psychosocial Assessment; Psychosocial Intervention; Professionalism; and Relational/Systems will be shared.
Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Grand Ballroom B

Understanding Health Risk Behaviors and Re-victimization Risk among Sexual Violence Victims: Examination of the Impact of Different Types of Sexual Victimization
(Social/Violence/M/Industrialized)

Chair: Littleton, Heather, PhD
East Carolina University, Greenville, North Carolina, USA

Sexual victimization remains a significant public health problem affecting approximately one in four women. Sexual victimization can have a deleterious impact on survivors’ mental health. In addition, sexual victimization is associated with health risk behaviors including substance use and sexual risk behaviors. Sexual violence victims also are at risk for further victimization. However, there is limited work comparing how different types of sexual victimization affect health risk behaviors or the mechanisms that may explain the association between victimization and risk behaviors. The four presentations in this symposium examine the impact of childhood sexual abuse, adolescent sexual assault, adult sexual assault, and sexual assault obtained by different tactics (e.g., by force or incapacitation) on health risk behaviors. Health risk behaviors evaluated include alcohol and drug abuse, engaging in one-time sexual encounters, and engaging in sexual behavior while impaired. In addition, a number of potential mechanisms that may explain the association of sexual victimization with these outcomes are evaluated including PTSD, use of sexual behavior as an affect regulation strategy, and sexual self-esteem. Implications of the findings for understanding how sexual victimization may relate to risk behavior and re-victimization risk are discussed.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Grand Ballroom B

Predicting Risky Sexual Behavior in Emerging Adulthood: Examination of Moderated Mediation among Victims of Childhood Sexual Abuse and Adult Sexual Assault
(Social/Violence//Industrialized)

Littleton, Heather, PhD¹, Grills-Taquechel, Amie, PhD², Drum, Katherine, PsyD³
¹East Carolina University, Greenville, North Carolina, USA
²Boston University, Boston, Massachusetts, USA

Research suggests that sexual victimization is associated with sexual risk behavior. However, little work has examined how different types of sexual victimization are related to risk or the mechanisms that explain this association. The current investigation evaluated a mediational model where use of sexual behavior as an affect regulation strategy mediated the relationship between distress and risk behavior, with child sexual abuse (CSA), adolescent/adult sexual assault (ASA), and combined history of CSA/ASA examined as moderators. Participants were 1,787 ethnically diverse college women, of whom 21% had a CSA history, 7% had an ASA history, and 11%
had a combined CSA/ASA history. The three types of risk behaviors examined were: number of partners, frequency of one-night stands, and frequency of sex while impaired. Results of analyses utilizing bootstrapping supported the mediated model and that the path from distress to sex as an affect regulation strategy was stronger among all victim groups, as compared to non-victims. The path from sex as an affect regulation strategy to risk behavior was stronger among ASA victims and combined CSA/ASA victims. Results suggest that sexual victimization may increase women’s likelihood of using sex as a way to modulate affect, and that ASA experiences may lead women to engage in risky sexual behaviors as a way to modulate affect.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Grand Ballroom B

Predictors of Prospective Sexual Victimization: Affect Regulation and Sexual Risk
(Prevent/Adult/Cmplx/Industrialized)

Miron, Lynsey, MA, PhD Student, Orcutt, Holly, PhD
Northern Illinois University, DeKalb, Illinois, USA

Women with child sexual abuse (CSA) histories have particularly high-risk for later adolescent and adult sexual assault (ASA). Psychological distress and increased sexual activity are two variables that have been consistently linked to increased risk of ASA. Psychological distress often occurs as a long-term consequence of CSA, and sexual activity may sometimes serve a tension- and negative affect-reducing function among women with a history of CSA. Paradoxically, engaging in such behavior may result in sex-related decisions that increase risk for experiencing ASA. The goal of the present study was to explore how the use of sex to regulate negative affect (SRNA) may operate independently, and in combination with other psychosocial factors (i.e., adolescent sexual assault [AdSA] and depressive symptoms), to increase college women’s (N = 735) risk of experiencing prospective adult sexual assault (P-ASA) using a comprehensive, longitudinal design. In the final path model, childhood physical abuse and psychological abuse, but not CSA, both significantly predicted AdSA at Time 1 (T1), which in turn predicted P-ASA. T1 depressive symptoms directly predicted P-ASA as did T1 behavioral forecasting of the likelihood of engaging in sexual intercourse with a poorly-known partner. SRNA, however, did not directly predict P-ASA.
Symposium  
Friday, November 8  
10:30 a.m. to 11:45 a.m.  
Grand Ballroom B

**The Role of Rape Tactics and Associated Mental Health Outcomes in Development of Substance Abuse Disorders: Results from a National Survey of Women**  
(Assess Dx/Violence/Industrialized)

**Zinzow, Heidi, PhD**¹, Resnick, Heidi, PhD², Walsh, Kate, PhD³, Kilpatrick, Dean, PhD²  
¹Clemson University, Clemson, South Carolina, USA  
²Medical University of South Carolina, Charleston, South Carolina, USA  
³Columbia University, New York, New York, USA

Sexual assault is both an outcome and predictor of risky behavior, including substance abuse. Little is known about drug/alcohol facilitated or incapacitated (DAFR) and forcible rape (FR) tactics in association with substance use problems. A national household telephone probability sample of 3,001 women participated in structured interviews. Stepwise multivariate logistic regression analyses controlled for demographics, childhood rape, and multiple rape history and predicted past year alcohol and drug abuse. Step One included three mutually exclusive rape tactic histories: DAFR only, FR only, and DAFR/FR combined in the same incident. DAFR/FR was significantly associated with alcohol abuse (OR = 2.54, p < .05), and DAFR with drug abuse (OR = 4.53, p < .01). FR was not associated with either outcome. Step Two added lifetime diagnoses of PTSD and major depressive episode (MDE). Only MDE was significantly associated with alcohol abuse, DAFR/FR was no longer significant. Both MDE and PTSD predicted drug abuse, and DAFR remained significant. These cross-sectional findings suggest that substance abuse may either serve as a coping mechanism or contributing factor to anxiety and depression symptoms among victims of DAFR/FR and DAFR. DAFR was uniquely related to drug abuse, potentially indicating additional risk behaviors associated with drug abuse.

Symposium  
Friday, November 8  
10:30 a.m. to 11:45 a.m.  
Grand Ballroom B

**Effects of Sexual Assault Experienced During Different Developmental Periods on Risky Sexual Behavior and the Role of Cognitive-Affective Sexual Appraisals**  
(Social/Violence/Industrialized)

**Kelley, Erika, MS, PhD Student**, Gidycz, Christine, PhD  
Ohio University, Athens, Ohio, USA

Relatively little research has examined whether sexual abuse experienced in childhood (CSA), as compared to in adolescence (ASA), differentially affects sexually-relevant cognitive, affective, and behavioral variables. Some studies show that CSA and ASA are each related to increased risky sexual behavior; less research has examined potential mechanisms of these relationships. This study examines differential effects of women’s histories of CSA, ASA, and both CSA and ASA on engagement in risky sexual behavior; and the potential roles of cognitive-affective sexual appraisals in these relationships. College women (n = 733) completed measures assessing CSA and ASA history, risky sexual behavior, erotophobia-erotophilia, sexual self-esteem, and sexual self-schemas. Results
showed that ASA history (but not CSA or both ASA and CSA history) was associated with increased engagement in risky sexual behavior. Among ASA victims, relationships between cognitive-affective sexual appraisals and risky sexual behavior appear to be dependent on the type of partner. Results showed that more positive sexual self-schemas, higher sexual self-esteem, and erotophilia were associated with risky sexual behavior with a regular partner, whereas lower sexual self-esteem in several areas was related to engagement in risky sexual behavior with a partner that the survivor just met.

**Symposium**
**Friday, November 8**
**10:30 a.m. to 11:45 a.m.**
**Grand Ballroom C**

**Family Approaches for Exploring and Promoting Resilience in Veteran Populations**
(Clin Res/Mil/Vets/M/Industrialized)

Chair: Erbes, Christopher, PhD LP¹, Discussant: Renshaw, Keith, PhD²
¹Minneapolis VAHCS, Center for Chronic Disease Outcome Research, University of Minnesota Medical School, Minneapolis, Minnesota, USA
²George Mason University, Fairfax, Virginia, USA

Family relationships, including especially couple and marital relationships, are a key source of support and thus a potentially vital venue for promoting resilience in Veteran populations. At the same time, families themselves face challenge in the context of military trauma. Four clinical researchers will present findings on the ways that families and culture can influence resilience, and on supports for resilience amongst families. Presentations will include survey findings on family predictors of perceived Veteran support, a randomized clinical trial of couple therapy for treating PTSD in Veterans, and qualitative data on processes outside the family (i.e., community, family, and VA supports) and inside the family (i.e., couple and family processes) that promote family resilience in the face of combat deployments and PTSD.

**Symposium**
**Friday, November 8**
**10:30 a.m. to 11:45 a.m.**
**Grand Ballroom C**

**Couple Reintegration and Resilience of Military Veterans of the Iraq and Afghanistan Wars**
(Clin Res/Mil/Vets/N/A)

Sayers, Steven, PhD¹, Barg, Fran, PhD², Mavandadi, Shahrzad, PhD¹, Hess, Tanya, PhD¹
¹Philadelphia VA Medical Center, Philadelphia, Pennsylvania, USA
²University of Pennsylvania, Philadelphia, Pennsylvania, USA

It is unclear why some couples fare poorly when a combat Veteran returns to a household from deployment while other couples demonstrate greater resilience. The current study addressed this question using a mixed qualitative-quantitative research design using purposive sample of combat Veterans of military conflicts in Iraq and/or
Afghanistan and their spouses. Twenty-two participants were interviewed on quantitative measures of individual and relationship functioning and problems in family reintegration—59% were Caucasian, 32% were Black/African American, and 9% were Hispanic, half of the Veterans were Guard or Reserve. Individual and marital functioning of participants spanned the range from low to high; all of the Veterans had experienced significant combat trauma. Interviews completed thus far indicated that positive communication prior to, and following the deployment, may be associated with successful post-deployment reintegration. In addition, a sense of relationship commitment may be important in determining higher levels of resilience of the couple. Qualitative data from couples to be added to the sample and additional cycles of qualitative analysis process will likely reveal other compelling reintegration processes that determine the quality of dyadic outcomes of combat Veterans and their spouses.

**Symposium**
**Friday, November 8**
**10:30 a.m. to 11:45 a.m.**
**Grand Ballroom C**

**Randomized Clinical Trial of a Couple-based PTSD Treatment for Returning Veterans and their Partners.**
(Assess Dx/Child/Adol//N/A)

**Sautter, Frederic, PhD¹, Glynn, Shirley, PhD², Becker Cretu, Julia, PsyD³, Wanders, Joseph, MEd⁴, Peterson, Nancy, PhD⁴**  
¹Tulane University Health Sciences Center, New Orleans, Louisiana, USA  
²VA Office of Mental Health Services and VA Greater Los Angeles Healthcare System, Los Angeles, California, USA  
³Southeast Louisiana Veterans Health Care System, New Orleans, Louisiana, USA  
⁴Michael E. DeBakey VA Medical Center, Houston, Texas, USA

Studies show that as many as 20% of OEF/OIF soldiers develop PTSD. The devastating impact of PTSD on the entire family suggests a need for treatments that reduce the impact of PTSD on the entire family. We present preliminary data from a randomized clinical trial testing the efficacy of a couple-based PTSD treatment called Structured Approach Therapy (SAT) in reducing the PTSD while also reducing family distress. Approximately forty OEF/OIF veterans and their partners were recruited through referring VA mental health providers for the randomized clinical trial. Couples were randomly assigned to one of two twelve-week manual-based interventions: Structured Approach Therapy or PTSD Family Education. Assessments were conducted before and after treatments, and at a three-month follow-up, measuring Veteran PTSD, partner distress, and relationship functioning. Preliminary analyses indicate that veterans completing SAT showed significantly greater reductions in self-rated and clinician-rated PTSD severity and family distress, with significantly more Veterans showing changed diagnostic status, than Veterans receiving PFE.
Predicting Perceived Post-Deployment Social Support through Intimate Relationship Communication, Satisfaction, and Partner Distress
(Clin Res/Mil/Vets/Industrialized)

Erbes, Christopher, PhD LP¹, Polusny, Melissa, PhD¹, Arbisi, Paul, PhD, ABPP², Shallcross, Sandra, MA, PhD Student³
¹Minneapolis VAHCS, Center for Chronic Disease Outcome Research, University of Minnesota Medical School, Minneapolis, Minnesota, USA
²Minneapolis VA Health Care System and University of Minnesota Medical School, Minneapolis, Minnesota, USA
³University of Minnesota, Minneapolis, Minnesota, USA

Perceived social support has been identified as a robust predictor of soldier resilience following combat deployments, but relatively few studies have explored potential interpersonal predictors of perceived support. Intimate relationships represent a key source of support but may themselves be strained as partners are faced with the challenges and distress associated with the combat deployment of a loved one. We examined predictors of soldier perceptions of social support (using the MOS Social Support Scale) in a sample of 124 soldier/partner couples 3 months after soldiers returned from a combat deployment to Afghanistan. Soldier and partner reports of communication (including positive bonding and negative interactions) and relationship satisfaction (measured with an abbreviated version of the DAS) and partner reports of distress (depression, somatization, and alcohol abuse) were examined as predictors. Bivariate relationships were found between perceptions of social support by the soldier and soldier and partner ratings of positive bonding, negative communication, and relationship satisfaction but not between soldier perceptions of support and partner ratings of distress. Preliminary regression analyses suggest that relationship satisfaction may be the most salient predictor of soldier perceptions of support.

The Impact of Community Support on Veterans with PTSD: Family Members’ Perspectives
(CulDiv/Mil/Vets/Industrialized)

Whealin, Julia, PhD¹, Nelson, Dawna, MSW¹, Kawasaki, Michelle, MA¹, Chen-Tatekawa, Jui-Feng, PhD²
¹National Center for PTSD/University of Hawaii, Honolulu, Hawaii, USA
²National Center for PTSD- Pacific Island Division, VA Pacific Island Healthcare System, Honolulu, Hawaii, USA

Whereas social support has been shown to confer resilience in those who have experienced trauma, little is known about the impact of community support upon coping in family members and U.S. Veterans. However, some data suggests that the community can play an important role in supporting Veterans with PTSD, especially in rural areas where mental health services are limited. The objective of this study was to examine family factors associated with stress-resilience among Veterans and their family members. We provide data from focus groups recently
conducted with geographically, developmentally, and ethno-racially diverse Veteran family members living in Hawai‘i, Guam and the Commonwealth of the Northern Mariana Islands. Open-ended questions inquired about issues including family stressors, perceived needs, and perceived community support. Findings from the focus groups suggest interacting and bidirectional relationships between community support, stigma, wellbeing, and access to care. Findings suggest a strong role for community support in promoting resilience in Veterans and their family members. Alternatively, when support was lacking, families provided needed assistance to help Veterans overcome challenges. Suggested dissemination and interventions efforts developed based on feedback from participants will also be presented.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Grand Ballroom D

Augmentation of Trauma-focused Therapy: Can We Improve Outcomes?

(Clin Res/Adult/Cmplx/I/N/A)

Chair: Galovski, Tara, PhD
Discussant: Resick, Patricia, PhD, ABPP

1University of Missouri St. Louis, St. Louis, Missouri, USA
2National Center for PTSD / Boston University, Boston, Massachusetts, USA

Evidence-based interventions for PTSD have demonstrated empirical success over the course of the last several decades. PTSD researchers now find themselves in the historically unique position of increasing the effectiveness of these demonstrably efficacious interventions. One potential improvement is the augmentation of established protocols with additional interventions designed to target co-morbid conditions and complex clinical presentations. This talk compiles results from treatment trials in which Cognitive Processing Therapy (CPT) was augmented by a separate intervention in an effort to enhance outcomes. As there is little doubt that the attrition rate within the PTSD population is substantial, Study 1 examines the benefits of Motivational Interviewing applied prior to CPT to increase readiness for change and decrease attrition rates. Given the comorbidity of Major Depressive Disorder and Panic Disorder with PTSD, Study 2 demonstrates the added value of Behavioral Activation for targeting MDD and PTSD simultaneously, while study 3 examines the effectiveness of combining Multiple Channel Exposure Therapy with CPT to target panic attacks. Finally, Study 4 describes a completed trial examining the benefit of treating sleep impairment prior to the commencement of CPT to improve sleep, PTSD, depression, and quality of life.
**Symposium**  
Friday, November 8  
10:30 a.m. to 11:45 a.m.  
Grand Ballroom D

**Restoring Sleep Before Beginning PTSD Therapy: Are We Enhancing Outcomes?**  
(Clin Res/Adult/Cmplx/N/A)

**Galovski, Tara, PhD.** Gloth, Chelsea, Doctoral Student, Chappuis, Courtney, Doctoral Student  
*University of Missouri St. Louis, St. Louis, Missouri, USA*

Sleep impairment is one of the most refractory symptoms to treatment, possibly because the symptom develops into a primary insomnia disorder. This study assessed the additive benefit of sleep-directed hypnosis administered prior to Cognitive Processing Therapy (CPT) in a sample of 92 female survivors of interpersonal violence suffering from PTSD. We hypothesized that the addition of hypnosis would specifically target sleep impairment beyond the benefits of CPT alone. Individuals were randomized to either the hypCPT (3 weeks of hypnosis prior to CPT) or ssmCPT (3 weeks of symptom monitoring prior to CPT). The PSQI and ISI assessed non-trauma-specific sleep impairment and the Clinician Administered PTSD Scale (CAPS) assessed trauma-related sleep impairment. Fixed effects models revealed that CAPS sleep, sleep latency, and insomnia severity showed significant moderation of the change parameters ($t > |2.0|; p < .05$). Two sleep outcomes had marginal interactions: sleep meds ($t = 1.93, p = .055$) and daytime dysfunction ($t = 1.80, p = .07$), and four sleep outcome models showed no significant moderation: sleep quality, sleep duration, sleep efficiency, and sleep disturbances ($t < |1.3|; p > .1$). Treatment appeared to specifically target trauma-related sleep impairment, with less effect shown on additional outcomes.

**Symposium**  
Friday, November 8  
10:30 a.m. to 11:45 a.m.  
Grand Ballroom D

**Can We Target Dropout and Non-response to Treatment? An Initial Trial of Motivational Interviewing to Augment Cognitive Processing Therapy for PTSD**  
(Clin Res/Adult/Cmplx/Industrialized)

**Blain, Leah, MA PhD Student**\(^1\), Galovski, Tara, PhD\(^2\)  
\(^1\)VA Maryland Healthcare System, Baltimore, Maryland, USA  
\(^2\)University of Missouri St. Louis, St. Louis, Missouri, USA

Currently, even well-supported cognitive behavioral therapies to treat post-traumatic stress disorder (PTSD) suffer from consistent rates of dropout and non-response to treatment, which represent barriers to dissemination and effective treatment. Motivational Interviewing (MI) has been used successfully to target ambivalence, decrease attrition, and increase response to treatment across a number of disorders. Thus, MI may be an effective intervention for increasing readiness to change and decreasing dropout and non-response within a PTSD-positive sample. The present pilot study sought to assess the efficacy of augmenting Cognitive Processing Therapy (CPT) with three sessions of MI in a sample of female interpersonal assault survivors ($N = 17$). The pilot results were compared to a recently completed CPT trial ($N = 92$) of similar design, as well as to the broader PTSD outcomes literature. Results indicate that MI did not substantially improve upon dropout rates ($\chi^2 = .49, p = .782$) or treatment engagement measures ($F = 1.24, p = .290$). Moreover, MI did not have a differential effect on readiness.
to change measures ($F = 1.86, p = .093$). MI study participants evidenced equivalent outcomes to recent CPT trials, but did not evidence significantly improved outcomes. Study limitations and clinical implications are considered.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Grand Ballroom D

The Treatment of Post-Traumatic Stress Disorder and Major Depressive Disorder: The Utility of a Combined Treatment Approach.
(Clin Res/Violence/Industrialized)

Angelakis, Samantha, Doctoral Student
Flinders University, School of Psychology, Adelaide, South Australia, Australia

This randomized study examines the utility of targeting depression symptoms in clients with comorbid post-traumatic stress disorder (PTSD) and major depression disorder (MDD). Participants receive either Cognitive Processing Therapy (CPT) alone, CPT then behavioral activation for depression, or, behavioral activation then CPT. Participants are assessed at pre-, mid- and post-treatment and at 6-month follow-up. Post-traumatic stress and depression symptoms are the main dependent variables. Emotional engagement, maladaptive cognitions, rumination, emotional numbing and therapist alliance are also being assessed as potential mechanisms of change. Currently 39 participants have been enrolled; a further 20 participants are projected to be enrolled by November. Emotional engagement, a predicted mechanism of change, is assessed through therapy session coding based on the client expressed emotional arousal scale-III. Coding is underway and by November the mediating role of engagement will be analyzed. At this stage sample size precludes treatment condition comparisons however, within-group effect sizes indicate large (ES > 1.00) changes on PTSD and depression severity, negative cognitions, and emotional numbing. Although preliminary, these findings suggest that an augmented treatment focused on both MDD and PTSD may be beneficial for those with comorbid PTSD/MDD.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Grand Ballroom D

Multiple Channel Exposure Therapy for PTSD and Panic
(Clin Res/Mil/Vets/Industrialized)

Teng, Ellen, PhD\textsuperscript{1}, Hiatt, Emily, PhD\textsuperscript{1}, Grubbs, Kathleen, PhD\textsuperscript{2}, Kunik, Mark, MD MPH\textsuperscript{1}, Stanley, Melinda, PhD\textsuperscript{1}
\textsuperscript{1}Michael E. DeBakey VA Medical Center, Houston, Texas, USA
\textsuperscript{2}Mental Illness Research, Education and Clinical Center, Little Rock, Arkansas, USA

Up to 36% of Veterans with post-traumatic stress disorder (PTSD) develop comorbid panic disorder (PD). Despite these high comorbidity rates, most trauma-focused treatments target PTSD symptoms specifically and do not address comorbid panic symptoms. Thus, recent attention has focused on the development of multi-component treatments that simultaneously address PTSD and PD. Multiple Channel Exposure Therapy (MCET), is a 12-session treatment that integrates panic control treatment with cognitive processing therapy for PTSD. Preliminary studies with civilians show MCET to be effective in reducing both PTSD and PD symptoms compared to control conditions,
but this has not been evaluated with Veterans. The current case series highlights how MCET was adapted for recently returning Veterans. Symptoms related to PTSD, panic, depression, and overall functioning were collected at baseline, 1-week post-treatment, and at a 5-month follow-up from two Veterans and are presented descriptively and in comparison with clinical norms. Self-report measures and structured clinical interviews indicate that both Veterans experienced decreases in PTSD and PD symptoms with concurrent improvement in depressive symptoms. Treatment satisfaction was high. These preliminary data suggest that MCET is a promising intervention that can simultaneously enhance outcomes in persons with PTSD and comorbid panic.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Grand Ballroom E

Risk and Resilience Update in Young Children
(Prevent/Child/Adol/I/Global)

Chair: Scheeringa, Michael, MD, MPH
Tulane University Health Sciences Center, New Orleans, Louisiana, USA

The majority of individuals who are exposed to life-threatening stress do not develop post-traumatic stress disorder (PTSD), and among those who develop PTSD, treatment response varies by individuals. In order to provide targeted preventive interventions and rational stepped-care treatments to make the most efficient use of funds, time, and effort, we need a better understanding of risk and resilience factors. This symposium will include four presentations that explore risk and resilience factors from different perspectives in very young children. Stacy Drury will present data on the association of the dopamine transporter gene with PTSD. Michael Scheeringa will present data on the interactions between the serotonin transporter gene, heart rate variability, and cortisol regulation in a framework of the differential susceptibility model. Alexandra DeYoung will present data from a new study that measures psychosocial risk factors in the acute period using a new screener for PTSD in young children. Markus Landolt will present findings on the ability of the PEDS checklist and additional characteristics of the traumatic events to predict the development of PTSD. The discussion will focus on the possibilities provided by these data for advances in prevention and stepped-care interventions.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Grand Ballroom E

Genetic Pathways to Preschool PTSD
(Bio Med/Child/Adol/Industrialized)

Drury, Stacy1, Scheeringa, Michael, MD, MPH2
1Tulane University School of Medicine, New Orleans, Louisiana, USA
2Tulane University Health Sciences Center, New Orleans, Louisiana, USA

Data demonstrating the impact of DAT, FKBP5 and COMT will be presented and the differential effects of trauma type and ethnicity. We suggest that genetic associations highlight the ability to provide insight into the underlying biology of PTSD. We have demonstrated the association of genetic variation in the dopamine transporter and PTSD
in preschool children where the 9 allele of the VNTR, and haplotypes containing the 9 allele, are associated with increased PTSD risk (x2; p = 0.006; df=1, 7.5454) and greater hyper-arousal symptoms. However children exposed to domestic violence with the 10/10 genotype have significantly lower emotional numbing symptoms consistent with plasticity model of gene-environment interactions (unpublished data). In this same preschool sample we have recently found that FKBP5 genotype (t/t or c/t compared to c/c), predicted total PTSD symptoms (f=4.1, p=.03 n=75), cluster b (p=.03) and cluster d symptoms (p=.05). Cluster c symptoms were not significantly associated with genotype. Controlling for the number of different traumatic events the significance increases to p=.02 and age of the child becomes significant, suggesting that duration since trauma may play a role in this association similar to adult findings. We also demonstrate that variation in the COMT gene predicts PTSD, even controlling for DAT, x2 (2, 105) = 8.05, p = .02).

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Grand Ballroom E

Screening for PTSD Risk in Young Injured Children
(Assess Dx/Child/Adol/Industrialized)

De Young, Alexandra, PhD1, Kenardy, Justin, PhD2, Kimble, Roy, MD1
1University of Queensland, Herston, QLD, Australia
2University of Queensland Schools of Psychology and Medicine, Herston, QLD, Australia

Objectives: To examine the feasibility and psychometric properties of the following two screens for PTSD in young children: (1) a new psychosocial risk factor screener, the Young Child PTSD Risk Screener (YCPRS), and (2) the Young Child PTSD Screen (YCPS), and to compare the performance of these 2 screens with the Pediatric Emotional Distress Scale (PEDS). Methods: Parents of young injured children (aged 1-6 years) completed the YCPRS, YCPS and PEDS within 2 weeks and at 1 and 6 months post accident. The Diagnostic Infant Preschool Assessment was completed at 1 and 6 months. Results: ROC curves and calculation of sensitivity, specificity, positive predictive value, negative predictive value and overall efficiency will be used to examine the predictive performance of the screens. Conclusions: Screening is consistently recommended as a method for identifying those who should be monitored for risk or referred to treatment, however there are currently no empirically validated PTSD screening tools available for young children and it is yet to be determined whether a screening program for young children is feasible in pediatric hospitals. This presentation will discuss these issues and how the screens tested in this study may be used in prevention and stepped-care intervention programs.
Evaluation of an Early Risk Screener for Post-Traumatic Stress Disorder in Preschool Children after Unintentional Injury
(Assess Dx/Child/Adol/Industrialized)

Landolt, Markus, PhD, Kramer, Didier, MSc
Zurich University, Zurich, Switzerland

Objectives: To evaluate the effectiveness and best set of predictors of an early screening tool for post-traumatic stress disorder (PTSD) in a sample of 87 two to six year old children after unintentional injury. Methods: The examined screener was applied 7-10 days post-trauma and consisted of (1) an adapted version of the Pediatric Emotional Distress Scale (PEDS), the PEDS-CH, and (2) additional questions on five risk factors. The PTSD Semi-structured Interview and Observational Record for Infants and Young Children served as criterion measure 6 months post-accident. A case was deemed positive when meeting DSM-5 preschool criteria for full or partial PTSD. Results: Isolated use of the PEDS-CH performed best, with good sensitivity (85%) and moderate specificity (63%) for full or partial PTSD. Conclusions: The PEDS-CH allows for successful early screening of preschool children after single accidental trauma. It may be used within a stepped care model for secondary preventative interventions.

Neurobiological Predictors of PTSD Severity: A Test of the Biological Sensitivity to Context Model
(Bio Med/Child/Adol/Industrialized)

Scheeringa, Michael, MD, MPH1, Drury, Stacy2
1Tulane University Health Sciences Center, New Orleans, Louisiana, USA
2Tulane University School of Medicine, New Orleans, Louisiana, USA

Gene variants of the serotonin transporter (SHTT) are associated with cortisol and cardiac reactivity separately in PTSD. But no previous studies have examined the interaction of these factors. These three predictors were used to test the relatively new biological sensitivity to context model. We concurrently assessed 141 3-6 year-old trauma-exposed children for PTSD, genotype status, heart rate variability (HRV) reactivity, and hypothalamic-pituitary-adrenal axis (cortisol) reactivity. Findings supported the model. Individuals with symmetric reactivity (HRV and cortisol reactive in the same direction regardless of whether these were over- and under-reactions) showed significantly more severe PTSD in the context of the SHTT short allele compared to the context of the SHTT long allele. The pattern was the opposite for asymmetric reactivity (RSA increased while cortisol decreased, or vice versa), these individuals showed more severe PTSD in the context of the long allele compared to the short allele. The findings better reflect the complex interrelationships of stress responses compared to single system studies. These findings provide a neurobiological and genetic basis to explain how one pathway to PTSD does not fit all
individuals. The coordination of neurobiological reactions (symmetric reactivities) appears more salient than the activity of one system in isolation.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Grand Ballroom F

Developmental Trauma Disorder: Data from the Multisite Field Trial
(Assess Dx/Child/Adol/M/Global)

Chair: van der Kolk, Bessel, MD¹; Discussant: Pynoos, Robert, MD MPH²
¹Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA
²UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA

The National Traumatic Stress Network was created, in part, to establish a discipline of childhood trauma, and to study the adaptation to trauma at various developmental stages, and how it varies depending on caregiving factors. Based on data collected on 1750 children within the NCTSN, the DSM5 workgroup within the NCTSN proposed an new diagnosis for inclusion within the DSM 5, called Developmental Trauma Disorder. Three data bases on the proposed disorder have been collected to date: 2000 children from the National Traumatic Stress Network core data set; data from 350 face-to-face interviews from the DTD field trial within the National Child Traumatic Stress Network, and a sample from the New School in New York City of over 700 children tested for DTD and DSM5 co-morbidities. This symposium will present the data collected from these different studies and compare them with the proposed DSM5 criteria for PTSD, as well as DSM5 co-morbidities. Taken together, the heterogeneity of symptoms associated with trauma suggest that single diagnoses or accumulated comorbidity do not accurately capture the syndrome pictures in these samples, as well as a strong interrelation between impairment in relationships, affect regulation, somatic symptoms and cognition.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Grand Ballroom F

Developmental Trauma Disorder Field Trial: First Findings from the Interview Study
(Assess Dx/Child/Adol/M/Industrialized)

Ford, Julian, PhD¹, Spinazzola, Joseph, PhD², Grasso, Damion, PhD¹, van der Kolk, Bessel, MD²
¹University of Connecticut Health Center, Farmington, Connecticut, USA
²Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA

This presentation describes the study methodology and initial empirical findings from a four-site national field trial of the event and symptom features of a proposed complex traumatic stress disorder syndrome for children and adolescents. The Developmental Trauma Disorder Structured Interview, the Kiddie Schedule for Affective Disorders and Schizophrenia for School-aged Children (6-18 years) (K-SADS-PL), and DSM-5 criteria for PTSD, reactive attachment disorder, negative mood dysregulation disorder, and non-suicidal self-injury disorder were administered to more than 300 adult primary caregivers with a child 8-17 years old receiving pediatric or mental health services. In this mixed sample of healthy and psychiatrically impaired children and adolescents,
Developmental Trauma Disorder (DTD) event (i.e., major disruption of primary caregiver-child bonding; potentially traumatic interpersonal victimization) and symptom (i.e., affect, somatic, cognitive, behavioral, relational, and self/identity dysregulation) features were identified primarily in the sub-group characterized by psychiatric impairment. Within that sub-group, DTD features were associated with severe impairment not fully accounted for by comorbid psychiatric disorders. Results support further clinical and scientific tests of DTD.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Grand Ballroom F

Psychometric Evaluation and Clinical Symptom Profiles Among Complexly-Traumatized Children: Results from a National Clinician Survey
(Assess Dx/Child/Adol//Industrialized)

D’Andrea, Wendy, PhD, Spinazzola, Joseph, PhD, Ford, Julian, PhD, Van Cleave, Treva, MA, van der Kolk, Bessel, MD

1 New School for Social Research, New York, New York, USA
2 Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA
3 University of Connecticut Health Center, Farmington, Connecticut, USA
4 The New School for Social Research, New York, New York, USA

In addition to clinical utility, any proposed diagnosis must demonstrate robust statistics in terms of its internal consistency and discriminant validity. The purpose of the proposed work is to examine the psychometrics of the diagnostic construct of Developmental Trauma Disorder (DTD). Clinicians reported on the trauma history and broad psychological and behavioral symptoms in a sample of approximately 700 treatment-seeking children with and without exposure to trauma. Findings suggest: a) the internal consistency of the DTD symptoms, both within clusters and within the syndrome; b) the discriminant validity of DTD from PTSD, as well as from acutely-traumatized children; and c) the predictive validity of the disorder with respect to functional impairment. Data on demographic-specific symptom presentations will be presented. Furthermore, the heterogeneity of symptoms associated with trauma indicated that single diagnoses or accumulated comorbidity do not accurately capture the most common syndrome pictures in this sample. Taken together, these results suggest the importance of understanding the diversity of child trauma symptoms, as well as the mechanistic overlap among relational, somatic, affective, and cognitive impairment.
Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Grand Ballroom F

DTD Field Trial, Methods and Results Phase I
(Assess Dx/Child/Adol//Global)

van der Kolk, Bessel, MD1, Ford, Julian, PhD2, Spinazzola, Joseph, PhD3, Pynoos, Robert, MD MPH4, D’Andrea, Wendy, PhD5

1Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA
2University of Connecticut Health Center, Farmington, Connecticut, USA
3The Trauma Center at JRI, Brookline, Massachusetts, USA
4UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA
5New School for Social Research, New York, New York, USA

Objective: No integrative diagnosis exists to guide assessment and treatment for children and adolescents with chronic abuse and neglect. This study assessed clinicians’ ratings of the clinical utility of a proposed Developmental Trauma Disorder (DTD). Methods: An internet survey was conducted with an international convenience sample of 472 self-selected medical, mental health, counseling, child welfare, and education professionals. Respondents made quantitative ratings of the clinical significance of DTD developmental trauma exposure and symptom items and also of post-traumatic stress disorder (PTSD) and other Axis I internalizing and externalizing disorder symptom items for four clinical vignettes. Ratings of the discriminability of each DTD item from PTSD, other anxiety disorders, affective disorders, and externalizing behavior disorders, and of each DTD item’s amenability to existing evidence-based treatments for those disorders, also were obtained. Results: Respondents viewed DTD criteria as: 1) comparable in clinical utility to criteria for PTSD and other psychiatric disorders; 2) discriminable from and not fully accounted for by other disorders; 3) and refractory to existing evidence-based psychotherapeutic treatments. Conclusion: Symptom criteria proposed for a DTD diagnosis warrant further clinical dissemination and scientific field testing.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Franklin 6

Are Peritraumatic Reactions Useful in Informing who is (Not) Resilient after Trauma?
(Assess Dx/Acc/Inj/M/Industrialized)

Chair: Bui, Eric, MD PhD1, Discussant: Brunet, Alain, PhD2

1Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA
2Douglas University Institute in Mental Health, McGill University, Montreal, Quebec, Canada

Reactions occurring during or immediately after a trauma (i.e., peritraumatic reactions) are a key feature of the DSM-IV diagnosis of post-traumatic stress disorder (PTSD), with Criterion A2 requiring subjective reactions of “fear, helplessness, or horror.” Although an individual’s immediate subjective response has been conceptualized as a
central tenet of what defines a traumatic stressor (Bovin & Marx, 2011), criterion A2 has been proposed for removal from the upcoming DSM-5 due to its lack of predictive power for PTSD (Brewin et al., 2009). This international symposium brings together new research from three separate laboratories to examine the utility of assessing peritraumatic reactions during acute stages of trauma exposure, with the aim of informing post-trauma prevention and intervention practices. Specifically, we will present the cognitive correlate of these peritraumatic reactions (including distress and dissociation) and their ability to predict who will develop PTSD and who will recover from PTSD. Implications of peritraumatic reactions assessment for clinical care in the prediction, prevention, and recovery of post-traumatic stress will be discussed.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Franklin 6

Peritraumatic Reactions and Attentional Threat Avoidance in the Immediate Aftermath of Trauma Exposure: Relationship and Implications for PTSD Risk Identification
(Prevent/N/A/N/A/N/A)

Thomas, Charmaine, PhD Candidate¹, Very, Etienne, MD², Birmes, Philippe, MD, PhD³, Salles, Juliette, MD⁴, Sears, Christopher, PhD¹, Bui, Eric, MD, PhD⁵
¹University of Calgary, Calgary, Alberta, Canada
²Université de Toulouse - Centre Hospitalier Universitaire de Toulouse, Toulouse, France
³Laboratoire du Stress Traumatique, Universite Toulouse 3 & CHU de Toulouse, France
⁴Centre Hospitalier de Toulouse, Université de Toulouse, France
⁵Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA

Although early intervention can increase prevention and treatment success in post-traumatic stress disorder (PTSD), reliably identifying those at risk remains elusive. Recent evidence suggests that attentional threat avoidance in the immediate aftermath of trauma exposure may be a potential marker of risk (e.g., Wald et al., 2011). Likewise, emotional and physical responses, conceptualized as peritraumatic reactions, have shown considerable promise in PTSD risk prediction (e.g., Bui et al., 2010). This study aims to examine the relationship between these two correlates of PTSD and their combined ability to predict future symptoms in the immediate hours following trauma exposure. Within six hours of admission to an emergency department, physical assault and motor vehicle accident survivors were administered a dot-probe task and completed the Peritraumatic Distress Inventory and the Peritraumatic Dissociative Experiences Questionnaire. Preliminary baseline data revealed a strong negative association between peritraumatic distress and threat avoidance ($r=-.82$, $p<0.01$). The Post-traumatic Stress Disorder Checklist and Beck Depression Inventory-II were administered one month later. Results of analyses evaluating the predictive ability of attentional threat avoidance and peritraumatic distress will be presented and discussed in the context of PTSD screening and risk identification.
The Utility of Peritraumatic Distress to Predict Post-Traumatic Stress Disorder: Review of Ten Years of Research
(Assess Dx/N/A//Industrialized)

Goutaudier, Nelly, PhD Candidate1, Kotte, Amelia, PhD2, Ojserkis, Rebecca3, Bui, Eric, MD PhD4
1OCOTOGONE-CERPP, Universite de Toulouse II, Toulouse, Midi-Pyrenees, France
2Harvard Medical School, Massachusetts General Hospital, Boston, Massachusetts, USA
3Massachusetts General Hospital, Boston, Massachusetts, USA
4Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA

The Peritraumatic Distress Inventory has been introduced as a measure of the intensity of the A2 PTSD criterion and other immediate emotional and physical reactions to trauma exposure (Brunet et al., 2001). Criterion A2 has been proposed for removal from the upcoming DSM-5 due to its lack of predictive power for PTSD (Brewin et al., 2009); however a large body of literature has highlighted the role of peritraumatic distress in the prediction of PTSD. We conducted a comprehensive review of the literature examining the utility of peritraumatic distress in the prediction of PTSD. Our search yielded 35 studies (sample sizes n=25 to n=702), 12 of which were prospective, and five of which assessed peritraumatic distress within two weeks of the index event. Our review found that: (a) peritraumatic distress predicts PTSD symptom severity after A1 qualifying events in a variety of populations, including children and older adults; (b) peritraumatic distress predicts PTSD-like symptom severity after exposure to non-A1 qualifying events; (c) peritraumatic distress predicts other symptoms including those related to eating disorders, traumatic/complicated grief, and sleep problems after A1 qualifying or non-qualifying events. These findings and the direction for future studies will be discussed in light of the recent change in DSM criteria and the research domain criteria framework.

Peritraumatic Dissociation Prospectively Predicts Lower Reduction in PTSD Symptoms in the First Year after Trauma
(Assess Dx/Acc/Inj/Industrialized)

Bui, Eric, MD PhD1, Morris, Laura, BA2, Brunet, Alain, PhD3, Simon, Naomi, MD1, Birmes, Philippe, MD, PhD4
1Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA
2Massachusetts General Hospital, Boston, Massachusetts, USA
3Douglas University Institute in Mental Health, McGill University, Montreal, Quebec, Canada
4Laboratoire du Stress Traumatique, Universite Toulouse 3 & CHU de Toulouse, France

Although some authors have suggested that peritraumatic dissociation might predict poorer recovery after trauma exposure (Brunet et al. 2006), this hypothesis has never been investigated longitudinally before. The present study aims to examine the prospective association between peritraumatic dissociation and drop in PTSD symptoms from...
one to 12 months after trauma. Participants were 80 adults (mean(SD) age = 42.1(6.2); 70% women) who were either involved in a road traffic accident (RTA) (n=21) or who had learned about their child being victim of a RTA (n=59). Peritraumatic dissociation was assessed within one week of the RTA using the peritraumatic dissociative experience questionnaire (PDEQ), and PTSD symptoms were assessed at 1 month and 12 months using the Clinician Administered PTSD Scale (CAPS). Mean CAPS scores were relatively low both at one month (mean(SD)=15.5(16.1)) and 12 months (mean(SD)=7.7(12.9)), and mean(SD) drop in CAPS score from 1 to 12 months was 7.8(11.3). In a multiple regression analysis controlling for gender and 1-month PTSD symptoms, peritraumatic dissociation significantly predicted smaller drop in PTSD symptoms between 1 and 12 months (B(SE)=-.049(0.13), p<0.001). Our results suggest that dissociation at the time of the trauma might interfere with spontaneous recovery from PTSD symptoms in the first year.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Franklin 7

Harmful Effects of War on Children: Interventions from Sierra Leone, Rwanda, and Sri Lanka
(Practice/Child/Adol/M/Global)

Chair: Fabri, Mary, PsyD
Heartland Alliance, Marjorie Kovler Center for the Treatment of Survivors of Torture, Chicago, Illinois, USA

During times of war, children are vulnerable to the gamut of horrors that can occur as victims and as witnesses. This symposium will present the three innovative intervention strategies employed to help children post-conflict. The Youth Readiness Intervention in Sierra Leone, a vocational and psychosocial rehabilitation program in Sri Lanka, and a mother-child intervention in Rwanda demonstrate efforts that help children recover from the harmful effects of war and support their inherent resiliency.
Addressing the Consequences of War: A Randomized Controlled Trial of a Group Intervention to Improve Emotion Regulation, Prosocial Skills and Functioning in War-affected Youth
(Clin Res/Child/Adol/W & C Africa)

Betancourt, Theresa, ScD MA¹, McBain, Ryan, Doctoral Student², Newnham, Elizabeth, PhD², Hann, Katrina, MA², Akinsulare-Smith, Adeyinka, PhD³, Hansen, Nathan, PhD⁴
¹Harvard School of Public Health/ FXB Center for Health and Human Rights, Boston, Massachusetts, USA
²Harvard School of Public Health, Boston, Massachusetts, USA
³City College of New York, New York, New York, USA
⁴Yale University, New Haven, Connecticut, USA

War-affected youth represent a vulnerable population at risk of developing mental health problems, interpersonal difficulties and impairments in daily functioning. This study tested the effectiveness of a group-based mental health intervention. A randomized controlled trial of the Youth Readiness Intervention (YRI) was conducted in Freetown, Sierra Leone for youth for 15-24 year olds (N=436) exhibiting psychological distress and functional impairments. Participants were randomly assigned to either the YRI (n=222) or a control condition (n=214). Participants received the YRI in groups once per week over a 10-week period and were assessed pre and post-YRI for emotion regulation/anger-management skills, functional impairment, psychological distress, and prosocial attitudes/behavior. Secondary outcomes included social support and post-traumatic stress (PTS) symptoms. Post-intervention, YRI participants reported significant improvements in emotion regulation skills, prosocial attitudes/behaviors, day-to-day functioning and perceived social support, compared to controls. Both conditions showed similar levels of improvement in psychological distress and PTS symptoms. The YRI is effective in stabilizing and strengthening war-affected youth across several domains. Future research should investigate additional components to address PTS and depression symptoms.

Cuckoo’s Nest: Providing Care of Former Child Soldiers
(Clin Res/Child/Adol/S Asia)

Fabri, Mary, PsyD¹, Satkunanayagam, Fr. Paul, MA², Cohen, Joanna, MSW³
¹Heartland Alliance, Marjorie Kovler Center for the Treatment of Survivors of Torture, Chicago, Illinois, USA
²Professional Psychological Counseling Center, Batticalo, Eastern Province, Sri Lanka
³Heartland Alliance, Chicago, Illinois, USA

Sri Lanka’s civil war between the ruling government and Liberation of the Tamil Tigers of Elam (LTTE) lasted 25+ years. Peace accords were signed in May 2009 with a conservative estimate of 6,000 child soldiers having been employed by the LTTE. U.S. Department of State’s Bureau of Democracy, Human Rights, and Labor funded
Heartland Alliance International who partnered with Professional Psychological Counseling Centre, a local organization in Batticaloa, Sri Lanka, to implement “Enhancing Livelihood Opportunities for Former Child Soldier in Sri Lanka.” Between July 2009 and October 2012, the six-month residential program enrolled 196 participants, 120 females and 76 males, and provided vocational training, psychosocial support, and mentoring. 124 completed the program. Baseline and graduation PCL for 105 participants was 51.2 and 31.1 (p<0.001); there were 68% with PCL scores indicative of PTSD at baseline, and 16% with PTSD at graduation. Baseline and program graduation PHQ-9 for 87 participants was 14.3 and 5.1 (p<0.001). 53% individuals had major or moderate depression at baseline and 2% had moderate depression at graduation. Cuckoo's Nest programming will be described in detail as well as the challenges of implementation and follow up for a child soldier rehabilitative program for child.

**Symposium**
**Friday, November 8**
**10:30 a.m. to 11:45 a.m.**
**Franklin 7**

**Rape during the Genocide: Distorted Mother-Child Relationships**
(Practice/Civil/Ref/E & S Africa)

**Rutembesa, Eugene**
*National University of Rwanda, Butare, Rwanda*

Genocide defies all logic; it breaks taboos; it creates chaos in a society. During the 1994 genocide, many Tutsi women were raped and conceived children from this sexual violence. Since 2006, IBUKA, a survivors association, has used group therapy to create a safe space to talk about the conflicting emotions of raising a child born from rape. Groups consisted of a maximum of 15 survivors and met once a week for approximately two hours. This presentation will share the thematic data learned from the groups and the emotional conflicts identified by rape survivors, including love-hate, sadness-joy, compassion-rage, and good-evil. In 2013, nineteen years later, the children are now adolescents and IBUKA is conducting groups with mothers and their children together. Efforts are being made to disclose the secrets around the birth of the children, to secure healthy identities, and to work on reconciliation. The mother-child relationships have been conflictual, but the groups provide a safe venue for feelings to be shared and resolved. This presentation will discuss the complex and persistent mother-child relationships as a result of pregnancies that occurred with genocidal rape in Rwanda and results of IBUKA's group therapy intervention.
Social Support and Social Reactions as Risk and Resiliency Factors among Traumatized Populations
(CulDiv/Diverse Pop/M/Industrialized)

Chair: Schumm, Jeremiah, PhD
Cincinnati VA Medical Center & University of Cincinnati, Cincinnati, Ohio, USA

Social reactions to trauma and social support are shown to be robust risk-resiliency factors in survivors' ability to recover from trauma. This symposium will present new findings from a range of traumatized populations that will expand the understanding of social reactions and social support in the context of trauma recovery. The first presentation will discuss the moderating role of PTSD in understanding the relationship between perceived and received social support among interpersonal trauma survivors. The second presentation will discuss longitudinal findings on the mediating role of post-traumatic growth in explaining the relationship between received and perceived social support among survivors of floods in Poland. The third presentation uses social network analysis to evaluate the relationship between changes in network structure and changes in PTSD symptoms among US military veterans receiving residential PTSD treatment. The fourth presentation, which involves a sample of US military veterans seeking PTSD treatment, will confer findings on the factor structure and cross-cultural application of a measure of social acknowledgment and disapproval that was originally developed and tested in Germany.

Stress-Related Growth Following Disaster Mediates the Link between Received and Perceived Social Support
(Commun/Disaster/Industrialized)

Kaniasty, Krzysztof, PhD
Indiana University of Pennsylvania, Indiana, Pennsylvania, USA

The objective of this project was to test the notion that post-traumatic growth would mediate the link between received social support and perceived social support in the context of coping with a natural disaster. METHOD: This longitudinal study of victims of severe floods in Poland assessed 12 months after the event (Wave 1) the extent of disaster exposure and amount of social support received immediately after the impact. Post-traumatic growth was assessed at Wave 2, 20 months post disaster. At Wave 3, 28 months post-event, the respondents (N=233) reported their current perceptions of social support availability. RESULTS: Path analyses supported the role of post-traumatic growth as a mediator of the impact of receiving social support on subsequent perceptions of social support. Receiving more help in the aftermath of the flood (Wave 1) was positively associated with perceiving beneficial changes in self and in relationships with others (Wave 2). These perceived benefits, in turn, were related to higher levels of perceived availability of social support (Wave 3). Two important theoretical and practical points
were established by these analyses: received social support is related to subsequent perceptions of social support, and this relation is mediated in the context of disasters by finding positive meaning in adversity. Health implications of the findings will be discussed.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Franklin 8

The Relationship between Post-Traumatic Cognitions and Social Support in the Severity of PTSD Symptoms
(Assess Dx/Violence/Industrialized)

Koucky, Ellen, PhD Candidate1, Bruce, Steven, PhD2
1Cincinnati VA Medical Center, Cincinnati, Ohio, USA
2University of Missouri St. Louis, Saint Louis, Missouri, USA

Social support (Guay et al., 2006; Schnurr et al., 2004) and post-traumatic cognitions (Ehlers & Clark, 2000) are recognized as key risk and resiliency factors following trauma, but much less is known about the way these variables interact in the development of PTSD. The current research aimed to clarify the relationship between these factors in a sample of interpersonal trauma survivors (N=472). Results indicate received social support (RSS) shares 25% (R2=.25) of the variance in perceived social support (PSS). The correlation between these variables was significantly stronger (Z=3.40, p <.001) in the PTSD-positive sample (n=204; r =.63) compared to the PTSD-negative sample (n=268; r =.40). Subjects meeting criteria for PTSD reported significantly higher levels of PSS (F (1,470) =51.045, p<.001, partial η2 =.098), but differences in RSS were non-significant. Finally, an SEM model analyzing the relationship between post-traumatic cognitions, PSS, RSS and PTSD symptoms was analyzed (n=397). Although the initial model was a poor fit with the study data, χ2 (1) = 140.04, p<.001 (RMSEA=.59, 90% CI=.51-.67, CFI=.88, GFI=.91, AGFI= -.90), analyzing the parameter estimates within the fully saturated modified model yielded important information. Discussion focuses on clinical implications of social support and post-traumatic cognitions as resiliency factors for PTSD.

Symposium
Friday, November 8
10:30 a.m. to 11:45 a.m.
Franklin 8

Using SNA to Examine Treatment Outcomes of Veterans diagnosed with combat-related PTSD
(Clin Res/Mil/Vets/N/A)

Gilman, Richard1, Schumm, Jeremiah, PhD2, Chard, Kathleen, PhD2
1Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio, USA
2Cincinnati VA Medical Center & University of Cincinnati, Cincinnati, Ohio, USA

This study examined the critical social network characteristics necessary for optimal treatment success for Veterans with combat-related PTSD (crPTSD). Data was collected from 100 OEF/OIF/OND Veterans diagnosed with
crPTSD who sought residential treatment at a large, Midwestern VA. Self- and clinician-rated PTSD data were obtained at pre- and post-treatment. Veterans at pre-, mid- and post-treatment also were asked to list up to five people that they were (a) close to (i.e., someone they could trust/confide in), and (b) talked with about their disability, over the past year. Veterans rated their degree of closeness/communication of each individual on separate 5-point rating scales. Further, they rated each individuals closeness/communication with each other. Controlling for pre-treatment closeness/communication data and PTSD symptoms, post-treatment closeness and communication predicted lower self- and clinician reported PTSD symptoms. There also was an inverse relationship between PTSD scores and changes in network density (i.e., number of individuals listed in the network) and network composition (i.e., number of new individuals named over time). Finally, controlling for pre-treatment variables, perceived closeness and communication ties between listed individuals predicted reduced PTSD symptoms at post-treatment. Effect sizes were in the moderate range.

**Symposium**

**Friday, November 8**

**10:30 a.m. to 11:45 a.m.**

**Franklin 8**

**Associations between Perceived Social Reactions to Trauma-Related Experiences with PTSD and Depression among Veterans Seeking PTSD Treatment**

(Res Meth/Mil/Vets/Industrialized)

**Schumm, Jeremiah, PhD**\(^1\), Koucky, Ellen, PhD Candidate\(^2\), Bartel, Alisa, MA\(^2\)

\(^1\)Cincinnati VA Medical Center & University of Cincinnati, Cincinnati, Ohio, USA

\(^2\)Cincinnati VA Medical Center, Cincinnati, Ohio, USA

The Social Acknowledgment Questionnaire (SAQ; Maercker & Müller, 2004) is a measure of trauma survivors' perceptions of social acknowledgment and disapproval from others, and these factors are shown to be associated with post-traumatic stress disorder (PTSD) among civilian trauma survivors. This study seeks to validate the structure of the SAQ among US military veterans and test the hypothesis that family and general disapproval are associated with PTSD and depression among veterans. Participants were 198 US veterans who experienced military trauma and completed an intake evaluation through a Veterans Affairs PTSD treatment program. Structural equation modeling (SEM) results supported a well-fitting three factor model for the SAQ that was similar to prior studies in capturing the constructs of social acknowledgment, general disapproval, and family disapproval. SEM results also showed that all three of the SAQ factors were associated with veterans' depression, while only general disapproval was related to veterans' PTSD. This is the first study to investigate the factor structure of the SAQ in a veteran sample and to investigate the relationship between SAQ factors and trauma survivors' depression. Results build upon prior findings by showing the importance of positive and negative social reactions to veterans' traumatic experiences.
Panel Presentation  
Friday, November 8  
10:30 a.m. to 11:45 a.m.  
Franklin 11/12

Opportunities and Strategies for NIMH Funding of Traumatic Stress Research  
(Bio Med/N/A/M/N/A)

Borja, Susan, PhD, Sarampote, Christopher, PhD, Waldeck, Tracy, PhD  
National Institute of Mental Health/NIH, Bethesda, Maryland, USA

With the changing landscape of NIH research funding, prospective investigators are likely to benefit by being aware of NIMH priorities, familiarizing themselves with the procedures for successful grant submission and review, and staying informed of the latest developments and notices regarding the submission process. This session is designed to highlight current funding priorities for basic, translational and interventional research at NIMH as well as provide information to help investigators navigate the many changes that have taken place in the past few years in how NIH receives, reviews, and funds grant applications. This panel discussion with NIMH staff promises to explain effective techniques for transforming research questions into competitive applications and for presenting ideas to reviewers and the Institute. Special focus will be placed on reviewing NIMH priorities in traumatic stress research and the mechanisms available to fund such work. Finally, through a Q&A session, NIMH program and policy staff members will provide more specific information and discussion on the development, submission, and review of applications with the goal of an NIMH funded grant.

Workshop Presentation  
Friday, November 8  
10:30 a.m. to 11:45 a.m.  
Grand Ballroom A

One Thousand Child Protective Workers Speak: Evaluating Supportive Services following Child Fatalities and other Critical Incidents  
(Self-Care/EmergWrks/M/Industrialized)

Pulido, Mary, PhD MSW  
New York Society for the Prevention of Cruelty to Children, New York, New York, USA

An underserved population, Child Protective Services (CPS) staff encounter danger and trauma during the course of their normal workday. The Restoring Resiliency Response (RRR) protocol was incorporated into workplace standard Child Protective Services procedures in New York City, to reduce the excessive levels of post-traumatic stress symptoms and secondary traumatic stress symptoms resulting from child fatalities, severe cases of physical and sexual abuse, and violence towards CPS staff in the field or workplace. This workshop will (a) describe the innovative process of the development and implementation of a program designed to meet CPS needs following critical incidents, (b) report on focus group data (c) outline the protocol of the Restoring Resiliency Response (RRR) model, and (d) present the participant evaluation data. Since 2007, 288 sessions were conducted for 1512 staff members. Evaluation data collected from 1,061 participants indicate the intervention was positively received and
helpful for recovery following a critical incident. The majority of CPS staff reported that they would use the techniques to bolster resilience in their future work and would encourage co-workers to participate in RRR sessions.

**Paper Presentation**

**Friday, November 8**

**10:30 a.m. to 11:45 a.m.**

**Franklin 9/10**

**Trauma and Resilience: The Role of Professionals I**

**Canadian Trauma Counselors Overseas: Narratives of Resilience in a Multicultural World**

(Self-Care/Caregvs/I/Global)

Keats, Patrice, PhD¹, Popadiuk, Natalee, PhD²

¹Simon Fraser University, Burnaby, British Columbia, Canada
²University of Victoria, Victoria, British Columbia, Canada

Researchers are exploring the needs of clients in developing countries who face devastating traumatic experiences, yet little focus is directed towards trauma counselors who support these types of international clients and communities. Our aim in this qualitative photoelicitation study was to learn about Canadian trauma counselors’ experiences (through their photographs and stories of daily experiences) while working cross-culturally with international clients when living and working abroad. Our participants reported aspects of resilience such as: meaningfulness in their work related to adapting, teaching, and supervising counseling skills and interventions to locals; growth and learning related to aspects of cultural rituals and people’s resilience; connectedness through working within strong and stable community contexts; relatedness through commonalities in traumatized populations; and developing flexibility in assimilating new world views, values, and life priorities. We conclude by noting that resilience can be built through peer support in an international community and learning from others who have had previous overseas experience; preparation, training, and orientation to working in foreign cultures; and working through personal trauma before going overseas to ensure appropriate self-care while witnessing and working with local people.
Resilience after Vicarious Trauma: A Review of Factors Affecting Post-Traumatic Growth among Mental Health Professionals
(Self-Care/Caregivers/I/Industrialized)

St. Cyr, Kate, MSc¹, Nelson, Charles, PhD, Cpsych¹, Quitangon, Gertie, MD FRCPC²
¹St. Joseph's Healthcare London, London, Ontario, Canada
²New York University School of Medicine, New York City, New York, USA

Introduction: Mental health professionals who provide services to survivors of trauma may experience vicarious trauma (VT): a post-traumatic stress-like reaction that may include intrusive thoughts, numbing, and avoidance. However, factors associated with resilience and post-traumatic growth after VT have not, to date, been widely investigated. Objective: This study aims to provide an overview of personal and organizational factors associated with resilience and post-traumatic growth among mental health providers with VT. Methods: A literature review was conducted to identify published studies relevant to resilience after VT. Results: Few studies focused on factors associated with resilience and post-traumatic growth among mental health professionals with VT; those that did reported mixed findings regarding the influence of a number of personal and organizational factors, such as sense of empowerment and time for self-care, on resilience and post-traumatic growth. Conclusions: This study identified factors that have been associated with resilience and post-traumatic growth among mental health professionals with VT in small, homogenous samples; it is possible that factors associated with resilience are analogous to factors related to VT. Larger longitudinal studies may be beneficial in understanding factors that may promote resilience and post-traumatic growth.

Teachers' Perspectives on Following-Up their Terror Exposed Students the First School Year after the Utøya Massacre
(Train/Ed/Dis/Caregivers/I/Industrialized)

Dalset, Marit, PhD Candidate¹, Schultz, Jon-Håkon, PhD²
¹University of Oslo, 0318 OSLO Norge, Oslo, Norway
²Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway

In the aftermath of the 22 July 2011 massacre in Norway, the Minister of Education and Research urged schools to go to the greatest possible length to adjust the learning environment of students that were directly affected by the terror. The objective of this study is to explore how teachers and school leaders perceive their role in terms of supporting students that were present during the Utøya terror attack. Using a qualitative design, the study explores feelings of uncertainty and confidence related to the follow-up of these students. Twenty four teachers and 12 school leaders from six schools with a total number of 36 exposed students were selected for the study. Preliminary findings indicate that the role of teachers is unclear when it comes to which actions that should be
taken in school settings. The informants seem to possess different levels of trauma knowledge and skills. A broad spectrum of measures appears to have been implemented, ranging from minimal actions on the one hand to extensive personal involvement on the other. According to prevailing theory, neither of these extremes is considered beneficial. So far limited research has been conducted on how trauma-informed practices in schools can help mitigate or intensify the impact of traumatic experience. This paper presents a discussion on the teacher’s role in facilitating and adapting the learning process.

Paper Presentation
Friday, November 8
10:30 a.m. to 11:45 a.m.
Franklin 9/10

Chaplains' Engagement in Enhancing Resiliency for Service Members and Veterans
(Practice/Caregvsr/Ind/Industrialized)

Nieuwsma, Jason, PhD¹, Rhodes, Jeffrey, MDiv., PhD², Bates, Mark, PhD², Cantrell, William, MDiv, PhD¹, Meador, Keith, MD, MPH¹
¹Department of Veteran Affairs Medical Center, VISN 6 Mental Illness Research, Education, and Clinical Center, Durham, North Carolina, USA
²Defense Centers of Excellence for Psychological Health & Traumatic Brain Injury, Arlington, Virginia, USA

In recent years, the U.S. military has pioneered efforts aimed at fostering resiliency in the face of trauma (DoD, 2007). The concept of resilience following trauma implies a role not only for mental health professionals but also for care providers who have more organic linkages to the contexts in which individuals live out resilient lives. Perhaps chief among such organic care providers are clergy. We conducted a nationwide survey of all active duty DoD chaplains and all full-time VA chaplains (N = 2,163; response rate of 60% in DoD and 75% in VA) that addressed chaplains' attempts at enhancing resiliency among service members and veterans. Compared to VA chaplains, DoD chaplains were significantly more likely to: 1) report frequently providing resilience training to patients (39% vs. 19%, p < .001), and 2) view enhancing resiliency as a major component of a chaplain’s job (87% vs. 63%, p < .001). Chaplains in both VA and DoD were more likely to report providing resilience training if they were regularly seeing service members / veterans with common mental health problems (p < .001), including anxiety, guilt, depression, and PTSD. Because of their identity as non-stigmatized, non-mental health providers with organic linkages to community settings, chaplains may be uniquely positioned to foster resiliency and reintegration for service members / veterans following trauma.
Brown Bag Lunch Movie

Friday, November 8
12:00 p.m. to 01:15 p.m.
Franklin 5

Striking a Chord: Music Can Heal Invisible Wounds
(Media/Mil/Vets/I/N/A)

Kudler, Harold, MD¹, Danieli, Yael, PhD², Garber, Nara, MFA³

¹VISN 6 MIRECC and Duke University Medical Center, Chapel Hill, North Carolina, USA
²Director of the Group Project for Holocaust Survivors and their Children, New York, New York, USA
³Lucky Penny Pictures, LLC, Brooklyn, New York, USA

Susan Cohn Rockefeller’s documentary, *Striking a Chord: Music Can Heal Invisible Wounds*, follows
singer/songwriter Nell Bryden and her band on a concert tour of Iraq filled with sharp images and trenchant
insights. Home may seem as accessible as Facebook in modern war but warriors are inexorably drawn into a
bubble that contains only their buddies and their mission. This survival mode is adaptive until the warfighter
returns home and tries to re-connect with anyone outside that bubble. Warriors have been pulled so far outside
themselves that they often feel like strangers in their own families. These interpersonal injuries are among the
most profound and least visible wounds of war. Home, friends and family are the themes of Bryden’s songs. Her
music strikes a resonant chord capable of harmonizing the dissonant thoughts, feelings and relationships of a
warfighter’s life. Even if this rapprochement only lasts as long as a concert or even a single song, music provides a
vital reminder that there still is a connection to be made. This can literally save lives and begin the work of
rebuilding them. Thanks to *Striking a Chord*, those of us on the home front have a better chance to understand the
enduring power of music and its significance for those who fight our wars.
Concurrent Session Seven

Master Methodologist
Friday, November 8
1:30 p.m. to 2:45 p.m.
Grand Ballroom E

Modeling Latent Mean and Growth Structures Using Structural Equation Modeling
(Res Meth/N/A/M/N/A)

Hancock, Gregory, PhD
University of Maryland, College Park, Maryland, USA

Structural equation modeling, in general, represents a process for assessing theories about causal relations among measured and latent variables through modeling those theories’ implications for the variances and covariances of observed variables. Mean structure models extend these models to allow for the assessment of theories about population differences in latent means, akin to analysis of variance on latent outcomes. The ability to do so greatly enhances researchers’ capacity to deal with experimental and quasi-experimental settings, facilitating more statistical power and/or requiring fewer subjects to conduct such studies. Latent growth modeling is a special application of structural equation modeling, which may or may not involve a mean structure, that allows one to assess individual differences in subjects’ growth/change over time in one or more measured or latent outcomes, as well as the measured and latent time-independent and time-dependent determinants of that change. This invited lecture will briefly review structural equation modeling, and then provide an introduction to latent mean and latent growth models within a structural equation modeling framework.

Symposium
Friday, November 8
1:30 p.m. to 2:45 p.m.
Grand Ballroom B

Improving Resiliency and Mental Health of Sexual Violence Survivors in Low-Income Conflict-affected Contexts in Sub-Saharan Africa through Economic Programming
(Clin Res/Civil/Ref/I/W & C Africa)

Chair: Bass, Judith, PhD, MPH
Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA

Many women in conflict-affected communities face the dual burden of sexual violence and poverty, factors independently associated with increased mental health problems and reduced resiliency. Other research results provided initial suggestion that social economic programs could improve social capital and resiliency among
participants in addition to improving economic outcomes. We hypothesized that increasing social capital and resiliency may lead to improved mental health outcomes. This symposium presents results from three studies investigating mental health impacts of economic programs with sexual violence survivors in Cote d’Ivoire and the Democratic Republic of Congo (DRC). The first speaker will present on integrating gender dialogue groups and economic empowerment programming and its impact on trauma symptoms among Ivorian women. The second speaker will present mental health outcomes from a trial of a social-economic intervention which included sexual violence survivors in eastern DRC. The third speaker will present on predictors of participation and social capital outcomes among sexual violence survivors who received a social-economic intervention following an evidence-based mental health treatment. The group will discuss implications for integrating economic and mental health programs and targeting economic programs for those with elevated mental health symptoms.

Symposium
Friday, November 8
1:30 p.m. to 2:45 p.m.
Grand Ballroom B

Impact of Village Savings and Loans Associations on Improving Mental Health and Well-Being among Sexual Violence Survivors in South Kivu, DRC: Results from a Randomized Controlled Trial.
(Clin Res/Violence/W & C Africa)

Annan, Jeannie, PhD1, Robinette, Katie, MPH2, Greco, Daniela, MA2, Seban, Juliette, PhD1, Murray, Sarah, MS, PhD Student3, Hall, Brian, PhD3, Bolton, Paul, MB BS4, Bass, Judith, PhD, MPH3

1International Rescue Committee, New York, New York, USA
2International Rescue Committee, Bukavu, South Kivu, Congo
3Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA
4Johns Hopkins University Bloomberg School of Public Health, Scituate, Massachusetts, USA

We present results from an RCT of a social-economic intervention, Village Savings and Loan Associations (VSLA), on mental health and resiliency of survivors of sexual violence. VSLA groups provide financial resources through weekly savings programs, loans to members and repayment, and payout to members at the VSLA cycle end (approximately 9-10 months). VSLA programming that includes sexual violence survivors seeks to improve social capital and resources, decrease stigma, and thereby improve mental health and well-being. Seventy-five VSLA groups across 9 villages were randomly assigned to participate in the VSLA program (n=159 women) or to the wait-control condition (n=142 women). Study eligibility included experiencing or witnessing sexual violence and symptom severity and functional impairment thresholds. More than 80% (n=239) of the study participants were followed up within 2-3 months of the end of the VSLA program. At baseline, 72.4% of the participants met standard criteria for clinically significant combined depression/anxiety (HSCL-25 scores > 1.75). Random effects models were used to account for clustering within VSLA groups. Statistically significant impacts of the intervention were seen for anxiety symptoms post-intervention (p<0.05) but not depression or trauma symptoms. Data will be presented on treatment participation and from the 6-month maintenance period.
Symposium  
Friday, November 8  
1:30 p.m. to 2:45 p.m.  
Grand Ballroom B

Combining Gender Dialogue Groups with Economic Empowerment Programming:  
Impact on Trauma Symptomatology among Ivorian Women  
(Global/Civil/Ref/W & C Africa)

Gupta, Jhumka¹, Annan, Jeannie, PhD², Falb, Kathryn, ScD³  
¹Yale School of Public Health, New Haven, Connecticut, USA  
²International Rescue Committee, New York, New York, USA  
³Yale University, New Haven, Connecticut, USA

Economic and gender empowerment programs are being implemented to reduce violence against women, but little is known about whether programs affect psycho-social well-being and mental health of women in conflict settings. An RCT was done with 1,198 women in rural Cote d’Ivoire to assess the addition of gender dialogue groups (GDG) to village savings and loans programs (VSLA) on reduction of intimate partner violence and trauma symptomatology. Trauma symptoms were measured by the Harvard Trauma Questionnaire. Scores ≥ 2.0 cut-off were coded as PTSD positive. Generalized linear mixed models were used to assess the relationships of interest and accounted for multilevel clustering. At baseline, 19.7% of women met criterion for PTSD; (HTQ symptom mean = 24.6, SD: 8.3). Participation in the VSLA + GDG arm was associated with 38% reduction in PTSD (95%CI: 0.41-0.95) and -1.86 change in trauma symptom score (95%CI: -3.16 -- -0.56) versus VSLA only. Addressing gender norms within economic programming may yield additional mental health benefits for women affected by conflict. Learning Objectives:1) To demonstrate the importance of addressing gender norms within economic programming to improve mental health among conflict-affected women. 2) To contrast economic programming only versus economic programming plus a gender norms component on trauma symptomatology.
Symposium  
Friday, November 8  
1:30 p.m. to 2:45 p.m.  
Grand Ballroom B

Combining Mental Health and Social Economic Programming to Improve Resiliency, Mental Health and Economic Outcomes for Sexual Violence Survivors in South Kivu, Democratic Republic of Congo  
(Clin Res/Civil/Ref/W & C Africa)

Bass, Judith, PhD, MPH¹, Annan, Jeannie, PhD², Robinette, Katie, MPH³, Greco, Daniela, MA⁴, Kaysen, Debra, PhD⁴, Hall, Brian, PhD¹, Murray, Sarah, MS,PhD Student¹, Seban, Juliette, PhD², Bolton, Paul, MB, BS⁵

¹Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA  
²International Rescue Committee, New York, New York, USA  
³International Rescue Committee, Bukavu, South Kivu, Congo  
⁴University of Washington, Seattle, Washington, USA  
⁵Johns Hopkins University Bloomberg School of Public Health, Scituate, Massachusetts, USA

Many survivors of sexual violence in low-income communities suffer economic marginalization in addition to the mental health impacts of their trauma. To try to address mental health and economic well-being and build resiliency, we sequentially offered a mental health intervention followed by a socio-economic program to survivors with elevated mental symptoms and reduced functionality to examine additive benefits. Results from the RCT of Cognitive Processing Therapy demonstrated substantial mental health benefits to participants compared with access to a treatment as usual condition (Bass et al., in press). Following completion of a 6-month post-CPT maintenance period, CPT participants were invited to participate in Village Savings and Loan Associations (VSLA). Concurrently, provision of VSLA to the wait-control VSLA groups from the previously described trial were initiated. 113 (72%) women who received CPT self-selected into a VSLA group. Data collection will be completed in June 2013. Participation and dropout rates will be compared across VSLA programs to see whether participation in CPT improved uptake of and retention in VSLA services. Economic and social capital outcomes among VSLA participants who first participated in CPT will be compared with those who participated in VSLA alone to examine whether CPT coupled with VLSA has added benefits over VSLA alone.
Symposium  
Friday, November 8  
1:30 p.m. to 2:45 p.m.  
Grand Ballroom F

**Neuroactive Steroids in PTSD: Towards Resilience and New Treatments**  
(Bio Med/Diverse Pop/M/Global)

**Chair:** Rasmusson, Ann, MD  
*National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA*

In this symposium, basic and clinical research defining a role for neuroactive steroids such as allopregnanolone, dehydroepiandrosterone, and cortisol in stress resilience, risk for PTSD, and development of new treatments for PTSD will be reviewed. Data will be presented from basic studies in which neuroactive steroid levels were manipulated to induce or reduce PTSD-like behaviors in animals, human HPA axis challenge and cerebrospinal fluid studies, observational studies in large human cohorts at rest and exposed to stress, and an fMRI emotion regulation paradigm in which neuroactive steroid levels were experimentally manipulated. Current multi-site pharmacological treatment trials based on this work also will be discussed.

**SSRIs Act as Selective Brain Steroidogenic Stimulants (SBSSs): Insight into the Mechanism of SSRIs in PTSD**  
(Bio Med/N/A//Global)

**Pinna, Graziano, PhD**  
*University of Illinois Chicago, Chicago, Illinois, USA*

Deficits in allopregnanolone (Allo) biosynthesis have been implicated in PTSD and depression. Increased Allo levels after fluoxetine (FLX) induce anxiolytic actions via a positive allosteric modulation of GABAA receptors. PTSD-like behavior associated with a corticolimbic Allo level decrease can be modeled in mice by social isolation stress followed by a fear conditioning test. Social isolation-induced Allo biosynthesis downregulation in glutamatergic neurons causes a GABAergic neurotransmission dysfunction resulting in aggression, anxiety-like behavior, and fear in socially isolated (SI) mice. To correct behavioral deficits in SI mice, we tested the stereospecificity of FLX and norfluoxetine (NFLX) in upregulating corticolimbic Allo content versus 5-HT reuptake inhibition. FLX and NFLX upregulate corticolimbic Allo levels in a stereospecific manner. Importantly, the EC50s of S-FLX/S-NFLX to normalize corticolimbic Allo content are 10-fold lower than the EC50s doses to inhibit 5-HT reuptake, which lacks stereospecificity. Hence, S-FLX and S-NFLX facilitate GABAergic neurotransmission and improve behavior by normalizing corticolimbic Allo content rather than by SSRI mechanisms. Corticolimbic Allo biosynthesis offers a non-traditional pharmacological target for a new generation of drugs, the selective brain steroidogenic stimulants (SBSSs), useful to treat depression and PTSD.
Symposium
Friday, November 8
1:30 p.m. to 2:45 p.m.
Grand Ballroom F

A Role for GABAergic and other Neuroactive Steroids in Supporting Resilience and Recovery from Extreme Stress
(Bio Med/Diverse Pop//N/A)

Rasmusson, Ann, MD\textsuperscript{1}, Pineles, Suzanne, PhD\textsuperscript{1}, Scioli, Erica, PhD\textsuperscript{2}
\textsuperscript{1}National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA
\textsuperscript{2}National Center for PTSD, Boston VA Medical Center and Boston University School of Medicine, Boston, Massachusetts, USA

Neuroactive steroids such as allopregnanolone (Allo), dehydroepiandrosterone (DHEA), and cortisol are produced peripherally and/or in the brain and impact fear learning and stress resilience. A balance in the peripheral and central nervous system levels of these neuroactive steroids, which have both positive and negative modulatory effects on the inhibitory GABA neurotransmitter system and excitatory glutamatergic systems, appears to influence behavior and symptoms experienced during extreme stress, as well as severity of PTSD and comorbid psychiatric and somatic conditions that follow. The results of a range of previous and new studies from our laboratories (military training, HPA axis activation, natural disaster, maximum load exercise, pain challenge) investigating these steroid biomarkers in both women and men in relation to behavioral resilience will be presented. In addition, their potential role in natural recovery from traumatic stress, as well as mediation of the effects of pharmacological, epigenetic, and psychological treatments for PTSD will be discussed.

Symposium
Friday, November 8
1:30 p.m. to 2:45 p.m.
Grand Ballroom F

Neurosteroids as Biomarker Candidates: Investigations in OEF/OIF/OND Era Veterans
(Bio Med/Mil/Vets//Industrialized)

Marx, Christine, MD\textsuperscript{1}, Kilts, Jason, PhD\textsuperscript{2}, Naylor, Jennifer, PhD\textsuperscript{2}, Szabo, Steve, MD, PhD\textsuperscript{2}
\textsuperscript{1}VA Medical Center, Durham, North Carolina, USA
\textsuperscript{2}Durham VA and Duke University Medical Centers, Durham, North Carolina, USA

Background: Evidence suggests neurosteroids such as DHEA and DHEAS are relevant to PTSD pathophysiology/treatment. DHEA and DHEAS have neuroprotective and anxiolytic-like actions in rodents, and levels appear altered in PTSD. Methods: DHEA and DHEAS levels and behavioral symptoms in male U.S. OEF/OIF/OND Era Veterans were assessed. ANCOVA examined PTSD symptom effects on levels, covarying for age and smoking. Contrast analyses were conducted. Pearson partial correlation coefficients were determined for CD-RISC and SCL-90-R assessments (n=621), controlling for age and smoking. Results: DHEA levels were significantly lower in Veterans with DTS≥40 (consistent with PTSD; n=213) compared to Veterans with DTS<10 (consistent with no/minimal PTSD symptoms; n=291), and also those with depression (BDI≥20 vs. BDI<10, p=0.0259). DHEAS levels positively correlated with resilience (CD-RISC, r=0.15, p=0.0002), and inversely correlated with global symptom
severity (SCL-90-R global severity index, r=-0.14, p=0.0006) and anxiety symptoms (SCL-90-R anxiety subscale, r=-0.13, p=0.0011), controlling for age and smoking. DHEA (p<0.0001) and DHEAS (p<0.0001) markedly decreased with age. Conclusions: Neurosteroids may be biomarker candidates for PTSD symptoms, depression symptoms, and resilience, and merit larger cohort investigations.

Symposium
Friday, November 8
1:30 p.m. to 2:45 p.m.
Grand Ballroom F

Allopregnanolone and DHEA Enhance Emotion Regulation Neurocircuits and Modulate Resting-State Amygdala Connectivity
(Bio Med/N/A/N/A)

Sripada, Rebecca, PhD¹, Marx, Christine, MD², Liberzon, Israel, MD¹
¹University of Michigan, Ann Arbor, Michigan, USA
²VA Medical Center, Durham, North Carolina, USA

Objective: ALLO and DHEA are endogenously-produced neurosteroids with anxiolytic effects. Dysregulated release of these neurosteroids has been linked to PTSD, but no research to date has examined the underlying neural pathways. Methods: To investigate the brain basis of ALLO and DHEA’s impact on emotion neurocircuitry, subjects were administered 400mg of pregnenolone (N=16), DHEA (N=14), or placebo (N=15) and underwent fMRI while performing the SEAT, a test of emotion processing and regulation. Resting-state brain connectivity was measured using amygdala as a seed region. Results: During the SEAT, compared to placebo, ALLO and DHEA reduced activity in the amygdala, insula, and hippocampus, and enhanced activity in medial prefrontal regions. ALLO and DHEA reduced resting-state amygdala connectivity with contralateral amygdala and precuneus, an effect that was associated with less negative affect. Conclusions: These results demonstrate that ALLO and DHEA reduce activity in (and connectivity between) regions associated with generation of negative emotion and enhance activity in regions linked to regulatory processes. Considering that activity in these regions is altered in PTSD, our results provide initial neuroimaging evidence that ALLO and DHEA may be useful as pharmacological interventions and invite further investigation into the brain basis of neurosteroid regulatory effects.
Recent Findings on Prolonged Exposure Treatment and its Mechanisms
(Clin Res/N/A/M/Global)

Chair: McLean, Carmen, PhD\(^1\), Discussant: Keane, Terence, PhD\(^2\)
\(^1\)University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA
\(^2\)National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA

Prolonged exposure therapy (PE) is an efficacious and effective treatment for post-traumatic stress disorder (PTSD) that is based on emotional processing theory (EPT). Much has been learned over the past two decades about the efficacy of PE and its mechanisms. This symposium will present findings from four recent studies that add to our understanding of the efficiency, applicability, and mechanisms of PE. In the first presentation, Dr. Edna Foa will present research showing that PE delivered in 60-minute sessions with 20 minutes of imaginal exposure is as effective as the standard delivery of 90-minute sessions with 40-60 minutes of imaginal exposure. In the second presentation, Dr. Bedard-Gilligan will present data on the impact of alcohol use on treatment compliance and outcome during PE, addressing a persistent concern that alcohol use might interfere with treatment. In the third presentation, Dr. Erin Clifton will present data examining patterns of emotional engagement during imaginal exposure and how they relate to treatment outcome for PE. In the final presentation, Dr. Alyson Zalta will present a recent study that provides strong support for EPT by showing that changes in trauma-related cognitions are a key mechanism of PE. Finally, Dr. Terry Keane will discuss implications of these findings in terms of our understanding of PE and the treatment of PTSD more broadly.

Can PE be Delivered Successfully in 60-Minute Sessions with 20-Minutes of Imaginal Exposure?
(Clin Res/N/A/N/A)

Foa, Edna, PhD\(^1\), Nacash, Nitsa, MD\(^2\), Huppert, Jonathan, PhD\(^3\), Su, Yi-Jen, PhD\(^4\)
\(^1\)University of Pennsylvania, Philadelphia, Pennsylvania, USA
\(^2\)Tel-Aviv Brull Community Mental Health Center, Tel Aviv, Israel
\(^3\)Hebrew University of Jerusalem, Israel
\(^4\)University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA

This lecture will describe the results of a study that examines whether 60-minute sessions of prolonged exposure (PE) that include 20-minute of imaginal exposure can ameliorate post-traumatic stress disorder (PTSD) in participants as effectively as the standard 90-minute sessions that include 40-minute of imaginal exposure. A
secondary goal was to explore the relationship of treatment outcome to within- and between-session habituation, and change in negative cognitions. Participants were individuals with chronic PTSD (N=39) randomly assigned to the standard 90-minute (N=19) or the 60-minute sessions (N=20) of PE. The results indicated that participants receiving shorter exposure sessions improved as much as those receiving 90-minute sessions on PTSD symptoms, depression, and trauma-related cognitions, at post-treatment and 6-month follow-up. Participants in the shorter sessions showed less within- and between- sessions habituation than those who received longer sessions. Both groups showed reduction in negative cognitions with no difference between groups. Change in PTSD symptoms was significantly associated with change in trauma-related cognitions and not with habituation. The findings are discussed within the framework of emotional processing theory, emphasizing the crucial role of cognitive change in exposure therapy.

Symposium
Friday, November 8
1:30 p.m. to 2:45 p.m.
Franklin 7

Substance Use as a Predictor of Treatment Engagement and Outcome in a PTSD Treatment Trial
(Clin Res/N/A/Industrialized)

Bedard-Gilligan, Michele, PhD¹, Garcia, Natalia, BS¹, Zoellner, Lori, PhD¹, Feeny, Norah, PhD²
¹University of Washington, Seattle, Washington, USA
²Case Western Reserve University, Cleveland, Ohio, USA

PTSD and substance use disorders frequently co-occur (Mills et al., 2006) and this co-occurrence predicts worse severity and poorer treatment outcome (e.g., McGovern et al., 2009). Increased understanding of how substance use impacts treatment processes may help us better maximize therapeutic gains. In these preliminary analyses, we examined 200 men and women seeking treatment for chronic PTSD to explore how pre-treatment drug and alcohol use impacts engagement and symptom outcomes, and whether this differs across treatment modalities. We looked at substance use as a predictor of drop-out, treatment compliance, and PTSD at post and six months following treatment (prolonged exposure (PE) or sertraline). For both treatments, greater scores on a composite measure of drug use was a significant predictor of early treatment drop-out (< 4 sessions) and of less in vivo and imaginal homework practice or sertraline adherence. Similarly, drug use predicted worse PTSD outcome at post and six month follow-up. In contrast, alcohol use did not predict drop-out, adherence, or PTSD outcomes for PE or sertraline. Illicit drug use at initiation of PTSD treatment is a risk factor for poorer compliance and outcome in both psychosocial and pharmacological treatments, and increasing treatment engagement seems particularly warranted for these individuals.
Symposium  
Friday, November 8  
1:30 p.m. to 2:45 p.m.  
Franklin 7

Optimal Emotional Engagement in Imaginal Exposure for PTSD: Examining Patterns across Time
(Clin Res/Violence//Industrialized)

Clifton, Erin, MA¹, Feeny, Norah, PhD¹, Zoellner, Lori, PhD²  
¹Case Western Reserve University, Cleveland, Ohio, USA  
²University of Washington, Seattle, Washington, USA

Emotional engagement with trauma memories is theorized to be critical for successful treatment of PTSD (Foa & Kozak, 1986). In prolonged exposure (PE) for PTSD, we aim for “optimal” engagement during imaginal exposure (IE). One study examined engagement during IE for PTSD and found three distinct patterns of emotional engagement that differentially related to outcome (Jaycox, Foa, & Morral, 1998). However, we still know little about common and “optimal” engagement patterns. We will examine emotional engagement over the course of IE in 116 men and women who completed up to 10 weeks of PE for PTSD. Engagement during IE was measured using client-reported subjective units of distress (SUDs; Wolpe & Lazarus, 1966) gathered every 5 min. Patterns in pre, peak, and post SUDs ratings were explored using hierarchical linear modeling (HLM) as well as their relationship to PTSD symptom trajectories. Preliminary analyses suggested that pre and peak SUDs trajectories across sessions were linear [F(1, 649.036)=8.41, p=.004); F(1, 209.017)=6.51, p=.011)] with engagement decreasing across session. The trajectory of end SUDs was quadratic [F(1, 466.037)=6.97, p=.009)] with engagement increasing early and then decreasing. Understanding engagement trajectories and their relation to improvement in treatment will bring us closer to knowing what is “optimal” during IE.

Symposium  
Friday, November 8  
1:30 p.m. to 2:45 p.m.  
Franklin 7

Mechanisms of Change in Prolonged Exposure for PTSD: The Role of Trauma-Related Cognitions
(Clin Res/Violence//N/A)

Zalta, Alyson, PhD¹, Gillihan, Seth, PhD², Fisher, Aaron, PhD³, Mintz, Jim, PhD⁴, McLean, Carmen, PhD⁵, Yehuda, Rachel, PhD⁶, Foa, Edna, PhD⁷  
¹Rush University Medical Center, Chicago, Illinois, USA  
²University of Pennsylvania, Philadelphia, Pennsylvania, USA  
³Stanford University, Stanford, California, USA  
⁴University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA  
⁵University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA  
⁶J. J. Peters Veterans Affairs Medical Center; Mount Sinai School of Medicine, Bronx, New York, USA

The goal of the current study was to examine mechanisms of change in Prolonged Exposure (PE) therapy for PTSD. Emotional Processing Theory of post-traumatic stress disorder (PTSD) proposes that disconfirmation of
pathological, trauma-related cognitions is a central mechanism in PTSD symptom reduction; but to date, the causal relationship between change in pathological cognitions and change in PTSD severity in PE has not been established. Female sexual or nonsexual assault survivors (N = 64) with a primary diagnosis of PTSD received 10 weekly sessions of PE. Self-reported PTSD symptoms, depression symptoms, and pathological trauma-related cognitions were assessed at pre-treatment, each of the 10 PE treatment sessions, and post-treatment. Lagged mixed-effect regression models indicated that session-to-session reductions in negative cognitions drove successive reductions in PTSD symptoms but not vice-versa. An identical but weaker pattern was observed between cognitions and depressive symptoms. To our knowledge, this is the first study to establish change in trauma-related cognitions as a central mechanism of PE treatment. These findings provide strong support for Emotional Processing Theory and have important clinical implications for the effective implementation of PE.

Panel Presentation  
Friday, November 8  
1:30 p.m. to 2:45 p.m.  
Grand Ballroom A

Using Innovative Multimedia Outreach to Promote Help Seeking Behavior and Reduce Stigma Associated with Mental Health Treatment  
(Prevent/Mil/Vets/I/N/A)

Kelly, Kacie, MS\(^1\), Slone, Laurie, PhD\(^2\), Lee, Dana, LCSW\(^3\), Batten, Sonja, PhD\(^4\), Tenhula, Wendy, PhD\(^1\), Hamblen, Jessica, PhD\(^5\), Herrera, Rhett, BS\(^1\), Ladwig, Debbie, MS\(^1\), Roberts, Miguel, PhD\(^3\), South, Koby, MS\(^1\)

\(^1\)Department of Veteran Affairs, Washington, District of Columbia, USA  
\(^2\)VA National Center for PTSD, Executive Division, White River Jct, Vermont, USA  
\(^3\)Defense Centers of Excellence for Psychological Health & Traumatic Brain Injury, Silver Spring, Maryland, USA  
\(^4\)VA Office of Mental Health Services, Washington, District of Columbia, USA  
\(^5\)VA National Center for PTSD/White River Junction VA Medical Center, White River Junction, Vermont, USA

Overcoming stigma associated with seeking mental health treatment among Veterans and Service members is a priority of the Department of Veterans Affairs (VA) and the Department of Defense (DoD). This panel presentation will feature 3 innovative initiatives developed by the departments to address this goal. First, the Real Warriors Campaign (RWC) is a multimedia public awareness initiative designed to encourage help-seeking behavior among Service members and Veterans coping with invisible wounds and increase awareness about resources for psychological health care and support. Second, Make the Connection is a public outreach campaign that utilizes traditional multimedia, as well as online and social media to connect Veterans and their friends and family members with information, resources and solutions related to their health, well-being and relationships. Third, About Face is an online video gallery that aims to help people recognize PTSD symptoms, determine if they have symptoms and motivate them to seek treatment. All 3 campaigns feature powerful personal accounts from Veterans and Service members discussing their stories of strength and recovery. Each of the programs is rooted in scientific evidence and utilizes innovative approaches to disseminate information, reduce stigma related to seeking mental health care and encourage Veterans and Service members to seek help.
Panel Presentation
Friday, November 8
1:30 p.m. to 2:45 p.m.
Franklin 9/10

How Four Minutes Can Impact a Community: Lessons Learned from Newtown
(Practice/Disaster/I/Global)

Brymer, Melissa, PhD, PsyD\textsuperscript{1}, Pynoos, Robert, MD MPH\textsuperscript{1}, Southwick, Steven, MD\textsuperscript{3}, Marans, Steven, PhD\textsuperscript{4}, Wong, Marleen, PhD\textsuperscript{5}
\textsuperscript{1}National Center for Child Traumatic Stress at UCLA, Los Angeles, California, USA
\textsuperscript{2}UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA
\textsuperscript{3}VA Connecticut Health Care System, West Haven, Connecticut, USA
\textsuperscript{4}Yale University School of Medicine Child Study Center, New Haven, Connecticut, USA
\textsuperscript{5}University of Southern California, Los Angeles, California, USA

On December 14th, 2012 a shooter entered Sandy Hook Elementary School killing 20 first graders and 6 educators. Panel members will discuss the immediate school, family, and community responses to this tragedy along with key findings regarding the initial and ongoing impact on the Newtown Public School District. A major focus will be to describe the planning and strategies employed to implement a long-term public mental health school and community based recovery program. We will discuss the impact that the nation’s mourning had on this small community, the need to enhance local community provider ability to deliver evidence-based practices, and the importance of mapping out long-term needs of the school district. Finally, we will discuss policy implications in regard to school safety planning and ways to broaden approaches to trauma-informed schools through collaboration among school and emergency management personnel, law enforcement, school administrators, parents, faculty, staff, and union officials.

Panel Presentation
Friday, November 8
1:30 p.m. to 2:45 p.m.
Franklin 11/12

Resilience and Vulnerability: Our Trains Run on Both Tracks
(Clin Res/Disaster/M/Global)

Hobfoll, Stevan, PhD\textsuperscript{1}, Bonanno, George, PhD\textsuperscript{2}, Weine, Stevan, MD\textsuperscript{3}, Ressler, Kerry, MD PhD\textsuperscript{4}, Bradley, Bekh, PhD\textsuperscript{5}
\textsuperscript{1}Rush Medical College, Chicago, Illinois, USA
\textsuperscript{2}Teachers College, Columbia University, New York, New York, USA
\textsuperscript{3}University of Illinois at Chicago, Chicago, Illinois, USA
\textsuperscript{4}Emory University School of Medicine, Atlanta, Georgia, USA
\textsuperscript{5}Atlanta VAMC/Emory University, Decatur, Georgia, USA

The study of trauma has focused on pathological responses. Many individuals, however, do not develop pathological responding. Some hardly develop symptoms whatsoever, and still others initially show upset, but recover. The panel will address differing pathways of resilience among survivors of mass casualty and terrorism;
refugees; low-income, urban families and people facing illness and grief. At the same time, in the face of trauma, people often experience severe distress and even breakdown. Rather than placing resilience and vulnerability in an either-or contrast, the panel will discuss how resilience and vulnerability are often parallel processes—trains running on two parallel tracks that define our humanity. Instead of defining types and tight-knit categories, research suggests heterogeneity in the pathways or trajectories that people display following exposure to mass casualty and trauma. We will discuss this data with a focus on how to better define resilience and recovery as well as the implications for examining resilience in future research. The panel will also address how these concepts and research data are critical for broadening our theoretical understanding of response to trauma, key to public health intervention, and have potential for building a Psychology of Human Strength in the face of adversity that has been absent in trauma studies.

**Workshop Presentation**
**Friday, November 8**
**1:30 p.m. to 2:45 p.m.**
**Franklin 8**

**Empathic Exposure and Early Intervention with Medically Hospitalized Trauma Patients**
*(Practice/Mil/Vets/M/Industrialized)*

**Wain, Harold, PhD, Perito, Robert, MD**
_Walter Reed National Military Medical Center, Bethesda, Maryland, USA_

With the influx of injured warriors from Afghanistan and Iraq, an approach was developed at Walter Reed National Military Medical Center to address psychiatric issues related to combat exposure among medical inpatients evacuated from a theater of combat. To overcome the barrier presented by stigma (Hogue, 2005,) psychiatric consultation became an automatic intervention for all patients returning from battle and was normalized as a routine part of multidisciplinary care. A method of Empathic Exposure was developed that encourages patients to share their conflicts and process their experiences while minimizing re-traumatization. Patients are offered an opportunity to reflect on their experiences, with the suggestion that this is helpful for the future. Attention is paid to reinforcing ego assets that emerge during the narrative and the clinician offers empathic responses from a supportive stance characterized by respect, empathy, warmth, affirmation, and a sense of hope. The patient is monitored for signs of distress. Frequent interruption of the trauma narrative with positive feedback helps prevent the patient being overwhelmed without fostering avoidance, allowing patients to begin to integrate the experience. Grieger et.al (2006) described the injured soldier in our population as having less psychiatric sequelae than did soldiers exposed to trauma without physical injury.
Using Peer Educators and Volunteers to Strengthen Children’s Resilience in Rwanda: A Case Study of the Care Group Model for Child Development

(Commun/Child/Adol/I/E & S Africa)

Tlakek, Sarah, Doctoral Student¹, Uwineza, Louise, BA²
¹Washington University in St. Louis, George Warren Brown School of Social Work, St. Louis, Missouri, USA
²World Relief, Kigali, NA, Rwanda

Post-traumatic stress disorder affects more than 25% of the Rwandan population (Munyandamutsa et al., 2012). School age children born after the 1994 genocide also demonstrate symptoms of post-traumatic stress including nightmares and avoidance that are likely due to the intergenerational transmission of trauma. Strengthening children’s resilience has been identified as an important way to alleviate trauma and prevent functional impairment. This presentation will describe a psychosocial intervention for children ages 5 - 12 in five rural and peri-urban communities in Rwanda. Components of resilience to target were identified by focus groups of children and are consistent with those identified by other Rwandan youth (e.g. perseverance, community support) (Betancourt et al., 2011). Intervention components include health and hygiene lessons, trauma-related psychoeducation, life skills activities, and parent training. Under the Care Group model program staff train volunteers to lead groups, and each child becomes a peer educator in his/her community. The program is scalable, replicable, and requires minimal external resources. Two waves of evaluation data for 300 children will be presented, including scores from the Child Status Index. Presenters will invite audience feedback to improve the measurement of resilience for children in Rwanda.

Media Presentation

Friday, November 8
1:30 p.m. to 2:45 p.m.
Franklin 6

From War to Home: Photos and Stories of Deployment and Homecoming from U.S. Veterans of the Wars in Iraq and Afghanistan
(Commun/Mil/Vets/I/Industrialized)

True, Gala, PhD
Philadelphia VA Medical Center, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA

Objective: This community-engaged research project used Photovoice methods to develop an exhibit of Veterans’ photos and stories to educate healthcare providers and other civilians about the diverse deployment and post-deployment experiences of Veterans. Methods: Veterans were given cameras and asked to take photos in the course of daily life, and contribute photos from their personal collections, to convey their deployment and post-
deployment experiences. Results: This media presentation will include discussion of key findings from the project; Veterans who participated in the project will also be present to discuss their experiences with Photovoice and to share their photos and stories. Themes identified included: impact of a deployment on Veterans’ physical, mental, and emotional health; challenges in making the transition home from deployment; barriers to accessing healthcare and other resources; and source of strength and support. Conclusions: This Photovoice exhibit, developed in collaboration with Veterans, enables providers to see illness and health through the patient’s eyes. Veterans benefitted from sharing their stories, and generated ideas for providing a patient-centered care environment.

**Paper Presentation**
**Friday, November 8**
**1:30 p.m. to 2:45 p.m.**
**Grand Ballroom C**

**Research on Military Personnel who Served in Iraq and Afghanistan**

**Trajectories of Post-Traumatic Stress Disorder (PTSD) Predict Suicidal Ideation Three Years after Deployment to a Combat Zone**

( Assess Dx/Mil/Vets/M/Industrialized)

**Madsen, Trine, PhD¹; Andersen, Soren, PhD¹; Karstoft, Karen-Inge, Doctoral Student², Berntsen, Dorthe, PhD³, Bertelsen, Mette, PhD¹**

¹Research and Knowledge Center, The Danish Veteran Center, Ringsted, Ringsted, Denmark
²University of Southern Denmark, Odense, Funnen, Denmark
³Aarhus University, Aarhus, Aarhus, Denmark

Suicidality in veterans is a problem of great concern. Veterans with PTSD are more likely to have suicidal ideations (Sher et al., 2012). Recent longitudinal studies have revealed heterogeneous trajectories of PTSD-symptoms following combat (Dickstein et al., 2010). However, it remains unclear whether deployed soldiers with certain patterns of PTSD-symptom developments are in higher risk of suicidal thoughts after deployment. If PTSD trajectories predict suicidal ideations then the accumulative knowledge on what characterizes veterans falling into different PTSD trajectories enables early identification of suicidal high-risk veterans. All in all 561 Danish soldiers were assessed at six time points before, during and after deployment to Afghanistan in 2009. Three years after deployment participants reported on suicidal ideations. Trajectories of PTSD symptoms were identified by latent class growth analyses. Adjusted multivariable logistic regression analyses were applied to examine whether deployed soldiers with certain PTSD-symptom trajectories were more likely to report suicidal thoughts. The findings revealed that trajectories with high PTSD-symptom-level at the three-year measurement were significantly associated with suicidal ideations three years after deployment. Early identification of veterans in higher risk of developing suicidal ideations has clinical importance.
The Impact of Post-Traumatic Stress Disorder, Traumatic Brain Injury and Depression on Risk of Suicide-related Behavior among Veterans of Iraq and Afghanistan

Finley, Erin, PhD MPH, Pugh, Mary Jo, PhD, RN, Bollinger, Mary, PhD MPH, Noel, Polly, PhD, Pugh, Jacqueline, MD, Dassori, Albana, MD
South Texas Veterans Healthcare System, San Antonio, Texas, USA

OBJECTIVE: Post-traumatic stress disorder (PTSD) and traumatic brain injury (TBI) are "signature injuries" of Operations Enduring Freedom (OEF; Afghanistan) and Iraqi Freedom (OIF; Iraq) and have been associated with increased risk of suicide-related behavior (SRB) among OEF/OIF Veterans. We examined whether co-occurring PTSD and TBI contribute to risk for SRB among OEF/OIF Veterans after controlling for known predictors, including depression. METHODS: The VA OEF/OIF Roster File was used to identify OEF/OIF Veterans receiving VA care in Fiscal Years 2009-2011; ICD-9-CM codes were used to group 211,652 cohort members as having: 1) neither ideation nor attempt; 2) ideation only; 3) attempt only; and 4) both ideation and attempt. Descriptive statistics were followed by multinomial logistic regression analyses predicting SRB. RESULTS: We found significant interaction effects on risk for SRB related to co-occurring PTSD and TBI (OR=2.7 for attempt; OR=2.6 for ideation). Risk for suicide attempt was also elevated when depression was comorbid with TBI (OR=2.3) or PTSD (OR=3.8) or both (OR=4.8). CONCLUSIONS: Although co-occurring PTSD and TBI are associated with increased SRB among OEF/OIF Veterans, depression also impacts risk, particularly among those with comorbid TBI and/or PTSD. Novel suicide prevention measures based on findings are suggested.

Is Resilience Related to PTSD Symptoms among OEF/OIF/OND Veterans?

DeViva, Jason, PhD, Pietrzak, Robert, PhD MPH, Harpaz-Rotem, Ilan, PhD
1VA Connecticut Healthcare System and Yale University, West Haven, Connecticut, USA
2National Center for PTSD, West Haven, Connecticut, USA
3Yale University School of Medicine, VA Connecticut Healthcare System, West Haven, Connecticut, USA

Resilience is thought to be negatively associated with PTSD symptoms, while stigma is theorized to correlate positively with PTSD. This survey study examined the relationships of resilience, stigma, and personality variables to PTSD symptom level among 90 OEF/OIF/OND veterans presenting for mental health screening. Participants completed the PTSD Checklist (Weathers et al. 1993), Response to Stressful Experiences Scale (Johnson et al. 2008), Connor-Davidson Resilience Scale (Connor & Davidson, 2003), Stigma Scale (StSc; King et al. 2007), Barriers to MH Care scale (Britt et al. 2008), Beliefs about Medication and Psychotherapy Scale (Bystritsky et al. 2005), Meaning in Life Questionnaire (Steger et al. 2006), and Ten-Item Personality Inventory (Gosling et al. 2003). All
questionnaire scores and several subscales were significantly related to PCL score, and were then entered into a linear regression equation using the stepwise method. Regression yielded a final model of TIPI emotional stability score, \( \beta = -0.27, 95\% CI = -2.26 \text{ to } -1.01, p = 0.001 \), StSc score, \( \beta = 0.34, CI = 0.20 \text{ to } 0.48, p < 0.001, \) combat exposure, \( \beta = 0.30, CI = 0.19 \text{ to } 0.40, p < 0.001, \) and MLQ meaning score, \( \beta = -0.19, CI = -0.64 \text{ to } -0.01, p < 0.05, \) which explained 63% of PCL variance. Though resilience measures were related to PTSD symptom level, results indicate emotional stability, stigma, combat exposure, and life meaning accounted for the most variance.

**Paper Presentation**

**Friday, November 8**

1:30 p.m. to 2:45 p.m.

**Grand Ballroom C**

**PTSD Treatment for Soldiers after Returning from Afghanistan: Low Utilization of Mental Health Services and Reasons for Dropping Out of Care**

(Practice/Mil/Vets/M/Industrialized)

**Hoge, Charles, MD, Grossman, Sasha, BA, Auchterlonie, Jennifer, MS, Riviere, Lyndon, PhD, Milliken, Charles, MD, Wilk, Joshua, PhD**

**Walter Reed Army Institute of Research (WRAIR), Silver Spring, Maryland, USA**

There are limited data on the adequacy of mental health treatment for PTSD following combat deployment. This study, based on longitudinal and cross-sectional data, assessed the percent of soldiers with PTSD who received the opportunity for minimally adequate treatment. Among 45,462 soldiers who completed the Post-Deployment Health Assessment after Afghanistan deployment, 2,230 received a diagnosis of PTSD within 90 days. Of these soldiers, 22% received only a single mental health care encounter and 41% received minimally adequate care (≥ 8 encounters over the next 12 months). Among 229 infantry soldiers who met strict criteria for PTSD on an anonymous survey, 106 (48%) reported any mental health treatment. Of those who received treatment, the median number of visits in 6 months was 4; 21% received only a single visit, and 46% received minimally adequate care (≥ 4 visits in 6 months). Most soldiers who reported dropping out of care gave multiple reasons, including feeling they could handle problems on their own, being too busy with work, not having enough time with the professional, stigma, treatment not working, confidentiality concerns, or discomfort concerning how the professional communicates or interacts with them. Treatment reach for PTSD after deployment remains low, with the majority of soldiers either not accessing care or not receiving adequate treatment.
**Paper Presentation**  
Friday, November 8  
1:30 p.m. to 2:45 p.m.  
Franklin 5

### Novel Treatments for PTSD

**Pilot, Open Label Study of Add-On Oral Δ 9–THC in Chronic PTSD**  
(Clin Res/N/A/M/N/A)

**Roitman, Pablo, MD**  
*Hadassah University Hospital, Jerusalem, Israel*

**Background:** PTSD is a chronic, debilitating disorder. PTSD patients achieve remission with current treatments. There are high rates of comorbid substance abuse, including frequent use of marijuana. There is evidence of CB1 receptor activity in emotional learning and memory. Marijuana is often used as compassion add-on therapy for treatment-resistant PTSD, but the exact dosing of inhaled marijuana cannot be determined. Goal: To evaluate the tolerance, safety and preliminary effects of tetrahydrocannabinol (THC) as add-on treatment for chronic PTSD.

**Method:** Ten outpatients with chronic PTSD received 5mg of sublingual THC twice a day for three weeks without change to prior medication intake. We measured changes in the CGI scale, the CAPS, PSQI, Nightmare scores NES and NFQ. Results: Treatment with THC resulted in significant changes in global symptom severity (CGI-s 6.0 to 4.9 and CGI-i 3.5 to 2.7; p<0.05), sleep quality (PSQI: 17.2 to 13.9, p< .05), nightmares (NES: 32.2 to 23.9, p< .002; NFQ: .88 to .44, p< .04) and CAPS arousal score (32.3 to 24.3, p<0.02). Adverse effects were noted in less than 30% of the sample without drop outs. Conclusion: Oral THC was acceptable and safe among severe and chronic PTSD patients. Those preliminary findings indicate that THC may specifically reduce global distress, hyper-arousal, sleep quality and nightmares.

**Yoga in the Treatment of Chronic PTSD: A Long-term Follow-up Study**  
(Clin Res/Adult/Cmplx/I/N/A)

**Rhodes, Alison, PhD Candidate¹, Spinazzola, Joseph, PhD², van der Kolk, Bessel, MD²**  
¹*Boston College, Chestnut Hill, Massachusetts, USA*  
²*Trauma Center at Justice Resource Institute, Brookline, Massachusetts, USA*

This study is a long-term follow-up assessment of a randomized control trial examining the efficacy of yoga for chronic PTSD stemming from prolonged childhood trauma. In the "parent study," 60 adult women were randomly assigned to a 10-week trauma-sensitive yoga intervention or to an attention control group. Yoga was effective in reducing PTSD, depression, and dissociative symptoms and engagement in negative tension reducing activities, and was associated with greater likelihood of loss of PTSD diagnosis compared to the Control Group. Participants from the RCT were invited to participate in long-term follow-up interviews to assess whether the initial intervention and/or yoga practice post-treatment was associated with a reduction in symptomology and PTSD.
diagnosis over time (n=49). Hierarchical linear and logistic regression analyses were used to examine whether treatment group status in the original RCT and frequency of yoga practice since the RCT ended predicted trauma symptomology and PTSD diagnosis. Results indicated that frequency of continuing yoga practice was the strongest predictor of reductions in PTSD symptoms, depression symptoms, and a greater likelihood of a loss of PTSD diagnosis. Yoga may be a useful adjunctive component of treatment with the greatest long-term benefits derived from continued yoga practice.

**Paper Presentation**  
**Friday, November 8**  
**1:30 p.m. to 2:45 p.m.**  
**Franklin 5**

**Advancing Our Understanding of Resilience by Considering Coping Strategy Focus and Flexibility**  
(Practice/N/A/M/Industrialized)

**Folger, Susan, MA PhD Student,** Wright, Margaret, PhD  
*Miami University, Oxford, Ohio, USA*

Past coping research highlights the importance of considering strategy-situation fit and flexibility in strategy selection (Bonanno et al., 2011). This study explored how perceived ability to cope with potentially traumatic events was influenced by two types of strategy selection (trauma focus versus forward focus). Flexible use of both strategies was also explored. Participants included 207 young adults (66.7% female; mean age = 18.86 years) who reported experiencing interpersonal violence (n = 76) or loss (n = 131). They completed assessments of coping flexibility, post-traumatic growth, psychological well-being, and post-traumatic stress symptoms. For the loss group, a forward focus predicted less post-traumatic stress (p < .001) and greater well-being (p < .001), and a trauma focus predicted more post-traumatic stress (p = .012). For the interpersonal violence group, ability to focus on the trauma predicted more post-traumatic growth (p < .001), but flexible coping that entailed both a trauma focus and a forward focus negatively predicted well-being (p = .011). Women with loss or interpersonal violence experiences indicated higher levels of well-being (p = .009) or growth (p = .025), respectively. Results highlighted the differential utility of type of strategy focus and flexibility in fostering resilience and growth following experiences of loss or interpersonal violence.

**Paper Presentation**  
**Friday, November 8**  
**1:30 p.m. to 2:45 p.m.**  
**Franklin 5**

**Reduction in Post-Traumatic Stress Symptoms in Congolese Refugees Practicing Transcendental Meditation**  
(Clin Res/Civil/Ref/M/E & S Africa)

**Rees, Brian, MD MPH**  
*U.S. Army, Moffett Field, California, USA*
The initial randomized/matched single-blind pilot study tested the effect of Transcendental Meditation (TM) practice on symptoms of post-traumatic stress (PTS) in Congolese refugees. TM group participants (N=21) were instructed in TM and matched with 21 control refugees. All participants completed the PTSD Checklist–Civilian (PCL-C) measure of PTS symptoms at baseline, and 30-day and 135-day posttests. PCL scores in the control trended up; the TM group scores went from high at baseline indicating severe PTS symptoms to a non-symptomatic level, scores below 35, after 30-days TM practice, and remained low at 135-days. Effect size was high (d > 1.0). 95% of TM subjects (20 of 21) had significant reductions (drop of 11 points or more) at 30 days, and 100% at 135 days; vs. 0% of controls. 90% (19 of 21) reached non-symptomatic levels at both 30 and 135 days; vs. 0% of controls. JTS 2013,26,1-4. The follow-up study evaluated the rapidity of onset of the effect of TM on PCL scores among the wait-list controls. After the three baseline measures, eleven refugees were taught TM, then re-tested ten days and 30 days after instruction. Average PCL scores dropped 29.9 points from 77.9 to 48.0 in ten days, then dropped another 12.7 to 35.3 at 30 days. Effect size was high (d > 1.0). There were no adverse events. All refugees who learned TM completed the studies and were able to practice TM.
Concurrent Session Eight

Featured Panel
Friday, November 8
3:00 p.m. to 4:15 p.m.
Grand Ballroom E

DSM-5: New Data, New Sub-types, and Comparisons with ICD-11
(Assess Dx/Disaster/M/Global)

Friedman, Matthew, MD, PhD¹, Brewin, Chris, PhD², Kilpatrick, Dean, PhD³, Lanius, Ruth, MD, PhD⁴, Scheeringa, Michael, MD, MPH⁵
¹National Center for PTSD, Executive Division, White River Junction, Vermont, USA
²University College London, London, London, United Kingdom
³Medical University of South Carolina, Charleston, South Carolina, USA
⁴University of Western Ontario, London, Ontario, Canada
⁵Tulane University Health Sciences Center, New Orleans, Louisiana, USA

This panel will focus on some of the important revisions in PTSD diagnostic criteria for DSM-5. Matt Friedman will provide an overview of the new criteria themselves and provide the rationale for additions, deletions and revisions of DSMIV criteria. Dean Kilpatrick will present Internet Study data comparing DSM-5 PTSD prevalence vs. DSM-IV prevalence with a focus on how changes in criteria (e.g., A1, A2 & C) influence prevalence estimates. Ruth Lanius will present the various sources of data that led to adoption of the new Dissociative Subtype. Michael Scheeringa will discuss research on children 6 years and younger that led to adoption of the new Pre-School Subtype. Finally, Chris Brewin will discuss the rationale for key differences between ICD-11 and DSM-5 diagnostic criteria for PTSD. Speakers will be succinct so that there is plenty of time for questions and comments from the audience.

Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Grand Ballroom D

Modern Methods in Trauma Research
(Res Meth/N/A/M/Global)

Chair: Lai, Betty, PhD¹, Discussant: Palmieri, Patrick, PhD²
¹University of Miami Miller School of Medicine, Coral Gables, Florida, USA
²Center for the Treatment and Study of Traumatic Stress, Summa Health System, Akron, Ohio, USA

This symposium focuses on modern methods in trauma research. Talks will be organized around stage of analysis, from measurement models and analyzing criterion variables, to multivariable analysis. First, Marit Netland will discuss how items measuring exposure to potentially traumatic events should be treated as causal indicators rather than as effect indicators. She will address implications of this approach for the classification of event list items, with examples from research on political violence. Second, Betty Lai will identify limitations of variable-
centered approaches (e.g., ANOVA, regression) in trauma research. She will describe growth mixture modeling, and she will illustrate how this technique may be utilized to identify subgroups, particularly resilient groups. She will present an applied example of growth mixture modeling, which was used to identify trajectories of post-traumatic stress responses among children after Hurricane Katrina. Finally, Matthew King will describe the use of recursive partitioning methods for data mining (CART). He will identify the advantages of this approach over more traditional techniques. Taken together, this symposium will introduce modern methods and approaches in trauma research, provide a primer for how these techniques and methods might be applied to current research, and promote the advantages of these modern approaches.

Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Grand Ballroom D

(Res Meth/N/A//N/A)

Netland, Marit, PhD
Bergen University College, Bergen, Norway, Norway

Researchers commonly treat event-list items measuring exposure to potentially traumatic events as effect indicators. This presentation first presents the view that event-list items should be treated as causal indicators. This implies that event lists should ideally include all events or event aspects congruent with the definition of the potentially traumatic exposure under study and that it is inappropriate to apply factor-analytic techniques for exposure classification. The presentation then discusses the importance of systematic frameworks for classification of exposure and construction of event lists which accord with the causal indicator perspective. An ongoing effort to develop such a framework for research on exposure to political violence is described. The presentation suggests that efforts toward improved classification and measurement of exposure may draw on theoretical insights and methodologies from various fields, such as philosophical theory of categories, library and information science (e.g., Ranagaratnam’s facet analysis) and research methodology (e.g., narrative content analysis and Guttman’s facet theory).

Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Grand Ballroom D

Data Mining in Trauma Research: Application of Classification and Regression Trees
(Res Meth/N/A//Industrialized)

King, Matthew, PhD
VA Boston Healthcare System, Boston, Massachusetts, USA

The questions faced by trauma researchers often put them in the role of forecaster: Which trauma survivors will develop PTSD? Who will benefit from treatment and who will drop out? To help answer such questions, researchers may wish to apply data mining techniques that maximize the use of existing datasets (e.g., combing
treatment data to identify unexpected outcome moderators). Parametric regression has been the traditional tool for this task, but has significant limitations when used for exploratory analysis. This presentation will introduce a more powerful and appropriate method: classification and regression trees (CART). Trees are nonparametric models constructed by a statistical learning algorithm: Given a set of variables, a tree “learns” which are useful for predicting an outcome by searching recursively for the cutpoints that partition the sample into maximally homogenous subgroups. Trees offer flexibility – both outcome and predictor variables can be continuous or categorical, and nonlinear relationships can be modeled without specifying a form a priori – and advantages over regression – a virtually unlimited number of predictors can be considered, automated detection of interactions, and more robustness to overfitting. Examples will be drawn from datasets on veterans’ post-deployment health and an RCT for rape survivors to demonstrate CART in application.

Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Grand Ballroom D

Growth Mixture Modeling: Identifying Children’s Trajectories of Distress after Trauma Exposure
(Res Meth/Child/Adol//Industrialized)

Lai, Betty, PhD¹, Self-Brown, Shannon, PhD², Thompson, Julia, MA³, McGill, Tia, MPH², Kelley, Mary Lou, PhD³
¹University of Miami Miller School of Medicine, Coral Gables, Florida, USA
²Georgia State University, Atlanta, Georgia, USA
³Louisiana State University, Baton Rouge, Louisiana, USA

We will describe growth mixture modeling and how it was applied in a study examining post-traumatic stress (PTS) symptom trajectories of risk and resilience among children exposed to Hurricane Katrina. Participants in this study were 426 Hurricane Katrina affect youth (51% female; 8–16 years old), assessed at four post disaster time points. We identified three distinct trajectories of PTS symptoms for children: resilient (71% of the sample), recovering (25%), and chronic (4%). Risk/protective factors associated with trajectory membership included: initial loss/disruption stressors, community violence, and peer social support. For every additional initial loss/disruption event that children reported, they were 1.33 times more likely to fall in the recovering versus the resilient group (CI=1.13–1.56). For every standard deviation that children fell above the mean on the community violence measure, children were 2.05 times (CI=1.20–3.51) more likely to fall in the recovering group, and 4.04 times (CI=1.52–10.75) more likely to fall in the chronic group, versus the resilient group. For every additional unit of social support that children reported, they were .84 times less likely to fall in the chronic group (CI=.04-.63) versus the resilient group. Findings will be discussed in terms of the utility of growth mixture modeling and clinical and research implications.
Secondary Trauma and Burnout in Military Mental Health Providers
(Self-Care/Mil/Vets/M/Industrialized)

Chair: Benight, Charles, PhD
University of Colorado at Colorado Springs, Colorado Springs, Colorado, USA

Military mental health providers are facing extensive clinical demands with complex cases interweaving traumatic stress exposure, traumatic brain injury, and a host of comorbid factors. The suicide rate within the military has continued to increase. Given these conditions, the risk for burnout and secondary traumatic stress in military mental health providers is high. This symposium highlights recent empirical work focused on the prevalence of secondary trauma and burnout and the identification of important mediators. The research literature in this area is very limited despite the importance of provider resilience in responding to the needs of our returning combat weary soldiers. The first paper by Dr. Benight and colleagues explores the prevalence of secondary traumatic stress among Army mental health providers and identifies the importance of self-regulating mediating constructs. The second paper by Drs. C. and D. McGeary and Dr. Garcia targets organizational and patient factors in relation to burnout in VA psychiatrists. The third paper by Dr. Bride focuses on predictors of burnout in a sample of military healthcare providers. The fourth paper by Dr. Travis and colleagues investigates burnout within Air Force mental health providers.

Organizational Factors and Burnout in VA PTSD Clinical Team Providers
(Self-Care/Mil/Vets/N/A)

Garcia, Hector, PsyD; McGeary, Cindy, PhD, ABPP; McGeary, Donald; Finley, Erin, PhD, MPH; Peterson, Alan, PhD

1 South Texas Veterans Healthcare System, San Antonio, Texas, USA
2 University of Texas, Arlington, Texas, USA
3 University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA

Objective: The VA has invested heavily in a national rollout to ensure evidence-based treatments (EBTs) for PTSD—including prolonged exposure (PE) and cognitive processing therapy (CPT)—are available at every VA facility nationwide. One potential challenge to making EBTs the standard of care for PTSD is provider burnout, which can result in reduced effectiveness and poorer treatment outcomes in mental health care. In an effort to address the lack of research in this area, we hypothesized that organizational factors would be associated with provider burnout among VA providers engaged in PTSD specialty care. Method: Clinicians at VA PTSD Clinical Teams (PCT) nationwide were recruited to participate in a confidential online survey of emotional burnout. Survey items addressed demographics, workplace characteristics (such as administrative load, organizational politics, collegial emotional support) and other factors. Emotional burnout was assessed by the Maslach Burnout Inventory. Data
were analyzed using descriptive statistics, and the contribution of variables to MBI score was tested using a linear regression model. Results: Organizational politics, excessive administrative work, and lack of emotional support were among the organizational barriers predicting burnout. Several organizational factors were linked to missed days at work and intention to leave the VA.

**Symposium**
**Friday, November 8**
**3:00 p.m. to 4:15 p.m.**
**Grand Ballroom F**

**The Conditional Effect of Burnout and Organizational Support on Secondary Traumatic Stress Among Military Healthcare Providers**
(Self-Care/Caregivers/Industrialized)

*Bride, Brian, PhD MPH*¹, Kintzle, Sara, PhD, MSW², *Yarvis, Jeff, PhD, MSW*²
¹*University of Georgia, Athens, Georgia, USA*
²*Ft. Belvoir Community Hospital, Fort Belvoir, Virginia, USA*

Secondary traumatic stress (STS) is a well-documented phenomenon, however research on moderating factors is sparse particularly among professionals serving military populations. The purpose of this study was to examine two potential moderators of STS, burnout and organizational support, in a sample of 70 healthcare providers at two military hospitals. Overall, participants reported relatively low levels of STS with slightly more than half endorsing at least one symptom and 8% reporting moderate to high symptomatology. Two moderation analyses were conducted using Hayes’ PROCESS macro for SPSS to examine whether burnout and organizational support, respectively, moderate the relationship between exposure to secondary trauma and STS. The main effect of burnout was significantly associated with STS, while the main effect of organizational support was not found to be significant. Analysis of conditional effects revealed that burnout was associated with STS at the 75th and 90th percentiles, but not at the 10th, 25th, and 50th percentiles. The conditional effect of organizational support on STS was significant at the 10th, 25th, and 50th percentiles, but not at the 75th and 90th percentiles. Thus, STS was more likely to be found among providers experiencing high levels of burnout or low levels of perceived organizational support. Implications of these findings will be discussed.

**Symposium**
**Friday, November 8**
**3:00 p.m. to 4:15 p.m.**
**Grand Ballroom F**

**Air Force Mental Health Providers Deployment Experiences**
(Self-Care/Mil/Vets/N/A)

*Travis, Wendy*¹, *McGeary, Cindy, PhD, ABPP*²
¹*US Air Force, USA*
²*University of Texas, Arlington, Texas, USA*

Deployed military mental health providers are confronted with combat-related emotional distress and trauma. Those providing trauma treatment are vulnerable to their patient’s symptoms, and repeated trauma exposure causes caregivers to suffer. These individuals are tasked with addressing recurrent suffering, using
treatments that expose them to intimate details of emotional suffering. Providers are also likely to experience
direct combat stress/trauma in deployed settings. Military mental health providers are faced with progressively
higher rates of potential secondary trauma stimuli and increasing workload/task complexity that contribute to
burnout. Air Force (AF) mental health personnel (N=132) participated in a survey about the deployment cycle.
Respondents also reported changes in deployment-related work behaviors and personal wellbeing. Although about
a quarter of mental health deployers experienced at least one negative outcome, AF mental health personnel
experienced both negative and positive effects on work, family and personal outcomes following deployment. AF
mental health personnel seem to experience approximately equivalent rates of post-deployment problems
compared with other AF personnel and less post-deployment behavioral health problems than Army or Marine
Corp members.

Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Grand Ballroom F

Secondary Traumatic Stress among Army Mental Health Providers: Prevalence and its
Work- and Exposure- Related Correlates
(Self-Care/Mil/Vets//Industrialized)

Cieslak, Roman, PhD¹, Anderson, Valerie, PsyD¹, Bock, Judith, PsyD¹, Moore, Bret, PsyD², Peterson, Alan, PhD³,
Benight, Charles, PhD¹
¹University of Colorado at Colorado Springs, Colorado Springs, Colorado, USA
²Warrior Resiliency Program, Southern Regional Medical Command, San Antonio, Texas, USA
³University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA

This study focused on the prevalence of secondary traumatic stress among Army mental health providers working
with combat soldiers. We also investigated personal, work-, and exposure- related correlates of secondary
traumatic stress. Participants (N = 224) completed measures of indirect exposure to trauma (i.e., diversity, volume,
frequency, ratio), appraisal of secondary exposure impact, direct exposure to trauma, secondary traumatic stress,
and work characteristics. The prevalence of secondary traumatic stress was 19.2%. Personal history of trauma,
complaints about having too many patients, and more negative appraisals of the impact caused by an indirect
exposure to trauma were associated with higher frequency of secondary traumatic stress symptoms. Finally,
results of a meta-analysis will be presented which showed that the severity of intrusion, avoidance, and arousal
symptoms of secondary traumatic stress was similar across various groups of professionals indirectly exposed to
trauma (e.g., Army mental health providers, rescue workers, social workers).
Surviving or Thriving? Longitudinal Trajectories of PTSD after Combat Exposure
(Assess Dx/Mil/Vets/M/Industrialized)

Chair: Solomon, Zahava, PhD
Tel Aviv University, Tel Aviv, Israel

We present four studies of long-term trajectories of PTSD symptoms after combat exposure in military veterans. Investigating samples of Danish and Israeli soldiers, we focus on understanding heterogeneous patterns of long-term adaptation following combat exposure. Long-term trajectories of PTSD are identified through growth mixture modeling methods. Presenters will identify factors pre-, peri- and post-deployment that predict membership of resilient and psychopathological trajectories. More precisely, combat-related, social, and psychological factors that predict membership of these trajectories are presented and the implications discussed. The final study devotes attention to trajectories of resilience and delayed-onset PTSD. Results indicate that responses to combat are indeed heterogeneous and that several factors distinguish between these trajectories.

Latent Trajectories of Trauma Symptoms and Resilience: a 3-year Longitudinal Study of Danish Veterans Deployed in Afghanistan
(Prevent/Mil/Vets/Industrialized)

Andersen, Søren1, Madsen, Trine, PhD1, Karstoft, Karen-Inge, Doctoral Student2, Berntsen, Dorthe, PhD3, Bertelsen, Mette, PhD1
1Research and Knowledge Center, The Danish Veteran Center, Ringsted, Denmark
2University of Southern Denmark, Odense, Funnen, Denmark
3Aarhus University, Aarhus, Denmark

Recent longitudinal studies have revealed distinct heterogeneous trajectories of PTSD-symptoms following combat (Dickstein, Suvak et al. 2010; Bonanno, Mancini et al. 2012). However, uncertainties remain regarding the nature of the trajectories, and the relative importance of pre-deployment vulnerability, deployment and homecoming stressors in predicting membership of the trajectories. In this study, we examined trajectories of PTSD-symptoms before, during and after deployment to Afghanistan in 561 Danish soldiers. Symptoms were assessed at six time points spanning the time from pre-deployment to three years post-deployment, and trajectories were identified through latent class growth analysis. Risk factors were identified through a series of post hoc multivariable logistic regression analyses. We present here the findings of six PTSD-symptom trajectories of which the largest was a resilient trajectory with low symptom levels across all six assessments. Furthermore, we identified trajectories of delayed onset, two trajectories of symptom-fluctuation in the low to moderate range, and a trajectory of symptom...
relief during and immediately after homecoming, but with a drastic increase in symptom level at the final assessments. Factors for membership of the resilient trajectory will be presented.

**Symposium**  
**Friday, November 8**  
**3:00 p.m. to 4:15 p.m.**  
**Franklin 5**

**The Predictive Role of Psychological Resources in Predicting Trajectories of Resilience and Distress after Combat Exposure: a 20 Year Prospective Study**  
(Assess Dx/Mil/Vets/Industrialized)

**Armour, Cherie, PhD**, Karstoft, Karen-Inge, Doctoral Student, Elklit, Ask, MSc, Solomon, Zahava, PhD  
1 University of Ulster, Coleraine, Northern Ireland, United Kingdom  
2 University of Southern Denmark, Odense, Funnen, Denmark  
3 Tel Aviv University, Tel Aviv, Israel

Heterogeneous trajectories of PTSD-symptoms have been found to exist in samples of combat soldiers post-deployment to war zones (Bonanno, Mancini et al. 2012). However, there remains a great deal of ambiguity in relation to what predicts membership of these trajectories. Whereas demographic variables, peri-traumatic reactions, and post-traumatic support have all been found to predict PTSD outcome (Brewin et al. 2000; Ozer et al., 2003), only a small part of the variance is explained, and hence, much remains unknown. In this study, we investigated a number of psychological resources as predictive factors for trajectories of PTSD-symptoms. We utilized a sample of 675 Israeli soldiers who were followed over 20 years post-deployment to the 1982 Lebanon war. Four discrete trajectories: resilience, recovery, delay, and chronicity were defined through latent growth mixture modeling (LGMM). Several covariates representing psychological resources were included as predictors of individual trajectories. Locus of control, way of coping, and attributional style predicted membership of the delayed onset, recovery, and chronicity trajectories as compared to the resilience trajectory. In conclusion, we suggest that the assessment of psychological resources in the early phase after trauma is important for the prediction of long-term outcome.

**Symposium**  
**Friday, November 8**  
**3:00 p.m. to 4:15 p.m.**  
**Franklin 5**

**Delayed-onset PTSD following Combat: Clinical Characteristics and Psychological Correlates**  
(Assess Dx/Mil/Vets/Industrialized)

**Horesh, Danny, PhD**, Solomon, Zahava, PhD, Ein-Dor, Tsachi, PhD, Zerach, Gadi, PhD, Keinan, Giora, PhD  
1 New York University Langone Medical Center, Department of Psychiatry, New York, New York, USA  
2 Tel Aviv University, Tel Aviv, Israel  
3 Interdisciplinary Center (IDC), Herzliya, Israel  
4 Ariel University, Ariel, Israel
Delayed-onset PTSD (DPTSD) has been under medico-legal debate for years. Previous studies examining the prevalence and underlying mechanisms of DPTSD have yielded inconclusive findings. We will present a series of findings focusing on DPTSD among war veterans. Israeli veterans from the 1982 Lebanon War (N=675), with and without antecedent acute combat stress reaction (CSR), have been prospectively assessed 1, 2, and 20 years post-war. They were divided into 4 groups, according to the time of first reported PTSD onset. Participants completed self-report questionnaires tapping psychopathology, psychological resources, stressful life events, and combat exposure. A considerable number of veterans (16.5%) reported DPTSD. A longer delay in PTSD onset was associated with less severe psychopathology, higher levels of psychological resources, and fewer stressful life events. Also, CSR was associated with an earlier onset of PTSD. Finally, the vast majority of veterans have reported at least some PTSD symptoms prior to the delayed onset of PTSD. Our results offer further validation for the existence of DPTSD. DPTSD also appears to be a unique sub-type of PTSD, with an attenuated clinical picture. Our findings may indicate that a delay in PTSD onset is associated with increased psychological resilience in the face of traumatic stress.

Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 5

20 Year Trajectories of PTSD following Combat: the Role of Social Resources in Predicting Resilience and Distress
(Assess Dx/Mil/Vets/Industrialized)

Karstoft, Karen-Inge, Doctoral Student¹, Armour, Cherie, PhD², Elklit, Ask, MSc³, Solomon, Zahava, PhD³
¹University of Southern Denmark, Odense, Funnen, Denmark
²University of Ulster, Coleraine, Northern Ireland, United Kingdom
³Tel Aviv University, Tel Aviv, Israel

Despite the significant body of research on PTSD in military veterans, only a few studies have systematically investigated the heterogeneous trajectories of resilience, symptomatology, and chronicity over time (Dickstein, Suvak et al. 2010; Bonanno, Mancini et al. 2012). Consequently, even less is known of the predictors of these trajectories. We conducted a latent class growth analysis to identify trajectories of resilience and symptomatology in 675 Israeli male veterans from the 1982 Lebanon War by assessing their PTSD-symptoms over a 20 year period. Furthermore, we also assessed the implication of the following predictors of these trajectories: combat exposure, acute stress reaction, military unit support, family environment, social support, and social reintegration after deployment. Four distinct trajectories; resilience, recovery, delay, and chronicity, were empirically identified. It will be presented how CSR, perceived life threat, social reintegration, social support, and family environment differentiate between and predict membership of the trajectories. Hence, we conclude that long-term psychological sequelae of military combat is best captured by heterogeneous trajectories, and that these are predicted by acute functional impairment in the battlefield and the availability of social resources at various levels.
Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 6

Trauma-focused Evidence-based Treatments in Routine Care: Provider Decisions, Client Characteristics, and Adaptations
(Train/Ed/Dis/Diverse Pop/I/Industrialized)

Chair: Wiltsey Stirman, Shannon, PhD¹, Discussant: Ruzek, Josef, PhD²
¹Boston VA Healthcare System, Boston, Massachusetts, USA
²National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA

This symposium will utilize both qualitative and quantitative data to assess how two trauma-focused, evidence-based treatments [Prolonged Exposure (PE) and Cognitive Processing Therapy (CPT)] are used in routine care settings. Settings will include inpatient Veterans PTSD programs, a Veteran Women’s Stress Disorder clinic, and community-based mental health clinics that provide treatment to both English and Spanish-speaking populations. The presenters will provide data regarding how clinicians determine whether to offer trauma-focused treatments as well as which treatment to offer, what clinicians do when clients refuse or drop out of CPT or PE, and characteristics of patients who are offered, and receive, CPT or PE vs. those who do not. Additionally, presenters will describe the process of modifying the treatments to fit the needs of a diverse clientele and different settings. Finally, data on the types of modifications that are made in routine care, as well as the reasons for those modifications, will be presented.

Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 6

Provider Considerations When Selecting Treatment for PTSD
(Clin Res/Mil/Vets//Industrialized)

Osei-Bonsu, Princess, PhD, MPH¹; Wiltsey Stirman, Shannon, PhD²; Bolton, Rendelle, MSW¹; Eisen, Susan, PhD³; Pellowe, Maura, PhD¹; Herz, Lawrence, MD¹
¹Department of Veteran Affairs Medical Center, Bedford, Massachusetts, USA
²Boston VA Healthcare System, Boston, Massachusetts, USA

The VA has invested substantial resources to roll out cognitive processing therapy (CPT) and prolonged exposure (PE) for the treatment of PTSD. However, there is evidence that <10% of veterans with PTSD are receiving these treatments. The current study explored factors providers consider when making decisions about using CPT or PE. We conducted 16 semi-structured interviews with CPT and/or PE trained and untrained licensed psychologists and social workers from two VA medical centers. Trained providers offered these treatments to all patients diagnosed PTSD. Providers trained in both treatments considered the nature of the trauma (e.g., PE for a discrete trauma, CPT for a trauma patient perpetrated/experienced pleasure). For patients who declined CPT or PE (>50%), providers revisited the use of these treatments based on elapsed time (e.g., every three months), patient stability,
and patient engagement. Patient co-morbid conditions were more of a consideration for making protocol modifications than for deciding to offer the treatments. Untrained providers reported using symptom-based approaches (e.g., addressing sleep problems) and supportive therapy. They reported offering referrals to trauma-focused treatments if patients did not improve. Study findings can be used to design an intervention to enhance provider efficacy in engaging patients in CPT and PE.

Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 6

VA Residential PTSD Treatment Provider Perceptions of Patient Appropriateness for Prolonged Exposure and Cognitive Processing Therapy: A National Investigation
(Clin Res/Mil/Vets//N/A)

Cook, Joan, PhD\(^1\), Dinnen-Reini, Stephanie, MS\(^1\), Simiola, Vanessa, Doctoral Student\(^1\), Schnurr, Paula, PhD\(^2\)

\(^1\)Yale School of Medicine, West Haven, Connecticut, USA
\(^2\)VA National Center for PTSD, Executive Division, White River Junction, Vermont, USA

One hundred and ninety-eight providers from 38 Department of Veterans’ Affairs (VA) residential PTSD treatment programs across the U.S. completed qualitative interviews regarding implementation of two evidence-based treatments (EBTs) for post-traumatic stress disorder (PTSD), Prolonged Exposure (PE) and Cognitive Processing Therapy (CPT). While some providers indicated that there were no contraindications to PE or CPT, other providers perceived a host of reasons regarding patient appropriateness for non- or limited use. The two most commonly reported reasons patients were perceived as not appropriate for PE included psychiatric comorbidities (n=44, 22.2%) (e.g., substance use, dissociation, serious mental illness, Axis II pathology), level of motivation (n=25, 12.6%) (e.g., reluctance to engage, past treatment non-compliance, dropout and non-attendance, compensation-seeking status). The two most commonly reported reasons patients were perceived as not appropriate for CPT included reduced cognitive ability (e.g., traumatic brain injury, literacy) (n=32, 16.2%) and psychiatric comorbidities (n=30, 15.2%). Possible solutions to address provider concerns, including educational and motivational interventions, will be discussed.
Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 6

Trauma-focused EBPs in a Clinic for Trauma-exposed Women Veterans: Who Receives Them, Who Doesn’t and Why?
(Practice/Mil/Vets/Industrialized)

Wiltsey Stirman, Shannon, PhD, Dick, Alexandra, MA, Gutner, Cassidy, PhD, DeVito, Andrea, BA, Meisel, Sam, BA, Davison, Eve, PhD

1 Boston VA Healthcare System, Boston, Massachusetts, USA
2 VA Boston Healthcare System, Women’s Health Sciences Division, National Center for PTSD, Department of Psychiatry, Boston University School of Medicine, Boston, Massachusetts, USA
3 Boston University, Boston, Massachusetts, USA
4 VA Boston Health Care System/Boston University, Boston, Massachusetts, USA

The Department of Veterans Affairs is working to implement the use of Evidence-Based Psychotherapies (EBPs) in their clinics to Veterans with PTSD. The goal of our study was to determine the proportion of women in a VA clinic who were offered an EBP and engaged in EBPs, and to understand why others were not receiving these treatments. Using a program evaluation tool designed to be feasible for delivery in a clinical practice setting, and including validated symptom, satisfaction, and functioning inventories, we surveyed 165 women Veterans and their providers at intake and follow-up appointments. Of those women, 58 were new patients who presented for individual psychotherapy, and 55 of them were offered an EBP through the clinic shortly after intake. Additionally, a significant proportion of the 107 patients who completed the assessment at a follow-up had been offered, or received, an EBP in the past. The most common forms of trauma-focused EBP was Cognitive Processing Therapy (CPT), but a substantial minority of patients were offered cognitive behavioral therapy (CBT; not necessarily trauma-focused) instead. The data gathered from our study are intended to shed light on EBP penetration in a VA setting as well as reasons why some women Veterans do not receive trauma-focused EBPs.
Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 6

Barriers and Facilitators to the Implementation of CPT in CMHCs: Provider’s Perspectives
(Commun/Caregvsr/N/A)

Marques, Luana, PhD, Dixon, Louise, BA, Simon, Naomi, MD, Kaysen, Debra, PhD, Wiltsey Stirman, Shannon, PhD
1 Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA
2 Massachusetts General Hospital, Boston, Massachusetts, USA
3 University of Washington, Seattle, Washington, USA
4 Boston VA Healthcare System, Boston, Massachusetts, USA

Objective: Although research has demonstrated the efficacy and effectiveness of Cognitive Processing Therapy (CPT), such data has not translated into the implementation of CPT into Community Mental Health Clinics (CMHCs). No study has examined the process by which one adapts, trains mental health providers, and implements CPT in CMHCs. The current study was designed to examine barriers and facilitators to implementation of CPT in a CMHC from a providers’ perspective. Methods: Twenty-seven CMHWs participated in this study (77.7% Caucasian, 7% Hispanic, and 15.3% Other). 85.2% were female and 48% were bilingual (40.7% speak Spanish). Qualitative Data: 90-minute individual interviews were conducted that examined 5 domains: provider knowledge, belief about evidence-based practices, motivation to learn, self-efficacy, and therapist characteristics. Quantitative Data: Providers also completed the Attitudes and Beliefs Regarding PTSD Scale, the Evidence Based Practice Attitude Scale, and the CPT Self-efficacy Scale. Results and Conclusions: Mixed method analysis will be used to examine the data with attention to describing providers’ barriers and facilitators. Results will help us address potential barriers prior to implementation of CPT within this community in addition to help us capitalize on facilitators.

Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 8

The Psychological Impact of Mass Violence and Conflict: Mediating Factors and Treatment Directions to Promote Resilience Following Trauma
(Global/Civil/Ref/M/Global)

Chair: Betancourt, Theresa, ScD MA, Discussant: Nickerson, Angela, PhD
1 Harvard School of Public Health/ FXB Center for Health and Human Rights, Boston, Massachusetts, USA
2 University of New South Wales, Sydney, New South Wales, Australia

The mental health impact of persecution and conflict constitute a significant global health burden, however pathways to psychological distress in affected individuals are poorly understood. Further, little is known about how
to optimally reduce distress and promote resilience in these populations. This symposium reports on a series of studies that highlight distinctive aspects of the refugee and post-conflict experience, and how these interact with health and wellbeing in a variety of post-conflict settings. The first presentation will elucidate the role of daily hardships in mental health outcomes in war-affected youth. The second presentation will highlight the mediating role of food insecurity in the relationship between trauma and mental health outcomes in post-conflict East Timor. The third presentation will explore the role of trauma experiences and refugee events in differentially predicting profiles of PTSD and prolonged grief symptoms in resettled refugees. The fourth presentation will report on the development, implementation, and results of a randomized controlled trial targeting PTSD in female war and natural disaster survivors in Aceh. Findings from these studies will be discussed in the context of current models of post-traumatic stress reactions, and implications for intervention in the aftermath of mass trauma will be considered.

Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 8

Post-Traumatic Stress and Prolonged Grief Symptoms in Resettled Refugees: Symptom Profiles and Predictors
(CulDiv/Civil/Ref/Industrialized)

Nickerson, Angela, PhD, Bryant, Richard, PhD
University of New South Wales, Sydney, New South Wales, Australia

While research has documented high levels of psychopathology in refugees, there is inadequate research identifying symptom profiles in individuals exposed to mass trauma and violence. This study employed latent class analysis to determine whether there are distinctive classes of bereaved people based on post-traumatic stress disorder (PTSD) and (prolonged grief disorder) PGD symptom profiles following mass trauma. Participants were 248 Mandaean adult refugees who were assessed at an average 4.3 years since entering Australia following persecution in Iraq. Latent class analysis revealed four classes of participants: (a) PTSD/PGD class (16%), (b) predominantly PTSD class (25%), (c) predominantly PGD class (16%), and (d) low symptoms class (43%). Results suggested that type of traumatic experiences and postmigration difficulties significantly predicted class membership. These findings provide evidence of specific symptom patterns following exposure to mass trauma and loss, which are associated with different types of pre- and post-migration experiences.
Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 8

The Role of Daily Stressors in Psychological Adjustment and Resilience among War-affected Youth
(Assess Dx/Civ/Ref/W & C Africa)

Newnham, Elizabeth, PhD¹, Betancourt, Theresa, ScD MA²
¹Harvard School of Public Health, Boston, Massachusetts, USA
²Harvard School of Public Health/ FXB Center for Health and Human Rights, Boston, Massachusetts, USA

Violent conflict is particularly prevalent in low-resource settings, where emergencies are likely to result in or exacerbate economic insecurity, weakened social services, and declines in health and education infrastructure. Further, the basic scaffolding that supports psychological health may be damaged by loss of family and exposure to violence. The current study investigated the mediating role of daily and contextual stressors in the development of psychological distress among youth living in a post-conflict setting. Participants comprised 529 youth (25% female, ages 10-18 at baseline) from the Study of War-Affected Youth in Sierra Leone. Standardized and locally-validated measures of psychological symptoms (depression, anxiety, and post-traumatic stress), daily stressors, violence exposure, access to services and social support were administered three times across a six year period. The significant association between daily stressors and distress was complemented by the findings of qualitative interviews (N=48, 50% female). Reports of abuse, interpersonal conflict and poverty interacted with a lack of educational and vocational opportunities to highlight the ongoing difficulties faced by war-affected youth. The findings indicate that interventions should address not only the trauma of war, but also the resulting stressors that characterize many post-conflict settings.

Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 8

Food Insecurity Undermines Mental Health in Postconflict Timor-Leste: Implications for Post-Traumatic Resilience
(Global/Disaster/E Asia & Pac)

Liddell, Belinda, PhD¹, Silove, Derrick, MD, PhD¹, Steel, Zachary, PhD, Cpsych², Tam, Natalino, Undergraduate², Nickerson, Angela, PhD³, Brooks, Robert, PhD, Cpsych³, Rees, Susan, PhD², Zwi, Anthony, PhD¹
¹University of New South Wales, Sydney, New South Wales, Australia
²University of New South Wales, Liverpool, NSW, Australia
³University of New South Wales, Kingston, ACT, Australia

The impact of food insecurity (FI) on psychopathology amongst vulnerable postconflict populations reflects a problem of global significance, however little is known about this relationship. This study examined the impact of food insecurity in mediating the relationship between trauma and mental health outcomes in postconflict Timor-Leste (East Timor). Timor-Leste experienced prolonged conflict and mass trauma during the 24 years of Indonesian occupation culminating in the humanitarian emergency of 1999 and further civil unrest in 2006. Since Timor-Leste...
gained independence, socio-economic development has been slow and enormous development challenges remain including food insecurity. We conducted a large-scale epidemiological mental health survey in Timor-Leste in 2010-11 where over 3000 Timorese adults were interviewed. Mediated moderation analyses revealed that food insecurity mediates the dose-response relationship between exposure to potentially traumatic events (PTEs) and risk for major depression, PTSD, and intermittent explosive anger (IED). Relationships with other key demographic factors, living difficulties and functional impairment were also explored. The findings indicate that food insecurity not only compounds the effects of trauma exposure on mental health, but also may impede resilience following trauma exposure in impoverished postconflict and settings.

Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 8

Treating PTSD in Muslim Women Following Mass Disaster/Conflict in Indonesia
(Clin Res/Disaster//E Asia & Pac)

Joscelyne, Amy, PhD\textsuperscript{1}, Dawson, Katie, PhD\textsuperscript{2}, Bryant, Richard, PhD\textsuperscript{2}
\textsuperscript{1}New York University School of Medicine, New York, New York, USA
\textsuperscript{2}University of New South Wales, Sydney, New South Wales, Australia

Although CBT is the treatment of choice for PTSD, the majority of studies have been conducted with western participants. We have relatively little knowledge of how people in non-western contexts respond to CBT, and in particular, the extent to which CBT is acceptable and effective in Islamic settings. In this RCT, we examined an adapted form of CBT that targeted the specific needs of women in Indonesia, who developed PTSD following the 2004 Asian tsunami and/or years of civil conflict in Aceh. The CBT intervention was adapted on the basis of findings from qualitative and experimental studies that examined cognitive mechanisms from a cross-cultural perspective. The intervention comprised education, anxiety management, prolonged exposure via a timeline exercise, and cognitive restructuring. Cognitive work focused on culture-specific appraisals. Women with PTSD (N = 64) were allocated to either CBT or active problem solving. Participants were assessed at baseline, treatment completion, and after a 6-month follow-up. Therapy was conducted by local workers with no formal health training who received instruction and supervision by the team investigators. Outcome data will be presented. The findings are discussed in terms of the specific adaptations that need to be implemented to ensure CBT is acceptable and meaningful in the Acehnese context.
**Symposium**  
**Friday, November 8**  
**3:00 p.m. to 4:15 p.m.**  
**Franklin 11/12**

**The Genetics of Post-Traumatic Psychopathology**  
(Bio Med/N/A/M/Industrialized)

Chair: Wolf, Erika, PhD  
_National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA_

This symposium features papers that evaluate the genetic etiology of post-traumatic psychopathology using a range of methodologies including genome-wide association, candidate gene, methylation, and gene expression approaches. The first paper uses a genome wide scan to demonstrate that variants in the RORA gene are associated with PTSD and also describes a follow-up candidate gene study that demonstrates the variants in RORA are also related to psychiatric comorbidity. The second paper uses a candidate gene approach to test if genetic variants in the RORA and CRHR1 genes are related to PTSD. The third paper provides evidence of an interaction between RORA and trauma exposure in predicting PTSD. Finally, the fourth paper uses an array of genetic methodologies to examine if variants within FKBP5 are associated with a range of phenotypic and endophenotypic traits that are relevant to risk and resilience following trauma exposure. Collectively, these papers highlight the role of oxidative stress and the stress response system in risk for PTSD, and provide initial evidence that the effects of these genetic risk variants may be dependent on severity of trauma exposure.

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**Symposium**  
**Friday, November 8**  
**3:00 p.m. to 4:15 p.m.**  
**Franklin 11/12**

**The RORA gene, PTSD and Fear-related Comorbidity**  
(Bio Med/Mil/Vets/Industrialized)

Miller, Mark, PhD¹, Wolf, Erika, PhD¹, Logue, Mark, PhD², Baldwin, Clinton, PhD²  
¹_National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA_  
²_Boston University School of Medicine, Boston, Massachusetts, USA_

Recently, we identified a potentially important new genetic risk locus for the development of PTSD (Logue et al., 2012). This finding was the result of the first published genome-wide association study (GWAS) of PTSD in which we genotyped 2.5 million single nucleotide polymorphisms (SNPs) spanning the entire genome using DNA from a sample of trauma-exposed veterans and their intimate partners. Analyses revealed an association among Caucasian participants between a SNP in the Retinoic Acid Orphan Receptor Alpha gene (RORA, rs8042149) and a lifetime diagnosis of PTSD that reached genome-wide levels of significance. In a second study, using the same sample, we examined the specificity of this association by analyzing patterns of association between 606 SNPs spanning the RORA gene and latent dimensions of psychopathology termed fear, distress (internalizing factors) and externalizing. One SNP, rs17303244, was associated with the fear component of internalizing (defined by symptoms of panic, agoraphobia, specific phobia, and obsessive-compulsive disorder) at a level of significance that
withstood correction for multiple testing across the gene. These findings point to the potential value of future research on the role of RORA in the etiology of PTSD and other forms of psychopathology.

Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 11/12

Genetic Predictors of Post-Traumatic Stress Disorder Symptoms after Hurricane Exposure in Older Adults
(Bio Med/Disaster//Industrialized)

Sumner, Jennifer, MS (PhD Student), White, Simone, BA, Acierno, Ron, PhD, Koenen, Karestan, PhD, Gelernter, Joel, MD, Amstadter, Ananda, PhD

1 Medical University of South Carolina, Charleston, South Carolina, USA
2 Cornell University, Ithaca, New York, USA
3 Ralph H. Johnson VA Medical Center, Charleston, South Carolina, USA
4 Columbia University School of Public Health, New York, New York, USA
5 Yale University School of Medicine, VA Connecticut Healthcare System, West Haven, Connecticut, USA
6 Virginia Institute for Psychiatric and Behavioral Genetics, VCU, Richmond, Virginia, USA

Most individuals experience at least one potentially traumatic event, but relatively few develop post-traumatic stress disorder (PTSD). Given the discrepancy between the high prevalence of trauma exposure and comparatively low prevalence of PTSD, research has focused on identifying risk factors, including genetic risk variants, for developing PTSD, a moderately heritable disorder. This study examined associations between post-disaster PTSD symptoms and single nucleotide polymorphisms (SNPs) in the corticotropin-releasing hormone receptor 1 (CRHR1) and retinoid-related orphan receptor alpha (RORA) genes in an epidemiologic sample of older adults exposed to the 2004 Florida hurricanes. CRHR1 SNP-selection was informed by evidence of hypothalamic-pituitary-adrenal axis dysregulation in PTSD, and RORA variation was informed by the first genome-wide association study (GWAS) of PTSD. Participants (N=626) completed interviews about post-hurricane PTSD symptoms and provided DNA samples. Among European Americans (n=564), several SNPs in CRHR1 were associated with higher PTSD symptoms: rs12938031, rs4792887, rs17689966, and rs173365. The most significant variant in RORA reported by the first GWAS of PTSD (rs8042129) also predicted higher PTSD symptoms. Implications of these first findings of associations between variants in CRHR1 and RORA and PTSD in disaster-exposed adults are discussed.
RORA Polymorphisms Modify the Association between Cumulative Trauma Exposure and PTSD Severity

(Bio Med/N/A/Industrialized)

Guffanti, Guia, PhD†, Roberts, Andrea, PhD‡, Yan, Lulu, MS§, Solovieff, Nadia, PhD¶, DeVivo, Immaculata, PhD¶, Ranu, Hardeep, PhD‡, Smoller, Jordan, MD¶, Purcell, Shaun, PhD§, Koenen, Karestan, PhD¶

†Columbia University/NY State Psychiatric Institute, New York, New York, USA
‡Harvard School of Public Health, Boston, Massachusetts, USA
§Columbia University, Mailman School of Public Health, New York, New York, USA
¶Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA
§Mount Sinai School of Medicine, New York, New York, USA
¶Columbia University School of Public Health, New York, New York, USA

Recently, Logue et al. reported genome-wide significant association between a polymorphism (rs8042149) in the RORA gene, encoding for the retinoic acid orphan receptor A, and Post-Traumatic Stress Disorder (PTSD) in a cohort of trauma-exposed white non-Hispanic US veterans. The GWAS yielded evidence of association for three additional SNPs at the 10-6 threshold in the same cohort (i.e., rs8041061, rs8024133, rs11071561). We conducted regression analyses to estimate the association between PTSD symptom severity and RORA SNPs and their interaction with exposure to traumatic events in a primarily European American sample from the Nurses Health Study II (NHSII). We report evidence for a replication between two of the four significant polymorphisms in the RORA gene studied by Logue et al. and PTSD symptom severity score. SNP rs11071561 and rs8024133 were associated with PTSD symptoms (p=0.014 and p=0.05) in the same direction as in Logue et al. We further tested the hypothesis that variations in the RORA gene interact with cumulative trauma exposure to increase the risk of PTSD. We found a significant gene-by-environment interaction via which the rs11071561 is associated with more severe PTSD symptoms at higher levels of exposure to trauma (p = 4.5 x 10-3).

Symposium
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 11/12

Association of FKBP5 Genotype with Risk and Resilience in the Wake of Trauma Exposure

(Bio Med/Violence/Industrialized)

Bradley, Bekh, PhD†, Binder, Elisabeth, MD PhD‡, Ressler, Kerry, MD PhD§

†Atlanta VAMC/Emory University, Decatur, Georgia, USA
‡Emory University, Atlanta, Georgia, USA
§Emory University School of Medicine, Atlanta, Georgia, USA

The FKBP5 is a gene is critical to the feedback inhibition of the HPA axis which is designed to terminate the stress response once the exposure to the stressor has ended. Stress response dysregulation is associated with increased
risk for development of trauma-related disorders including PTSD. Our research group has previously shown that polymorphisms in the FKBP5 gene interact with childhood abuse to predict adult PTSD symptoms and enhanced suppression of cortisol. Other research groups have replicated these findings and extended them to additional psychiatric phenotypes. Ongoing research is needed to understand the mechanisms underlying the relationship between FKBP5 genetic variation and post-trauma risk/resilience. We will present data from our recent research. The presented data presents research showing that variation in FKBP5 genotype is associated with: 1) attention bias toward threat, 2) hippocampal activation and morphology, 3) demethylation of functional GREs in the FKBP5 gene in individuals with a history of childhood abuse, 4) gene-expression changes of a subset of GR-responsive genes 5) biologically distinct subtypes of PTSD. These research findings reflect and increased understanding of the processes underlying the association of FKBP5 with risk and resilience in the wake of trauma exposure. Implications for future research will be discussed.

Panel Presentation
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 7

**Trauma-Informed System Change in Child Welfare**
(Train/Ed/Dis/Child/Adol/M/Industrialized)

Tullberg, Erika, MPH¹, Wilson, Charles, MSW², Saxe, Glenn, MD¹
¹New York University Langone Medical Center, New York, New York, USA
²Chadwick Center for Children and Families, Rady Children’s Hospital – San Diego, San Diego, California, USA

The concept of creating “trauma-informed systems” has been gaining momentum over the past few years. This workshop will provide an overview of efforts to develop “trauma-informed” child welfare systems, and through showing the evolution of such efforts provide a guide for those who are interested in doing such work locally and/or in other systems. In 2010, the National Child Traumatic Stress Network (NCTSN) launched a Breakthrough Series Collaborative (BSC) focused on using trauma-informed practice to improve foster care placement stability. Presenters will provide a summary of lessons learned from this multi-site effort, focusing on both successes and instances where the BSC process was not sufficient to achieve or sustain system change. Presenters will also introduce a new effort to advance this system-level work, “Child Welfare Practice Laboratories,” which will be partnerships between mental health and child welfare agencies that are interested in jointly implementing trauma-informed practices and evaluating their impact on system outcomes. We believe this new effort will help advance trauma-informed system change work, and is an opportunity to develop an evidence base around trauma-informed child welfare practice. Audience members will be invited to brainstorm ways these efforts could be applied to other service systems.
Development of Mobile Applications for PTSD and Related Conditions
(Tech/N/A/I/N/A)

Hoffman, Julia, PsyD¹, Ramsey, Kelly, BA¹, Taylor, Katherine, MPH²
¹National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA
²PGSP-Stanford Psy.D. Consortium & VA Palo Alto Health Care System, Menlo Park, California, USA

The recent emergence and pervasiveness of mobile devices has led to innovations in clinical care that may help address some of the various logistical and social issues that limit the impact of treatment as usual, especially for underserved populations. Smart phones and other mobile devices allow the user to browse the Internet, communicate by text message, consume various types of media, and download complete applications with tremendous opportunities for interactivity and stored progress. These always on and accessible devices enhance flexibility of intervention and assessment opportunities, potentially creating a “force multiplier” for healthcare providers. Multiple evidence-informed resources can be delivered via these novel platforms including health tips, self-assessments, appointment reminders, treatment tools, and real-time interaction with providers and supportive others. Currently, many technologists are working to create mobile apps to address psychological distress. These tools would be better created by experts in psychopathology who can leverage understanding of available scientific evidence and realities of clinical care. This workshop will lead those who are interested in developing mobile apps through a soup to nuts review of how to create the tools that are poised to revolutionize healthcare.

Local and Foreign Trainers Partnering in a War and Tsunami Affected Community: Collaborative Partnerships over Time
(Train/Ed/Dis/Caregvs/M/S Asia)

McNulty, Michael, PhD MSW¹, Satkunanayagam, SJ, MEd, MA, Fr. Paul, MA²
¹Institute for Clinical Social Work, Chicago, Illinois, USA
²Professional Psychological Counselling Centre of Batticaloa Sri Lanka, Urani, Batticaloa, Eastern, Sri Lanka

After the 2004 Tsunami, Mike McNulty, PhD from Evanston, IL responded to a request for assistance from Fr. Paul Satkunanayagam, SJ, M.A., M.Ed., founder and executive director of the Professional Psychological Counseling Centre of Batticaloa, Sri Lanka. McNulty has traveled to Batticaloa on 14 additional two week trips to help Satkunanayagam bring counselor training to a city and district chronically affected by war and disaster. Together, one course at a time, they developed and are teaching a counselor certificate program called Portable Accessible Counselor Training (PACT). PACT is a curriculum designed for Tamil and Sinhalese lay counselors attempting to
assist traumatized children and adults. This workshop will describe the partners’ collaboration over time including: their experiences teaching Tamil and Sinhalese paraprofessionals involved in intensive trauma counseling work, the teaching process in the classroom in Batticaloa where courses are translated from English to Tamil, collaboration from their respective home communities, cross cultural issues that developed and were managed over time between partners. The workshop will focus on the advantages, insights, and challenges involved in maintaining a long term collaborative training partnership to bring counselor training to a chronically traumatized area of the world.

Workshop Presentation
Friday, November 8
3:00 p.m. to 4:15 p.m.
Franklin 9/10

Fostering Resilience through Mindfulness in PTSD Clinical Practice with Veterans
(Practice/Mil/Vets/M/Industrialized)

Jung, Eunie, PhD¹, Maxwell, Susan, PsyD², Odell, Nancy, LCSW³
¹Durham VA Medical Center, Department of Veterans Affairs, Durham, Virginia, USA
²San Francisco VA Medical Center (VAMC-SF), San Francisco, California, USA
³University of California, San Francisco VA Med Ctr., San Francisco, California, USA

A trio of clinical psychologists working with military veterans with PTSD will present their approach to fostering resilience with this population through mindfulness-based group therapy. Cognitive-affective avoidance, a signature feature of chronic PTSD, poses a significant barrier to developing new resilience. Mindfulness-based group treatment can help individuals overcome avoidance and develop affect containment capacities, thereby enhancing treatment engagement and new learning. Four specific agents of resilience found in mindfulness-based treatment for PTSD will be identified. Two in particular will be discussed: 1. Restoration of attentional agency and 2. Regeneration of internal witnessing capacities damaged by trauma. The workshop will incorporate wider research findings on 1. Effects of PTSD on attentional capacities; and 2. The protective effects of nonavoidance and flexible responding in coping with PTSD. Presenters will lead group in a demonstration meditation and representative handouts will be provided. Benefits and limitations of this approach, including tailoring mindfulness and meditation to individuals coping with PTSD, will be addressed.
Can Modifications in the Memory of the Trauma over Time Promote Recovery from Post-Traumatic Stress?

Dekel, Sharon, PhD\(^1\), Solomon, Zahava, PhD\(^1\), Bonanno, George, PhD\(^2\), Greene, Talya, MPH, PhD\(^3\), Ein-Dor, Tsachi, PhD\(^4\)

\(^1\)Tel Aviv University, Tel Aviv, Israel
\(^2\)Teachers College, Columbia University, New York, New York, USA
\(^3\)University of Haifa, Haifa, Israel
\(^4\)Interdisciplinary Center (IDC), Herzliya, Israel

With the growing knowledge that over-consolidation of the trauma memory is linked with Post-traumatic Stress Disorder (PTSD), we examined changes over time in the trauma recollections of a sample of highly exposed survivors of the September 11th terrorism attacks 7 and 18 months following the attacks (study 1), and the recollections of a sample of Israeli prisoners of war from the Yom-Kippur War, 18 and 35 years after the war (study 2). Participants completed a self-report questionnaire assessing exposure and generated open-ended narrative accounts of their experiences. Utilizing structural equation modeling (SEM), the data showed negative memories predicted subsequent PTSD symptoms; at the same time, initial PTSD symptoms lead to subsequent amplifications in the memory. Additionally, the data showed that individuals with a recovery trajectory created a more benign memory of the trauma over time as indicated in changes in the content and the language used to describe their traumatic experience. Altogether, the findings suggest a positive feedback loop between the memory of the trauma and PTSD symptoms and that minimization of the trauma is associated with recovery. The findings may support novel pharmacological interventions for PTSD targeted at trauma memory reconsolidation and underscore the assessment of trauma memory as a diagnostic tool.
belongings, personal information) and, for those who deploy, the combat environment—exposures associated with acute and long-term psychological distress and psychiatric disorders. We present qualitative data based on interviews with 34 active duty MA workers and trainers. We describe and discuss (1) stressors associated with MA work, (2) the methods of coping MA personnel use during deployment and upon re-integration to the home and garrison environment, (3) reported significance and personal growth gained from MA work, and (4) management approaches to stress reduction in MA personnel. These lessons learned increase our understanding of personal and systems approaches to resilience and growth in high stress occupations. These findings may be applied to other high risk groups including other military populations, first responders, disaster workers, and others exposed to the dead.

Paper Presentation
Friday, November 8
3:00 p.m. to 4:15 p.m.
Grand Ballroom C

Childhood Interpersonal Trauma among Male and Female U.S. Military Veterans, Active Duty, and National Guard/Reservists
(Social/Adult/Cmplx/I/Industrialized)

Blosnich, John, PhD MPH\(^1\), Dichter, Melissa, PhD MSW\(^2\), Cerulli, Catherine, PhD\(^3\), Bossarte, Robert, PhD\(^1\)

\(^1\)Veterans Affairs Medical Center, Canandaigua, New York, USA
\(^2\)Department of Veterans Affairs Medical Center, Philadelphia, Pennsylvania, USA
\(^3\)University of Rochester, Rochester, New York, USA

Childhood trauma, in the forms of physical, emotional, or sexual abuse, is associated with poor mental health outcomes in adulthood. Childhood adversity may lead some people to enter into military service in adulthood, and has been associated with increased odds of negative mental health outcomes, including post-traumatic stress disorder, among military veterans. Existing literature has not examined the prevalence of childhood trauma among U.S. military veterans compared with their non-veteran peers. There has been little investigation into early trauma experiences of female veterans. We used data from a large probability-based sample of adults from six U.S. states, and the District of Columbia, to compare prevalence of childhood interpersonal trauma among adults with and without military service. Analyses were stratified by sex and by age, and the three forms of abuse were analyzed separately. Differences in childhood traumas were more pronounced among men and women age 18-55 with military service histories, who had greater odds of all forms of childhood abuse than their non-veteran peers. Findings are consistent with theories of men and women joining military service to escape traumatic childhood environments. It may be important to address experiences of childhood trauma early with a military population to prevent further mental health effects of cumulative trauma exposure.
Resilience and Stigma as Predictors of Mental Health Utilization among OEF/OIF/OND Veterans Presenting for Care at a VA Medical Center

DeViva, Jason, PhD
Pietrzak, Robert, PhD MPH
Harpaz-Rotem, Ilan, PhD

1 VA Connecticut Healthcare System and Yale University, West Haven, Connecticut, USA
2 National Center for PTSD, West Haven, Connecticut, USA
3 Yale University School of Medicine, VA Connecticut Healthcare System, West Haven, Connecticut, USA

This survey study examined relationships between stigma and resilience measures and mental health service utilization among a sample of 80 OEF/OIF/OND veterans presenting for mental health (MH) screening. Participants completed the Response to Stressful Experiences Scale (Johnson et al. 2008), Connor-Davidson Resilience Scale (Connor & Davidson, 2003), Stigma Scale (StSc; King et al. 2007), Barriers to MH Care scale (Britt et al. 2008), Beliefs about Medication and Psychotherapy Scale (BMPS; Bystritsky et al. 2005), and Ten-Item Personality Inventory (Gosling et al. 2003). Participants also reported whether they had ever received therapy or psychotropic medication. Resilience, stigma, barriers, and personality subscales were significantly related to receiving psychotherapy, medication, or either, and were entered into binary logistic regression equations using the forward Wald method. For receiving any MH care, the StSc fear of discrimination, B=1.09, Wald(1)=9.71, p<.01, and BMPS therapy beliefs, B=1.17, Wald(1)=5.43, p <.05, subscales emerged as significant. For medication, the same two variables were significant. For therapy, the fear of discrimination subscale, B=1.08, Wald(1)=8.15, p<.01, emerged as significant. Though resilience measures were related to MH utilization, results indicate that fear of discrimination and beliefs about therapy accounted for the most variance.
Concurrent Session Nine

Special Session
Friday, November 8
4:30 p.m. to 5:45 p.m.
Grand Ballroom E

Special Session in Honor of Dr. Matthew Friedman

Schnurr, Paula, PhD\textsuperscript{1}, Keane, Terence, PhD\textsuperscript{2}, Kilpatrick, Dean, PhD\textsuperscript{3}, Krystal, John, MD\textsuperscript{4}, Schnyder, Ulrich, MD\textsuperscript{5}, Ursano, Robert, MD\textsuperscript{6}

\textsuperscript{1}National Center for PTSD, Geisel School of Medicine at Dartmouth, White River Junction, Vermont, USA
\textsuperscript{2}National Center for PTSD, Boston University, Boston, Massachusetts, USA
\textsuperscript{3}Medical University of South Carolina, Charleston, South Carolina, USA
\textsuperscript{4}National Center for PTSD, Yale School of Medicine, New Haven, Connecticut, USA
\textsuperscript{5}Zurich University, Zurich, Switzerland, Switzerland
\textsuperscript{6}Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA

As one of the members of ISTSS since its earliest years, Past-President of ISTSS Dr. Matthew Friedman has had a substantial influence on the field of traumatic stress studies. This presentation will highlight Dr. Friedman’s many contributions to ISTSS and to the field over a career that began when he was treating returning Vietnam veterans in the 1970s. These contributions include not only his scholarly writings but also the creation of the National Center for PTSD, development of practice guidelines for ISTSS and the Departments of Veterans Affairs and Defense, participation in the development of DSM-IV and DSM-5 diagnostic criteria for PTSD, and efforts to help develop ISTSS into a globally active society.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Grand Ballroom B

Theories, Constructs and Research on Psychological Resilience in High Risk Occupations

Chair: Lee, Jennifer, PhD
Department of National Defence, Ottawa, Ontario, Canada

In addition to facing typical workplace stressors (e.g., work overload, interpersonal conflict, work/life imbalance), individuals working in high risk occupations are at risk for facing stressors beyond the normal realm, such as primary or secondary exposure to traumatic events. While such exposures have been linked with unfavorable mental health outcomes, a fair proportion of workers in these occupations remain unharmed. This has generated
interest in the concept of psychological resilience, prompting research on the factors that may mitigate the mental health impacts of workplace traumatic events and potentially serve as targets for resilience-building interventions. This symposium will focus on the concept of psychological resilience as it applies to military personnel. Beginning with a comprehensive review of key theories and constructs derived by an international expert panel, this symposium will include presentations on the role of intrapersonal and interpersonal factors as buffers of the impact of both life and combat stressors on well-being, mental health care seeking attitudes as a potential mechanism for resilience, and variations in stress and coping by dispositional resilience. The implications of results for the development of resilience-building interventions for individuals working in high risk occupations and directions for future research will be emphasized.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Grand Ballroom B

An International Consensus Definition of Psychological Resilience for Military Organizations
(Prevent/Mil/Vets//Industrialized)

Zamorski, Mark, MD1, Adler, Amy, PhD2, Castro, Carl, 3, Greenberg, Neil, MD, MsC4, Sadler, Nicole, PhD5, Sudom, Kerry, PhD5

1Department of National Defence, Ottawa, Ontario, Canada
2Walter Reed Army Institute of Research (WRAIR), APO, Armed Forces - Europe, USA
3U.S. Army Medical Research and Materiel Command, Fort Detrick, Maryland, USA
4Academic Centre for Defence Mental Health, King’s College London, London, London, United Kingdom
5Australian Defence Force, Canberra, ACT, Australia

In modern military organizations, resilience has special significance, notably that complex tasks must be executed in an unforgiving environment under extreme adversity. Understanding resilience demands that it be defined and measured. To facilitate collaborative military research, The Technical Cooperation Program (TTCP) Technical Panel (TP) 13 defined psychological resilience as “the sum total of dynamic psychological processes that permit individuals to maintain or return to previous levels of well-being and functioning in response to adversity.” The key features of this definition include its emphasis on: 1) resilience as a process, not an outcome; 2) the dynamic nature of resilience, implying the possibility of its enhancement; 3) the diversity of psychological processes underlying resilience; 4) the continuity of reactions to adversity (resistance, resilience, recovery) and the belief that these transitions share many of the same psychological processes; 5) the importance of performance and well-being as independent outcomes of interest; 6) resilience as a multifaceted, latent trait that is expressed in response to adversity; and 7) that adversity takes many forms in addition to traumatic stress. The utility of this definition for facilitating research, developing and evaluating resilience training programs, and enhancing clinical care are discussed.
Symposium  
Friday, November 8  
4:30 p.m. to 5:45 p.m.  
Grand Ballroom B

Psychological Resilience to Stressful Life Events and Military Combat Experiences among Canadian Military Personnel  
(Res Meth/Mil/Vets//Industrialized)

Lee, Jennifer, PhD, Sudom, Kerry, PhD, Zamorski, Mark, MD, Watkins, Kimberley, MA  
Department of National Defence, Ottawa, Ontario, Canada

A recent study proposed a model of resilience consisting of specific intrapersonal and interpersonal characteristics that may reduce declines in well-being among individuals facing stressful experiences. The aim of the present study was to assess the criterion validity of this model in Canadian Forces military personnel. Participants included 18,431 Regular Force recruits who completed a baseline health survey between 2003 and 2009. In a first analysis, the role of the intrapersonal and interpersonal resilience factors in buffering the impact of stressful life events on well-being was examined among all participants. For the second analysis, baseline data on these factors were matched with data collected upon routine post-deployment screening to examine their role in buffering the impact of combat experiences on well-being among participants who were eventually deployed overseas (n = 1584). Some of the resilience factors in the model minimally buffered the impact of stressful life events on well-being, and none of them buffered the impact of combat experiences on well-being. Results pointed to a protective rather than buffering role of intrapersonal and interpersonal resilience factors. Together, results highlight important methodological considerations for future research on psychological resilience and point to potential strategies for resilience-building interventions.

Symposium  
Friday, November 8  
4:30 p.m. to 5:45 p.m.  
Grand Ballroom B

Coping and Psychological Stress in Military and Civilian Defence Personnel: Does Resilience Make a Difference?  
(Res Meth/Mil/Vets//Industrialized)

Born, Jennifer, MSc, Lee, Jennifer, PhD  
Department of National Defence, Ottawa, Ontario, Canada

Psychological resilience is defined as the range of psychological processes that help individuals overcome adversity. Evidence suggests that resilient individuals are better able to cope with stress. This analysis explored variations in coping styles by resilience. Participants (N=428) included military personnel (70%) and civilians (30%) participating in a stress management program. Using validated tools, resilience was measured along with stressor appraisals (threat and control), coping and psychological stress. A linear regression model with age, sex, stressor appraisals and coping (reframing, taking action, avoidance, exercise, venting and denial) as predictors of psychological stress was tested. Among participants with low resilience (n=133), psychological stress was significantly associated with greater use of avoidance and venting, and lesser use of reframing. Among those with high resilience (n=295), a similar model was observed, however, psychological stress was also significantly
associated with lesser use of exercise. The models accounted for 30% and 26% of the variance in psychological stress, respectively. These findings quantify how coping patterns vary according to resilience, and suggest that programs should promote reframing, while discouraging avoidance and venting. Among highly resilient individuals, it may also be of value to promote the use of exercise.

**Symposium**
**Friday, November 8**
**4:30 p.m. to 5:45 p.m.**
**Grand Ballroom B**

**Changing Mental Health Care Seeking Attitudes To Build Psychological Resilience - Lessons Learned from A Canadian Military Intervention**
(Prevent/Mil/Vets/Industrialized)

*Fikretoglu, Deniz, PhD*, Blais, Ann-Renee, PhD, Lam, Quan, MA, Sullivan-Kwantes, Wendy, MA, Richards, Karen, MA, McCreary, Don, PhD

*Defence Research and Development Canada, Toronto, Ontario, Canada*

Road to Mental Readiness (R2MR) is the largest resilience-building intervention in the Canadian Forces (CF). A key R2MR objective is to foster positive attitudes towards seeking mental healthcare. The objective of this multi-year program of research is to identify, measure, and change mental healthcare attitudes among CF recruits, using the Theory of Planned Behaviour. In Study 1, we used qualitative methods to identify the beliefs underlying mental healthcare attitudes (n=84). Study 1 results were used to develop an instrument to measure mental healthcare attitudes (Study 2, n=39). The instrument was revised based on psychometric analyses; factor analytic, correlational, and regression analyses were conducted to identify the beliefs that most needed to be targeted for change (Studies 3-4, n=127). Psychometric analyses revealed internal consistency reliability estimates in the acceptable to excellent range (.69-.92) for the theoretical constructs; exploratory factor analyses provided good support for the theorized factor structure. Additional analyses challenged the current R2MR practice of placing a large emphasis on concerns about confidentiality and being stigmatized, and identified different beliefs to target for change. We discuss the lessons learned in building an evidence base for targeting resilience—promoting mental healthcare attitudes in military settings.

**Symposium**
**Friday, November 8**
**4:30 p.m. to 5:45 p.m.**
**Grand Ballroom C**

**Efficacy of PTSD Treatment Trainings in the Veterans Affairs System**
(Clin Res/Mil/Vets/I/N/A)

*Chair: Raza, Gina, PhD*¹, *Discussant: Collie, Claire, PhD*²

¹*Salem VA Medical Center, Roanoke, Virginia, USA*
²*VA Office of Mental Health Services, Durham, North Carolina, USA*

Three clinical researchers will discuss research findings on two evidence-based psychotherapies for PTSD: Cognitive Processing Therapy (CPT) and Prolonged Exposure (PE). Data includes clinician and patient data reported
by therapists who have completed a national dissemination training of CPT in the VA system, clinical effectiveness data on CPT and PE, and data on how VA mental health clinicians select between CPT and PE for individual patients. The effectiveness of CPT and PE for patients, the role of therapist, patient, and treatment-level factors on treatment outcome, and the variables used by clinicians to select treatment were evaluated. Results suggest that clinician and patient factors may impact treatment selection as well as treatment outcome. Our discussant, the National Project Director for the Local Evidence Based Psychotherapy Coordinator Program for the Veterans Affairs system, will share her perspective on the training and use of CPT and PE in the VA system.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Grand Ballroom C

How VA Mental Health Providers Select Between Evidence-Based PTSD Treatments
(Train/Ed/Dis/Caregvs//N/A)

Raza, Gina, PhD1, Holohan, Dana, PhD2
1Salem VA Medical Center, Roanoke, Virginia, USA
2Salem VA Medical Center, University of Virginia School of Medicine, Virginia Tech Carilion School of Medicine, Roanoke, Virginia, USA

Among evidence-based psychotherapies (EBPs) for PTSD, two exposure-based treatments have been identified by Veterans Affairs (VA) and Department of Defense (DoD) clinical practice guidelines as first-line PTSD treatments: Cognitive Processing Therapy (CPT) and Prolonged Exposure (PE). Beyond research supporting the general efficacy of CPT (Resick et al., 2008; Chard et al., 2012) and PE (Rauch et al., 2012), recent studies have examined comorbid diagnoses (e.g., Borderline Personality Disorder; Harned et al., 2012) and conditions (e.g., illiteracy, TBI; Rizvi et al., 2009; Capeheart & Bass, 2012), as PTSD typically occurs with other diagnoses (Kessler et al., 1995). We emailed an anonymous survey link to over 1,500 VA mental health clinicians trained in CPT and/or PE to ask a) which co-occurring variables they consider when selecting PTSD treatments and b) the extent to which they find current research helpful for guiding their treatment selection. Survey responses from over 350 VA clinicians identified a) which co-occurring variables they use to select between CPT and PE, b) the extent to which these decisions are informed by research findings, and c) which variables could be further examined by future research or highlighted in clinical trainings to aide in treatment selection for specific patients.
Dissemination of CPT in the VA: Where Are We Now?
(Train/Ed/Dis/Mil/Vets//N/A)

Chard, Kathleen, PhD¹, Healy, Ellen, PhD², Cogan, Chelsea, MA², Resick, Patricia, PhD, ABPP³
¹Cincinnati VA Medical Center & University of Cincinnati, Cincinnati, Ohio, USA
²VA Boston Healthcare System, National Center for PTSD, Boston, Massachusetts, USA
³National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

Research demonstrates that mental health providers deliver evidence-based psychological treatments at low rates, despite their documented effectiveness and their recommendation in numerous practice guidelines (Goisman, Warshaw, & Keller, 1999; Rosen et al., 2004). In an effort to provide the best care to Veterans, VA Central Office in 2007 launched a national dissemination of Cognitive Processing Therapy (CPT; Resick & Schnicke, 1996). CPT is a 12-session treatment based on a social cognitive theory of PTSD that focuses on the meaning an individual makes in response to the traumatic event and how the person copes as they try to regain a sense of mastery or control over their life (Resick, Nishith, Weaver, Astin, & Feurer, 2002). Clinicians who complete the 2-3 day in-person workshops are asked to attend weekly group consultation with national CPT experts for approximately 6 months. To date more than 4600 VA clinicians have attended 2 or 3 day workshops and 1348 have completed all training requirements. This presentation will provide information about the clinicians trained and patient data reported by therapists in consultation on the PTSD Checklist (PCL) and Beck Depression Inventory (BDI), including numbers pre (PCL= 64.6, BDI= 31.8) to post (PCL= 45.1, BDI=19.1) treatment.

Assessment of Therapist-Level and Patient-Level Factors in Evidence-Based Therapy Outcomes for PTSD in a Veterans Affairs Outpatient Clinic
(Clin Res/Mil/Vets//Industrialized)

Tuerk, Peter, PhD, Wangelin, Bethany, PhD, Yoder, Matthew, PhD, Acierno, Ron, PhD
Ralph H. Johnson VA Medical Center, Charleston, South Carolina, USA

The Veterans Health Administration (VHA) has advanced training initiatives to disseminate Prolonged Exposure (PE) and Cognitive Processing Therapy (CPT) for PTSD. There is a well-developed literature regarding randomized controlled trials for these treatments and the literature regarding effectiveness trials in normative contexts is growing. Yet, findings are sparse concerning the relative influence of patient, therapist, and treatment-specific factors on therapy outcomes. Increased understanding of such factors in typical clinical settings is essential for avoiding unchallenged assumptions regarding the correlates of treatment success. The current study investigates PTSD Checklist outcomes for 329 veterans receiving PE or CPT as standard care in a VHA PTSD specialty clinic. The data collection period spans 6 years and links outcomes to patients nested within 8 clinic therapists with VA training in PE and CPT. Hierarchical linear models examined the proportion of variance accounted for by patient-
level, therapist-level, and treatment-level factors. Results reveal that patient- and therapist-level factors both account for a similar proportion of variance in outcomes (9%), with baseline pathology and criterion A1 context mattering little. Therapist-level factors were associated with significantly more variance in outcomes for CPT cases (19%) relative to PE cases (5%).

Symposium  
Friday, November 8  
4:30 p.m. to 5:45 p.m.  
Grand Ballroom D

Aging, Trauma, and the Life Course: Risks and Resiliencies  
(Clin Res/Older/M/Industrialized)

Chair: Davison, Eve, PhD
Discussant: Southwick, Steven, MD

1 VA Boston Health Care System/Boston University, Boston, Massachusetts, USA  
2 VA Connecticut Health Care System, West Haven, Connecticut, USA

The potential impact of trauma experienced over the life course in older adults is often overlooked in both research and clinical practice, yet it has important implications for later-life mental and physical health. A growing body of research demonstrates that older trauma survivors may display both vulnerability and resilience decades after trauma exposure. A special interest group, "Aging, Trauma, and the Life Course," recently convened at the International Society for Traumatic Stress Studies; the included papers represent the work of several SIG members. In the first paper, factors contributing to psychological resilience in a large survey of older U.S. Veterans are discussed. Next, the long-term emotional and physical sequelae of World War II trauma in the German elderly population are delineated. The next paper tests a longitudinal life-span developmental model of factors contributing to late-life positive adjustment in American repatriated prisoners of war from the Vietnam era. Lastly, relations among childhood physical and sexual abuse, PTSD, and current cognitive function in former Swiss indentured child laborers are illuminated. Together, these papers exemplify the richness and breadth of current research in life-course trauma and aging, and suggest directions for future inquiry and application.

Symposium  
Friday, November 8  
4:30 p.m. to 5:45 p.m.  
Grand Ballroom D

Psychological Resilience in Older U.S. Veterans: Results from the National Health and Resilience in Veterans Study  
(Assess Dx/Older/I/Industrialized)

Pietrzak, Robert, PhD MPH
Cook, Joan, PhD

1 National Center for PTSD, West Haven, Connecticut, USA  
2 Yale School of Medicine, West Haven, Connecticut, USA

In this study, we employed cluster analysis of trauma exposure and psychopathology measures to evaluate the prevalence and determinants of resilience in a contemporary, nationally representative sample of 2,025 U.S. veterans aged 60 and older (mean=71.0). Results suggested that a three-group solution best fit the data: Control
among veterans with a high number of traumas, 69.5% were resilient. Compared to the Distressed group, the Resilient group was more likely to have college or higher level of education and to be married/living with a partner. They also scored higher on measures of emotional stability, social connectedness (i.e., secure attachment, social support), protective psychosocial characteristics (e.g., community integration, purpose in life), and positive perceptions of the military’s effect on one’s life; and lower on measures of physical health difficulties and psychiatric problems, and openness to experiences. Taken together, these results suggest that, among older veterans with high lifetime trauma burden, nearly 70% are psychologically resilient in later life. Prevention efforts targeted toward bolstering social connectedness, community integration, and purpose in life may help promote resilience in this population.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Grand Ballroom D

IN THE SHADOW OF WAR - Epidemiological findings on long-term psychosocial and health sequels of traumatic experiences in the German elderly
(Commun/Older//Industrialized)

Glaesmer, Heide,
Leipzig University, Leipzig, Germany

About 40-50% of those who were born before the end of WW II report traumatic experiences. These experiences are mostly war-related traumatic experiences including forced displacement, war effort, bombings or war captivity. The proportion of people with war-related traumatic experiences increases from 20% in those born at the end of WWII up to nearly 60% in the oldest age group. These traumatic experiences are related to worse mental and physical health outcomes even 60 years later. 3.9% of the elderly population is affected by Post-traumatic Stress Disorder (PTSD). Other mental disorders like depression or somatoform disorders are related to traumatic experiences and PTSD in the elderly too. Beside the mental health outcomes, traumatic experiences and PTSD are both related to worse physical health outcomes, e.g. cardiovascular diseases and risk factors in the elderly population of Germany. The traumatic experiences and the worse mental and physical health outcomes lead to increased health care utilization in the elderly. Although war-related traumatic experiences are quite common, they had long been neglected in research as well as in clinical practice. Fortunately, in the last years more attention has been paid to traumatic experiences of the war generation, and the body of evidence is growing.
Modeling the Effects of Captivity: Longitudinal Study of Later-life Well-being among American Repatriated Prisoners of the Vietnam War
(Clin Res/Older//N/A)

King, Daniel, PhD1; King, Lynda, PhD2, Lee, Lewina , PhD3, Pless Kaiser, Anica, PhD4, Park, Crystal, PhD5, Spiro III, Avron, PhD3
1National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA
2Boston University School of Medicine and VA Boston Healthcare System, Boston, Massachusetts, USA
3Boston University School of Public Health, Boston, Massachusetts, USA
4VA Boston Healthcare System, National Center for PTSD; Boston University School of Medicine, Boston, Massachusetts, USA
5University of Connecticut, Storrs, Connecticut, USA

There is current enthusiasm for research on healthy functioning and well-being in trauma-exposed individuals, with emphasis on consequences that unfold in later years. This study’s goal was to test a longitudinal model of factors contributing to late-life positive adjustment in one trauma group: the 567 male American repatriated prisoners of war from the Vietnam era. The model encompassed demographics at time of capture (age, education, and marital status, together indicative of maturity), attributes assessed shortly after release and return to the U.S. (reports of torture during captivity, mental health at repatriation, and personality), and variables measured roughly three decades later (psychosocial resources and late-life stressors). The focal dependent variable was positive adjustment, operationalized in terms of life satisfaction and mental health-related quality of life. SEM findings indicated that maturity at time of capture was the primary contributor to mental health at repatriation. The higher-order psychosocial resources latent variable, subsuming late-life sense of mastery, perceived social support, and positive appraisal of the military experience, was a salient mediator, linking the influences of early-life captivity-related variables and personality in the form of openness to experience, as well as late-life stressors, to long-term positive adjustment.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Grand Ballroom D

Former Swiss Indentured Child Laborers and their Trauma-related Elevated Risks of Cognitive Impairment in Old Age
(Social/Surv/Hist/Industrialized)

Maercker, Andreas, PhD, MD
University of Zurich, Zurich, Switzerland

The investigation of the Swiss ‘Verdingkind’-cohort provided the opportunity to hypothesize that exposure to childhood trauma, as well as PTSD symptoms would be significantly associated with poorer cognitive function, especially in memory-related domains, and thus constitute a risk for cognitive decline in their old age.
‘Verdingkinder’ were indentured child laborers who during their childhood were removed from their usually poor family environment by the authorities and sent to work on farms. This was a common feature of Swiss rural economy until the mid-1950’s and a dark chapter of Swiss history. Historic studies have shown that many of these children were regularly beaten, and emotionally and sexually abused. According to PTSD status and whether they experienced childhood trauma (CT) or adulthood trauma (AT), participants (n = 96) were categorized as belonging to one of four groups: CT/PTSD+, CT/PTSD-, AT/PTSD+, AT/PTSD-. Overall, results indicate that PTSD is accompanied by cognitive deficits which appear to be independent of earlier childhood adversity. Our findings suggest that cognitive deficits in old age may be partly a consequence of PTSD or at least be aggravated by it.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Franklin 5

Deployment-related Mental Health Support; Review of 5 NATO Partners in the Period 2006-2010
(Train/Ed/Dis/Mil/Vets/M/Industrialized)

Chair: Vermetten, Eric, MD, PhD
Military Mental Health Research/UMC Utrecht, Netherlands

Many militaries have systematized the mental support that can be provided in the context of missions. However, the rationale for this and the implementation of resources is not necessarily the same across NATO partners. In this symposium we will identify and compare the organization and practice of mental support offered by five NATO countries, with the aim of identifying the key (or most successful) methods, shared improvement and promising new developments. This effort was carried out in close collaboration with key persons in the area of military mental health care within the Australian Defense Forces (ADF), Canadian Armed Forces (CAF), British Army (BA), Netherlands Armed Forces (NLD) and the United States Army (USA). We will discuss: training, prevention, early identification, intervention and (after) care in the field of mental health. The current evaluation shows that all participating forces during the career of a soldier in different ways attention to supporting mental health. Also, there was much overlap between the rational and applied methods of the participating forces. Topics like screening of mental health, psychological debriefing after critical incidents, decompression subsequent to deployment, aftercare are discussed. Has military mental health care reached an established state, that is state-of-the-art?
Leadership, Cohesion and Morale in the Primary Prevention of Traumatic Stress Disorders
(Prevent/Mil/Vets//Industrialized)

Greenberg, Neil, MD, MsC
Academic Centre for Defence Mental Health, King’s College London, London, United Kingdom

UK Armed Forces (AF) personnel deployed to Afghanistan are frequently exposed to intense combat; yet little is known about the short-term mental health consequences of this exposure and the potential mitigating effects of military factors such as cohesion, morale, and leadership. To assess the possible modulating influence of cohesion, morale, and leadership on post-traumatic stress disorder (PTSD) symptoms and common mental disorders resulting from combat exposure among UK AF personnel deployed to Afghanistan in 2010. Personnel completed a self-report survey about aspects of their current deployment, including perceived levels of cohesion, morale, leadership, combat exposure, and their mental health status. Outcomes were symptoms of common mental disorder and symptoms of PTSD. Combat exposure was associated with both PTSD symptoms and symptoms of common mental disorder. Of the 1,431 participants, 17.1% reported caseness levels of common mental disorder, and 2.7% were classified as probable PTSD cases. Greater self-reported levels of unit cohesion, morale, and perceived good leadership were all associated with lower levels of common mental disorder and PTSD. Greater levels of unit cohesion, morale, and good leadership may help modulate the effects of combat exposure and the subsequent development of mental health problems among UK Armed Forces personnel deployed to Afghanistan.

What We Know About Combat and Mental and Behavioral Health
(Clin Res/Mil/Vets//M East & N Africa)

Castro, Carl
U.S. Army Medical Research and Materiel Command, Fort Detrick, Maryland, USA

After over a decade of wars in Iraq and Afghanistan there are many things that we have learned about combat, and many things left for us to still answer. First, we know that combat increases the rate of PTSD, anger and aggression, alcohol use and risk taking behavior; and that these mental and behavioral health issues are related to the levels of combat. Second, we know that not all Soldiers and Marines are equally exposed to combat, some are at more risk than others. Third, we know that females deal with the demands of combat as effectively as males. Finally, we know that leadership and mental health training helps prevent or attenuates the impact of combat. Despite our increase in knowledge in these areas, we still have lots more to learn. First, we have not optimized the use of technology. Second, we still struggle with how to best transition Soldiers back home from combat, and how to sustain families and family ties during the deployment. Finally, we still lack mental health
treatments for Soldiers and Marines that are brief, effective, and long-lasting. We must not rest until these questions and others are fully addressed. Our troops deserve the best.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Franklin 5

Psychiatric Care for Canadian Forces Soldiers in Kandahar, Afghanistan
(Clin Res/Mil/Vets//Industrialized)

Jetly, Rakesh, MD, FRCPC
*Canadian Forces Health Services, Ottawa, Ontario, Canada*

Not since Korea have the Canadian Forces (CF) been engaged in combat missions such as those experienced in Kandahar. CF Health Services Group led programs address the psychological stressors throughout the deployment cycle. Predeployment resilience programs are in place. A robust multidisciplinary clinical team (psychiatrists, social workers and mental health nurses) is deployed with the soldiers to Kandahar. A variety of clinical presentations are seen in addition to the expected trauma related conditions. Clinical presentations require attention in the context of operational medicine. The challenges of adapting “best practices” from an office to a war zone are many and require flexibility and pragmatism. Barriers to care must be overcome in order to have a successful Mental Health program. The initiatives within The Canadian Forces to address stigma and attitudes towards Mental Illness are multidimensional and have led to compelling data that the “war” on stigma is being fought successfully. Attitudes are changing and CF members are quite progressive thinking. Post deployment treatment uses a multidisciplinary approach aimed at clinical and vocational outcomes.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Franklin 5

Australian Defence Force Deployment Interventions: Establishing Optimal Cut-offs and Screening
(Prevent/Mil/Vets//Industrialized)

McFarlane, Alexander, MD\(^1\), Van Hooff, Miranda, BA (Hons), PhD\(^1\), Hodgson, Stephanie, BSc Hons Psychology\(^1\), Tran, Thao, BA (Hons), PhD\(^2\), Benassi, Helen, Dipl Psych\(^1\), Searle, Amelia, BA (Hons), PhD\(^1\)
\(^1\)The University of Adelaide, Adelaide, South Australia, Australia
\(^2\)Adelaide University, Adelaide, South Australia, Australia

The ADF has placed considerable efforts into preparing, monitoring and supporting deployed personnel. Screening is conducted prior to returning to Australia and then 6 months later. This presentation focuses on the development of optimal cut-offs in the screening instruments against a structured diagnostic interview. In a study of the entire Defence Force, the optimal cut-offs for the screening measures were estimated, using the CIDI as the gold standard for a clinical diagnosis. With K10, the optimal screening cut-off for the ADF was found to be 17, where as the epidemiological cut-off was 25. The optimal cut-off for the PCL was 29 for screening purposes and 53 for epidemiological assessments. This highlights that in managing and reporting on the impact of deployments,
screening tools need to be interpreted differently when being used for referring individuals for subsequent clinical assessments as against reporting on the probable rates of PTSD and psychological disorders more generally in the deployed environment. Further evidence highlighted the impact of increasing symptomatology with trauma exposures, demonstrating the need for a longitudinal perspective in screening and the relevance of subsyndromal symptoms to future risk of disorder. The program for managing deployed personnel has been implemented in the context of the broader review of care for ADF members.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Franklin 6

Improving Access to Evidence-Based Trauma Focused Treatment for Children in the Child Welfare System
(Train/Ed/Dis/Child/Adol/M/Industrialized)

Chair: Cloud, Marilyn, LCSW1, Discussant: Franks, Robert, PhD2
1 Connecticut Department of Children and Families, Hartford, Connecticut, USA
2 Child Health and Development Institute of Connecticut/Connecticut Center for Effective Practice, Farmington, Connecticut, USA

This symposium describes efforts in Connecticut to transform the Department of Children and Families into a more trauma-informed agency, including expanding access to trauma-focused treatment for children in the system. First, we will describe results from a statewide dissemination of TF-CBT with 16 agencies, 300 staff, and more than 2,000 children using learning collaboratives based on the Breakthrough Series Collaborative model (Institute for Healthcare Improvement, 2004). Implementation and outcome data from over 300 staff and 2,000 children receiving TF-CBT will be presented. Second, we will describe the results of a recent statewide readiness and capacity assessment of trauma-informed care and trauma-focused EBTs conducted with child welfare and behavioral health providers. Results from staff surveys and focus groups will be provided. Finally, we will describe Connecticut’s plan for implementing standardized trauma screening and EBT referral protocols within the child welfare system. Lessons learned about implementation of trauma screening in child welfare practice and recommendations for other states considering the same will be discussed.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Franklin 6

Results from a Statewide Implementation of TF-CBT
(Commun/Child/Adol/Industrialized)

Lang, Jason, PhD, Franks, Robert, PhD
Child Health and Development Institute, Farmington, Connecticut, USA

Connecticut was among the first states to begin using learning collaboratives for the statewide implementation of a behavioral health EBP in 2007. In the past five years, TF-CBT has been disseminated to 16 community mental
Assessing Statewide Readiness and Capacity to Provide Trauma-Informed Care within the Child Welfare System
(Social/Child/Adol/Industrialized)

Connell, Christian, PhD\textsuperscript{1}, Crusto, Cindy, PhD\textsuperscript{2}
\textsuperscript{1}Yale School of Medicine, New Haven, Connecticut, USA
\textsuperscript{2}Yale University School of Medicine, New Haven, Connecticut, USA

Children involved in the child welfare system are likely to have experienced a range of traumatic experiences. This presentation will summarize a mixed method evaluation to assess readiness of a statewide child welfare system and affiliated agencies to deliver trauma-informed care to children through a 5-year Federal grant to the Connecticut Department of Children and Families. The mixed method evaluation included surveys of child welfare staff and supervisors and community mental health agency staff, as well as focus groups with a range of system stakeholders. In addition, the evaluation team accessed a range of administrative data to document the needs of children and families within the system and the current service array for children exposed to trauma. Results revealed a number of potential system strengths as well as areas requiring more support and development. Key needs within the system included supports for staff experiencing vicarious trauma and opportunities to promote cross-agency collaboration. Results informed implementation planning for the statewide initiative. The presentation will address various perspectives on the issues and challenges faced by a state system in preparing to implement a statewide focus on trauma-informed care and how such information can be used to inform implementation efforts at the system-level.
Universal Trauma Screening in Child Welfare: The Connecticut Collaborative on Effective Practices for Trauma (CONCEPT)

(Train/Ed/Dis/Child/Adol//Industrialized)

Lang, Jason, PhD, Cloud, Marilyn, LCSW

1 Child Health and Development Institute, Farmington, Connecticut, USA
2 Connecticut Department of Children and Families, Hartford, Connecticut, USA

We will describe efforts to implement a standardized trauma and mental health screening tool in Connecticut’s child welfare system. Descriptions of the process used to develop and implement the trauma screening tool and process will be provided, including selecting a screening tool, integration into the state’s child welfare data system and case planning procedures, and linkages to community service providers of trauma-focused treatments. We will describe results from initial pilots of trauma screening by child welfare staff, perceptions of child welfare staff about implementation of trauma screening and usefulness in their CPS practice, and challenges and considerations about integration of trauma screening into the child welfare system. Recommendations will be made for development and integration of a trauma and/or mental health screening and referral into child welfare practice and for policy and practice changes necessary to support screening. We will also discuss considerations for how trauma focused initiatives, including screening, can be embedded within the broader child welfare context and practice model.

Examining Developmentally-informed Patterns of Trauma History and Pathways to Maladaptive Child Functioning: Evidence from the National Child Traumatic Stress Network

(Clin Res/Child/Adol/M/Industrialized)

Chair: Dierkhising, Carly, PhD Candidate

National Center for Child Traumatic Stress at UCLA, Los Angeles, California, USA

Decades of research on the relation between childhood trauma exposure and subsequent psychosocial functioning has led to the conclusion that trauma-exposed children are a heterogeneous group and that trauma exposure does not necessarily result in a unified presentation of symptoms (Cloitre, Stolbach, Herman, et al., 2009). Variation in responses to trauma may be partially explained by the timing of exposure, and may relate differentially to developmental outcomes (Elder, 1998). This symposium will explore developmentally sensitive periods that put children and adolescents at heightened risk for a myriad of symptoms and functional impairments (e.g., behavioral, school, and attachment problems). The first presentation will explore how trauma profiles at each developmental stage relate to PTSD symptoms and functional impairments by focusing on differences among three
age groups. The second presentation will explore how early adversity in the familial context (e.g., early age-of-onset of trauma, child maltreatment, and caregiver impairment) impacts child traumatic stress. The final presentation will expand to the community context, by evaluating the differential contributions of family and community violence in the development of PTSD symptoms and delinquency among adolescents.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Franklin 7

Unpacking Early-Onset Child Trauma Exposure in the NCTSN Core Dataset: The Relationship between Caregiver Impairment, Child Maltreatment, and Child Traumatic Stress
(Prevent/Child/Adol//Industrialized)

Vivrette, Rebecca, PhD Candidate¹, Kiser, Laurel, PhD MBA², Dierkhising, Carly, PhD Candidate¹
¹National Center for Child Traumatic Stress at UCLA, Los Angeles, California, USA
²University of Maryland School of Medicine, Baltimore, Maryland, USA

Research indicates that the earliest forms of trauma exposure include child maltreatment and intra-familial trauma (USDHHS, 2010). In examining predictors of maltreatment, several studies have demonstrated that impairment to the caregiving system (e.g., parental substance use) is highly related to risk for abuse, neglect, and domestic violence (CDC, 2011). Additionally, multiple studies have demonstrated that early childhood trauma is a potent predictor of emotional and behavioral impairment (e.g., Kearney et al., 2010). Preliminary analyses of the NCTSN CDS (n=14,088) have shown that exposure to an impaired primary caregiver has the earliest age of onset (M = 2.6, SD = 2.5) and longest duration (M = 6.3 years, SD = 4.6) compared to other trauma types. Furthermore, impaired caregiving in the CDS is highly correlated with physical abuse, emotional abuse, neglect, and domestic violence, with these traumas loading onto a common primary factor (range = .75–.82). The current study aims to unpack the direct and indirect relationships of impaired caregiving with intrafamilial trauma exposure, PTSD, depression, anxiety, and aggression, using structural equation modeling. Results of this project have important implications for promoting healthy family functioning as a prevention/early intervention target for reducing child trauma exposure and impairment.
Understanding Pathways to Youth Delinquency: Differential Contributions of Child Maltreatment, Community Violence, and PTSD Symptoms among Adolescents

Briggs, Ernestine, PhD, Dierkhising, Carly, PhD Candidate, Wang, Lu, PhD Candidate
1 National Center for Child Traumatic Stress, Durham, North Carolina, USA
2 National Center for Child Traumatic Stress at UCLA, Los Angeles, California, USA

Exposure to violence in childhood is a robust risk factor for later delinquent behavior into adolescence (Smith & Thornberry, 1998). However, less is known about the specific mechanisms involved in the linkages between violence exposure and delinquency, particularly as it relates to the differential associations with PTSD (Ford et al., 2010, Kerig, 2012). The current study examines the role of PTSD symptom clusters as potential explanatory mechanisms between violence exposure in varied contexts (i.e., child maltreatment, community violence) and delinquent behavior using an adolescent subsample of the NCTSN CDS (n = 3,785). Preliminary analyses of the CDS revealed that 27% of trauma-exposed adolescents in the CDS were exposed to community violence, and between 27-49% had experienced some form of maltreatment. Moreover, between 15-27% demonstrated some form of delinquent behavior (e.g., skipping school, substance abuse). Exposure to increasing numbers of traumas in childhood significantly increased the risk for delinquency in adolescence. Additional analyses for this presentation will examine the specific role of PTSD symptom cluster in the interrelationships among maltreatment, community violence, and delinquency in adolescence. Implications for practice and further research will also be discussed.

Trauma History Profiles across the Developmental Spectrum: Differential Patterns of Exposure and Associations with Post-Traumatic Stress, Behavioral Problems, and Functional Impairments

Dierkhising, Carly, PhD Candidate, Vivrette, Rebecca, PhD Candidate, Wang, Lu, PhD Candidate, Liang, Li-Jung, PhD
1 National Center for Child Traumatic Stress at UCLA, Los Angeles, California, USA
2 National Center for Child Traumatic Stress, Los Angeles, California, USA

Child trauma exposure is related to a variety of problems in functioning and behavior (van der Kolk, 2003). However, it is possible that constellations of trauma types are differentially related to impairment outcomes. Research indicates that exposure to chronic trauma heightens the risk for multiple functional impairments (e.g., delinquency, substance use) as compared to single incident trauma (Ford et al., 2010). Further, it is likely that functional impairments are differentially related to constellations of trauma exposure depending on timing of
developmental epoch. For the current study, we explore associations among trauma history profiles and impairment across developmental periods utilizing the NCTSN CDS (n=14,088). Preliminary findings indicate that trauma profiles vary across development, with the onset of intra-familial trauma occurring primarily in early childhood (range 58-80%), and the onset of violence and assault occurring primarily in middle childhood (range 42-60%). Moreover, total number of confirmed traumas (range 2.8-3.8) and functional impairments (range 1.9-3.6) gradually increase with age. The presenter will present the trauma exposure profiles of CDS youth in early childhood, middle childhood, and adolescence; demonstrate how these profiles differentially relate to functioning; and discuss implications for clinical practice.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Franklin 8

Ethno-cultural Pathways to Coping and Resilience Following Mass Trauma
(Global/Disaster/M/Global)

Chair: Srinivas, Tejaswinhi, BA
University of Denver, Denver, Colorado, USA

An increasing body of research on mass trauma (e.g., armed conflict, environmental disaster) has focused on coping processes and resilience-related factors from socio-ecological and cross-cultural frameworks, which respectively consider how these processes and factors manifest across multiple levels of the social ecology (e.g., individual, community) and different cultural groups. Findings from both frameworks have begun to converge on the importance of ethno-cultural coping processes and resilience-related factors for improving mental health outcomes. Taking this emerging theme as a starting point, the symposium will highlight the importance of ethno-cultural and context-dependent pathways to coping and resilience following mass trauma. The symposium will showcase a systematic review of children in areas of armed conflict as well as quantitative, qualitative, mixed methods, and intervention studies on Bhutanese refugees in migratory transition, displaced Haiti earthquake survivors, and families in post-genocide Rwanda affected by HIV/AIDS. Context-dependent themes of resilience, culturally-specific coping factors, and the impact of indigenous coping strategies and locally-adapted interventions on mental health outcomes will be presented, and implications for intervention will be discussed.
Family-Based Prevention of Mental Health Problems among Children Affected By HIV/AIDS in Rural Rwanda: A Pilot Feasibility Study
(Clin Res/Child/Adol/E & S Africa)

Betancourt, Theresa, ScD MA¹, Ng, Lauren, PhD¹, Kirk, Catherine, MPH¹, Sezibera, Vincent, PhD², Bizimana, Justin, BS³, Cyamatare, Felix, MD⁴
¹Harvard School of Public Health/ FXB Center for Health and Human Rights, Boston, Massachusetts, USA
²National University Of Rwanda, Butare, Southern Province, Rwanda
³Rwinkwavu Hospital, Rwinkwavu, Eastern Province, Rwanda
⁴Partners In Health, Boston, Massachusetts, USA

HIV-affected children are at increased risk for a range of mental health problems. Family-based interventions may prevent mental health problems by strengthening protective processes and resilience. The Family Strengthening Intervention (FSI) aims to improve communication and parenting, provide psychoeducation on HIV and its effects on families, and strengthen problem solving and ability to access supports and services. 20 families (N=39 children) that had at least one HIV+ caregiver and school-aged child (age 7 to 17) were enrolled in an open trial of the FSI. Children and caregivers were administered locally-adapted and validated measures of child mental health and functioning, and measures of prosocial behavior, resilience, social support, family trust, and parenting before and after intervention. Multi-level models accounting for clustering by families were used to test for change in outcomes of interest. Following the intervention, children reported significantly less depression, irritability, and harsh punishment from caregivers. Caregivers reported that their children displayed significantly more resilience and pro-social behaviors post-intervention (ps<.05). The FSI is a promising intervention that may improve mental health symptoms, strengthen protective factors, and improve parent-child relationships in families affected by HIV.

Resilience in Children Living in Areas of Armed Conflict: a Systematic Review of Protective and Promotive Factors in Low- and Middle-Income Countries
(Global/Civil/Ref//Global)

Tol, Wietse, PhD¹, Song, Suzan, MD², Jordans, Mark, PhD³
¹Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA
²Center for Survivors of Torture, San Jose, California, USA
³HealthNet TPO, London School of Hygiene and Tropical Medicine, Amsterdam, Netherlands

This presentation discusses the results of a systematic review of epidemiological studies of resilience amongst conflict-affected children in low- and middle-income countries. We searched Medline/Pubmed; PsycInfo; ERIC; PILOTS; JSTOR; contacted authors of key publications; and hand-searched specialized journals. We identified 53 studies for narrative synthesis: 15 qualitative studies, and 38 quantitative studies. Qualitative studies showed
variation across socio-cultural settings with regard to resilience outcomes, and reported contextually unique processes determining such outcomes. Quantitative studies were mostly cross-sectional in nature and focused largely on school-aged children. They focused on promotive and protective factors at different socio-ecological levels, i.e. individual, family-, peer-, school-, and community-level factors. Factors showed gender-, symptom-, and phase of conflict-specific effects on mental health outcomes. Based on these findings, the presentation focuses on resilience as a complex dynamic process, rather than the balance between risk- and protective factors with known impacts on mental health. Accordingly, the presentation argues that resilience-focused interventions will need to be tailored to specific contexts, rather than the application of a universal model that may be expected to have similar effects on mental health across contexts.

Symposium  
Friday, November 8  
4:30 p.m. to 5:45 p.m.  
Franklin 8  

Utilizing Indigenous and Psychosocial Coping Strategies in Disaster Mental Healthcare: Preliminary Evaluation of a Mental Health Worker Project in Post-Earthquake Haiti  
(Clin Res/Disaster/Latin Amer & Carib)  

James, Leah, PhD MSW¹; Noel, Roger, Assistant²  
¹University of Denver, Denver, Colorado, USA  
²Soulaje Lespri Moun, Bon Repos, Port-au-Prince, Haiti  

Potential hazards of whole-sale importation of psychological interventions based in dominant Western culture to other cultural contexts are well documented. The current study entails preliminary evaluation of an intervention model designed to foster post-disaster resilience by encouraging use of psychosocial coping strategies based in a Western psychological model, while maintaining use of pre-existing indigenous cultural and religious coping strategies. This locally-implemented lay mental health worker project, Soulaje Lespri Moun (SLM; "Relief for the Spirit") serves displaced survivors of the 2010 earthquake in Port-au-Prince, Haiti. Results of a quasi-experimental trial revealed decreased severity of stress and trauma responses and increased use of coping strategies associated with participation in the SLM intervention. Additionally, while the use of psychosocial coping strategies explicitly taught in SLM increased with participation, cultural and religious coping strategies (which were not directly taught) increased as well. Results suggest that with a collaborative, culturally-sensitive approach, participants may maintain both pre-existing and imported perspectives (and their respective coping strategies) simultaneously, and access each as needed. The ability to flexibly employ a wide range of coping and treatment strategies may in fact be a key element of resilience.
Coping among Bhutanese Refugees in Migratory Transition  
(CulDiv/Civ/Ref/S Asia)

Chase, Liana, MSc⁠; Welton-Mitchell, Courtney, PhD²; Bhattarai, Shaligram, MA, MPhil (Cantab)³
⁠¹McGill University, Montreal, Quebec, Canada  
⁠²University of Denver, Denver, Colorado, USA  
⁠³Transcultural Psychosocial Organization, Damak, Jhapa, Nepal

The Bhutanese refugee camps of eastern Nepal are home to a mass resettlement operation; over half the population has been relocated and most of those remaining are scheduled to resettle by 2014. While recent research suggests Bhutanese refugees are experiencing degradation of social networks and rising suicide rates, little is known about ethnocultural pathways to coping and resilience in this population. A common coping measure (Brief COPE) was adapted to the linguistic and cultural context of the refugee camps and administered to a representative sample of 193 Bhutanese refugees as part of a broader ten-month ethnographic study. Active coping, planning, and positive reframing were the most frequently utilized strategies, followed by acceptance, religion, and seeking emotional support. Exploratory factor analysis resulted in five factors: 1) humor, denial, behavioral disengagement; 2) positive reframing, planning, active coping; 3) emotional support, instrumental support; 4) interpersonal (a new subscale), acceptance, self-blame; and 5) venting, religion. Data support the relevance of some previously identified dimensions of coping while suggesting others may have limited application in this context. Implications for understanding coping among Bhutanese refugees are elaborated.

Blunted Affect and Arousal: Transdiagnostic Psychobiological Evidence of “Shutting Down” after Exposure to Complex Trauma  
(Bio Med/Adult/Cmplx/M/Industrialized)

Chair: D’Andrea, Wendy, PhD¹, Discussant: Lanius, Ruth, MD, PhD²  
⁠¹New School for Social Research, New York, New York, USA  
⁠²University of Western Ontario, London, Ontario, Canada

Affective and psychobiological research typically examines hyperarousal and high negative affect; however, some adults with psychopathology—particularly those with complex trauma—exhibit unexpectedly low levels of physiological and affective reactivity. This symposium includes three talks that address such blunted affective responses, measured by hypo-reactivity across physiological modalities. To elucidate hypo-arousal, panelists discuss relationships of blunted affect to hypo- and hyper-reactivity, trauma, and specific forms of psychopathology. D’Andrea will discuss decreased autonomic reactivity to stimuli in women with complex trauma histories, as well as emotional correlates of low autonomic responses. McTeague will discuss heterogeneity in
physiological defensive responses across anxiety disorders among individuals with and without complex trauma, contrasting focal fear syndromes with chronic, broad distress. Siegle will present neuroimaging data showing evidence for both hyper- and hypo-reactivity in depressed and anxious individuals, with blunting accounted for by trauma history. Finally, Lanius will discuss the relevance of these data to PTSD and post-trauma pathology, particularly as pertaining to dissociative subtypes of PTSD. Altogether, these data point to a broad picture of both hyper- and hypo-reactivity in which may occur transdiagnostically following trauma.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Franklin 9/10

Blunted Autonomic Reactivity Following Exposure to Trauma
(Bio Med/Adult/Cmplx//Industrialized)

D’Andrea, Wendy, PhD
New School for Social Research, New York, New York, USA

While a wealth of research has documented exaggerated physiological reactivity in PTSD, some participants may not fit this profile; indeed, many patients report predominant numbing. Research on heterogeneity within trauma-exposed participants across disorders, including within the diagnosis of PTSD, suggests that blunted physiological reactivity may be a source of variance in symptom profile. This talk will present two studies with evidence of blunted autonomic reactivity. In the first study, women were recruited based on history of exposure to a traumatic event, and participated in an acoustic startle paradigm. In the second study, a sample of treatment-seeking women with complex trauma participated in cognitive and affective tasks, both while physiology was monitored. In all conditions, two physiological profiles emerged: one whose autonomic physiology fluctuated throughout the task, consistent with hyper-arousal, and a second profile with consistently blunted affect and arousal reactivity. While acute trauma was associated with elevated arousal, complex exposure was associated with consistent low-level arousal, including notable decreases in autonomic activity. Profile differences were not accounted for by PTSD symptoms. These findings highlight the importance of heterogeneity within trauma-related disorders, and highlight the need for research on hypo-arousal.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Franklin 9/10

Blunted and Discordant Affect Sensitivity Syndromes
(Bio Med/Adult/Cmplx//Industrialized)

Siegle, Greg, PhD
University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, USA

Trauma is often associated with blunted affect. This is rarely described in depression neuroscience, potentially due to the presence of both hyper- and hypo-reactivity in the disorder coupled with a reliance on group means. Here, we examined of fMRI derived reactivity and connectivity in response to emotional stimuli in networks of limbic and cortical regions implicated in emotional information processing among 85 depressed and 35 healthy individuals. As
expected, many depressed individuals displayed hypo-reactivity compared to controls. Dissociation was associated with activity in sensory processing. Trauma history was associated with decreased connectivity of the amygdala to brain networks responsible for task-related processing. Possible explanations are that for some individuals, particularly those who dissociate, blunted affect could result from decreased network activity, associated with decreased sensory input. For other individuals, particularly those with trauma histories, blunted affect may result from decreased network connectivity, e.g., failure of initial emotion cues to inform a broader processing system. Both of these phenomena could result in subjectively blunted affective functioning, but might lead to different intervention pathways.

Symposium
Friday, November 8
4:30 p.m. to 5:45 p.m.
Franklin 9/10

Defensive Reactivity across the Anxiety Disorder Spectrum: Influence of Lifespan Stress, Trauma, & Negative Affectivity
(Assess Dx/Adult/Cmplx//Industrialized)

McTeague, Lisa, PhD, Lang, Peter, PhD, Laplante, Marie-Claude, PhD, Bradley, Margaret, PhD
University of Florida, Gainesville, Florida, USA

Guided by the nosology, anxiety patients are expected to show defensive hyperarousal during affective challenge, irrespective of the principal phenotype. In the current study, more than 400 patients representing the spectrum of anxiety disorders (i.e., specific or social phobia, panic disorder with or without agoraphobia, obsessive compulsive disorder, generalized anxiety disorder, post-traumatic stress disorder) and control participants imagined threatening and neutral narratives as physiological responses were recorded. Clear evidence emerged for exaggerated reactivity to clinically-relevant imagery—most pronounced in startle reflex responding. However, defensive reactivity varied across principal anxiety disorders. Disorders characterized by focal fear and impairment (e.g., specific phobia) showed robust fear potentiation. For disorders of long-enduring, pervasive apprehension and avoidance (e.g., PTSD secondary to multiple traumas), defensive reactivity was paradoxically diminished. Attenuated responses, particularly among anxious-misery disorders, corresponded to higher rates of early life stress and lifetime trauma exposure. This defensive physiological gradient—the inverse of self-reported distress—was evident not only between but also within disorders. In summary, adaptive defensive engagement during imagery may be compromised by chronic dysphoria and lifespan stress.
Panel Presentation
Friday, November 8
4:30 p.m. to 5:45 p.m.
Grand Ballroom A

**Enhancing Resilience: Theory, Practice and Evidence**
(Commun/N/A/M/Global)

Pat-Horenczyk, Ruth, PhD\(^1\), Baum, Naomi, PhD\(^2\), Brom, Danny, PhD\(^3\)
\(^1\)Israel Center for the Treatment of Psychotrauma, Herzog Hospital, Jerusalem, N/A, Israel
\(^2\)Hebrew University, Jerusalem, Israel
\(^3\)Hebrew University of Jerusalem, Jerusalem, Israel

Resilience has become a central concept in the development of both prevention and intervention programs before and after exposure to potentially traumatic events. In this symposium we present four programs geared to boost resilience in different populations with preliminary evidence as to their effectiveness: (1) BEAR, a program for Building Emotion and Affect Regulation in children living in children’s homes in Singapore. Evidence from 10 BEAR-groups (80 children) will be presented from the child, the caregiver and the facilitator perspectives. (2). Teacher assisted program for strengthening coping strategies in children exposed to war. Results of a controlled study comparing children in 4 schools in the aftermath of war will be presented. (3). Peace of Mind: this program addresses the needs of former combat soldiers readapting to civilian life. Evidence from 200 participants in the program will be presented. The three panelists will then discuss the common aspects of building resilience in the three different populations and contexts.

Panel Presentation
Friday, November 8
4:30 p.m. to 5:45 p.m.
Grand Ballroom F

**New Approaches to First Responder Behavioral Health: The National Fallen Firefighter Foundation Life Safety Initiative 13**
(Prevent/EmergWrks/I/Industrialized)

Watson, Patricia, PhD\(^1\), Gist, Richard, PhD\(^2\), Slawinski, Tonya, PhD\(^3\)
\(^1\)National Center for PTSD, Executive Division, White River Junction, Vermont, USA
\(^2\)Kansas City (Missouri) Fire Department, Kansas City, Missouri, USA
\(^3\)ABC, Murraysville, Pennsylvania, USA

This panel introduces a new tiered system of response to fire and rescue personnel stress, designed for use by emergency responders, their organizations, and the professionals who assist them. The approaches included in the system were developed across a three-year series of working groups seeking consensus on how to keep fire and rescue personnel healthy, resilient, and successful. It was led by the National Fallen Firefighters Foundation, joined by leading researchers and practitioners in fire service constituency organizations to generate intervention models that work effectively in emergency response organizations. The panel presenters will discuss the components of the system, including: a) Tools for peer support, including Stress First Aid: (adapted from Navy/Marine Corps COSFA); b) Tools for the organization, including After Action Review and Curbside Manner
Panel Presentation
Friday, November 8
4:30 p.m. to 5:45 p.m.
Franklin 11/12

Building Resilience among Young Clinicians and Researchers Working with Trauma-Exposed Populations
(Self-Care/Caregivers/Global)

Kirlic, Namik, Doctoral Student
Figley, Charles, PhD
Courtois, Christine, PhD, ABPP
Kudler, Harold, MD
Osofsky, Joy, PhD

The University of Tulsa; Laureate Institute for Brain Research, Tulsa, Oklahoma, USA
Tulane University, New Orleans, Louisiana, USA
Courtois & Associates, PC, Washington, District of Columbia, USA
VISTN 6 MIRECC and Duke University Medical Center, Chapel Hill, North Carolina, USA
LSU Health Sciences Center, New Orleans, Louisiana, USA

Vicarious traumatization and compassion fatigue are not uncommon phenomena among professionals working with trauma-exposed populations. Characterized by changes in perception of self and the worldview, as well as emotional and physical exhaustion, vicarious traumatization and compassion fatigue can resemble symptoms of depression and anxiety, in turn significantly affecting one’s personal and professional functioning. Young trauma clinicians and researchers committed to working with adults and children survivors of disasters, violence, abuse, and complex trauma may be at a particular risk given the unseasoned nature of their training and experience. Building resilience is not only important in order to protect young trauma professionals against such symptoms, but also in order to maintain their ability to effectively and successfully treat trauma survivors whom they serve. This panel of distinguished researchers and clinicians will discuss the symptoms of, and the risks for, vicarious traumatization and compassion fatigue in this population. Moreover, ways to achieve and maintain skills and practices that can serve to protect against vicarious traumatization and compassion fatigue will be outlined. Panelists will draw from their own professional experience, as well as the scientific work they have conducted.
Saturday, November 9

Keynote Address

Saturday, November 9
9:00 a.m. to 10:15 a.m.
Grand Ballroom E/F

Resilience: The Science of Mastering Life’s Greatest Challenges
(Train/Ed/Dis/N/A/I/N/A)

Charney, Dennis, MD¹, Southwick, Steven, MD²
¹Mount Sinai School of Medicine, New York, New York, USA
²VA Connecticut Health Care System, West Haven, Connecticut, USA

Many of us will be struck by one or more major traumas sometime in our lives. Perhaps you have been a victim of sexual abuse, domestic violence, or assault. Perhaps you were involved in a serious car accident. Perhaps you are a combat veteran. Or maybe you are among the millions who have suffered a debilitating disease, lost a loved one, or lost a job. Based upon work discussed in my book, Resilience: The Science of Mastering Life’s Greatest Challenges, I will present how new research into the psychological, biological and social impact of trauma can help us manage our own stressors and tragedies. Drawing on two decades of work with trauma survivors, I along with my co-author, Dr. Steven Southwick, have woven the latest scientific findings together with extraordinary stories of people who have overcome seemingly impossible situations. The question that is frequently asked is “How did you do it?” I will present the ten “resilience factors” that we found survivors use to cope, and how individuals can learn to become stronger and more resilient. This can provide a vital roadmap for overcoming and potentially growing from the adversities we all face at some point in our lives.
The Contribution of Emotion Regulation Strategies to Trauma Related Risk and Resilience
(Clin Res/N/A/M/Industrialized)

Chair: Bradley, Bekh, PhD
Atlanta VAMC/Emory University, Decatur, Georgia, USA

Research indicates that maladaptive emotion regulation strategies are associated with increased post-trauma risk and adaptive emotion regulation skills are associated with greater post-trauma resilience. Emotional dysregulation appears to be a core symptom underlying a variety of trauma-related behavioral and psychological problems. This symposium presents multi-method research examining emotion regulation in diverse samples of traumatized individuals. The first presentation examines the relationship between attentional control and emotion regulation. The second presentation addresses psychophysiological reactivity in traumatized adults using data from a study examining the comorbidity of substance abuse disorders and PTSD. The third presentation presents data on respiratory sinus arrhythmia as a predictor of risk and resilience for internalizing disorders in a sample of traumatized adolescents. The final presentation focuses on the role of emotional dysregulation, as measured by a behavioral task, in predicting risk for sexual victimization. Together, these presentations point to the importance of emotional regulation in determining risk and resilience among traumatized individuals. Presentations will address the implications of the presented data for the development of improved interventions for the treatment of trauma-related psychological problems.

Attentional Control and Basic Emotion Regulation: Associations and Implications for Neural Network Models of PTSD
(Res Meth/Adult/Cmplx//N/A)

Fani, Negar, PhD1, Ressler, Kerry, MD PhD1, Bradley, Bekh, PhD2
1Emory University School of Medicine, Atlanta, Georgia, USA
2Atlanta VAMC/Emory University, Decatur, Georgia, USA

Little is known about how attentional disruptions common to Post-traumatic Stress Disorder (PTSD), such as intrusive trauma-related thoughts and impaired focus on desired tasks, are related to abnormalities in emotion regulation. We investigated these associations using self-report measures (PTSD Symptom Scale: PSS; Attentional
Control Scale: ACS; Difficulties in Emotion Regulation Scale: DERS) and a novel attentional control task, the Affective Number Stroop (ANS) in 38 traumatized individuals. We observed a significant negative correlation between emotion dysregulation (DERS total) and attentional control (ACS total; r(38)=-.73, p=.000). Attentional control (ACS total) negatively correlated with total PSS [r(36)=-.39, p=.018]. Together, ACS and DERS score accounted for 23% of the variance in PSS (F2,33=4.88, p=.014). DERS total corresponded with more errors on ANS trials that included trauma-related [r(8)=.67, p=.07] and positive [r(8)=.7, p=.06] distractors, but DERS total was not associated with errors on neutral distractor trials [r(8)=.46, p=.25]. Together, attentional control and emotion regulation appear to be tightly linked and highly relevant to PTSD symptomatology. We will expand on the commonalities of these constructs and discuss the possibility that dysfunction in a common neural network supports the presence of these abnormalities in PTSD.

Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Grand Ballroom B

Respiratory Sinus Arrhythmia (RSA) Predicts Risk & Resilience to Internalizing Psychopathology following Childhood Trauma Exposure
(Bio Med/Child/Adol//Industrialized)

McLaughlin, Katie, PhD, Alves, Sonia, BA, Sheridan, Margaret, PhD
Harvard Medical School/Children’s Hospital Boston, Boston, Massachusetts, USA

OBJECTIVE: Identifying factors that confer vulnerability and resilience to psychopathology following childhood trauma is critical for preventing the mental health sequelae of these experiences. Respiratory sinus arrhythmia (RSA) is a marker of tonic parasympathetic nervous system control over cardiac chronotropy that may influence vulnerability to psychopathology following childhood trauma. METHODS: Heart period data was acquired from a community-based sample of adolescents (aged 13-17 years; N=168) at rest and during the Trier Social Stress Test (TSST). RSA was calculated from the inter-beat interval time series. Adolescents reported on their exposure to traumatic events and internalizing and externalizing symptomatology. RESULTS: Resting RSA interacted with childhood trauma in predicting internalizing psychopathology, such that adversity was associated with internalizing problems only in adolescents with low RSA. This pattern was observed across numerous types of trauma. RSA predicted heart rate recovery following the TSST, highlighting a mechanism by which high RSA confers protection to internalizing psychopathology following trauma. CONCLUSIONS: Adolescents with high RSA exhibit resilience to internalizing psychopathology following childhood trauma. Interventions aimed at improving vagal tone might mitigate the mental health consequences of these experiences.
Substance Use as an Emotion Regulation Strategy in Adults with Co-Morbid PTSD and SUDs
(Bio Med/N/A/Industrialized)

Davis, Telsie, PhD, Jovanovic, Tanja, PhD, Ressler, Kerry, MD, PhD, Bradley, Bekh, PhD
1 Emory University School of Medicine, Atlanta, Georgia, USA
2 Atlanta VAMC/Emory University, Decatur, Georgia, USA

Studies show individuals with PTSD display more intense fear and a slower return to baseline in response to fear-inducing stimuli than those without PTSD. Substance use is a noted self-medication response to emotional distress, but there is little research on substance use as an emotion regulation strategy on a physiological level among individuals with co-morbid PTSD and Substance Use Disorders (SUDs). To address this gap, we assessed startle magnitude and fear-potentiated startle among four groups: co-morbid PTSD/SUDs, PTSD only, SUDs only, and trauma-exposed controls. Participants (N=213) were recruited from an urban hospital in Atlanta, GA, where 79 met criteria for PTSD (53 had co-morbid SUDs) and 135 did not meet criteria for PTSD (70 with SUDs). PTSD was assessed using the Modified PTSD Symptoms Scale (MPSS) and SUDs were assessed using the Structured Clinical Interview for DSM (SCID). Startle magnitude was evaluated using electromyography of the eyeblink muscle in response to an acoustic startle probe. Fear-potentiated startle was analyzed by comparing startle magnitude at baseline to startle during a fear-conditioned stimulus. SUDs had a significant effect on startle response only among PTSD participants, F(1,77)=6.70, p=.01. Results suggest substance use may co-occur with PTSD because it reduces heightened fear and allows normalized function in traumatized individuals.

Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Grand Ballroom B

Sexual Assault Severity and Visual Attention Allocation When Viewing Rape Photos: The Role of In Vivo Emotion Regulation
(Assess Dx/Child/Adol/Industrialized)

Walsh, Kate, PhD, DiLillo, David, PhD
1 Columbia University, New York, New York, USA
2 University of Nebraska - Lincoln, Lincoln, Nebraska, USA

Sexual assault is associated with emotion regulation (ER) deficits; however, most studies have used self-report methods to assess ER, a practice that may be limited by participants’ emotional clarity. Attentional deployment is an important component of ER that can aid in the down- or up-regulation of emotional states. The present study used observational (eyetracking) and self-report methods to assess ER among sexual assault victims vis-à-vis visual attention allocation. Undergraduate women (N =142): reported sexual assault history; rated rape-specific, negative, and positive pictures while an eyetracker measured gaze patterns; and completed an emotion regulation measure anchored to the picture task. Women with moderate assault experiences first fixated on rape
photos later in the trial, spent more time on rape photos, and returned to rape photos fewer times than did non-victims or severe victims. Moderate victims also reported greater problems with in vivo ER, which was associated with attention allocation biases. Moderate assault and ER problems interacted to predict dwelling on rape photos for longer. Although moderate victims initially avoided traumatic stimuli, once they did look, they had difficulty disengaging from rape photos, possibly reflecting attempts to discern confusing emotions. Implications for revictimization and emotion-focused therapies are discussed.

Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Grand Ballroom C

Promoting a Peaceful Recovery: Preventing Violence in the Wake of Trauma
(Clin Res/N/A/M/Industrialized)

Chair: Constans, Joseph, PhD\(^1\); Discussant: Elbogen, Eric, PhD, ABPP\(^2\)
\(^1\)Southeast Louisiana Veterans Health Care System, New Orleans, Louisiana, USA
\(^2\)University of North Carolina, Chapel Hill & VISN 6 MIRECC, Chapel Hill, North Carolina, USA

Violent behavior is a common reaction to trauma exposure. Violence not only leads to significant social and legal consequences but also may complicate trauma recovery. Scholarship on traumatic stress is thus increasingly focused on the relationship between violence and trauma. As reducing violence following trauma may allow for a more peaceful and successful recovery, prevention and treatment strategies directly aimed at violence may be critical components of post-traumatic care. This symposium will describe recent findings regarding risk factors for violence following trauma and novel clinical interventions that may reduce this risk. New research methods with the potential to expand understanding and improve clinical care will also be presented. Presentations have implications for researchers as well as for clinicians working across all levels of prevention and care. Symposium presentations address violence in a variety of trauma exposed populations, including combat veterans, victims of urban community violence, and adult survivors of childhood abuse. The symposium will highlight issues specific to these populations in addition to general patterns and themes. Potential directions for future research and clinical development will also be discussed.
Reduction Violence and Violent Re-injury among Victims of Violence at an Urban Level I Trauma Center
(Clin Res/Violence//Industrialized)

Nanney, John, PhD¹, Conrad, Erich, MD¹, Singh, Kuldeep, MD¹, Vu, Ha, MD¹, Constans, Joseph, PhD²
¹Department of Psychiatry, Louisiana State University Health Sciences Center, New Orleans, Louisiana, USA
²Southeast Louisiana Veterans Health Care System, New Orleans, Louisiana, USA

Victims of urban violence face adversity well beyond their physical injuries. Violent trauma is a recurrent event for many, and up to 20% of those who survive an initial assault will die from later violence. Victims of urban violence engage in high rates violence themselves, and they may have a heightened risk for violence after their injury. The hospitalization immediately following violent trauma may be a critical window for psychosocial intervention with this population. At that time, violently injured patients have extensive contact with health care professions and may be uniquely amenable to change in the wake of a life-threatening event. This presentation will describe the development and pilot evaluation of a novel, hospital-based intervention designed to take full advantage and this opportunity. Rooted in motivational interviewing, the program assesses individual risk factors for violence and violent injury and encourages specific, individually tailored behavioral changes that may ameliorate risk and improve quality of life. In addition to indicators of acceptability and feasibility, we will report baseline sample characteristics (estimated n = 90), and early outcome data regarding changes in motivation and risk-reducing behavior. Challenges, implications, and future directions will also be discussed.

Personality, Warzone, and Symptom Predictors of Post-military Aggressive Behavior Reported by Vietnam Veterans
(Assess Dx/Mil/Vets//Industrialized)

Marx, Brian, PhD¹, Holowka, Darren, PhD², Kaloupek, Danny, PhD¹, Keane, Terence, PhD²
¹National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA
²National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA

Acts of excessive violence or brutality such as torture or purposeful harm to noncombatants are a documented phenomenon during wartime. Although some research has examined the psychological sequelae of perpetrating or observing such behavior, there is little research on its broader correlates. The present study examined associations among personality variables, combat exposure, the witnessing of or participating in excessive violence during war, post-traumatic stress disorder (PTSD) symptoms, and aggressive behavior after military discharge. A sample of 1104 Army and Marine Veterans of the Vietnam War completed self-report measures and diagnostic interviews as part of a 15-site study. Hierarchical linear regression analyses revealed that trait aggressiveness,
disconstraint (e.g., impulsivity), negative emotionality, exposure to acts of excessive violence, and PTSD symptom severity collectively predicted post-military aggressive behavior. General combat exposure was not a significant predictor and no significant interactions were observed among the predictor variables. Personality characteristics, exposure to excessive violence, and PTSD have been recognized as risk factors for physical and mental illness, but they may also be risk factors for post-military aggressive behavior by veterans.

**Symposium**  
**Saturday, November 9**  
**10:30 a.m. to 11:45 a.m.**  
**Grand Ballroom C**

**Identifying Violence in OIF/OEF Veterans: Applications of Natural Language Processing and Machine Learning**  
(Res Meth/Mil/Vets//Industrialized)

**Constans, Joseph, PhD**¹, Nanney, John, PhD²  
¹Southeast Louisiana Veterans Health Care System, New Orleans, Louisiana, USA  
²Department of Psychiatry, Louisiana State University Health Sciences Center, New Orleans, Louisiana, USA

Violent behavior among OEF/OIF veterans is a significant focus of public concern. Studies suggest violent behavior may indeed be a significant problem for OEF/OIF veterans and possible risk factors for violence in this cohort have been identified. Extant research, however, is restricted to self-report surveys of relatively small, geographically restricted samples. This methodology entails limitations inherent to survey research and precludes attention to the potential role of social ecology in shaping violence risk. Research methods from clinical informatics may help address these limitations. Specifically, advances in Natural Language Processing (NLP) and Machine Learning (ML) now allow for the retrieval of information embedded in the unstructured text of electronic medical records. Such information can then be combined with data in health information databases and analyzed in high-performance computing environments, allowing for large scale research on nationally representative data. This presentation will describe an evaluation of a specific VA-developed NLP/ML software package, the Automated Retrieval Console (ARC), in identifying violent behavior from the mental health notes of OEF/OIF veterans. Recall and precision data from applying ARC to various note types will be presented. On-going and future research projects that utilize these methods will be discussed.

**Symposium**  
**Saturday, November 9**  
**10:30 a.m. to 11:45 a.m.**  
**Grand Ballroom C**

**Cognitive Behavioral Therapy for Abuse Victims with Intermittent Explosive Disorder**  
(Clin Res/Adult/Cmplx//Global)

**McCloskey, Michael, PhD**  
Temple University, Philadelphia, Pennsylvania, USA

Intermittent Explosive Disorder (IED) is a chronic and debilitating disorder of affective aggression found in approximately 5% of the population. In addition to aggressive outbursts, IED is associated with increased anger, socio-emotional processing deficits and a decreased quality of life. Furthermore a history of physical and emotional
abuse is common among individuals with IED and is associated with greater impairment. There are currently no empirically-validated treatments for IED, but preliminary data suggests that a cognitive – behavioral intervention may be efficacious in treating individuals with IED. However, no date no research has directly examined the efficacy of cognitive-behavioral therapy (CBT) for patients with IED with a significant history of physical or emotional abuse. Forty participants with IED who reported a significant history of childhood abuse were randomized to receive 12 sessions of either CBT or supportive therapy. Results showed that participants in the CBT condition decreased aggression, anger and associated deficits from pretreatment to post-treatment, and that this improvement was superior to the supportive psychotherapy control. The CBT group also showed an improved quality of life. Results suggest that cognitive behavioral interventions may be efficacious in treating aggression among abuse victims with IED.

Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Grand Ballroom E

Bereavement and Complicated Grief across the Lifespan in Civilians and Military Populations
(Assess Dx/Diverse Pop/M/Industrialized)

Chair: Simon, Naomi, MD¹, Discussant: Cozza, Stephen, MD²
¹Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA
²Center for the Study of Traumatic Stress, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA

The loss of a loved one is one of the greatest stressors people experience in their lifetime. Although the death of a loved one is usually a painful and disruptive experience, only approximately 7% of bereaved individuals will develop complicated grief (CG) (Kersting et al., 2011). Although not yet a formal Axis I DSM diagnosis, a growing body of data support that CG is a recognizable syndrome occurring at least 6 months after a loss (Shear et al., 2011) that is associated with increased risk for adverse medical and mental health outcomes and substantial functional impairment (Latham & Prigerson, 2004). This symposium will present data furthering our understanding of core components of CG such as specific symptoms of separation distress and its relationship to attachment, post-traumatic stress symptoms, potential differences in response to different types of loss, as well as the correlates and impact of bereavement and CG among diverse populations including children and adults, and civilians and military populations.
Traumatic Distress and Post-Traumatic Stress Disorder in Complicated Grief
(Assess Dx/Older//Industrialized)

Simon, Naomi, MD1, Bui, Eric, MD, PhD1, Marques, Luana, PhD1, Shah, Riva, BS2, Robinaugh, Don, PhD2, Zisook, Sidney, MD3, Reynolds, Charles, MD4, Shear, M Katherine, MD5
1Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA
2Massachusetts General Hospital, Boston, Massachusetts, USA
3University of California, San Diego, San Diego, California, USA
4University of Pittsburgh, Pittsburgh, Pennsylvania, USA
5Columbia University School of Social Work, New York, New York, USA

Complicated grief (CG) and post-traumatic stress disorder (PTSD) share being the result of exposure to a major stressor, leading to suggestions that CG may be a post-loss stress disorder (Simon, 2012). CG and PTSD may be comorbid (e.g., Simon et al., 2007; Marques et al. in press), yet little is known about PTSD symptoms in CG in relation to the loss, or PTSD diagnostic status. Individuals with a primary diagnosis of CG (n=296, 77.4% women, mean (SD) age =52.9(14.4)) were assessed for PTSD symptoms with the Davidson Trauma Scale (DTS) in relation to the loss at baseline in a treatment trial. Over one-third (36.8%: n=109) met SCID criteria for current comorbid PTSD and had higher PTSD symptom severity across all DTS symptom clusters (p<0.001), as well as greater work and social impairment. PTSD symptoms did not differ based on type of death (e.g. prolonged illness, violent). Finally, PTSD symptom severity predicted greater work and social impairment above and beyond the Inventory of Complicated Grief score (change in R2=32.8%, B(SE)=0.22(0.2), p<0.001), and held true regardless of PTSD diagnosis, suggesting that PTSD symptoms in relation to the loss might reflect impairing symptoms that are not captured by traditional measures of CG symptoms.
Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Grand Ballroom E

Assessing Separation Distress in Complicated Grief
(Clin Res/N/A//N/A)

Shear, M Katherine, MD¹, Simon, Naomi, MD², Bui, Eric, MD PhD², Robinaugh, Don, PhD³, Mauro, Christine, PhD Candidate⁴, O’Connor, Mary-Frances, PhD⁵, Reynolds, Charles, MD⁶, Skritskaya, Natalia, PhD⁷, Wang, Yuanjia, PhD⁷, Zisook, Sidney, MD⁸
¹Columbia University School of Social Work, New York, New York, USA
²Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA
³Massachusetts General Hospital, Boston, Massachusetts, USA
⁴Columbia University, New York, New York, USA
⁵University of Arizona-Tempe, Tucson, Arizona, USA
⁶University of Pittsburgh, Pittsburgh, Pennsylvania, USA
⁷Columbia University and New York State Psychiatric Institute, New York, New York, USA
⁸University of California, San Diego, San Diego, California, USA

Yearning, a core symptom of complicated grief (CG) usually assessed with a single item, is a manifestation of separation distress. Assessing a range of separation distress symptoms allows better characterization of CG. Further, attachment security facilitates close companionship, and we hypothesize that it is a mitigating factor in separation distress intensity. This presentation explores the construct of separation distress in CG and examines its relationship with state attachment style. We administered the 21-item UCLA Yearning After Loss Scale (YALS: O’Connor, In press; n= 266) and the State Adult Attachment Measure (Gillath et al. 2009; n=67) to participants in two clinical trials for CG. Each item of the YALS was endorsed strongly by about half of the participants. Results from two separate studies were virtually identical. Additionally, state attachment security correlated inversely with YALS score (r = -0.48, p<.0001) while attachment avoidance (r=0.34, p=0.01) but not anxiety (r=0.04, p=0.74), correlated positively. Results confirm that separation distress in CG includes a range of manifestations in addition to yearning, and varies in severity in a clinical population. Secure attachment is associated with less, and avoidant attachment with more intense separation distress, possibly related to corresponding variation in support after bereavement.
Complicated Grief among Treatment Seeking OEF/OIF/OND Veterans
(Assess Dx/Mil/Vets/Industrialized)

Bui, Eric, MD PhD1, Pentel, Kimberly, BS2, Goetter, Elizabeth, PhD1, Ohye, Bonnie, PhD2, Stewart, Ann, MSW2, Brendel, Rebecca, MD1, Simon, Naomi, MD1

1Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA
2Massachusetts General Hospital, Boston, Massachusetts, USA

Although recent data suggest that grief is prevalent and associated with poor physical outcome among service members (Toblin et al., 2012), little is known about the rates and impact of complicated grief (CG) in treatment seeking veterans. As part of the clinical evaluation of 100 treatment-seeking OEF/OIF/OND veterans at the Home Base Program, measures including PTSD symptoms (PTSD Checklist; PCL; Blanchard et al., 1996), CG symptoms (Inventory of Complicated Grief; Prigerson et al., 1995) and Quality of life (Quality of Life Enjoyment and Satisfaction Questionnaire; Endicott et al., 1993) were completed. Among this clinical sample of veterans, 92% reported a significant loss. Of those, 32% reported the loss of a fellow service member as the index loss and 16% reported multiple losses. Overall, 23% met criteria for CG (ICG>30 and time since loss> 6 months). Among those with PTSD (68%, mean(SD) PCL=57.4(13.6)), 26% had comorbid CG. In a multiple regression quality of life was negatively and independently associated with both PTSD (B(SE)=−6.6(2.1), p<0.001) and CG (B(SE)=−8.5(2.3), p<0.001). CG appears to be frequent among treatment seeking veterans and is independently associated with poorer quality of life. Screening for CG amongst this population is warranted.

Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Grand Ballroom E

Grief in Military and Civilian Children: Predictors of Child Peer Problems
(Assess Dx/Child/Adol/Industrialized)

Ortiz, Claudio, PhD; Fisher, Joscelyn, PhD, Cozza, Stephen, MD, Fullerton, Carol, PhD, Ursano, Robert, MD
Center for the Study of Traumatic Stress, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA

In the United States, 1 in 20 children under 16 years of age experience the death of a parent (Haine, Ayers, Sandler, & Wolchik, 2008). Parentally bereaved children show higher levels of anxiety, depression, and post-traumatic stress than children who never experience parental death (Currier, Holland, & Neimeyer, 2007). Child peer interactions are critical contributors to overall child health and wellness and, therefore are important outcomes to assess in bereaved children. Empirical support for differences in child outcomes following the experience of a long protracted (i.e., anticipated) parental death versus a sudden (i.e., unanticipated) parental death is mixed (Lieberman, Compton, Van Horn, & Ippen, 2003; Saldinger, Cain, & Porterfield, 2003). This study examines parental death among 185 military and civilian families (caregivers and their children). The risk of child peer problems are examined in relation to (1) time since death, (2) demographics, (3) circumstances of death (e.g.,
sudden), (3) child grief, and (4) caregiver grief. Findings suggest that suddenness of death significantly predicts child peer problems following the death of a parent.

Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Grand Ballroom F

Treatment of PTSD in Children and Adolescents
(Clin Res/Child/Adol/M/Global)

Chair: Foa, Edna, PhD, Discussant: Yadin, Elna, PhD
University of Pennsylvania, Philadelphia, Pennsylvania, USA

Children and adolescents often experience traumatic events resulting in symptoms of post-traumatic stress disorder. Researchers from four clinical groups will present findings from treatment development trials utilizing manualized protocols, developed for implementation with young survivors of traumatic experiences. Dr. Foa will report on results of a randomized controlled trial (RCT) comparing the efficacy of Prolonged Exposure for Adolescents (PE-A) to Client Centered Therapy (CCT) delivered by supervised rape crisis counselors. Dr. Gilboa-Schechtman will present results of an RCT conducted in Israel, examining the efficacy and maintenance of gains in adolescents treated with PE-A compared to treatment employing Time Limited Dynamic Therapy (TLDP). Dr. Cohen will discuss findings that demonstrate the efficacy of Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) in adolescents with complex trauma. Dr. Berkowitz will review results of a study evaluating the effectiveness of the Child and Family Traumatic Stress Intervention (CFTSI) in reducing the odds of youth developing PTSD, compared to a supportive and nondirective intervention. Dr. Yadin will discuss the clinical and research implications of these findings in terms of the therapeutic options available to mental health providers working with children and adolescents suffering from the effects of trauma and PTSD.

Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Grand Ballroom F

The Efficacy of Prolonged Exposure (PE) and Client Center Therapy for Adolescent PTSD
(Clin Res/Child/Adol//Global)

Foa, Edna, PhD
University of Pennsylvania, Philadelphia, Pennsylvania, USA

In this lecture we will report on the results of a randomized study comparing the efficacy of Prolonged Exposure for Adolescents (PE-A) to Client Centered Therapy (CCT). Treatment was conducted by rape crisis center counselors who were supervised by PE experts. Participants were 61 girls ages 13-18 with PTSD related to sexual assault. Treatment consisted of 14 sessions. Blind independent evaluations occurred at: pre-treatment, after session 7 (mid-treatment) post-treatment, and at 3-, 6-, and 12-months post-treatment. The result indicated that, compared to adolescents given CCT, adolescents given PE-A improved faster during treatment, and had better outcomes at
post-treatment and at the 12-month follow-up on all primary and secondary outcomes (including independent assessor ratings of PTSD symptoms, PTSD diagnosis, functioning, and self-report ratings of PTSD symptoms and depression. Further, 74.2% of PE-A adolescents demonstrated at least a 50% reduction in PTSD symptoms by post-treatment, compared to 46.7% for CCT adolescents, a difference largely maintained through the 12-month follow-up (71.0% vs. 46.7%). The results will be discussed in light of the fact that the therapists were trained to be counselors and were novices in CBT in general and PE in particular.

Symposium  
Saturday, November 9  
10:30 a.m. to 11:45 a.m.  
Grand Ballroom F

A Randomized Controlled Trial of Prolonged Exposure and Dynamic Therapy for Adolescent Victims of Single Event Traumas  
(Clin Res/Child/Adol//Global)

Gilboa-Schechtman, Eva, PhD¹, Shafran, Naama, MA, PhD Student¹, Rachamim, Lilach, PhD²

¹Bar-Ilan University, Ramat Gan, Israel, Israel  
²Schneider Medical Center, Petach Tikva, Israel

Adolescents exhibit a unique clinical expression of post-traumatic distress characterized by significant emotional and behavioral dysregulation. In the present study we examined the efficacy and maintenance of developmentally adapted prolonged Exposure (PE-A) compared to active control Time Limited Dynamic Therapy (TLDP-A) for reducing post-traumatic and depressive symptoms in adolescent victims of single event traumas. Adolescents (n=38, age 12-18) were randomly assigned to receive either PE-A or TLDP-A. We found that both treatments resulted in decreased post-traumatic stress disorder and depression, and increased functioning. PE-A exhibited greater reduction of PTSD and depression symptom severity, and greater increase in global functioning than did TLDP-A. At post-treatment, 86.7% of adolescents treated with PE-A, and 46.7% of those treated with TLDP-A no longer met diagnostic criteria for PTSD. Treatment gains were maintained at 6 and 17 months follow-up. Both treatments were well received by patients and their families, and evinced positive pre-treatment expectancy, high therapeutic alliance and satisfaction with clinical outcome. Directive trauma-focused interventions howed superiority over psychodynamically oriented intervention immediately after treatment and at 6-months follow-up.

Symposium  
Saturday, November 9  
10:30 a.m. to 11:45 a.m.  
Grand Ballroom F

Trauma-Focused CBT for Complex Trauma  
(Practice/Child/Adol//Global)

Cohen, Judith, MD  
Allegheny General Hospital, Pittsburgh, Pennsylvania, USA

Objective: Describe clinical applications of Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) for adolescents with complex trauma. Methods: Dr. Cohen describes clinical applications of TF-CBT, a well-tested evidence-based treatment, for youth with complex trauma. Specific applications include 1) identifying core unifying trauma themes
about the adolescent’s complex trauma experiences; 2) applying gradual exposure during the TF-CBT stabilization phase including with regard to the therapeutic relationship that may serve as a trauma trigger; 3) adjusting the proportionality of the three TF-CBT treatment phases (Stabilization; Trauma Narration; Consolidation) in recognition of the severe affective and behavioral dysregulation that most of these adolescents experience; 4) using trauma themes as the basis for developing and processing the youth’s trauma narrative; and 5) as needed, extending the Consolidation Phase to address traumatic loss and ongoing safety and trust issues. An RCT compared group TF-CBT to a WL for 52 youth with complex trauma. Conclusions: Youth receiving TF-CBT experienced significantly greater improvement in PTSD (Cohen’s d=2.04), depression and anxiety (d=2.45), conduct problems (D=0.95) and prosocial behaviors (d=1.57). Conclusion: With appropriate applications of TF-CBT, youth with complex trauma experience significant improvements.

Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Grand Ballroom F

Prevention of PTSD in Adolescents
(Clin Res/Child/Adol//Industrialized)

Berkowitz, Steven, MD1; Marans, Steven, PhD2
1University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA
2Yale University School of Medicine Child Study Center, New Haven, Connecticut, USA

The presentation will review an effective psychosocial model of secondary prevention, the Child and Family Traumatic Stress Intervention (CFTSI). In a Randomized Effectiveness trial, CFTSI reduced the odds of youth developing PTSD by 65% with an effect size of 0.4 as compared to a supportive and nondirective intervention. CFTSI is a 4-6 session parent-child model delivered within the first 30 days post potentially traumatic event. CFTSI was especially significant in reducing Avoidance and Re-Experiencing symptoms, but was not significant in reducing hyperarousal symptoms. The presentation will also introduce the data regarding the use of medications, including propranolol and morphine in the prevention of PTSD in adolescents. Propranolol has had mixed outcomes. Some clinical trials will be reviewed to clarify its effectiveness in this age group. Morphine has not been studied in a randomized trial, however, retrospective data demonstrates a strong effect in the prevention of PTSD. In addition, some promising medications and psychosocial interventions that have yet to be fully studied will be presented with a focus on possible uses and cautions for PTSD prevention.
Symposium  
Saturday, November 9  
10:30 a.m. to 11:45 a.m.  
Franklin 7

Dissemination and Implementation within Global Mental Health: Policy, Strategies and Lessons from the Field  
(Global/Diverse Pop/I/Global)

Chair: Murray, Laura, PhD  
Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA

Global mental health focusing on trauma populations in low-resource countries (LRC) has seen significant advances. A growing literature base suggests acceptability, feasibility and effectiveness of evidence-based trauma treatments (EBTs) in LRC. On a policy level, this has led to recommendations to use EBTs in LRC. However, despite scientific data and policy-level recommendations, uptake has been slow. Implementation of EBTs in LRC is complicated, and there is little information on the “HOWs” of this process. This symposium will set the stage with an update on evidence and policy, and then describe specific implementation strategies in LRC. Data on implementation outcomes will be presented across 5 sites focused on trauma populations across the age spectrum. Discussion will include how we can begin to reduce the treatment gap in LRC for trauma-affected populations more quickly by using Implementation Science.

Symposium  
Saturday, November 9  
10:30 a.m. to 11:45 a.m.  
Franklin 7

WHO Guidelines for Treatment of Mental Disorders and Conditions Specifically Related to Stress: Development, Results and Future Steps  
(Social/Diverse Pop//Global)

Tol, Wietse, PhD1, van Ommeren, Mark, PhD2  
1Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA  
2World Health Organization, Geneva, Geneva 27, Switzerland

Mental health contributes 14% to the global burden of disease, but the gap between needs and availability of services remains enormous. To bridge this gap, the focus in global mental health has shifted to scaling up of services, e.g. through making services available in non-specialized (e.g. primary care) settings. To facilitate such scaling up, WHO started the mental health Gap Action Program (mhGAP) (1) (WHO, 2009), which includes evidence-based guidelines and a flowchart module to treat a number of priority mental health conditions. This presentation focuses on an expansion of this program through the development of evidence-based guidelines for stress-related disorders and conditions, including symptoms of acute traumatic stress, PTSD, and bereavement. Development of the guidelines followed WHO methods and consisted of (a) formation of a Guideline Development Group; (b) selecting scoping questions (Population, Intervention, Comparison, Outcome); (c) identifying and commissioning recent systematic reviews; (d) systematic appraisal of evidence using GRADE methodology; and (e) formulation and peer review of recommendations. This presentation will summarize the development process;
present the resulting set of 21 recommendations covering psychological and pharmacological interventions; and highlight further steps for research and intervention based on the guidelines.

Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Franklin 7

Train-the-Trainer Approaches in Low Resource Countries: Findings from Tanzania and Thailand
(Train/Ed/Dis/Diverse Pop//E & S Africa)

Dorsey, Shannon, PhD¹, Murray, Laura, PhD², Bolton, Paul, MB, BS³
¹University of Washington, Seattle, Washington, USA
²Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA
³Johns Hopkins University Bloomberg School of Public Health, Scituate, Massachusetts, USA

A growing body of evidence supports the effectiveness of evidence-based practices (EBP) for addressing mental health problems in low-resource countries (LRC; Patel et al, 2008). However, scaling up and sustainability of EBP is limited. One barrier is the ongoing use of western-based experts for training and supervision. We present a Cascading Implementation (Chamberlain et al., 2008) Train-the-Trainer (TTT) model from two studies that utilized experienced counselors and supervisors as co-trainers for a subsequent cohort of counselors. The first is a group-based traumatic grief intervention for orphans in Tanzania and Kenya; the second an open trial of a transdiagnostic intervention for displaced Burmese adults. TTT procedures and initial implementation outcomes for local co-trainers and counselors in both studies will be described. Trained by local co-trainers in Tanzania/Kenya, counselors had significant increases in intervention knowledge and increases in attitudes towards structured counseling approaches (Pre-M = 23.92; Post-M = 27.14; t = 3.91; p < .01), pre- to post-training. Additionally, co-trainer quantitative evaluations of counselor skill were in-line with those of intervention expert. Data from the Thailand study were collected in February 2013 and are being analyzed. Next steps for TTT in LRC and potential challenges and benefits will be discussed.
Implementation Research within Studies among Trauma Survivors in Low-resource Countries: Zambia, Thailand, and Iraq
(Social/Diverse Pop//Global)

Murray, Laura, PhD¹, Bidas, Rinad, PhD², Dorsey, Shannon, PhD³, Bolton, Paul, MB BS⁴
¹Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA
²University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, USA
³University of Washington, Seattle, Washington, USA
⁴Johns Hopkins University Bloomberg School of Public Health, Scituate, Massachusetts, USA

The Implementation literature in Low-Resource Countries (LRC) is in its infancy (Thorncraft et al., 2009). The field of global mental health has now shown that various evidence-based practices (EBPs) are feasible, adaptable and effective for trauma-affected populations (Bolton et al., 2007; Bass et al., in press), and organizations such as the World Health Organization (WHO) have recommended the use of EBPs. However, the uptake of these interventions by locally-based organizations has been slow. One barrier to uptake of EBPs include implementation factors, or the “how” of scaling up, delivering, and sustaining interventions. This presentation will use the conceptual model of Proctor et al., (2009) to describe three implementation science strategies for global mental health in LRC, highlighting projects in Zambia with traumatized children, and Iraq and Thailand with adult survivors of systematic and/or political violence. Three specific implementation strategies include: 1) an apprenticeship model of training and supervision, 2) suicide planning when using task-shifting, and 3) a transdiagnostic approach. Authors will also present implementation outcomes from these studies including fidelity, sustainability, uptake, and feasibility. Stakeholder and counselor perspectives highlight organizational and systems-level challenges in implementing EBPs for trauma populations in LRC.

Building an Evidence-base for Technology in Treatment: Adoption, Assessment, Engagement and Efficacy
(Tech/Mil/Vets/I/Industrialized)

Chair: Price, Matthew, PhD¹, Discussant: Ruzek, Josef, PhD²
¹University of Vermont, Burlington, Vermont, USA
²National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA

The integration of technology into clinical care for trauma has the potential to improve the fidelity with which treatment is delivered, guide clinical practice, reach underserved populations, and facilitate recovery. This symposium will address critical gaps in research on the use of technology in care across the continuum of clinical
practice: adoption by providers, use by patients, methods to improve assessment, and efficacy. The first talk will present the results of a large investigation on barriers to the adoption of mobile applications in PE, CBT-I, and CPT in a large sample of highly trained VA clinicians (Kuhn et al). Then adoption will be explored from the patient perspective through data on predictive factors for engagement with a web-based intervention among 2000 at-risk adolescents (Price et al). The benefits of using computer tools to enhance clinical decision making and assessment will be explored through the STRESS, an interactive computer-based assessment tool designed to assess PTS in children (Grasso et al.). Finally, the results of an RCT on the use of virtual reality exposure combined with d-cycloserine, placebo, or alprazolam for Veterans with PTSD will be presented for the first time (Rothbaum, et al). These presentations will offer audience members an opportunity to understand the key research and practical issues in the use of technology in treatment.

Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Franklin 8

RCT of Virtual Reality Exposure Therapy Combined with d-Cycloserine, Alprazolam, or Placebo for PTSD in Iraq Veterans with PTSD
(Clin Res/Mil/Vets/Industrialized)

Rothbaum, Barbara, PhD, ABPP, Gerardi, Maryrose, PhD, Ressler, Kerry, MD, PhD
Emory University School of Medicine, Atlanta, Georgia, USA

This will be the first unblinded presentation of data from an NIMH-sponsored study with Virtual Reality Exposure Therapy (VRE) combined with medication for Iraq Veterans with PTSD. To date, 153 patients have been entered and 91 have treatment outcome data. Regarding concomitant medications, 96 patients (64.9%) were on antidepressants, 40 (27%) were not, 12 (8.1%) took other psychiatric medications but not anti depressants, and data are missing for 12 (8.1%). Treatment involves 6 sessions, 5 of which incorporate VR exposure, preceded by taking one pill of either 50 mg d-Cycloserine, pill placebo, or .25 mg alprazolam (Xanax). As this is translational research, the exposure therapy was purposely under dosed. Assessments include interviews, self-report measures, and psychophysiological assessment. Preliminary data, collapsed across all groups (blind has not been broken for this abstract): Mean CAPS pre-treatment = 85.8 (SD 18.00); post-treatment = 67.9 (SD 25.71); 3-mo FU = 60.42 (SD 28.58, n = 65); 6-mo FU = 58.67 (SD 30.32, n = 55); 12-mo FU = 51.05 (SD 32.21, n = 42). Regarding remission, at the 12-Month FU, 35% were below 30 on the CAPS. Session-by-session PSS means were as follows: Pre 32.82, T2 31.65, T3 30.65, T4 27.9, T5 26.21, T6 24.04, Post 25.78, 3mo 23.35, 6mo 23.46, and 12mo 20.03.
Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Franklin 8

Development of and Preliminary Psychometrics for the Computer-Administered STRESS: Structured Trauma-Related Experiences and Symptoms Screener
(Tech/Child/Adol//Industrialized)

Grasso, Damion, PhD¹, Reid-Quinones, Kathy, PhD², Felton, Julia, PhD³
¹University of Connecticut Health Center, Farmington, Connecticut, USA
²Medical University of South Carolina, Charleston, South Carolina, USA
³University of Maryland, College Park, Maryland, USA

The Structured Trauma-Related Experiences and Symptoms Screener (STRESS) is a computer-administered self- and parent-report instrument for children and adolescents ages 7-18 that assesses potential trauma exposure and symptoms of post-traumatic stress disorder using the revised criteria expected in the Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM-5). Data from children and caregivers were collected on a sample of children undergoing a forensic child abuse and neglect evaluation to examine feasibility and preliminary psychometrics. Results suggest good overall and within-scale internal consistency. Self- and parent-report was moderately correlated, consistent with other measures of PTSD. As expected, scores from a brief depression screen (i.e., Short Mood and Feelings Questionnaire) were most highly correlated with scores from Criterion D Negative Alterations in Mood and Cognitions, suggesting convergent validity. The potential advantages of using computer-administered assessments over paper-and-pencil and clinical interview assessments are discussed.

Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Franklin 8

Provider Perceptions of a Patient Smartphone App for Prolonged Exposure Therapy
(Clin Res/Mil/Vets//Industrialized)

Kuhn, Eric, PhD¹, Hoffman, Julia, PsyD¹, Reger, Greg, PhD², Eftekhar, Afsoon, PhD¹, Crowley, Jill, PhD¹, Ramsey, Kelly, BA¹, Ruzek, Josef, PhD¹
¹National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA
²National Center for Telehealth & Technology, Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury, Tacoma, Washington, USA

Mobile technology is rapidly being integrated into medical health care, yet its use in mental health care is lagging. To elucidate factors that may explain this, we examined Prolonged Exposure (PE) therapy providers’ perceptions of a PE app for patients. In this presentation, key features of the app, PE Coach, are highlighted. Next, research using Diffusion of Innovations theory to help explain the adoption of PE Coach is presented. Study 1 examined PE providers’ perceptions of the app before its release. Using a web-based survey, 163 PE providers rated the app’s relative advantage to existing practices, compatible with their needs and values, and complexity, and their intention to use the app if available. In general, providers had positive perceptions of the app, with those who
were younger, smartphone owners, and had used apps in care holding more favorable perceptions than their counterparts. A multiple regression found that smartphone ownership, relative advantage, and complexity predicted future use intention. Study 2 attempts to replicate Study 1 but examines perceptions a year after the app’s release so seeks to understand its use since release, and will be completed later this spring. These studies will provide insight into factors affecting clinical adoption of an app in the provision of PE and may suggest intervention targets to enhance implementation efforts.

Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Franklin 8

Adolescent Engagement with a Web-based Post-disaster Mental Health intervention
(Tech/Disaster//Industrialized)

Price, Matthew, PhD, Resnick, Heidi, PhD, Gros, Kirstin, PhD, Davidson, Tatiana, PhD, Soltis, Kathryn, BA, Ruggiero, Kenneth, PhD

1University of Vermont, Burlington, Vermont, USA
2Medical University of South Carolina, Charleston, South Carolina, USA
3Ralph H. Johnson VA Medical Center, Charleston, South Carolina, USA

Exposure to disasters and other major life stressors is a significant risk factor for the development of mental health disorders in adolescents. Research has shown that only about 1 in 4 adolescents who meet criteria for mental health disorders after a disaster receives mental health services. Self-guided web interventions can reach adolescents who might not otherwise receive formal mental health services. They are especially appealing to adolescents and families because they are easily and privately accessible, and are often low cost or free. However, the extent that adolescents will access this type of intervention is unknown. The current study examined engagement in a web-based intervention in a population based study of 2000 adolescents exposed to a natural disaster. The intervention was available for a period of 4 months and offered a modular treatment to reduce depression, post-traumatic stress, and substance abuse. 35% of the sample accessed at least one of the modules. Results of a generalized linear model predicting access of the modules suggested that having PTSD (OR = 1.45, p = .04), and using alcohol in the past year (OR = 1.63, p = .01). Males were less likely to engage (OR = 0.80, p = .03). The findings suggest that web-based approaches may be an effective way to reach symptomatic adolescents with evidence based care in the aftermath of a disaster.
Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Franklin 11/12

Couple Therapy Outcomes with PTSD Patients and Their Partners
(Clin Res/N/A/M/N/A)

Chair: Monson, Candice, PhD
Discussant: Riggs, David, PhD

1 Ryerson, Toronto, Ontario, Canada
2 Center for Deployment Psychology/USUHS, Bethesda, Maryland, USA

This symposium will present data from three different treatment outcome efforts. The first presentation will present outcomes related to cognitive changes in a randomized controlled trial of cognitive-behavioral conjoint therapy for PTSD (CBCT for PTSD), which is a purported mechanism of change of the intervention. The second presentation will present initial outcomes of couple therapy for alcohol use disorders and PTSD (CTAP). The final presentation will present on outcomes of integrative behavioral couple therapy (IBCT) with couples who have a veteran with and without PTSD.

Symposium
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Franklin 11/12

Changes in Trauma-related Cognitions with Cognitive-behavioral Conjoint Therapy for PTSD in a Randomized Controlled Trial
(Clin Res/N/A/N/A)

Monson, Candice, PhD
Macdonald, Alexandra, PhD
Pukay-Martin, Nicole, PhD
Fredman, Steffany, PhD
Wagner, Anne, PhD Candidate
Torbit, Lindsey, MA PhD Student

1 Ryerson, Toronto, Ontario, Canada
2 National Center for PTSD and VA Boston Healthcare System, Boston, Massachusetts, USA
3 Ryerson University, Toronto, Ontario, Canada

Cognitive-behavioral conjoint therapy for post-traumatic stress disorder (CBCT for PTSD; Monson & Fredman, 2012) has been shown to improve PTSD and comorbid symptoms and enhance relationship functioning in several uncontrolled and a recent controlled trial (Monson et al., 2004, 2011, 2012; Schumm et al., in press). Though the treatment’s efficacy is demonstrated, less is known about the intervention’s purported mechanisms of change. This presentation will describe outcomes specific to trauma-related cognitions from the recent randomized controlled trial. Forty individuals diagnosed with PTSD secondary to a range of traumatic events and their intimate partners were randomly assigned to receive CBCT for PTSD immediately or to waitlist. Random regression analyses revealed that patients receiving CBCT for PTSD as compared with waitlist had increases in the self-worth subscale of the World Assumptions Scale, decreases in guilt cognitions on the Trauma-related Guilt Inventory, and improvements on the Personal Beliefs and Reactions Scale. The association between these improved cognitions and changes in PTSD symptoms will also be presented. The implications of these results in terms of understanding the active components in CBCT for PTSD and other trauma-focused cognitive therapies for PTSD will be discussed.
Initial Findings for a Cognitive-behavioral, Couple-based Treatment for Veterans with Alcohol Use Disorder and Post-Traumatic Stress Disorder
(Clin Res/Mil/Vets//Industrialized)

Schumm, Jeremiah, PhD\textsuperscript{1}; Monson, Candice, PhD\textsuperscript{2}, Timothy, O'Farrell, PhD, ABPP\textsuperscript{3}, Nancy, Gustin, PsyD\textsuperscript{4}, Chard, Kathleen, PhD\textsuperscript{1}
\textsuperscript{1}Cincinnati VA Medical Center & University of Cincinnati, Cincinnati, Ohio, USA
\textsuperscript{2}Ryerson, Toronto, Ontario, Canada
\textsuperscript{3}Boston VA Healthcare System & Harvard Medical School, Brockton, Massachusetts, USA
\textsuperscript{4}Cincinnati VA Medical Center, Cincinnati, Ohio, USA

Rates of co-occurring post-traumatic stress disorder (PTSD) and alcohol use disorder (AUD) are shown to be especially high among military veterans, and treatment prognosis for these individuals is worse versus individuals who have only of these disorders. This challenging comorbidity is compounded by these individuals often demonstrating intimate partner relationship problems. This study will present pilot study results from a 15-session treatment for addressing these issues, called Couples Treatment for Alcohol Use Disorder and PTSD (CTAP). CTAP integrates components of two empirically-supported treatments: Cognitive-Behavioral Conjoint Therapy for PTSD and Behavioral Couples Therapy for Substance Use Disorders. Using the Clinician-Administered PTSD Scale and Timeline Followback Interview for substance use, an independent rater assessed veterans (N = 10) and their partners prior to and following participation in CTAP. At pre- and post-treatment, participants also completed self-report questionnaires regarding the veterans' PTSD and substance use problems and the couple's relationship functioning. Results showed significant reductions in PTSD and problematic substance use along with relationship improvements. These findings suggest that CTAP may be a promising therapy for Veterans with AUD-PTSD and their partners.

Integrative Behavioral Couples Therapy for Veterans with PTSD: Results from the VA National Dissemination Project
(Train/Ed/Dis/Mil/Vets//Industrialized)

Glynn, Shirley, PhD\textsuperscript{1}; Christensen, Andrew, PhD\textsuperscript{2}, McCutcheon, Susan, EdD\textsuperscript{3}
\textsuperscript{1}VA Office of Mental Health Services and VA Greater Los Angeles Healthcare System, Los Angeles, California, USA
\textsuperscript{2}University of California, Los Angeles Department of Psychology, Los Angeles, California, USA
\textsuperscript{3}Veterans Health Administration, Washington, District of Columbia, USA

Over the past six years, the VA has embarked on a major initiative to disseminate evidence-based family programs to support the recovery of Veterans living with psychiatric illness, including PTSD. One of the first evidence-based family-based treatments disseminated in VA has been Integrative Behavioral Couples Therapy (IBCT), in which
traditional marital behavior change strategies are augmented to promote empathy and cultivate acceptance. This presentation will begin with a brief overview of the dissemination of family services in VA. Program evaluation data from 250 couples participating in IBCT in VA will then be presented. Approximately half of these Veterans are diagnosed with PTSD. After the four session engagement phase, the average number of IBCT session attended was 9.57. From pre to post-treatment, average scores on the couples satisfaction index increased statistically significantly for both members of the couple. There was no difference in drop-out or improvements accruing from the therapy based on PTSD status of the couple. These results will be discussed in terms of the role that general marital counseling, in contrast to targeted PTSD couples interventions, can play in developing social support and improving marital satisfaction among Veterans with PTSD. The role of IBCT in a comprehensive treatment plan for PTSD will be outlined.

Panel Presentation
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Franklin 6

From the Streets to the Boardroom: Generating Trauma-informed Growth across a spectrum of Community Services
(Social/Diverse Pop/M/Industrialized)

Foderaro, Joseph, MSW, LCSW1, Cancellier, Roberta, MSW2, Ibeh, Ngozi, MSW Candidate3, Putthoff, Jeff, MDiv, PhD4, Ryan, Ruth Ann, MSN APRN1

1Drexel University School of Public Health, Fort Washington, Pennsylvania, USA
2City of Philadelphia, Philadelphia, Pennsylvania, USA
3Temple University, Bensalem, Pennsylvania, USA
4Hopeworks, Camden, New York, USA

Building resiliency to persistently adverse conditions and traumatizing events requires a strong undercarriage of systems which are inherently intact and capable of making the adaptations that traumatic events demand. Unfortunately, the very short-term adaptations that individuals, families, institutions and even communities adopt in order to buffer themselves from the full impact of trauma often serve to, in the long run, inhibit full recovery. The process of adaptations to trauma and adverse conditions often parallel the same processes which permit outbreaks of violence and disintegration. This panel of experts and urban catalysts for change will present their attempts to incorporate a system-wide model of bringing community-building practices to a variety of different settings including emergency and transitional housing, vocational training for youth at risk of becoming victims of violence or marginalization by the larger community, and men and women in the corrections setting and in doing so, creating a more consistently safe, cohesive, and growth promoting experience for consumers across a wide spectrum of services. A brief introduction of operationally-defined examples of how individual and community trauma has impacted the organizations represented will precede group discussion.
Panel Presentation  
Saturday, November 9  
10:30 a.m. to 11:45 a.m.  
Franklin 9/10

The Use of Clinical Practice Guidelines and Support Tools to Improve Behavioral Health Practice  
(Practice/Mil/Vets/M/Industrialized)  

**Holcombe, Philip**, PhD, **Cassidy, Carla**, RN, MSN, CANP, **Degenhardt, Ernest**, RN, MSN, CANP, **Roberts, Miguel**, PhD  

1 *Defense Centers of Excellence for Psychological Health & Traumatic Brain Injury, Silver Spring, Maryland, USA*  
2 *Department of Veteran Affairs, Washington DC, District of Columbia, USA*  
3 *US Army, San Antonio, Texas, USA*

Clinical practice guidelines (CPG) and clinical support tools (CST) are two primary methods Veterans Health Affairs (VA) and the Department of Defense (DoD) Military Health System employ to assist providers with implementation of evidenced-based care. There is considerable scientific rigor employed to develop the CPGs, and the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury has developed multiple CSTs to assist providers with implementation of VA/DoD CPGs. However, research suggests that awareness and utilization of CPGs is less than optimal. This presentation will use experiential training exercises to familiarize providers and policy developers with the VA/DoD process for CPGs, discuss some frequent barriers and solutions for CPG implementation, and highlight multiple CSTs available to assist providers and clinics with implementation of CPGs within the behavioral health context.

Workshop Presentation  
Saturday, November 9  
10:30 a.m. to 11:45 a.m.  
Grand Ballroom A

Towards a Culture of Evidenced Based Practice in Army Behavioral Medicine  
(Train/Ed/Dis/Mil/Vets/M/Global)  

**Grace, Gerry**, PhD, **Schobitz, Rick**, PhD, **Scott, Valerie**, PsyD  

1 *San Antonio Military Medical Center, San Antonio, Texas, USA*  
2 *Brooke Army Medical Center, San Antonio, Texas, USA*

Towards a Culture of Evidenced Based Practice in Army Behavioral Medicine The effective dissemination of evidenced based treatments for PTSD within the DoD met with significant systemic challenges. Some challenges included; creating time for supervision, no trained supervisors on site, and clinic templates not allowing for 90 minute sessions. The psychology training program at Brooke Army Medical Center developed a pilot project to improve the quality of training in evidenced based treatments for PTSD. This project has proven very successful in accomplishing multiple goals. Firstly, gold standard treatments are now directly available for treating PTSD. Secondly, the quality of supervision through reviewing recorded sessions, and weekly seminar participation
enhances the providers skill set while offering a supportive environment to mitigate against provider fatigue. Finally, this model of training and dissemination equips the future officer leader and behavioral medicine provider with the competence and confidence to develop a culture of evidenced based practice throughout Army Behavioral Medicine. This workshop will outline the structure and process of a proposed effective model of training and disseminating evidenced based treatments for PTSD.

Workshop Presentation
Saturday, November 9
10:30 a.m. to 11:45 a.m.
Grand Ballroom D

Promoting Resilience for Professionals Serving Traumatized Children and Youth from Under-resourced Communities: Addressing Burnout and Vicarious Trauma in School Staff within a Multilevel Intervention
(Commun/Caregvs/M/Industrialized)

Dorado, Joyce, PhD1, Jennings, Patricia, PhD2, Martinez, Miriam, PhD3
1UCSF-San Francisco General Hospital, San Francisco, California, USA
2Penn State University, University Park, Pennsylvania, USA
3Columbia University College of Physicians and Surgeons, New York, New York, USA

Effectively addressing complex trauma in children necessitates targeting interventions at caregiving systems (e.g. schools) (Saxe, 2006). Professionals who serve traumatized individuals are vulnerable to burnout and secondary traumatic stress (Figley et al., 2011). UCSF Healthy Environments and Response to Trauma in Schools (HEARTS) is a multilevel school-based program promoting school success in traumatized students from under-resourced communities. HEARTS is public health approach to trauma grounded in evidence based practice (e.g., Blaustein & Kinniburgh, 2010) that creates trauma-sensitive school environments that are supportive to traumatized students and the staff who work with them. Cultivating Awareness and Resilience in Education (CARE) is a mindfulness-based intervention designed to reduce stress and improve teachers’ performance and classroom learning environments. A randomized controlled trial found participation in CARE significantly improved teacher well-being, physical symptoms, efficacy, burnout/time-related stress, and mindfulness compared to controls (Jennings et al., 2011). Evaluation data indicate that participants viewed both HEARTS and CARE as feasible and acceptable. Workshop will integrate key components of CARE with HEARTS lessons learned about providing collaborative, trauma-informed consultation and support for teachers around vicarious trauma.
Trauma Outcomes in Adolescents

Sleep Problems among Adolescent Survivors: A Cohort Study
(Clin Res/Disaster/A/E Asia & Pac)

Fan, Fang, PhD¹, Chen, Shijian, MAP²
¹Center for Studies of Psychological Application, South China Normal University, Guangzhou, Guangdong, China
²South China Normal University, Guangzhou, Guangdong, China

Objective: To examine sleep problems and associated risks among adolescent survivors. Method: Following the 2008 Wenchuan earthquake, 1573 survival adolescents from the epicenter was assessed periodically for 2 years. Sleep Quality, PTSD, Depression, Anxiety, Social Support, Life Events, and demographics were assessed. Trajectory analysis was used to examine sleep disturbance changes and associated risks. Results: Twelve months after the earthquake, 48.90% of participants reported sleeping less than 7 hours per night, 27.68% disclosed difficulties initiating sleep, 8.82% experienced problems staying sleep, 22.60% felt their sleep quality was poor and 40.01% had difficulties functioning during daytime hours. Sleep impairments were stable from 18 months to 30 months following the earthquake and the prevalence rates were between 28% and 30%. The risk of sleep issues significantly increased in senior students (OR=2.29) and in those who witnessed the tragic events directly (OR=1.21). Depression (OR=1.69), anxiety (OR=1.57), poor social support (OR=1.83), and negative life events (OR=2.62) were also associated with increased risk and persistence of sleep problems. Conclusions: Sleep disturbances are common and persistent in adolescent survivors. Multiple demographic, psychosocial and earthquake related factors are associated with the increased risk of sleep difficulties.

"Hot spots" in Adolescents’ Narratives After a Violent Shooting Episode in Norway: Characteristics and the Relationship to PTSD
(Prevent/Disaster/I/Industrialized)

Hafstad, Gertrud, PhD¹, Jensen, Tine, PsyD³, Dyb, Grete, MD PhD¹
¹Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway
²University of Oslo, Oslo, Norway

It has been suggested that the organization of the worst moment in traumatic memories ("hot spots") is of particular importance for the development of PTSD. However, current knowledge regarding the organization and content of the worst moments is incomplete, in particular among youth. The trauma narratives of young trauma survivors with and without PTSD were analyzed and the worst moment was compared to the remaining narrative. Participants were 25 adolescents (age 15-18) with PTSD and 40 (age 15-18) without PTSD, all of whom had survived
the 2011 terror attack at Utøya Island Norway. They were asked to give a detailed narrative about the event and indicate the worst moment of their experience. The worst moment and the remaining narrative were analyzed separately with regard to organization and emotional content. Edna Foa and colleagues’ coding manual was used to evaluate the degree of unfinished thoughts, the use of present tense, and the degree of cognitive processing. We expected these elements to be significantly more often present in the narratives of adolescents with PTSD than in those without. Group differences among those with and without PTSD were calculated by means of independent samples t-tests. The findings may have clinical implications for whether therapists should target the trauma “hot spots” in their narrative work.

**Paper Presentation**
**Saturday, November 9**
**10:30 a.m. to 11:45 a.m.**
**Franklin 5**

**Trauma and Perinatal Depression in Adolescent Mothers: Results from a Prospective Epidemiological Study**
(Prevent/Child/Adol/M/N/A)

Rizo, Cynthia, PhD Candidate, Killian, Candace, Doctoral Student, Bledsoe, Sarah, PhD MSW, Meltzer-Brody, Samantha, MD
*University of North Carolina at Chapel-Hill, Chapel Hill, North Carolina, USA*

Trauma and perinatal depression (PND) are linked to negative outcomes including low birth weight, impaired bonding, and increased risk of child maltreatment (Phipps 2011; Weissman, 2006). Existing literature includes primarily small, cross-sectional samples with mixed or limited evidence on the associations between trauma subtypes and PND. To address this limitation, our prospective longitudinal study examines relationships between intimate partner violence (IPV), other trauma subtypes, and PND in adolescent mothers. A diverse group of 224 pregnant adolescents was recruited during prenatal visits at a public health clinic. Data on trauma history and depression were collected prenatally and postpartum. Bivariate analyses examine the prevalence of PND and trauma history. A mediation model of trauma subtypes, antenatal depression (AND), and postpartum depression (PPD) was tested using path analysis. Nearly 82% of subjects reported some form of trauma. Our final model ($\chi^2 (3)=3.972, p=0.265$) indicates childhood sexual abuse (0.204, $p<0.01$), childhood grief/loss (0.199, $p<0.01$), and sexual IPV (0.139, $p=0.060$) were all significantly related (or approaching significance) to PPD, partially mediated by AND (0.321, $p<0.000$). Results suggest intervention for adolescent mothers include a trauma component to enhance mother and baby resilience. Other implications will be discussed.
Paper Presentation  
Saturday, November 9  
10:30 a.m. to 11:45 a.m.  
Franklin 5

Child Sexual Abuse (CSA): Health-Related Consequences  
(Assess Dx/Child/Adol/M/Industrialized)

Schnyder, Ulrich, MD¹, Landolt, Markus, PhD¹, Maier, Thomas, MD², Mohler-Kuo, Meichun, PhD¹

¹Zurich University, Zurich Switzerland  
²Zurich University, Wil, Switzerland

Objective: To study health-related quality of life (HQoL) and emotional and behavioral problems among victims of CSA. Methods: Participants were a nationally-representative sample of 6787 9th grade students ages 13-20 (15.5 ± 0.66) in Switzerland. Data were collected through self-reported computer-assisted questionnaires. Fifteen forms of sexual victimization were assessed using a newly-developed Child Sexual Abuse Questionnaire (CSAQ). Results: 24% of girls and 12% of boys reported a history of ‘non-contact CSA only’, with 15% and 5% of girls and boys reporting ‘CSA with physical contact’, respectively. Children who experienced ‘CSA with physical contact’ reported lower HQoL in terms of mental (mean=41.7[40.9-42.6]) and physical health (mean=52.3[51.6-53.0]) than children reporting ‘non-contact CSA only’ (means=44.9[44.3-45.5] and 53.8[53.3-54.2], respectively) or ‘no history of CSA’ (means=48.9[48.6-49.2] and 54.5[54.1-54.8], respectively). ‘CSA with physical contact’ was related to more behavioral and emotional problems (mean=13.2[12.8-13.7]) than ‘non-contact CSA only’ (mean=11.9[11.6-12.2]) or ‘no history of CSA’ (mean=9.7[9.4-9.9]). Similar patterns were identified for girls and boys. Children who had experienced CSA with physical contact had the worst overall health status. Conclusions: Intervention for CSA victims is necessary to reduce long-term consequences.
Brown Bag Lunch Movie

Saturday, November 9
12:00 p.m. to 01:15 p.m.
Franklin 5

When Helping Hurts: Reflections by Contributing Experts and ISTSS Founders
(Self-Care/Caregivers/M/Global)

Ochberg, Frank, MD1, Figley, Charles, PhD2, Panos, Angela, PhD3, Williams, Mary Beth, PhD4
1 Michigan State University, East Lansing, Michigan, USA
2 Tulane University, New Orleans, Louisiana, USA
3 University of Utah, Salt Lake City, Utah, USA
4 MAIS, Inc., Warrington, Virginia, USA

Seven senior members of ISTSS collaborated with Gift From Within (Joyce Boaz, director) to create the film, "When Helping Hurts," fifteen years ago: Charles Figley, John Wilson, Atle Dyregrov, Mary Beth Williams, Carl Bell, Angela Panos and Frank Ochberg. Now, in edited, updated format, this film is widely used to help first responders and therapists understand compassion fatigue, vicarious trauma and burnout—and to overcome debilitating effects. Excerpts of the 52 minute DVD will be shown. The ISTSS team will expand upon their filmed comments and reflect on lessons learned over the years that this powerful instructional video has been in circulation. Audience participation is encouraged. Experience using this film in training seminars for therapists, educators, employers and the general public will be shared.
Concurrent Session Eleven

Featured Roundtable

Saturday, November 9
1:30 p.m. to 2:45 p.m.
Grand Ballroom E

Leveraging Technology for Treatment of PTSD: Opportunities and Challenge
(Clin Res/Violence/M/Global)

Green, Bonnie, PhD\(^1\), Krupnick, Janice, PhD\(^2\), Litz, Brett, PhD\(^2\), Ruzek, Josef, PhD\(^3\), Dutton, Mary Ann, PhD\(^1\)

\(^1\)Georgetown University School of Medicine, Washington, District of Columbia, USA
\(^2\)VA Boston Health Care System/Boston University, Boston, Massachusetts, USA
\(^3\)National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA

PTSD is a common mental disorder with an increased risk of suicidal behaviors and impaired functioning. Despite its associated distress and disability, only 7% of affected individuals seek treatment within a year of onset, and median length of time individuals with PTSD typically delay treatment is 12 years. Even when treatment is sought, many individuals fail to follow through to completion. They may live far from treatment centers, be unable to take time off from work for appointments, or lack transportation. Others may be uncomfortable attending a mental health facility because of perceived stigma or fear that attendance will harm their careers. Still others may not identify the need for mental health treatment, or they may not believe that treatment will help. Telephone, email, and internet-based treatments hold promise for difficult-to-reach populations because of the barriers mentioned, and may have the capacity to reach more individuals needing help. Yet they may pose new challenges not present in face-to-face encounters. Our Roundtable will consist of brief presentations on issues that the presenters, all of whom have used these approaches, have encountered, such as safety, confidentiality, and relationship issues, identifying phases/types of intervention seen as most compatible with these methods. An audience/panel discussion of these and other issues will ensue.
The Detroit Neighborhood Health Study: Genes, Trauma, and Health
(Bio Med/Diverse Pop/M/Industrialized)

Chair: Mitchell, Karen, PhD
National Center for PTSD-Women’s Health Science Division, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

The Detroit Neighborhood Health Study (DNHS) includes a probability sample of 1547 adults in the Detroit area. The majority of participants are African American; 58.5% are female. To date, they have completed up to 3 waves of data collection. Each wave consisted of a 40-minute phone interview, for which participants received $25 compensation. The database includes a wealth of information regarding trauma exposure; lifetime and current post-traumatic stress disorder (PTSD), major depression, and generalized anxiety disorder diagnoses at each time point; neighborhood and demographic characteristics; and smoking, alcohol, and substance use. Additionally, genetic data were collected for a subset of participants. The current symposium will describe the DNHS and a selection of papers that have resulted from this unique cohort. Findings illustrate the longitudinal, bidirectional impact of trauma and post-traumatic stress symptoms; associations between trauma, PTSD, and health-related constructs such as smoking and obesity; and the role of genes in the etiology of PTSD as well as smoking behavior. In addition, two studies show significant interactions between genes and trauma exposure in predicting PTSD symptom severity and smoking, respectively. Results underscore the importance of investigating biopsychosocial predictors of PTSD in an inner-city, primarily African American cohort.

The SS Genotype Variant of 5HTTLPR Protects Against PTSD for Inner City African Americans: Results from Two Independent Samples
(Bio Med/Diverse Pop/Industrialized)

Walsh, Kate, PhD¹; Bradley, Bekh, PhD², Galea, Sandro, MD, DrPH³, Ressler, Kerry, MD, PhD⁴, Aiello, Allison, PhD⁵, Wildman, Derek, PhD⁶, Uddin, Monica, PhD⁷, Koenen, Karestan, PhD⁷

¹Columbia University, New York, New York, USA
²Atlanta VAMC/Emory University, Decatur, Georgia, USA
³Mailman School of Public Health, New York City, New York, USA
⁴Emory University School of Medicine, Atlanta, Georgia, USA
⁵University of Michigan, Ann Arbor, Michigan, USA
⁶Wayne State University, Detroit, Michigan, USA
⁷Columbia University School of Public Health, New York, New York, USA

The 5-HTTLPR polymorphism in the promoter region of the serotonin transporter gene (SLC6A4) has been shown to interact with stressful life events to increase general risk for post-traumatic stress disorder (PTSD). However,
little is known about the effects of this interaction on PTSD symptom clusters among African Americans exposed to early life adversity. The current study examined the interaction between exposure to childhood emotional abuse and 5-HTTLPR genotype on risk for PTSD total and cluster symptom severity in two independent African American samples from Detroit (n = 151) and Atlanta (n = 593). PTSD symptom severity was assessed with the PTSD Checklist-Civilian version and the Modified PTSD Scale. In both African American samples, a significant main effect of 5-HTTLPR genotype was observed such that the L allele was associated with increased risk for PTSD. The 5-HTTLPR genotype modified the effect of emotional abuse on PTSD symptom severity such that participants with the SS genotype who were exposed to emotional abuse had significantly lower reexperiencing and hyperarousal symptom severity scores relative to those with any L allele. The SS variant of the 5-HTTLPR genotype appears to buffer against the development of PTSD symptoms in two independent samples of African Americans exposed to childhood emotional abuse. Interpretations and implications will be discussed.

Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Grand Ballroom B

Bidirectional Relationships between Trauma Exposure and Post-Traumatic Stress: A Longitudinal Study of Adults Living in Detroit
(Prevent/Violence/Industrialized)

Lowe, Sarah, PhD1, Walsh, Kate , PhD2, Uddin, Monica, PhD3, Wildman, Derek, PhD3, Galea, Sandro, MD, DrPH4, Koenen, Karestan, PhD5
1 Columbia University, Mailman School of Public Health, New York, New York, USA
2 Columbia University, New York, New York, USA
3 Wayne State University, Detroit, Michigan, USA
4 Mailman School of Public Health, New York City, New York, USA
5 Columbia University School of Public Health, New York, New York, USA

Previous research has documented bidirectional relationships between trauma exposure and post-traumatic stress (PTS), such that individuals who are exposed to more traumatic events are at increased risk of PTS, and more severe PTS is associated with more subsequent trauma exposure. However, it is unclear whether the relationship between trauma exposure and PTS differs when the trauma is assaultive (e.g., sexual assault, being held up or mugged) vs. non-assaultive (e.g., serious illness, death of close friend or family member). The purpose of this study was to fill this gap through testing a three-wave cross-lagged panel model of trauma exposure and PTS among urban-dwelling adults (N = 981; 84.8% non-Hispanic Black). The cross-lagged model had adequate fit with the data. Examination of whether cross-lagged paths differed by the type of traumatic event indicated that, whereas lifetime assaultive trauma was more strongly associated with PTS, PTS was more strongly associated with further non-assaultive trauma. This suggests that assaultive trauma may be principally responsible for triggering a “vicious cycle” of PTS and subsequent non-assaultive trauma exposure. Based on these results, we suggest policies and practices that prevent trauma exposure in urban contexts and increase accessibility and affordability of empirically-supported treatments for PTS.
Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Grand Ballroom B

Interaction between Polygenic Risk for Cigarette Use and Environmental Exposures in the Detroit Neighborhood Health Study
(Bio Med/Diverse Pop//Industrialized)

Meyers, Jackie, PhD
Columbia University, New York, New York, USA

Until this year, all large-scale gene identification studies on smoking were conducted in populations of European ancestry, limiting what is known in other populations. Further, despite a rich epidemiologic literature focused on the social determinants of smoking, few studies have examined moderation of genetic influences on smoking in African-Americans (AA). In the Detroit Neighborhood Health Study, a sample of 1,306 randomly selected majority AA residents of Detroit, we constructed a genetic risk score (GRS) in which we combined top genetic variants from a recent study. We tested for association between the GRS with cigarettes per day and examined if two social contexts (traumatic events and neighborhood social cohesion) moderated the genetic associations. The GRS significantly predicted number of cigarettes smoked per day. Significant interactions were observed between the GRS and number of traumatic events experienced and average neighborhood social cohesion; the association between genetic risk and smoking was greater amongst individuals who had experienced an increased number of traumatic events in their lifetimes, and diminished for individuals who lived in a neighborhood characterized by greater social cohesion. This study indicates that environmental determinants have the potential to both exacerbate and diminish genetic influences on smoking behaviors.

Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Grand Ballroom B

PTSD and Obesity in the Detroit Neighborhood Health Study
(Bio Med/Diverse Pop//Industrialized)

Mitchell, Karen, PhD1, Aiello, Allison, PhD2, Galea, Sandro, MD, DrPH3, Uddin, Monica, PhD4, Wildman, Derek, PhD4, Koenen, Karestan, PhD5
1National Center for PTSD-Women's Health Science Division, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA
2University of Michigan, Ann Arbor, Michigan, USA
3Mailman School of Public Health, New York City, New York, USA
4Wayne State University, Detroit, Michigan, USA
5Columbia University School of Public Health, New York, New York, USA

African Americans (AA), particularly women, have among the highest rates of overweight and obesity in the U.S. compared to other racial groups. Socioeconomic disadvantage and high rates of trauma exposure and post-traumatic stress disorder (PTSD) in disadvantaged urban areas may partially account for high rates of obesity-related health conditions among AA groups. We investigated PTSD and overweight/obesity in a population-based,
AA sample. Participants (n=454) were administered diagnostic telephone interviews and asked their height and weight, which were used to calculate body mass index. The prevalence of obesity was significantly higher among women (37.15%) than men (13.31%; p<.001). Multivariable logistic regression models revealed significant associations between lifetime PTSD and obesity, but not overweight, in the AA subsample (OR=2.71, 95% CI: 1.15, 6.41) after controlling for demographic variables. In gender-stratified models, PTSD was associated with overweight (OR=5.73, 95% CI: 1.20, 27.43) as well as obesity (OR=6.67, 95% CI: 1.81, 24.52) only among women. We also tested whether sex moderated the impact of PTSD; the interaction was marginally significant for obesity only (β=1.47, p=.06). Results underscore the contribution of PTSD to obesity among AA women and the importance of addressing the unique health needs of AA women with PTSD.

Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Grand Ballroom C

After a Natural Disaster: Understanding and Treating Child and Youth Post-Traumatic Mental Health Problems
(Clin Res/Child/Adol/M/Industrialized)

Chair: McDermott, Brett, MD
Mater Misericordiae University Hospital, Brisbane, Queensland, Australia

The symposium will consist of 4 related papers. The first paper will outline a stepped care service provision approach to the management of child and youth post-traumatic mental health presentations following a natural disaster in Australia. The second paper will report on comorbidity patterns in 136 children aged 3-6 years following Hurricane Katrina, and compare this sample with two groups of children - those exposed to a single event trauma, and those exposed to repeated events traumas. The third paper will describe a recently developed parenting program (Disaster Recovery Triple P) for implementation following a natural disaster, and report on the pilot evaluation of this program. The final paper will describe and report on the evaluation (up to 12 months post-treatment) of a manualised, trauma-focused, 10-session CBT intervention with two samples of children and adolescents (n=55) impacted by separate natural disasters in Australia.

Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Grand Ballroom C

Comorbidity with PTSD in Preschool Children: Hurricane Katrina Disaster Compared to Single-Event and Repeated-Events Traumas
(Assess Dx/Child/Adol//Industrialized)

Scheeringa, Michael, MD MPH
Tulane University Health Sciences Center, New Orleans, Louisiana, USA

In Scheeringa et al., 2008 (Journal of Clinical Child and Adolescent Psychology 37, 508-518), several aspects of diagnoses that were comorbid with PTSD were reported in the first 70 3-6 year-old children who were recruited
following the Hurricane Katrina disaster. This presentation will present the data on the final sample of 136 children and compare them to two other groups who were collected in the same study and who experienced non-disaster single event or repeated events traumas. Seven comorbid disorders will be described in terms of whether they existed pre-trauma or developed post-trauma. Hurricane victims with PTSD showed diagnoses of depression 34% of the time compared to only 17% in single event and 25% in repeated events traumas. Whereas Hurricane victims with PTSD showed diagnoses of ODD only 46% of the time compared to 64% in the repeated events. The Hurricane group also had lower rates of comorbid ADHD. The 2008 study showed that no children developed a non-PTSD disorder in the absence of PTSD symptoms. This issue of how central PTSD is to the trauma response will be examined in all three groups. The presenter will discuss the implications of these findings for large-scale implementation of intervention strategies following disasters.

Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Grand Ballroom C

Beyond an Illness Model: Introducing Disaster Recovery Triple P, a Universal Parenting Intervention
(Prevent/Child/Adol//Industrialized)

Cobham, Vanessa, PhD1, McDermott, Brett, MD2, Sanders, Matthew, PhD1
1University of Queensland, Brisbane, Queensland, Australia
2Mater Misercordiae University Hospital, Brisbane, Queensland, Australia

Parenting practices contribute significantly to children’s likelihood of developing post-traumatic difficulties following a natural disaster. Following flood and cyclone disasters in the Australian summer of 2010/2011, a universal parenting intervention (Disaster Recovery Triple P; Cobham, McDermott, & Sanders, 2011) was developed. The intervention consists of a one-off, 2-hour seminar for parents living in disaster-impacted areas. Content included in the seminar includes: common emotional and behavioural presentations in children and adolescents following a natural disaster; the course of these presentations over time; why some children are affected and not others; parent traps that may maintain emotional and behavioural difficulties in children; answering children’s questions; and seeking further help. This intervention was implemented across the state of Queensland in 2011, with over 40 seminars held statewide. Participants were able to take part in an evaluation of the intervention. The intervention (and associated implementation challenges) will be described, and evaluation data presented.
Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Grand Ballroom C

A Stepped-care Post-disaster Child and Adolescent Service Response: Attempting to Address Response Reach and Variations in Acuity
(Commun/Child/Adol//Industrialized)

McDermott, Brett, MD1, Cobham, Vanessa, PhD2
1Mater Misericordiae University Hospital, Brisbane, Queensland, Australia
2University of Queensland, Brisbane, QLD, Australia

Introduction: Weather-related disasters impact large numbers of children and adolescents. Even if within the catchment of a dedicated service, difficulties are experienced meeting the new referral surge. Further, given variation in presentation acuity it is unlikely a one size fits all service will prove effective. The objective of the presentation is to describe a system of child and adolescent post-disaster care that has evolved in response to a series of Australian disasters, provide empirical data on service uptake of elements of the model and highlight differences with former service provision responses. Method: Drivers of the service model will be detailed including concerns about service reach, a historical focus on school-based screening and recent research emphasising alterations in post-disaster parenting. Results: Our stepped-care response to a recent flood disaster will be presented including: Level (I) communication strategy, Level (II) uptake of teacher training module and parenting program and Level (III) results of school-based screening, numbers of students identified with moderate and severe psychopathology and subsequent uptake of Trauma-focused CBT. Conclusion: Whether this model met the aim of greater reach and differential response based on acuity will be discussed, as well as the challenging task of evaluating a model of care rather than a discrete intervention.
Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Grand Ballroom C

Treating Post-Traumatic Mental Health Problems in Youth Following a Natural Disaster: "My Story of the Flood"
(Clin Res/Child/Adol/Industrialized)

Cobham, Vanessa, PhD¹, McDermott, Brett, MD²
¹University of Queensland, Brisbane, Queensland, Australia
²Mater Misercordiae University Hospital, Brisbane, Queensland, Australia

Following devastating floods in different parts of Queensland, Australia in January 2011 and 2012, targeted screening was conducted in severely impacted areas to identify children and adolescents with new or significantly exacerbated mental health problems. This presentation will describe a trauma-focused, manualised CBT intervention consisting of 2 parent sessions and up to 8 child/adolescent sessions. The intervention was delivered on an individual basis within schools and has been completed by 55 youth to date. The effectiveness of the intervention is being evaluated using the same measures employed during the screening process: self-report questionnaires (the PTSD-R1, the Children’s Depression Inventory, and the Spence Children’s Anxiety Scale), and a structured diagnostic interview (the Anxiety Disorders Interview Schedule for Children - child and parent versions). Outcome measures are being completed post-treatment, at 6-month follow-up and 12-month follow-up. These data will be reported.

Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Grand Ballroom D

(Bio Med/Mil/Vets/A/Industrialized)

Chair: Engdahl, Brian, PhD
Department of Veterans Affairs Medical Center, Minneapolis, Minnesota, USA

Neuroimaging is increasingly versatile, as illustrated by our findings drawn from adult subjects exposed to a wide range of trauma, using multiple imaging technologies and experimental designs. We describe how neuroimaging can: 1) show how the protein Apolipoprotein E (APOE) exerts a genetic influence on the brain’s neural communications (as measured by magnetoencephalography (MEG)), and therefore influences PTSD symptoms, 2) identify a new target for PTSD treatment development: the Kappa Opioid Receptor (KOR) system (as detected using positron emission tomography (PET)), 3) document that Mindfulness Based Stress Reduction and paroxetine treatment result in increased hippocampal volume, increased N-acetyl aspartate, and increased frontal cortical function (as detected via PET and Magnetic Resonance Imaging), and 4) demonstrate that Post-traumatic Growth is related to the brain’s ability to effectively adapt following exposure to potentially traumatic events (using...
Collectively, these studies highlight the utility of applied neuroimaging to the study of PTSD and to the understanding of mechanisms associated with causation, treatment, recovery, and resilience.

**Symposium**  
**Saturday, November 9**  
**1:30 p.m. to 2:45 p.m.**  
**Grand Ballroom D**

**Kappa Opioid Receptor Imaging in PTSD**  
*(Bio Med/Adult/Cmplx//Industrialized)*

**Neumeister, Alexander, MD**  
*New York University School of Medicine, New York, New York, USA*

The dynorphin/kappa opioid receptor (KOR) system is a critical mediator of a stress-induced psychopathology, and emerges as a potential target for treatment development. Recently, we developed a KOR-selective radioligand \[11C\]LY2795050 that provides a unique opportunity to study in vivo the role of the KOR in relation to aspects of depressive-anxious symptoms using positron emission tomography (PET). Drug-naïve individuals with PTSD, trauma-exposed, but asymptomatic healthy control subjects (TC) and non-trauma exposed healthy control subjects (HC) were invited to participate in one magnetic resonance imaging (MRI) and one PET study. Regions of interest defined on Automated Anatomical Labeling (AAL) template for SPM2 were applied to calculate regional distribution volume values. Volume of distribution (VT) values, which are directly proportional to KOR availability were reduced in PTSD subjects relative to TC and HC subjects. Cortisol levels partially mediating the relation between KOR availability and depressive symptomatology. These data suggest involvement of KOR in the etiology of PTSD and suggest the KOR as a potential target for treatment development for PTSD.

**Symposium**  
**Saturday, November 9**  
**1:30 p.m. to 2:45 p.m.**  
**Grand Ballroom D**

**Evaluating the Role of Apolipoprotein E in PTSD Symptom Severity and Neural Communication**  
*(Bio Med/Mil/Vets//Industrialized)*

**Peterson, Carly, PhD\(^1\), James, Lisa, PhD\(^2\), Engdahl, Brian, PhD\(^2\), Miller, Ryan, PsyD\(^1\), Leuthold, Art, PhD\(^1\), Lewis, Scott, MD, PhD\(^3\), Georgopoulo\(s\), Apostolos, MD, PhD\(^1\)**  
\(^1\)Brain Sciences Center, Minneapolis VAMC, Minneapolis, Minnesota, USA  
\(^2\)Department of Veterans Affairs Medical Center, Minneapolis, Minnesota, USA

Apolipoprotien E (apoE), a protein associated with lipid metabolism in the brain, is involved in critical neural functions and has been associated with various neuropsychiatric disorders, including Alzheimer’s dementia. Each apoE isoform (E2, E3, E4) has a different number of cysteine residues per mole (2, 1, and 0, respectively). This study evaluated associations among the number of apoE cysteine residues, PTSD symptom severity, and neural communication assessed by magnetoencephalography (MEG) in 49 male veterans with PTSD. Results demonstrated a significant inverse relationship between the number of cysteine residues and severity of PTSD re-experiencing symptoms (p = .018). The number of cysteine residues was not associated with avoidance/numbing...
or hyperarousal symptoms or with resilience total score. However, cysteine residues, re-experiencing symptoms, and neural communication were marginally associated: as the number of cysteine residues increased, synchronous neural interactions (the correlation in neural signals between MEG sensor pairs) increased per re-experiencing symptom (p = .08). The findings suggest a genetic influence on the brain’s ability to effectively communicate and how these neural interactions relate to PTSD symptomatology. Future research will further explore the roles of apoE and neural communication in health and resilience.

Neural Communication in Post-Traumatic Growth: Differences between Veterans with PTSD and Resilient Controls

(Applied Neurosciences)

Anders, Samantha, PhD1, Peterson, Carly, PhD1, James, Lisa, PhD1, Engdahl, Brian, PhD2, Leuthold, Art, PhD1, Lewis, Scott, MD, PhD3, Georgopoulos, Apostolos, MD, PhD1

1Brain Sciences Center, Minneapolis VAMC, Minneapolis, Minnesota, USA
2Department of Veterans Affairs Medical Center, Minneapolis, Minnesota, USA

Although post-traumatic growth (PTG) has recently received much research attention, only one study has examined neural correlates of PTG (Rabe, Zöllner, Maercker & Karl, 2006). Recent advances in neuroscience methods allow the exploration of non-self-report outcomes, and record fast, in the moment psychological processes that would otherwise be impossible to assess (Harmon-Jones & van Honk, 2012). The aim of the current study is to examine neural correlates of PTG using task-free magnetoencephalography. In a sample of veterans, we found significant differences in PTG-to-trauma ratios between resilient, trauma-exposed controls (N = 256) and veterans with PTSD (N = 124), indicating that those in the control group report more PTG per lifetime trauma experienced than those with PTSD (Kolmogorov-Smirnov Z = 3.55, p < .001). Furthermore, we found significant group differences in the ratio of global synchronous neural interactions per PTG per trauma, such that, as the PTG-per-trauma ratio increased, the resilient controls demonstrated more neural decorrelation compared to those with PTSD (Kolmogorov-Smirnov Z = 3.56, p < .001). This is in line with our previous findings (James et al., 2013) and may indicate that growth following trauma is enabled by this decorrelated neural network.
**Symposium**  
_Saturday, November 9_  
_1:30 p.m. to 2:45 p.m._  
_Grand Ballroom D_  

**Effects of MBSR and Paroxetine Treatment on Brain Structure and Function in PTSD**  
(Bio Med/Adult/Cmplx/Industrialized)  

_Bremner, J., MD¹, Fani, Negar, PhD², Carmody, James, PhD³_  
¹Emory University/Atlanta VAMC, Atlanta, Georgia, USA  
²Emory University School of Medicine, Atlanta, Georgia, USA  
³University of Massachusetts Boston, Worcester, Massachusetts, USA  

A network of brain regions that mediate memory and fear have been implicated in the pathophysiology of PTSD, including the hippocampus, amygdala and medial prefrontal cortex. Brain imaging studies in PTSD have found a smaller volume of the hippocampus and lower concentrations of N-acetyl aspartate (NAA) as measured with magnetic resonance imaging (MRI) in patients with PTSD related to both combat and childhood abuse. Functional imaging studies using positron emission tomography (PET) found deficits in function in medial prefrontal cortex and hippocampus, and increased amygdala function, with provocation of PTSD symptoms. We found that female patients with early childhood sexual abuse-related PTSD treated with paroxetine had an increase in hippocampal volume and NAA, and increased orbitofrontal function in response to traumatic reminders. Treatment of Iraq vets with PTSD with Mindfulness Based Stress Reduction (MBSR) resulted in increased medial prefrontal function in response to combat-related slides and sounds. These studies show that treatment of PTSD is associated with changes in brain circuits that have been implicated in the symptoms of the disorder.

**Symposium**  
_Saturday, November 9_  
_1:30 p.m. to 2:45 p.m._  
_Grand Ballroom F_  

**CPT Vs. PCT: Final Results of an RCT with an Active Military Sample**  
(Clin Res/Mil/Vets/I/Industrialized)  

_Chair: Resick, Patricia, PhD, ABPP_  
National Center for PTSD / Boston University, Boston, Massachusetts, USA  

This symposium will present final results from an RCT comparing CPT with present-centered therapy (PCT) conducted at Fort Hood Texas for previously deployed soldiers with PTSD. PCT has been used as a control in large VA studies and found to be effective in reducing PTSD. Six cohorts of 16-20 soldiers with PTSD were randomized into CPT or PCT. They were given 12 sessions twice a week for 6 weeks and assessed pretreatment, 2 weeks posttreatment, 6 months, and 1 year following therapy. The study is comprised of 107 participants. Dr. Resick will present main results of the study regarding PTSD and depression. Dr. Wachen will present a study in which types of index events were coded to determine if they affect initial severity of PTSD or treatment outcome. Dr. Borah will examine the role of unit cohesion and coping skills at baseline in affecting treatment outcome. Dr. Resick will finish with an examination of whether changes in cognitions precede, follow, or are simultaneous with changes in PTSD. Because CPT-C is a cognitive therapy without an exposure component, there is no opportunity for habituation of emotions. The mechanism of change should be extinction through change in thinking.
Categorization of Index Event: Effects on PTSD Symptom Clusters and Treatment Outcome

(Wachen, Jennifer, PhD1, Holder, Nicholas, BSc2, Dondanville, Katherine, PsyD3, Resick, Patricia, PhD, ABPP4, Litz, Brett, PhD5, Mintz, Jim, PhD6, Kitsmiller, Emily, BA3, Borah, Adam, MD5, Peterson, Alan, PhD3)

1National Center for PTSD / Boston University, Boston, Massachusetts, USA
2University of Texas Health Science Center at San Antonio, Fort Hood, Texas, USA
3University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA
4VA Boston Health Care System/Boston University, Boston, Massachusetts, USA
5Darnell Army Medical Center, Ft. Hood, Texas, USA

This study seeks to examine how differences in index (most significant) traumatic events may reflect differences in the manifestation of post-traumatic stress disorder (PTSD) symptoms and treatment outcomes in 107 active duty military from a randomized clinical trial examining group Cognitive Processing Therapy-Cognitive-only (CPT-C) and Present Centered Therapy (PCT). Index traumas as identified by the Post-traumatic Symptom Scale-Interview (PSS-I) at baseline were coded and assigned to one of four categories: Life Threat to Self, Life Threat to Others, Traumatic Loss, and Moral Injury by Self or Others. PTSD symptoms, guilt cognitions, and trauma beliefs were assessed at baseline and 2 weeks following treatment. Contrary to hypotheses, there were no significant differences in symptom clusters based on type of index trauma. However, there were significant differences in treatment outcome such that service members who experienced traumatic loss showed greater improvement in PTSD symptoms following treatment than those who did not (p=.004, d=.59), while individuals who experienced moral injury had significantly higher PTSD scores following treatment than those who did not experience moral injury (p=.026, d=.46). Potential differences between CPT-C and PCT, as well as the mediating role of guilt and trauma-related thoughts and beliefs on treatment outcomes will also be explored.
The Role of Trait Resilience and Unit Cohesion in PTSD Treatment Outcomes among Active Duty Soldiers

(Borah, Elisa, PhD, Baima, Greg, PhD, Wachen, Jennifer, PhD, Borah, Adam, MD, Resick, Patricia, PhD, ABPP, Mintz, Jim, PhD, Litz, Brett, PhD, Peterson, Alan, PhD)

1University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA
2National Center for PTSD / Boston University, Boston, Massachusetts, USA
3Darnell Army Medical Center, Ft. Hood, Texas, USA
4National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA
5VA Boston Health Care System/Boston University, Boston, Massachusetts, USA

This study examined the roles that internal trait resilience and external perceived unit cohesion play in PTSD treatment gains among active duty soldiers. These data come from the first randomized clinical trial comparing cognitive processing therapy (CPT) to present-centered therapy for combat-related post-traumatic stress disorder in 93 active duty service members. Unit Cohesion was measured by the Walter Reed Army Institute of Research Military Vertical & Horizontal Cohesion Scales. Trait resilience was measured by the Responses to Stressful Events Scale (RSES). Logistic regression revealed that service members with the highest levels of vertical cohesion, or positive impressions and relationships with the commanders of their units, did better in PTSD treatment than those who had low and medium levels of vertical cohesion. Improvement in treatment was based on decreases in Post-traumatic stress Checklist (PCL) scores measured at the 12 month treatment follow up. The highest treatment gains were found by those who displayed high levels of vertical cohesion (r = -0.23, p=.03), indicating a small correlation between improvements in PCL scores and vertical cohesion. Data analysis indicated that changes in PCL scores were not influenced by trait resilience.
in several trials. Participants show improvement with PCT, which focuses on managing current PTSD in their work and home environments through problem solving. Participants were 107 active duty service members randomized to receive either CPT-C or PCT in groups of 6-10 people. Treatment was conducted twice weekly for 6 weeks with 90-minute sessions. Participants were assessed pretreatment, weekly during treatment, and 2 weeks, 6 months and 1 year posttreatment. Mixed effects regressions examined primary outcomes of PTSD and depression. Intent to Treat (ITT) results indicated PTSD symptoms improved for both CPT-C and PCT groups over time with large effect sizes (d=1.50 and 1.01 respectively), although CPT-C showed significantly more improvement (difference between slopes of treatment change, p=.04, d=0.40). For depression, only the CPT-C group improved significantly (d=0.86 for CPT-C, d=0.21 for PCT), with difference between slopes of treatment change for the two groups (p=.02, d=0.47). Examination of cohort effects indicated consistent improvement over time for the CPT-C groups, while PCT groups showed more variable change.

Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Grand Ballroom F

The Chicken and the Egg: Do Cognitions Precede or Follow Change in PTSD?
(Clin Res/Mil/Vets/Industrialized)

Resick, Patricia, PhD, ABPP1, Suvak, Michael, PhD2, Mintz, Jim, PhD3, Wachen, Jennifer, PhD1, Borah, Adam, MD4, Peterson, Alan, PhD3
1National Center for PTSD / Boston University, Boston, Massachusetts, USA
2Suffolk University, Boston, Massachusetts, USA
3University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA
4Darnell Army Medical Center, Ft. Hood, Texas, USA

While PTSD was considered to be an anxiety disorder, the assumption was made that the mechanism of change was through habituation and extinction following repeated exposures of traumatic details and/or in vivo exposure assignments. Under the DSM-5, other emotions and cognitions are part of the diagnosis and PTSD is in a separate category of trauma-related disorders. Other cognitive theories have been proposed that don’t require exposure and habituation (Resick et al. 2008; Gallagher & Resick, 2013) but direct change in thinking. Unless cognitions are measured during treatment it is not possible to determine if cognitions mediate improvement in PTSD. This presentation will determine if change in cognitions precedes change in PTSD scores (or clusters), if change in PTSD precedes cognitive change or whether they occur simultaneously. Data to be examined are the PTSD Checklist (PCL) and Cognitive Emotions Regulation Questionnaire (CERQ) which were administered weekly prior to group CPT-C sessions with active military members. The CERQ is an 18-item short form of a scale that measures self-blame, other-blame, rumination, catastrophizing, positive refocusing, planning, positive reappraisal, putting into perspective and acceptance. The data will be analyzed by bivariate dynamic latent change score modeling which will delineate the direction of influence.
Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Franklin 5

Trauma and Juvenile Delinquency: Investigations of Processes Underlying Risk, Resilience, and Recovery
(Clin Res/Child/Adol/M/Industrialized)

Chair: Kerig, Patricia, PhD
University of Utah, Salt Lake City, Utah, USA

Trauma is highly prevalent amongst youth involved in the justice system yet more needs to be known about the processes that account for risk or resilience amongst these youth. To that end, this symposium brings together investigators from four laboratories spanning diverse regions of the US. On the side of risk, the first study focuses on the role of trauma exposure and PTSD in the development of problem sexual behavior among justice-involved youth and illustrates the importance of trauma-informed intervention to move these youth toward recovery. The second study demonstrates that PTSD differentiates between justice-involved youth characterized by primary vs. secondary callousness and that these two subtypes show distinct patterns of emotion regulation. On the side of resilience, the third study investigates factors that are predictive of psychosocial adjustment among youth recently released from incarceration and how these are related to prior maltreatment as well as institutional trauma. Finally, the fourth study utilizes a longitudinal sample to assess the combined impact of childhood maltreatment and juvenile arrest on the attainment of normative tasks of emerging adulthood, including high school graduation, employment, and marriage. Taken together, these studies promise to shed light on the factors promoting resilience among traumatized youth in the justice system.

Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Franklin 5

Trauma Exposures and Aggression in Adolescents with Problem Sexual Behavior: A Call for Trauma-Informed Care
(Commun/Child/Adol//Industrialized)

Cruise, Keith, PhD¹, Cruz-Katz, Spencer, MA, PhD Student²
¹Fordham University, New York, New York, USA
²Fordham University, Bronx, New York, USA

Justice-involved youth report high rates (90%) of lifetime exposure to potential traumatic events (PTEs) (Abram et al., 2004) and PTSD (11 to 50%) relative to community samples (Ford et al. 2012). Juvenile offenders who engage in problem sexual behavior (PSB) also demonstrate high rates of PTE exposure (Seto & Lalumiere, 2010) indicating that trauma exposure and current PTSD symptoms represent potential treatment targets for this population. This paper highlights the results of a program evaluation conducted with a community-based treatment program for juveniles with PSB. The authors assisted the agency in gathering self-report assessment data from current program clients and parents obtaining data from 26 of 36 clients. High rates of lifetime PTEs (mean of five) with 52.2% of
youth endorsing a Criterion A traumatic event were found. PTSD symptom severity scores were correlated with proactive aggression (r = .54, p < .05) and reactive aggression (r = .50, p = .05) suggesting that trauma-informed intervention (see Cook et al., 2005; Ford et al., 2012) be infused into the standard treatment as well as systematic use of trauma screens at intake assessment. Affect dysregulation appears to be a key component of the current symptom presentations suggesting the need to increase skills to promote symptom relief and recidivism risk reduction.

Symposium  
Saturday, November 9  
1:30 p.m. to 2:45 p.m.  
Franklin 5

**Primary versus Secondary Callousness among Juvenile Justice-involved Youth:**  
**Investigating Difficulties in Emotion Regulation**  
(Clin Res/Child/Adol/Industrialized)

**Bennett, Diana, MS (PhD Student), Kerig, Patricia, PhD**  
*University of Utah, Salt Lake City, Utah, USA*

This study compared difficulties in emotion regulation among 417 detained adolescents (306 boys, 111 girls). Mixture modeling in Mplus identified two groups of youth high in callous-unemotional (CU) traits consistent with primary and secondary CU. Youth were grouped on the basis of PTSD symptoms which represents a novel method that is consistent with the theory underlying secondary callousness. Compared to youth classified in the primary group, youth classified as secondary CU reported higher levels of PTSD symptoms, anxiety, and trauma exposure. Using a broad conceptualization of emotion dysregulation, results suggested that youth classified as secondary CU reported greater lack of clarity of their emotional states and greater nonacceptance of emotions. This group of youth evidenced higher levels of distress (PTSD, anxiety, and emotion dysregulation) compared to low-CU youth in the sample as well. The particular difficulties in emotion regulation reported by youth in the secondary group compared to the other groups may be related to processes involving emotional numbing in the aftermath of post-traumatic distress. The results of the current study have implications for understanding the development of delinquency among trauma-exposed adolescents and also suggest that emotion regulation may be an important factor helping youth to cope with trauma and achieve resilient outcomes.
Symposium  
Saturday, November 9  
1:30 p.m. to 2:45 p.m.  
Franklin 5  

Snare or Turning Point? An Exploration of Change and Continuity in Psychosocial Adjustment among Justice-involved Youth  
(Social/Child/Adol//Industrialized)  

Dierkhising, Carly, PhD Candidate¹, Natsuaki, Misaki, PhD²  
¹National Center for Child Traumatic Stress at UCLA, Los Angeles, California, USA  
²University of California, Riverside, Riverside, California, USA  

Turning points are life events that bring significant change in one’s developmental trajectory. Juvenile incarceration is a potential turning point that can divert antisocial trajectories (Sampson & Laub, 2003). However, many youth do not exhibit psychosocial adjustment following incarceration. This variability may be explained by circumstances of the incarceration experience, particularly the experience of trauma during incarceration. The current study utilizes a sample of recently incarcerated youth (N=64; 75% male) recruited from a re-entry program to explore whether perceived change as a result of incarceration promotes post-release psychosocial adjustment (reduced PTSD, depression, and criminality, and increased social support and self-esteem) and if psychosocial adjustment depends on trauma exposure during incarceration? Controlling for child maltreatment, individuals had increased social supports (β=.333, p<.01) and self-esteem (β=.337, p<.01) the more they perceived incarceration as life changing. Of note, the effect of perceived change was moderated by incarceration trauma in predicting PTSD (β=.239, p<.05), depression (β=.278, p<.05), and criminality (β=.303, p<.05). Findings indicated that individuals who experience cumulative incarceration trauma were less likely to develop maladjustment if they perceived incarceration as a life changing event.

Developmental Role Attainment among Individuals with Histories of Child Abuse and Neglect and Juvenile Justice Involvement  
(Social/Adult/Cmplx//Industrialized)  

Allwood, Maureen, PhD, Widom, Cathy, PhD  
John Jay College, CUNY, New York, New York, USA  

This study examines three areas of developmental role attainment (high school graduation, employment, and marriage) in relation to prior juvenile justice involvement among individuals with histories of child abuse and neglect and matched controls. Developmental roles have been shown to partially mediate the relationship between childhood abuse and neglect and adult arrest, however, the mediation effect for individuals with juvenile justice involvement is unclear. The sample is drawn from a prospective study of children with documented cases of physical and sexual abuse and neglect (before age 11) and a matched comparison group of non-abused or neglected children (Widom, 1989). Developmental role attainment is assessed during an interview at approximate age 29, and juvenile and adult arrest records were collected from law enforcement agencies. Results show that
childhood abuse and neglect predicted decreased likelihood of attaining each of the three developmental roles (graduation, current employment, and current marriage) and greater likelihood of juvenile and adult arrest. Further data analyses will assess the role of juvenile justice arrest in the attainment of the developmental roles for both the maltreated and control groups. The importance of these developmental milestones and the long-term implications for thriving versus surviving will be discussed.

Sympoisum
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Franklin 6

Correlates and Predictors of "Good Grief" in Bereaved Children and Adolescents: Implications for Intervention
(Prevent/Child/Adol/M/Industrialized)

Chair: Kaplow, Julie, PhD, ABPP¹, Discussant: Layne, Christopher, PhD²
¹University of Michigan Medical School, Ann Arbor, Michigan, USA
²UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA

Only a minority of bereaved youth tends to exhibit “clinically significant” psychiatric problems following loss. However, most studies focus primarily on risk associated with “maladaptive” grief reactions and largely ignore factors that characterize or promote resilience. Using diverse samples, including parentally bereaved school-aged children and war-exposed adolescents, this symposium describes three studies that focus on correlates, predictors, and manifestations of “good grief”. Study 1 examines correlates of adaptive functioning in parentally bereaved youth, including children’s coping efficacy, emotional expression, spirituality, and parent-child communication. Study 2 examines the hypothesized role of social support as a mediator of grief, including links between war-related losses, total number of supports, perceived social support, and post-war distress in war-exposed adolescents. Study 3 uses Linguistic Inquiry and Word Count (LIWC) analysis to examine correlates of risk and resilience in parentally bereaved children, with a focus on words children use to describe their thoughts and feelings about the death. We conclude by discussing clinical implications of our findings, including ways in which our team is seeking to assess these factors and therapeutically harness them to promote “good grief”, using a treatment specifically designed for grieving youth.
Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Franklin 6

Individual and Psychosocial Mechanisms of Adaptive Functioning in Parentally Bereaved Youth
(Clin Res/Child/Adol//Industrialized)

Howell, Kathryn, PhD LP1, Shapiro, Danielle, PhD2, Kaplow, Julie, PhD, ABPP3
1University of Memphis, Memphis, Tennessee, USA
2University of Michigan Medical School, Ann Arbor, Michigan, USA

The death of a parent is one of the most devastating events that can happen to a family. Despite the distress that parentally bereaved children experience, only a minority express clinically significant psychiatric problems. Little is known about the individual and psychosocial mechanisms that may help to buffer children from negative grief-related mental health outcomes. This study examines factors that may contribute to adaptive functioning in a sample of 53 recently parentally bereaved children, ages 7-12. Adaptive functioning is defined as falling below clinical cutoff levels on all measures of depression, post-traumatic stress, anxiety, and internalizing/externalizing symptoms. Fifty seven percent of children were in the adaptive functioning group. Using linear mixed modeling, children in the adaptive functioning group had lower mean scores on avoidant coping and higher mean scores on coping efficacy and spirituality. Children in the adaptive functioning group also had higher mean scores on parental positive reinforcement and parent-child communication. Findings suggest that adaptive functioning following parental loss is related to factors intrinsic to the child, such as coping strategies and spiritual beliefs, as well as extrinsic factors such as parents’ responsiveness to the child and family communication. Implications for targeted intervention efforts are discussed.

Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Franklin 6

Linguistic Correlates of Risk and Resilience in Parentally Bereaved Children
(Clin Res/Child/Adol//N/A)

Wardecker, Britney, BA/BS1, Kaplow, Julie, PhD, ABPP3, Edelstein, Robin, PhD1, Kross, Ethan, PhD1
1University of Michigan, Ann Arbor, Michigan, USA
2University of Michigan Medical School, Ann Arbor, Michigan, USA

The way people describe traumatic experiences has been linked to psychological health. For example, referencing others is associated with fewer psychiatric symptoms whereas focusing on oneself is associated with greater psychiatric symptoms. Because most work in this area has focused on adults, it is unclear whether language may play a similar role in predicting children’s mental health following a traumatic event such as the death of a parent. The current study examined the words children use to discuss the recent death (M = 90.7 days) of their parent and the ways in which language may be a marker for adaptive functioning. Thirty-seven bereaved children ages 7-12 (M = 9.13) answered questions focusing on thoughts and feelings related to the loss of the parent. The Linguistic Inquiry and Word Count (LIWC) was used to measure children’s use of word categories. Consistent with adult
studies, results showed that greater use of the word “we” was associated with fewer symptoms of maladaptive grief and post-traumatic stress; greater use of the word “I” or greater use of the present tense was associated with more symptoms of post-traumatic stress, depression, and anxiety. Discussion will include implications for reducing maladaptive grief and promoting adaptive grief in bereaved youth.

Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Franklin 6

Social Support as a Moderator or Mediator of War-Related Losses in Adolescents
(Commun/Child/Adol//C & E Europe & Indep)

Hall, Brian, PhD1, Layne, Christopher, PhD2, Kaplow, Julie, PhD, ABPP3, Elhai, Jon, PhD4, Shapiro, Danielle, PhD3

1Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA
2UCLA - National Center for Child Traumatic Stress, Los Angeles, California, USA
3University of Michigan Medical School, Ann Arbor, Michigan, USA
4University of Toledo, Toledo, Ohio, USA

Social support consistently emerges as a protective factor (or vulnerability factor, if in deficit) in the trauma literature. Most studies of social support following trauma use adult samples and examine social support as a moderator (protective factor). These associations may also emerge in war-exposed youth who suffer major disruptions to their social networks. This 3-wave prospective study of post-war adjustment in Bosnian adolescents (N = 223, 75% female; mean age = 16 years) examined perceived social support as a potential moderator and mediator of links between war-related losses (violent deaths, natural deaths, disappearances, separations) and post-war distress (depression, PTSD, grief). Contrary to hypothesis, no moderating effect was found, indicating that a “main effects” model could test the predictive effects of each network sector. As hypothesized, support from nuclear family, extended family, and peers (but not adult friends) inversely predicted post-traumatic stress, depression, and maladaptive grief reactions. Evidence of mediation was found linking war-related losses and post-war adversities as inverse predictors of support, which in turn inversely predicted subsequent distress. We discuss various implications of approaching social support not simply as a protective moderator, but as a mediator of links between war-related losses and subsequent adjustment.
Lessons Learned from Disseminating Evidence-based Trauma Treatments: Results of Four Projects
(Train/Ed/Dis/Child/Adol/M/Global)

Chair: Saunders, Benjamin, PhD
Discussant: Goldbeck, Lutz, PhD

1 Medical University of South Carolina, Charleston, South Carolina, USA
2 University Ulm, Ulm, Baden-Wuerttemberg, Germany

This symposium will describe the lessons learned from four projects in the U.S. and Norway. Dr. David Kolko will describe a series of studies and projects concerning implementation of AF-CBT with a focus on statewide training and national learning collaboratives. He will describe challenges for the training program, fidelity, family engagement, and sustainability. Outcome data and lessons learned will be reviewed. Lucy Berliner, MSW will describe the Harborview Evidence-Based Practice initiative in the state of Washington that is implementing a guided approach to evidence-based practice in public mental health service agencies. She will focus on the unique challenges of public mental health and specific methods that can be used to sustain the use of evidence-based thinking and practice in these settings. Dr. Tine Jensen will describe the national effort in Norway to disseminate TF-CBT after the mass shootings in 2011 as well as her recent RCT testing TF-CBT in community service agencies. Dr. Ben Saunders will present lessons learned after 6 years of a statewide dissemination project and will focus on community and leadership factors. Lutz Goldbeck, Ph.D. will serve as Discussant.

Implementing an Evidence Based Method for Treating Traumatized Youth (TF-CBT) in Regular Clinics - Experiences from Norway
(Train/Ed/Dis/Child/Adol//Industrialized)

Jensen, Tine, PsyD
University of Oslo, Norway

After the July 22 terror attack in Norway, a plan for implementing TF-CBT was initiated. Implementing interventions poses challenges at a professional and organizational level. Often mentioned obstacles are related to transferring models from a controlled environment into ordinary clinics. Children referred to regular clinical care settings may differ from children who receive treatment in specialized and/or university clinics in several ways. Moreover, many traumatized children and families referred for treatment in community settings are not seeking treatment for trauma-specific symptoms. Implementation may therefore include introducing new assessment procedures. The working conditions of therapists may also differ. In regular clinics, therapists have to treat a broad variety of disorders and few are specially trained in trauma treatment methods. This may influence how therapists learn and deliver an intervention. And lastly, therapist turnover requires systems of implementation that ensures
sustainability. In this presentation experiences from an implementation model will be presented based on the following 5 core components: Pre-service training, ongoing consultation, staff performance evaluation, decision support data systems, and administration support. Challenges and solutions will be analysed in light of data from an effectiveness study conducted in Norway.

**Symposium**
**Saturday, November 9**
**1:30 p.m. to 2:45 p.m.**
**Franklin 9/10**

**Lessons Learned from a National Learning Collaborative on Alternatives for Families: A Cognitive-Behavioral Therapy**
(Train/Ed/Dis/Child/Adol//Industrialized)

Kolko, David, PhD, ABPP  
*University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, USA*

This presentation describes the use of the learning collaborative (LC) methodology used by the NCTSN to disseminate EBTs for the treatment of child trauma and abuse. A recent application of the LC approach to disseminate an EBT targeting child physical abuse and family conflict (AF-CBT) will be described. Twelve U.S. agencies initially participated in the year-long LC (63 total participants), each represented by a senior leader, supervisor, and clinicians. The LC included 3, two-day learning sessions that combined the delivery of clinical content and focused training or implementation processes, monthly agency case consultation calls, supervisor, and senior leader calls, monthly metrics reviews, and ongoing faculty and LC staff feedback calls. A summary of key achievements (e.g., proportion of clinicians conducting assessments and delivering AF-CBT) and obstacles (e.g., limited case flow and technical skills) will be provided in three domains: agency preparation, training program administration, and consultation/supervision processes. Examples of key structural and clinical issues raised by participants and key issues identified by faculty that affected adoption will be outlined along with suggestions to enhance the effectiveness of this novel approach to the spread of EBTs in diverse community settings.

**Symposium**
**Saturday, November 9**
**1:30 p.m. to 2:45 p.m.**
**Franklin 9/10**

**Sustainment of EBP in Low Resource Public Mental Health**
(Clin Res/Child/Adol//Industrialized)

Berliner, Lucy, MSW  
*University of Washington/Harborview Medical Center, Seattle, Washington, USA*

Implementation science has taught lessons for implementation and sustainment of EBP. However, many methods for high quality implementation and sustainment activities require external funding or significant infusion of additional resources. Many “brand name” EBTs require adopting organizations to purchase their support and monitoring programs. However, most brand name EBTs target a single outcome which can create organizational complications and costs for managing all of the sustainment activities across treatments. This presentation will describe a variety of practical organizational strategies that promote sustainment including approaches to
incorporating routine standardized assessment to identify a clinical target and promote treatment engagement, establishing ongoing evidence-based internal supervision and access to internal training for new staff. Fidelity to the EBP model has been identified as critical for achieving outcomes, yet monitoring fidelity is a high cost activity. The presentation will outline a number of quality assurance approaches that can be undertaken within existing resources and that can applied across EBTs.

Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Franklin 9/10

6 Years of EBT Implementation: Lessons Learned from Project BEST
(Train/Ed/Dis/Child/Adol//Industrialized)

Saunders, Benjamin, PhD
Medical University of South Carolina, Charleston, South Carolina, USA

Project BEST is a statewide effort to implement TF-CBT using a community-based learning collaborative approach. Now in its 6th year, over 500 broker and clinical professionals have been trained and currently are using TF-CBT in 39 of the 46 counties. Pre-post treatment effect sizes for PTSD symptoms averaged d=1.16, larger than pre-post effects found in recent clinical trials of TF-CBT. Overall outcome matrices (73.1% improved by >1/2 SD) and diagnostic results (36% to 11% meeting PTSD criteria) also showed significant improvements. However, implementation efforts have encountered frequent obstacles at the community, organization, and personal levels. Solutions have been tried and some been found to be successful. Lessons learned at each of these levels will be described. These include the importance of: 1) local, committed leadership; 2) brokers to the community implementation of a clinical treatment; 3) training brokers in their roles and responsibilities for treatment outcomes; 4) a sense of shared community responsibility and collective, community problem-solving; 5) interorganizational relationships; 6) measuring clinical outcomes; 7) measuring implementation markers; 8) use of these metrics by service organizations to facilitate service delivery. Implications for future implementation projects and research will be discussed.

Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Franklin 11/12

The DSM-5 Diagnostic Criteria for PTSD: Implications for PTSD Assessment and Screening
(Res Meth/N/A/M/Global)

Chair: Wyka, Katarzyna, PhD
Weill Cornell Medical College, New York, New York, USA

The revised PTSD diagnostic criteria may have a considerable impact on the field of trauma and disaster research. Though the proposed PTSD cluster structure was largely informed by empirical research (i.e., factor analytic studies), the implications of these changes are not yet well understood. Psychometric studies can offer insight into
issues related to the reliability and validity of the new diagnostic criteria and their cross-cultural applicability. Likewise, the DSM-5 revisions necessitate new and revised assessment measures that are psychometrically sound and that incorporate the latest technological advancements. This symposium will provide a discussion of several measurement considerations stemming from the DSM-5 revisions. In the first presentation, Dr. Wyka will discuss the reliability of the proposed four-cluster DSM-5 PTSD diagnostic criteria and describe the effect of its use on PTSD estimates using disaster screening data. Dr. Weathers will provide an overview of the recently revised PTSD checklist (PCL-5) and present preliminary findings from a confirmatory factor analysis. Next, Dr. Milanak will describe a new online, highly structured PTSD assessment approach that can be easily adapted for clinical assessment and research. Lastly, Dr. Verkuilen will present a novel method for studying culturally based post-traumatic symptom patterns.

Symposium
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Franklin 11/12

The Impact of DSM-5 Revisions on the Reliability of the PTSD Diagnosis
(Res Meth/Disaster/Industrialized)

Wyka, Katarzyna, PhD¹, Verkuilen, Jay, PhD², Rasmussen, Andrew, PhD³, Difede, JoAnn, PhD⁴
¹Weill Cornell Medical College, New York, New York, USA
²City University of New York, New York, New York, USA
³Fordham University, Bronx, New York, USA
⁴New York Presbyterian Hospital/Weill Medical College of Cornell University, New York, New York, USA

The DSM approach to the PTSD diagnosis requires endorsing a pre-specified minimum number of post-traumatic symptoms in each of the conceptually defined symptom clusters (e.g., re-experiencing or hyperarousal symptoms). Such a diagnostic system is sometimes called a non-compensatory decision rule, i.e., within a given cluster, symptoms combine in a compensatory fashion; however, it is not allowed to compensate for lack of a sufficient number of symptoms in one cluster by symptoms from another cluster. The DSM-5 revisions to the PTSD diagnostic criteria include changing a three cluster model (re-experiencing, numbing/avoidance, and hyperarousal symptoms) to a four cluster model (intrusion symptoms, avoidance symptoms, arousal/reactivity symptoms and negative mood and cognitions), where one of the clusters is defined by two symptoms only (avoidance symptoms). In this presentation, we will discuss issues related to the reliability of non-compensatory models, focusing on the DSM-5 PTSD diagnosis. Furthermore, we will illustrate the potential implications of utilizing the four cluster model on PTSD prevalence estimates using a large post-disaster screening data.
Symposium  
Saturday, November 9  
1:30 p.m. to 2:45 p.m.  
Franklin 11/12

**The PTSD Checklist for DSM-5 (PCL-5): Development and Initial Psychometric Analysis**  
(Assess Dx/N/A/N/A/N/A)

Weathers, Frank, PhD  
*Auburn University, Auburn, Alabama, USA*

The PTSD Checklist (PCL) is a widely used self-report measure of PTSD. The PCL was recently revised to reflect changes in the PTSD symptom criteria for DSM-5. Major revisions include expanding from 17 to 20 items, with the deletion of one item (foreshortened future) and the addition of four items (negative beliefs, blame, negative feelings, risk-taking); rewording of seven items; and changing the rating scale numerical anchors from 1-5 to 0-4. Initial psychometric analyses indicate that the PCL-5 has high internal consistency and test-retest reliability, strong convergent and discriminant validity, and acceptable fit with leading four-factor models in confirmatory factor analysis. The presentation will include a discussion of the rationale for these revisions and a psychometric comparison of the PCL and PCL-5.

Symposium  
Saturday, November 9  
1:30 p.m. to 2:45 p.m.  
Franklin 11/12

**Using Case Diagnostics to Explore Cultural Variability in the Four Factor Model of PTSD**  
(Res Meth/Civil/Ref/Global)

Rasmussen, Andrew, PhD
Verkuilen, Jay, PhD

1*Fordham University, Bronx, New York, USA*

2*City University of New York, New York, New York, USA*

The past decade has seen a growing number of confirmatory factor analyses of PTSD in non-Western populations (Palmieri et al., 2007; Rasmussen et al., 2007). By and large these support the four factor model that was the basis for the symptoms structure of PTSD in the DSM-5. Few of these studies have examined this model on heterogeneous samples to take the influence of cultural and individual differences into account. Based on recent literature on diagnostics in structural models (e.g., Steinley & McDonald, 2007; Cardinale, 2011; Pek & Sterba, 2011), we present a novel method for studying culturally based response patterns in a multinational sample of asylum seekers who were administered the Harvard Trauma Questionnaire. The method first accounts for the known four factor model and then examines deviations from it to identify important unmodeled features, such as cultural or individual differences in scale responses. These differences may be related to PTSD or may be better conceptualized as unrelated variance. We explore both the psychometric and substantive implications of unmodeled heterogeneity.
Symposium  
Saturday, November 9  
1:30 p.m. to 2:45 p.m.  
Franklin 11/12  

A Web-Based Self-administered Structured Interview for Measuring DSM-5 PTSD: The NSES  
(Assess Dx/N/A//Industrialized)  

Milanak, Melissa, PhD, Resnick, Heidi, PhD, Kilpatrick, Dean, PhD  
Medical University of South Carolina, Charleston, South Carolina, USA  

Given the release of DSM-5, there is a need for new PTSD assessment measures to address major diagnostic changes. This paper describes the National Stressful Events Survey (NSES; Kilpatrick et al., 2011) designed to provide data to the APA DSM-5 PTSD Sub-workgroup about the impact of proposed changes to the PTSD diagnosis and consequently assessed for exposure to DSM-IV and DSM-5 Criterion A events, as well as for PTSD symptoms and indicators of distress or functional impairment associated with PTSD symptoms. The NSES assessment measure was self-administered, completed online by a national sample of US adults, using a highly-structured clinical interview format in which branching follow-up questions were used to clarify responses. Questions measuring exposure to Criterion A events and PTSD symptoms were developed with input from the DSM-5 Sub-workgroup to ensure that they captured the content of events and symptoms as conceptualized. A brief overview of DSM-IV vs. DSM-5 comparisons will be presented. Advantages of this assessment approach will be discussed including use of a structured interview format that provides more anonymity for respondents, ease and accessibility of a high quality online PTSD assessment tool, and an assessment platform that can be easily adapted for clinical assessment and research.

Biomarkers of PTSD  

Longitudinal Change in Serum Brain-derived Neurotrophic Factor in Accident Survivors with PTSD  
(Bio Med/Acc/Inj/M/Industrialized)  

Matsuoka, Yutaka, MD PhD¹, Nishi, Daisuke, MD PhD², Noguchi, Hiroko, PhD, RN¹, Kim, Yoshiharu, MD, PhD³, Hashimoto, Kenji, PhD³  
¹Translational Medical Center, National Center of Neurology and Psychiatry, Kodaira, Tokyo, Japan  
²National Institute of Mental Health, National Center of Neurology and Psychiatry, Kodaira, Tokyo, Japan  
³Chiba University Center for Forensic Mental Health, Chiba, Japan  

This prospective cohort study investigated serum levels of brain-derived neurotrophic factor (BDNF), which mediates synaptic plasticity crucial for fear memory extinction, in patients severely injured in a motor vehicle accident (MVA). A nested, case-controlled study was conducted with 103 MVA survivors: 8 patients who met the
criteria for full diagnosis of PTSD at 6 months after MVA, 10 patients with partial PTSD, and 85 patients with no PTSD. PTSD was evaluated by the Clinician-Administered PTSD Scale (CAPS). Serum BDNF levels were measured shortly after the MVA and at 6-month follow-up. Posttrauma serum BDNF levels differed between the three groups after controlling for age and sex ($F = 3.41, p = .04$), with unexpectedly higher serum BDNF levels seen in the full PTSD group compared with the no PTSD group. Additional analysis of patients with serum samples taken at baseline and 6 months revealed the full PTSD group had significantly higher serum BDNF levels over the 6 months than the no PTSD group after controlling for age and sex ($F = 6.44, P < .01$). A positive correlation was seen between change in serum BDNF levels at 6 months and CAPS score at 6 months ($r = .26, p = .014$). The findings of this study suggest that elevated serum BDNF levels could be a biomarker of PTSD after a traumatic event.

**Paper Presentation**

**Saturday, November 9**

**1:30 p.m. to 2:45 p.m.**

**Grand Ballroom A**

**DHEA, DHEAS, and Cortisol as Potential Biomarkers of Childhood Trauma Exposure and Post-Traumatic Stress Disorder**

(Bio Med/Mil/Vets/I/N/A)

Van Voorhees, Elizabeth, PhD; Robbins, Allison, BA; Calhoun, Patrick, PhD; Dennis, Michelle, BA; Beckham, Jean, PhD

1 Durham VAMC, Mid-Atlantic MIRECC, Duke University, Durham, North Carolina, USA

2 Durham VA Medical Center/ VISN 6 MIRECC, Durham, North Carolina, USA

3 Durham VA Medical Center, Durham, North Carolina, USA

PTSD and depression have been linked to hypothalamic-pituitary-adrenal (HPA) axis dysregulation, including changes in levels of the neuroendocrine hormones cortisol, dehydroepiandrosterone (DHEA), and dehydroepiandrosterone sulfate (DHEAS). While elevated cortisol levels have been found to have neurotoxic effects, DHEA(S) appears to mitigate the effects of cortisol and may be associated with resiliency and coping. We examined the association of PTSD and childhood maltreatment with cortisol and DHEA(S). Regression analyses were conducted on a sample of participants with (n=43) and without PTSD (n=57). Controlling for age, sex, PTSD status, and depression status, childhood trauma was inversely associated with cortisol level ($F[5,94]=11.56, ΔR²=.11, p=.001$) and cortisol/DHEA ratio ($F[5,94]=6.14, ΔR²=.05, p=.02$), but PTSD status was not. Results suggest that early trauma may contribute to deleterious alterations in HPA axis functioning and cortisol secretion, and subsequent increases in relative levels of DHEA(S) may be a neurobiological means of mitigating these effects. This interpretation of DHEA(S) as a neurobiologically-mediated protective mechanism is consistent with literature demonstrating positive association between DHEA(S) and improvements with psychotherapy, as well as with evidence that DHEA supplementation may decrease symptoms of depression and PTSD.
The Impact of Intimate Partner Stalking on PTSD and Psychophysiological Reactivity in Survivors of Intimate Partner Violence
(Assess Dx/Violence/M/Industrialized)

Mechanic, Mindy, PhD1, Griffin, Michael, PhD2, Newton, Tamara, PhD3, Grahn, Ruth, PhD4, Resick, Patricia, PhD, ABPP5
1 California State University, Fullerton, Fullerton, California, USA
2 University of Missouri St. Louis, Saint Louis, Missouri, USA
3 University Of Louisville, Louisville, Kentucky, USA
4 Connecticut College, New London, Connecticut, USA
5 National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

Intimate partner stalking (IPS) creates a context in which threatened harm is omnipresent. Unremitting threat is likely to trigger constant survival-based monitoring of threat cues. Constant, unremitting awareness of looming threat/violence may also activate physiological arousal above and beyond that which is already activated by intimate partner abuse (IPA) alone. Research documents the unique contribution of IPS to PTSD among battered women. This project aims to further understand the nature and impact of stalking in the context of IPA. We report psychophysiological data from a study of 33 battered women recruited from community agencies. We compared relentlessly stalked (RS) battered women (n= 17) with minimally stalked (MS) battered women (n = 16) using a laboratory assessment in which psychophysiological measurements were recorded during a recounting of the worst traumatic episode of domestic violence. Analyses revealed significantly greater reexperiencing, avoidance and arousal symptoms in the RS women (p<.01) as well as higher depressive symptoms (p<.001). In addition, in the laboratory assessment the RS women had significantly higher autonomic arousal (heartrate and skin conductance) (p<.05) while talking about their traumatic experience. Findings will be discussed in terms of psychobiological and phenomenological theories of trauma and PTSD.
The Dissociative Subtype of PTSD: A Genome-Wide Association Study
(Bio Med/Mil/Vets/M/Industrialized)

Wolf, Erika, PhD¹, Rasmusson, Ann, MD¹, Mitchell, Karen, PhD², Logue, Mark, PhD³, Miller, Mark, PhD¹
¹National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA
²National Center for PTSD-Women's Health Science Division, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA
³Boston University School of Medicine, Boston, Massachusetts, USA

Psychometric and neuroimaging studies have identified a dissociative subtype of PTSD which is manifested in 15-30% of individuals with the diagnosis. The subtype is defined by symptoms of derealization and depersonalization and will be listed alongside the PTSD diagnosis in DSM-5. We conducted a genome-wide association study among 484 white, trauma-exposed veterans and their partners to identify genetic variants associated with the subtype. Sixteen SNPs evidenced associations with dissociation in the suggestive range of \( p < 10^{-5} \), but no SNPs met strict genome-wide level of significance (i.e., \( p < 5 \times 10^{-8} \)). One SNP, rs263232, was located in ADCY8, a gene implicated previously in bipolar disorder and expressed only in the brain. The enzyme it produces is involved in long term potentiation, synaptic plasticity, and learning and memory. A second SNP, rs71534169, located in DPP6, is involved in regulating dendritic excitability. The most highly significant SNPs were intergenic and located near genes that play a role in cell protection from oxidative stress (NQO2) and necrotic cell death (RIPK1). The association between these SNPs and the dissociative subtype remained after controlling for PTSD severity. Results suggest possible subtype-specific genetic risk variants in need of further evaluation and replication.

Models of PTSD and Resilience

Empirical advances in the study of Resilience and Psychopathology following Exposure
(Res Meth/N/A/I/N/A)

Galatzer-Levy, Isaac, PhD¹, LeDoux, Joseph, PhD², Marmar, Charles, MD¹
¹New York University School of Medicine, New York, New York, USA
²New York University Center for Neural Science, New York, New York, USA

There is increasing interest in identifying distinct clinically relevant outcomes following a potentially traumatic event including resilience, recovery, and chronic stress. We will present work using Latent Growth Mixture Modeling (LGMM) based methods for identifying these outcomes. First, we will present recently published findings demonstrating patterns of risk and resilience in a large cohort of chronically exposed police officers followed
prospectively from academy training through 4-years of service (n=234). This work shows that officers follow four distinct trajectories including Resilience, Recovery, Increasing distress, and anticipatory distress and that resilience is predicted prospectively by positive emotional valence prior to exposure. Further, we will present trajectories of fear extinction learning identified in rats, a commonly used translational paradigm for studying traumatic stress exposure. Rats clustered into three patterns with regard to fear extinction learning including rapid fear extinction (57.3%), slow fear extinction (32.3%), and failure to extinguish fear (10.3%). This work demonstrates a burgeoning translational method for the empirical identification and study of risk and resilience outcomes. This approach provides a framework to identify common patterns and to characterize healthy and poor adaptation in response to potentially traumatic events.

Paper Presentation
Saturday, November 9
1:30 p.m. to 2:45 p.m.
Franklin 7

Coping with Traumatic Stress Inventory (CTSI): Development of a Measure of Trauma Coping Strategies
(Assess Dx/N/A/I/Industrialized)

Iwanicki, Sierra, MA PhD Student, Lauterbach, Dean, PhD
Eastern Michigan University, Ypsilanti, Michigan, USA

While there are a number of measures designed to assess coping (e.g., Ways of Coping Questionnaire) none were expressly designed to assess coping with a broad array of traumatic events. Consequently, many homegrown measures have been developed to assess coping strategies used in response to specific types of trauma (e.g., rape) or in response to a specific event (e.g., hurricane Andrew). The purpose of this study was to develop a broad measure of coping with traumatic stress using a sequential, exploratory mixed-methods design. An initial pool of 143 items was developed to assess 14 facets of coping. Two focus groups comprised of trauma survivors and a panel of three experts in the field of coping and traumatic stress provided feedback on form/content of the instrument. Results confirmed adequate levels of face and content validity of the items and led to additional item refinement. The resultant draft was administered to 407 undergraduate students. Exploratory factor analysis using robust maximum likelihood estimation and statistical testing of the factor loadings resulted in a 5 factor 22-item instrument. Psychometric analyses demonstrated excellent reliability for the entire measure (α = .88) and across subscales (α = .75-.94). Additionally, there was evidence of strong convergent validity and higher total scores of coping were predictive of lower traumatic stress.
How Does Emotional Processing Style Lead to PTG versus PTSD?
(Clin Res/Violence/M/Industrialized)

Larsen, Sadie, PhD¹, Berenbaum, Howard, PhD²
¹Clement J. Zablocki VA Medical Center, Milwaukee, Wisconsin, USA
²University of Illinois, Champaign, Illinois, USA

Background: As the field of trauma research has moved toward examining a broad range of outcomes of trauma, studies of post-traumatic growth (PTG) highlight that individuals are sometimes able to grow from trauma (Helgeson et al., 2006). The field has now moved from documenting the presence of PTG to elucidating predictors of PTG. Although several studies have focused on the cognitive processes leading to PTG, emotional processing has been examined far less, even though it is theorized as a critical part of recovery from trauma (e.g. Foa et al., 2005). Objective: Examine whether emotional processing predicts PTG or PTSD. Method: Participants included 107 women (age M = 38) recovering from recent traumatic or aversive events (e.g. assault, loss of a loved one). Results: In this sample, PTG and PTSD were not significantly correlated with each other (r=.01). In regressions, different types of emotional processing were related to PTG vs. PTSD. Emotion suppression (Emotion Regulation Questionnaire; Gross & John, 2003) positively predicted PTSD, whereas emotional processing (Emotional Approach Coping Scale [EACS]; Stanton et al., 2000) positively predicted PTG. Emotional expression (EACS) did not predict either. Whereas PTSD predicted functional impairment, PTG did not. Conclusion: Emotional processing plays an important role in predicting both PTSD and PTG, though in different ways.

Trauma-related Beliefs and Post-Traumatic Stress Disorder: A Meta-Analysis
(Assess Dx/Violence/I/N/A)

Jun, Janie, MS (PhD Student), Zoellner, Lori, PhD
University of Washington, Seattle, Washington, USA

Many trauma theories note the importance of changes in the survivor’s cognitions and beliefs and their role in the development of post-traumatic stress disorder (PTSD) (Ehlers & Clark, 2000; Foa & Kozak, 1985; 1986; Horowitz, 1986). The available information of trauma-related beliefs and PTSD is limited to individual studies and a few non-comprehensive qualitative reviews (e.g., Brillon, 1999; Muran, 1993). There has not been a systematic analytic review of this area. Thus, we conducted a meta-analysis to examine the strength of the association between trauma-related beliefs (total score, self beliefs, world beliefs, and self-blame beliefs) and PTSD symptom severity or diagnosis. Our meta-analysis consisted of 84 studies with trauma-exposed adults reporting PTSD symptoms. The analyses revealed medium to large effects. The weighted mean effect size (r) was .52 for total trauma-related beliefs, .54 for self beliefs, .43 for world beliefs, and .32 for self-blame beliefs. Moderator analyses were conducted, showing larger effect sizes for self beliefs in males than females, non-interpersonal traumas than
interpersonal violence, and cross-sectional studies than prospective studies. The strong association between trauma-related beliefs and PTSD clearly affirms the importance of negative thoughts that may affect the development and maintenance of post-trauma symptoms.

**Paper Presentation**
**Saturday, November 9**
**1:30 p.m. to 2:45 p.m.**
**Franklin 8**

**New Research in Intimate Partner Violence**

**Intimate Partner Violence among Women Veterans: Previous Interpersonal Trauma as a Risk Factor**
*(Clin Res/Adult/Cmplx/M/Industrialized)*

Iverson, Katherine, PhD¹, Mercado, Rowena, MD², Carpenter, Sarah Louisa, BA³, Street, Amy, PhD⁴  
¹National Center for PTSD / Boston University, Jamaica Plain, Massachusetts, USA  
²Boston VA Healthcare System, Jamaica Plain, Massachusetts, USA  
³Suffolk University, Boston, Massachusetts, USA  
⁴National Center for PTSD, Boston VA Medical Center and Boston University School of Medicine, Boston, Massachusetts, USA

Childhood abuse and military sexual trauma (MST) are common forms of interpersonal violence experienced by women Veterans that may increase risk for intimate partner violence (IPV). This study examined the relative impact of three forms of interpersonal violence exposure [childhood physical abuse (CPA), childhood sexual abuse (CSA), and MST] and demographic/military characteristics on past-year IPV among female Veterans. Participants were 160 female Veteran patients of the New England VA Healthcare System. Women completed a cross-sectional paper-and-pencil mail survey that included validated assessments of past-year IPV and previous interpersonal violence exposures. Women who reported CSA were 3.06 (95% confidence interval: 1.14-8.23) times more likely to report past-year IPV relative to women who did not experience CSA. Similarly, women who reported MST were 2.33 (95% confidence interval: 1.02-5.35) times more likely to report past-year IPV compared to women who had not experienced MST. CPA was not associated with IPV risk. Less education and having served in the Army were associated with higher risk. Findings have implications for assisting at-risk women Veterans in reducing their risk for IPV through detection and intervention efforts focused on resilience.
The Role of Repetitive Thought in Fostering or Impeding Resilience Following Experiences of Interpersonal Violence

(Clin Res/Violence/I/Industrialized)

Allbaugh, Lucy, MS (PhD Student), Wright, Margaret, PhD
Miami University, Oxford, Ohio, USA

Repetitive thought strategies, like rumination, have been predominantly linked to negative outcomes following trauma (Nolen-Hoeksema, 2000). More recently it has been suggested that event-related and deliberate rumination strategies may instead facilitate post-traumatic growth or buffer against psychopathology (Cann, et al., 2011; Treynor, et al., 2003). The purpose of this study was to examine whether four types of rumination (brooding, reflecting, intrusive, and deliberate) differentially predicted negative (depressive, anxious, and post-traumatic stress symptoms) versus positive (post-traumatic growth) outcomes. Participants were 130 young adults (mean age: 18.7 years) who experienced an interpersonal violence event (physical or sexual assault; bullying; emotional abuse). Multiple regression analyses were employed to determine the best predictor of each outcome by entering all rumination types together to predict each individual outcome. Brooding and reflecting rumination were strong predictors of negative outcome. Deliberate rumination emerged as the only predictor of growth and never predicted negative outcomes suggesting that a deliberate, focused style of repetitive thought may be adaptive for some. Further, findings suggest that some measures of rumination may better differentiate adaptive from maladaptive rumination, necessitating careful consideration in future research.

Adherence to and Effects of Trauma-Focused Treatment in Victims of Intimate Partner Violence in Colombia

(Clin Res/Violence/M/Latin Amer & Carib)

Caceres-Ortiz, Eduin, PhD
Universidad Catolica de Colombia, Bogota, Cundinamarca, Colombia

The purpose was to evaluate the adherence to and effects of a group treatment focused on the trauma of Colombian women victims of intimate partner violence (IPV). The participants were 47 women, 82.5% with complex trauma and 17.5% with only IPV. The instruments used were: attendance and assignment records, scales of satisfaction with the treatment and change perceived, and follow-up interviews. Participation in the treatment was 85.1%, with a 14.9% abandonment rate. Of the 40 women who completed therapy, 95% attended the eight sessions and 5% attended six. The easiest assignments and techniques used during and after treatment were breathing, problem solving and stop thinking. The least used and of greatest difficulty were cognitive restructuring and carrying out of pleasing activities. The perception of change and satisfaction with the treatment was high, as was the adherence of the therapists. Follow-up show that 75.8% of women use the techniques learned in couple
conflicts and other situations. The conclusion is reached that the treatment was effective, with good indices of adherence of participants and therapists. It is recommended to review the exercises of the cognitive component.

**Paper Presentation**
**Saturday, November 9**
**1:30 p.m. to 2:45 p.m.**
**Franklin 8**

**The Effect of an Evidence-based Intervention on Women’s Exposure to Intimate Partner Violence (IPV)**
(Clin Res/Violence/M/Industrialized)

Miller, Laura, PhD, Howell, Kathryn, PhD, Graham-Bermann, Sandra, PhD

1University of Notre Dame, Notre Dame, IN, Indiana, USA
2University of Memphis, Memphis, Tennessee, USA
3University of Michigan, Ann Arbor, Michigan, USA

For many women, intimate partner violence (IPV), victimization may take a relatively chronic course. The current study sought to test an strengths-based intervention that combines mental health support with advocacy services for women with recent exposure to IPV. It was hypothesized that mothers’ participation in the intervention, the Mom’s Empowerment Program (MEP), would result in significant reductions in violence victimization. Participants included 120 mothers randomly assigned to an intervention or no treatment comparison group. Mothers were ethnically diverse and primarily low-income. Each mother reported on the level of violence at baseline and at a 6 to 8 month follow-up interview using standardized measures. The MEP was delivered in a community setting and is designed to enhance safety planning surrounding violence, promote post-traumatic healing, and identify healthy coping strategies. Results indicated that while violence significantly decreased over time for all women over the course of the study, the reduction in total level of violence was significantly more rapid for those mothers who attended more sessions of the intervention. The effectiveness of this intervention in reducing IPV provides evidentiary support to combining advocacy services with therapeutic services as a way of enhancing long-term resilience in women with a history of IPV victimization.
Mild Traumatic Brain Injury: What Difference Does it Make to How we Treat Trauma Survivors?
(Practice/Acc/Inj/M/N/A)

Bryant, Richard, PhD
University of New South Wales, Sydney, NSW, Australia

In recent years unprecedented attention has been given to the role of mild traumatic brain injury (MTBI) in adjustment to traumatic experiences. MTBIs can occur in many civilian (e.g. motor vehicle accidents) and military (e.g. improvised explosive devices). This session will overview current knowledge about MTBI in relation to clinical outcomes and interventions for affected people. It will commence with an outline of the evidence of how MTBI and PTSD can intersect, with attention to problems of differential diagnosis. It will then discuss how MTBI can compound PTSD responses after trauma. It will also review recent evidence from military and civilian studies concerning the respective roles of MTBI and PTSD on clinical outcomes. Finally, this session will address the implications for management of people who suffer the effects of MTBI.
**Featured Panel**

**Saturday, November 9**
3:00 p.m. to 4:15 p.m.
Grand Ballroom F

**Responding to the Boston Marathon Bombing**
(Global/Disaster/M/Industrialized)

Shalev, Arieh, MD¹, Herman, John, MD², Digioia, Donna, MD³, Simon, Naomi, MD², Koenen, Karestan, PhD⁴, Keane, Terence, PhD⁵

¹ Hadassah Hospital, Jerusalem, Jerusalem, Jerusalem, Israel
² Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, USA
³ Massachusetts General Hospital, Boston, Massachusetts, USA
⁴ Columbia University School of Public Health, New York, New York, USA
⁵ National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA

Occurring on festive sunny day, the April 15th 2013 Boston Marathon Bombing was a striking reminder of terror’s prototypical scenario and protagonists: utter surprise, innocent victims, high visibility, shatters lives, ripple effect on entire communities and human responders trying to mitigate the impact. This panel gives a voice to responders: Dr. John Herman oversaw the mental health response of Boston's major receiving hospital. Dr. Naomi Simon managed outpatient care request for acute trauma and PTSD response. Dr. Donna Digioia provided continuous care to amputees, other survivors and their families. Dr. Terry Keane was involved in activities initiated by the Boston based National Center for PTSD. The technicalities of responding professionally to disasters are often challenged by being a member of affected communities and by reacting to others. The narratives to be shared in this panel will reflect both professional and personal experiences. A short discussion will send the audience from Boston to Jerusalem, to outline commonalities and differences in 'being there' during experiences that, one can only wish, would never happen to those attending the session.

**Symposium**

**Saturday, November 9**
3:00 p.m. to 4:15 p.m.
Grand Ballroom A

**Biological and Cognitive Correlates of PTSD Diagnosis and Treatment**
(Res Meth/Mil/Vets/M/Industrialized)

Chair: Jovanovic, Tanja, PhD

Emory University School of Medicine, Atlanta, Georgia, USA

Post-traumatic stress disorder (PTSD) is the fourth most common psychiatric disorder, and delineating risk and resilience factors is of great importance to the development of improved and personalized treatment approaches for this disorder. However, PTSD is frequently co-morbid with other mental disorders, such as depression, substance abuse, and related anxiety disorders. Given this complexity, progress in the field can be greatly enhanced by focusing on phenotypes that are more proximal to the neural bases of the disorder. Such intermediate phenotypes can provide investigative tools to increase our understanding of the roots of the disorder.
and develop better prevention or intervention programs. The goal of this symposium is to describe some of these phenotypes that are associated with PTSD. The first presentation will discuss the results of a cognitive task that discriminates individuals with PTSD from those with depression. The next two talks will focus on PTSD treatment outcomes; the first will show data on cortisol response to stressful scenes as predictive of treatment outcome. The last presentation will include data from a startle paradigm used in assessment of virtual reality exposure therapy. Taken together, the data presented in this symposium will provide several intermediate phenotypes that may prove useful in diagnosis and assessment of PTSD treatment.

Symposium
Saturday, November 9
3:00 p.m. to 4:15 p.m.
Grand Ballroom A

Post-Traumatic Stress Disorder & Cognitive Function
(Bio Med/N/A/N/A)

Charvat, Mylea, PhD1, Etkin, Amit, MD PhD2, Goodkind, Madeleine, PhD3, Oathes, Desmond, PhD4, Bryant, Richard, PhD5, McFarlane, Alexander, MD6, Gyurak, Anett, PhD7, Williams, Leanne, PhD7
1Stanford University School of Medicine, Stanford, California, USA
2Stanford University/Palo Alto VA, Palo Alto, California, USA
3VA Palo Alto Health Care System / Stanford University, Palo Alto, California, USA
4Stanford University, Stanford, California, USA
5University of New South Wales, Sydney, NSW, Australia
6The University of Adelaide, Adelaide, South Australia, Australia
7Stanford University School of Medicine/VA Palo Alto Health Care System, Stanford, California, USA

Recent studies suggest an important role for executive function in PTSD. We used a computerized neurocognitive battery in several cohorts of patients with PTSD, healthy subjects and patients with GAD and MDD. The validated neurocognitive battery allows rapid data acquisition (~30 minutes). We assessed nine domains: attention, motor coordination, verbal memory, working memory, executive function, cognitive flexibility, decision speed, response inhibition and information processing. Thirty-seven individuals with PTSD and 168 healthy individuals (including 69 trauma exposed individuals with no PTSD) were compared in study 1. Separately, 26 individuals with PTSD were compared to 27 persons with comorbid MDD and GAD. Individuals with PTSD performed worse than both matched trauma-exposed and non-trauma-exposed health controls in the domains of motor coordination, working memory, response inhibition, attention, information processing and span of visual memory. A comparison of PTSD with anxious depressed patients, who share a similar level of overall anxious and depressive symptomatology, found that individuals with PTSD performed worse in the domains of motor coordination, attention, verbal memory, cognitive flexibility and response inhibition. Results will be discussed in terms of the global impact of PTSD on cognitive function as well as across disorders.
Cortisol Reactivity Predicts Treatment Outcome in Virtual Reality Exposure Therapy
(Res Meth/Mil/Vets/Industrialized)

Jovanovic, Tanja, PhD1, Norrholm, Seth, PhD2, Youngner, Cole, BS1, Gerardi, Maryrose, PhD1, Rothbaum, Barbara, PhD, ABPP1
1Emory University School of Medicine, Atlanta, Georgia, USA
2Atlanta VAMC/Emory University, Decatur, Georgia, USA

One of the most reported biological findings in post-traumatic stress disorder (PTSD) is hypersensitivity of glucocorticoid receptors. The present study examined treatment-related changes in cortisol reactivity to a combat virtual reality (VR) scene in veterans with PTSD treated with VR exposure therapy. Salivary cortisol was obtained at baseline and post VR scene at 4 time points: prior to treatment (n=68), immediately after treatment (n=63), at 3 months (n=43) and 6 months post-treatment (n=29). PTSD symptoms were assessed using CAPS. The results showed a significant decrease in CAPS scores across time, F(3,93)=31.81, p<.001; however there was variability in the CAPS change between patients. There was a significant change in cortisol in response to the VR scene, F(1,22)=8.10, p<.01, and a significant decrease in cortisol reactivity across treatment, F(3,66)=2.70, p=.05. Cortisol reactivity prior to treatment was correlated with the change in CAPS scores from pre- to post-treatment, r=-.33, p=.008. Higher cortisol reactivity was predictive of poorer treatment outcome even after controlling for initial symptom severity and baseline cortisol levels, t=2.69, p=.009. These data suggest that glucocorticoid sensitivity may be a valuable prognostic indicator of PTSD treatment response and warrants further investigation as more comprehensive indicators of treatment outcome are developed.

A Novel Approach to Monitoring PTSD Symptom Severity: Assessment of Psychophysiological Reactivity During Virtual Reality-based Exposure Treatment
(Clin Res/Mil/Vets/Global)

Norrholm, Seth, PhD1, Jovanovic, Tanja, PhD2, Youngner, Cole, BS2, Rothbaum, Barbara, PhD, ABPP2
1Atlanta VAMC/Emory University, Decatur, Georgia, USA
2Emory University School of Medicine, Atlanta, Georgia, USA

Exposure therapy is an evidence-based treatment for post-traumatic stress disorder (PTSD) that has been employed in both active duty and veteran populations deployed to Iraq or Afghanistan. The evaluation of its effectiveness has been limited to semi-structured clinical interviews and self-reports. In the current study, we employed a novel methodology during for assessing psychophysiological reactivity over the course of virtual reality (VR)-based exposure treatment and at several follow-up time points. The psychophysiological indices included measurement of the acoustic startle response. Relative to their pre-treatment, self-reported symptom severity on the Clinician Administered PTSD Scale (CAPS), traumatized veterans reported a significant reduction of symptoms
at post-treatment ($F(1,62)=68.35, p<.001$) that was maintained to 6 months post-treatment ($F(1,34)=58.54, p<.001$). Upon exposure to VR combat scenes, startle reactivity was also decreased when comparing within-session ($F(1,34)=9.69, p=.004$) and between-session habituation ($F(1,34)=pre-treatment vs 6 mos, F(1,34)=4.90, p=.03$). In addition, early startle responses to the VR scenes at pre-treatment correlated with change in CAPS scores over time ($Pre-treatment vs 6 months, r=0.31, p=0.02$). This study supports the use of objective, physiological tools as a complementary measure of symptom PTSD expression.

Symposium
Saturday, November 9
3:00 p.m. to 4:15 p.m.
Grand Ballroom D

Evaluation of Technology-based PTSD Educational Products for Clinicians and Trauma Survivors
(Train/Ed/Dis/N/A/I/Industrialized)

Chair: Hamblen, Jessica, PhD
VA National Center for PTSD/White River Junction VA Medical Center, White River Junction, Vermont, USA

Technology-based education and interventions for mental health issues and stress management have increased in recent years. Such products offer promise of broader access, reduced barriers to help seeking, and lower cost (Hollon et al., 2002; Sanyal, 2006). VA’s National Center for PTSD (NCPTSD) is committed to the development and dissemination of technology-based educational products that facilitate clinician training, psycho-education, and evidence-informed tools for self-management of distress following trauma exposure. Not only can novel, connected technologies mitigate implementation challenges faced in ongoing clinical care for psychological disorders, they can be used to increase reach and build resilience in populations that are underserved due to issues including rurality and subsyndromal presentation. This symposium highlights the evaluation of four such products developed fully or in partnership by NCPTSD. Each presentation highlights a specific educational product or self-help resource, covering issues of content retention, preferred modality of learning, PTSD symptom management, and product usability for meeting the needs of clinicians and trauma survivors. The evaluations also focus on perceived helpfulness of products, which is not only an important aspect of novel technology development, but also a potential mechanism for resilience building in trauma survivors.
Fostering Resilience for Trauma Survivors Using a Web-Based Self-Help Resource: Evaluation of PTSD Coach Online
(Tech/Diverse Pop/Industrialized)

Matteo, Rebecca, PhD¹, Hermann, Barbara, PhD², Hamblen, Jessica, PhD³
¹National Center for PTSD/White River Junction VA, White River Junction, Vermont, USA
²VA National Center for PTSD, Executive Division, White River Junction, Vermont, USA
³VA National Center for PTSD/White River Junction VA Medical Center, White River Junction, Vermont, USA

To expand upon the success of the PTSD Coach mobile app, VA’s National Center for PTSD developed PTSD Coach Online, a self-help resource consisting of 17 tools that aim to alleviate stress, improve well-being, and increase stress management skills. Although similar to the mobile application, PTSD Coach Online is accessible to users on a desktop platform (rather than smartphone), and includes a broader range of stress-management tools. Availability of online self-help interventions has increased in recent years, yet research into efficacy and usability of these resources is scarce. This presentation focuses on an evaluation of PTSD Coach Online among a nationally-representative sample of military and non-military adults (n=1200) with current stress and interest in using an online self-help resource. Respondents were stratified into three groups using a PTSD screen: no probable PTSD, subclinical PTSD, and probable PTSD. The goal of the study was to assess usefulness and usability of PTSD Coach Online, including pre-post analyses to examine whether distress and perceived ability to manage stress change after use of tools. The relationships of demographic and mental health variables to change outcomes are also assessed as are intentions for continued use of tool for distress management.

Disseminating Best Practices: An Online Provider Course on the VA/DoD Clinical Practice Guideline for PTSD
(Train/Ed/Dis/Caregvs//Industrialized)

Hermann, Barbara, PhD¹, Hamblen, Jessica, PhD²
¹VA National Center for PTSD, Executive Division, White River Junction, Vermont, USA
²VA National Center for PTSD/White River Junction VA Medical Center, White River Junction, Vermont, USA

Background: The National Center for PTSD develops many online educational products for providers, including PTSD101, an online curriculum of 1-hour multimedia courses on various topics related to trauma and PTSD. Objective: This study evaluated the impact of one of these courses, “An Overview of the VA/DoD Clinical Practice Guideline for PTSD”, on clinicians’ knowledge, attitudes, and practice intentions. Methods: We contracted with a research firm to recruit participants from a nationally-representative provider panel and to administer the pre-post evaluation surveys. Results: The sample consisted of 303 community-based providers, including psychiatrists, general practitioners, and psychologists. Data indicate significant improvements in knowledge of evidence-based
PTSD treatment, positive attitudes toward practice guidelines and evidence-based practice, and intentions to use evidence-based PTSD practices. Usability and helpfulness ratings were high. Analyses examining whether certain provider characteristics are associated with pre-course variables or changes in outcomes are underway and will also be presented. Conclusions: Our PTSD101 course on the VA/DoD Clinical Practice Guideline for PTSD enhances knowledge, attitudes, and practice intentions. Data from the evaluation can inform future educational products and initiatives to increase evidence-based practices.

Symposium
Saturday, November 9
3:00 p.m. to 4:15 p.m.
Grand Ballroom D

PTSD Coach: Feasibility, Usability, and Perceived Helpfulness of a Mobile Application for Self-Management of PTSD
(Tech/Mil/Vets/N/A)

Hoffman, Julia, PsyD¹, Kuhn, Eric, PhD¹, Miner, Adam, Doctoral Student², Taylor, C., MD³, Ramsey, Kelly, BA¹, Ruzek, Josef, PhD¹
¹National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA
²PGSP-Stanford Psy.D. Consortium & VA Palo Alto Health Care System, Menlo Park, California, USA
³Stanford University School of Medicine, Menlo Park, California, USA

The recent emergence and pervasiveness of mobile devices has led to innovations in clinical care that may help address some of the logistical and social challenges in delivering standard face-to-face treatment for PTSD. PTSD Coach is a mobile application (app) intended for self-management of post-traumatic stress symptoms. The app includes psycho-education, a validated self-assessment (the PTSD Checklist), evidence-based coping, and links to social support. PTSD Coach has experienced rapid uptake in the general population, with over 100,000 downloads in 74 countries since its release in April, 2011. Evaluation efforts to date will be described. An initial mixed-methods evaluation has been completed with 54 Veterans in treatment for PTSD. Findings suggest that the app has high user satisfaction, is perceived as being helpful for self-management of PTSD, and is used as intended with a few indications of additional “off-label” uses. A small RCT in progress (30/50 subjects complete) compares 1 month of app usage to a waitlist control. Outcomes include increased knowledge of PTSD symptoms and self-efficacy to manage PTSD. Finally, a pilot study of PTSD Coach Connect, a prototype system that allows secure wireless transmission of PTSD Coach data to a clinician dashboard will be presented. This type of innovation has the promise to revolutionize delivery of behavioral interventions.
Symposium  
Saturday, November 9  
3:00 p.m. to 4:15 p.m.  
Grand Ballroom D

Teaching Trauma Survivors about Evidence-Based Treatments: Comparison of Two Modalities  
(Train/Ed/Dis/N/A/Industrialized)

Hamblen, Jessica, PhD, Hermann, Barbara, PhD, Merrick, Cybele, MA  
1VA National Center for PTSD/White River Junction VA Medical Center, White River Junction, Vermont, USA  
2VA National Center for PTSD, Executive Division, White River Junction, Vermont, USA

“Understanding PTSD Treatment” is an online multimedia presentation that aims to provide information on evidence-based treatments for PTSD, dispel myths about PTSD treatment, and provide advice on choosing a therapist. It includes video interviews of experts answering questions about treatment. A companion booklet provides another format to access the information. A nationally representative sample of 417 military service members and 362 non-military service members who had an interest in PTSD and in evaluating related materials completed pre and post surveys. Respondents were randomized into two groups with half evaluating the online course and half evaluating the booklet. We compare the two modalities on 1) knowledge of PTSD and PTSD treatment, 2) attitudes and beliefs about mental health treatment, especially for PTSD, 3) behavioral intentions to seek treatment or encourage a significant other to seek treatment for PTSD, and 4) product usability & satisfaction. Implications for product modality and matching modality to specific audiences will be discussed.

Symposium  
Saturday, November 9  
3:00 p.m. to 4:15 p.m.  
Franklin 5

Trauma Assessment in Forensic Contexts: Legal Implications of Evaluating Trauma-Related Risk and Resilience  
(Assess Dx/Child/Adol/M/Industrialized)

Chair: Zelechoski, Amanda, PhD, ABPP, Discussant: Heilbrun, Kirk, PhD, ABPP  
1Valparaiso University, Valparaiso, Indiana, USA  
2Drexel University, Philadelphia, Pennsylvania, USA

The inclusion of trauma exposure information in forensic mental health evaluations is becoming increasingly important. Research demonstrates a robust relationship between trauma and important risk and protective factors, sometimes called mitigating and aggravating factors in the legal realm. However, it is unclear (1) whether and to what extent trauma history is specifically assessed in various types of forensic evaluations and (2) the degree to which inclusion of that information has an impact on legal outcomes. In this symposium, four clinical-forensic researchers will present studies that examined the inclusion of trauma history in forensic mental health evaluations. The first two papers will present research examining whether we should and, if so, whether we are, in fact, evaluating trauma-specific factors in two types of forensic evaluation contexts: child custody and juvenile waiver. The second two papers will present research exploring the extent to which the inclusion of trauma-specific
information has an impact on outcomes in legal contexts, specifically in juvenile delinquency and capital sentencing forensic evaluations. This symposium includes interdisciplinary research and aims to facilitate dialogue between the trauma, forensic, and legal communities that is important to ensure appropriate assessment and effective presentation of traumatic exposure evidence.

Symposium
Saturday, November 9
3:00 p.m. to 4:15 p.m.
Franklin 5

Beyond the Best Interests of the Child: Assessing Trauma in Child Custody Matters
(Assess Dx/Child/Adol//Industrialized)

Zelechoski, Amanda, PhD, ABPP, Freedle, Agata, BSc Hons Psychology
Valparaiso University, Valparaiso, Indiana, USA

Child custody evaluations are among the most controversial types of forensic mental health assessments (Melton, et al, 2007). However, when done competently and appropriately, the information provided can be extremely helpful to the court and the conflicted family. Not surprisingly, many families involved in child custody disputes have multigenerational histories of traumatic exposure, which can have important implications for the child’s needs, parenting capacity, and the resulting fit (Fuhrmann & Zibbell, 2012); however it is unclear whether and to what extent child custody evaluators specifically assess traumatic exposure or make trauma-informed recommendations. This study analyzed 142 child custody evaluation reports from three major metropolitan cities and found that over 2/3 of the reports did not indicate whether the child’s history of traumatic exposure was directly assessed, either during interviews or through formal psychological testing. More often (approximately 60% of the reports), parents’ individual trauma histories were evaluated through interviews and formal testing. The majority of evaluation reports included data related to each parents’ potential for child abuse gathered from multiple sources. Implications of these findings will be discussed in light of the well-established potentially traumatizing effect of marital conflict on children.

Symposium
Saturday, November 9
3:00 p.m. to 4:15 p.m.
Franklin 5

Including Trauma in Forensic Evaluations of Juvenile Amenability to Treatment: How Evaluator Report Trauma and Its Role as a Treatment Need.
(Assess Dx/Child/Adol//Industrialized)

Riggs Romaine, Christina, PhD\textsuperscript{1}, Goldstein, Naomi, PhD\textsuperscript{2}, DeMatteo, David, PhD\textsuperscript{2}
\textsuperscript{1}Wheaton College, Norton, Massachusetts, USA
\textsuperscript{2}Drexel University, Philadelphia, Pennsylvania, USA

Frequently requested at pre- and post-adjudication stages in the juvenile justice system, forensic psychological evaluations of amenability to treatment tend to include information on youths’ personalities, cognitive abilities, and needs across psychosocial domains (Melton, et al, 2007). Although approximately 75% of juvenile justice youth have experienced traumatic victimization (Abram, et al, 2004) and such experiences may impact response to
treatment (Boyer, et al, 2009), research has not examined whether and how evaluators assess traumatic experiences when examining treatment needs and amenability. This study examined the psycho-legal evaluations of 144 juveniles charged as adults in one urban county. Potentially traumatic events (PTEs) were defined broadly and coded along with other legal and mental health variables. At least one PTE was noted in 71% of evaluations (most common PTEs: abuse/neglect, death of caregiver, domestic violence), but only 6% included related treatment recommendations. This presentation will discuss how information on PTEs was included in evaluations, and the relationship between PTEs and risk-relevant factors such as out of home placement, mental health diagnoses, and legal decisions to adjudicate youth in the juvenile (rehabilitative) or adult (punitive) system. The role of trauma as a risk-relevant target for intervention will be discussed.

Symposium
Saturday, November 9
3:00 p.m. to 4:15 p.m.
Franklin 5

Court Mental Health Clinic Evaluations: Reported Childhood Abuse and Recidivism
(Assess Dx/Child/Adol//Industrialized)

Conrad, Selby, PhD, Tolou-Shams, Marina, PhD
Brown Medical School, Providence, Rhode Island, USA

History of childhood abuse is linked with involvement in the juvenile justice system (Swanston et al., 2003) and increased risk of psychiatric problems (Tebutt et al., 1997). Court mental health clinics (CMHCs) provide an opportunity to explore these risk factors and their impact on recidivism. Little is known about the association between childhood abuse, psychiatric concerns and future delinquency within this population. Thus, this study’s aims include: 1) explore rates of childhood abuse within a CMHC sample, 2) explore the association between abuse types, diagnosis, substance use and 12-month recidivism, and 3) determine whether these patterns of risk differ by gender. CMHC evaluations (n=404) were included in this retrospective chart review and coded (α≥ .70) for demographic variables, history of childhood abuse (sexual, physical, emotional), psychiatric diagnoses and substance use. Twelve month post-evaluation recidivism rates and past offense history were collected from a juvenile court database. Rates of the different types of childhood abuse within this sample will be presented. Logistic regression indicates that sexual abuse is associated with recidivism for girls but not boys. Rather, for boys recidivism is associated with externalizing disorders and history of past offense. Findings suggest that gender-specific trauma-informed intervention may reduce recidivism.
Evaluating Trauma in Capital Sentencing Evaluations: Prevalence and Relevance to Jury Decision-Making
(Assess Dx/Diverse Pop/Industrialized)

Wolbransky, Melinda, PhD¹, Keesler, Michael, MS, JD², DeMatteo, David, PhD², Laughon, Pam, PhD³
¹John Jay College of Criminal Justice (CUNY), New York, New York, USA
²Drexel University, Philadelphia, Pennsylvania, USA
³University of North Carolina, Asheville, North Carolina, USA

Capital juries must weigh the presence of aggravating and mitigating factors before sentencing a defendant to life or death. Mitigation, such as the presence of mental illness, intellectual disability, or previous abuse, suggests why the death penalty is not appropriate. Not only are defense attorneys required to present this evidence, such circumstances are common among death row inmates – including childhood trauma (Cunningham, 2010). It is essential that juries understand how a defendant’s traumatic history likely affected his/her development, emotion regulation, relationships, and may have contributed to other mental health problems. This presentation provides both descriptive and inferential data on the presence of trauma-related mitigation in 368 North Carolina death penalty cases. While history of abuse (24%), exposure to violence within the home (56%), living in impoverished conditions (12%) and being involved in foster care (6%) were all presented as possible mitigating factors, juries do not always appear to agree that such factors are in fact mitigating. Further, results of logistic regression analyses suggest that jury decision-making may not be greatly affected by the presence of such factors. This presentation will discuss the importance of evaluating and clearly communicating the presence and impact of traumatic exposure to assure jury understanding.

Using Web-based Tools and Public Service Announcements to Address Trauma
(Clin Res/Violence/M/Industrialized)

Chair: Newman, Elana, PhD
University of Tulsa, Tulsa, Oklahoma, USA

Media, especially online communication and education tools, are playing an increasingly prominent role in addressing trauma. Web-based intervention tools, including those utilizing social media, are being used to mitigate the impact of disasters, address symptoms of PTSD, and promote resilience. Public service announcements, designed to reduce the occurrence and consequences of events such as domestic violence, are progressively being used on buses, subways, television and the Internet. Given the increasing popularity of these types of web-based and public service announcement initiatives, it is important to understand whether such dissemination methods
can be effective in addressing trauma, and if so, what strategies work best under what context. These four presentations will address the efficacy of a website post-disaster intervention, internet based psychotherapy and comprehensive online toolkits for veterans, and effective domestic violence prevention public service announcements. Using different approaches and methodologies, these presentations illustrate the important role of innovative evidence-based approaches to prevention and intervention in the trauma field.

**Symposium**  
**Saturday, November 9**  
3:00 p.m. to 4:15 p.m.  
Franklin 7

**Deployment of My Trauma Recovery for the Aurora Theater Shooting**  
(Prevent/Disaster//N/A)

**Benight, Charles, PhD**  
*University of Colorado at Colorado Springs, Colorado Springs, Colorado, USA*

On July 20, 2012 a lone gunman entered a movie theater in Aurora Colorado and opened fire on the public. Twelve people were killed and many more injured. The My Trauma Recovery website is a stand-alone support system designed to empower survivors of trauma in their recovery. The site was designed based on theoretically and empirically based mechanisms from Social Cognitive Theory that boost individual levels of coping capability. The site has received empirical support within a natural disaster context. Very little research is available that describes the public use of a web support system that is deployed community-wide following this type of tragedy. The My Trauma Recovery site was deployed through the Aurora 7/20 Committee into the Aurora/Denver Metro region. The website was customized with a new name, emergency contact information, and a landing page banner and was launched on December 17, 2012. Specific media exposure and victim communication was handled through the 7/20 Committee helping to provide community-wide awareness of the resource. This paper reports on the utilization of the site including total number of site hits, unique visitors, user engagement, bounce rates, module focus, and identification of factors related to uptake.
Online Toolkits: Web-Based Dissemination and PTSD Provider Support
(Train/Ed/Dis/Mil/Vet/Industrialized)

Ruzek, Josef, PhD¹, Drescher, Kent, PhD², Landes, Sara, PhD³, McCaslin, Shannon, PhD³, Prins, Annabel, PhD³, Spangler, Shana, PhD³, Swales, Pamela, PhD³, Weaver, Christopher, PhD³, Young, Bruce, MSW³

¹National Center for PTSD – Dissemination and Training Division, VA Palo Alto Health Care System, Menlo Park, California, USA
²VA Palo Alto Health Care System, National Center for PTSD, Menlo Park, California, USA
³National Center for PTSD, VA Palo Alto Health Care System, Menlo Park, California, USA
⁴Palo Alto University, Palo Alto, California, USA

Trauma survivors receive services from a range of helper audiences, includes, in addition to mental health professionals specializing in PTSD, other helper groups such as clergy or primary care. Most mental health professionals and other provider groups have relatively little awareness or familiarity with best practices for treatment of PTSD as described in clinical practice guidelines or manualized evidence-based interventions. Locating information and guidance that is specific to their helping role is challenging in that most online resources for PTSD and traumatic stress are designed for a wide range of audiences, not for specific helping disciplines. Internet-based tools provide a cost-effective way of reaching large numbers of providers to educate them about best practices specific to their helping roles and support delivery of quality services for trauma survivors. We describe a series of online toolkits developed by the National Center for PTSD that are designed for specific audiences, including clergy, employers and employee assistance professionals, primary care nurses and physicians, staff of educational institutions, disaster responders, police, and VA PTSD treatment providers.

Improving Quality-of-Life and PTSD and Depressive Symptoms for OEF/OIF Combat Veterans: Assessing the Benefits of Interactive, Internet-Based Psychotherapy and Peer-to-Peer Support
(Prevent/Mil/Vet/N/A)

Hobfoll, Stevan, PhD
Rush Medical College, Chicago, Illinois, USA

Veterans of OEF and OIF (n=150) volunteered participation in 2-group, randomized, wait list behavioral clinical trial to evaluate the efficacy of the VETS PREVAIL INTERVENTION on PTSD and depressive symptoms, anxiety, and quality of life. Baseline data within and between groups was compared to those same measures at 4, 8 and 12 weeks. Participants completed 5 modules ON-LINE designed to provide assistance to returning war Veterans who may be at risk for PTSD or depression and readjustment. Modules focused on problem solving skills, avoidance, and being active/engaged. Participants in the intervention group also had the opportunity to chat on-line with
Reactions to Domestic Violence Public Service Announcements: Memory, Attitudes, Affect, and Individual Differences
(Clin Res/Violence/Industrialized)

Welton-Mitchell, Courtney, PhD, McIntosh, Daniel, PhD, DePrince, Anne, PhD
University of Denver, Denver, Colorado, USA

Public service announcements (PSAs) are an increasingly visible part of efforts to decrease the occurrence and consequences of domestic violence. It is not clear however, how images commonly used in domestic violence PSA (bruised faces or body parts; smiling faces) influence memory for the message and attitudes about domestic violence, and what role affect may play in such responses. Moreover, the extent to which individual differences (trauma history, PTSD symptoms) influence outcomes is not known. We investigate these questions in three studies with undergraduates and a community sample of women with a recent history of domestic violence, using methods ranging from psychophysiology to self-report. Results indicate graphic negative images enhanced memory for content, are rated as more persuasive, and are more likely to compel the viewer to act. Affective responses also differed based on image type, and in some cases, partially mediated the relationship between PSAs and outcomes. Trends in the data suggest further study of the role of individual differences is needed. This research provides information specifically relevant to the design of domestic violence public service campaigns and broadly relevant to understanding the role of emotional responses and individual differences on outcomes associated with PSAs.

Symposium
Saturday, November 9
3:00 p.m. to 4:15 p.m.
Franklin 9/10

Making it Stick: Lessons Learned from NCTSN Sites Around Implementation and Sustainability of Trauma-informed Evidence Based Practices for Youth and their Families
(Train/Ed/Dis/Child/Adol/M/Industrialized)

Chair: Hanson, Rochelle, PhD
Medical University of South Carolina, Charleston, South Carolina, USA

Three sites from the SAMHSA-funded National Child Traumatic Stress Network will share lessons learned about implementation and sustainability from their experiences in facilitating numerous training activities and learning collaboratives across the United States. Although these collaboratives vary in scope (national, state, regional) and
outcome (agency uptake of a trauma-focused, evidence-based practice; community change to increase capacity for trauma-informed practices), similar lessons emerge around implementing and sustaining changes that lead to improvement. These unifying themes will be shared and explored with symposium participants. Each presenter will describe their dissemination and implementation initiatives, with an emphasis on a summary of outcomes and lessons learned. Topics to be covered include: coaching modalities to ensure evidence-based treatments are done with fidelity and in a sustainable manner; use of community resources to improve appropriate referrals and promote sustainability; and tenets of implementation science that allow agencies to overcome common EBT implementation barriers (e.g., supervision, screening practices, etc.). The symposium will include active discussion to address common challenges and strategies to enhance implementation and long term sustainability.

Symposium  
Saturday, November 9  
3:00 p.m. to 4:15 p.m.  
Franklin 9/10

Statewide Dissemination Platform for Creating a Roster of Clinicians Implementing EBTs  
(Train/Ed/Dis/Child/Adol//Global)

Amaya-Jackson, Lisa, MD MPH  
Duke University School of Medicine, Durham, North Carolina, USA

Lisa Amaya-Jackson and Jessica Burroughs (National Center for Child Traumatic Stress, or NCCTS) will begin the presentation with an overview of the NCCTS Learning Collaborative Model for the Adoption & Implementation of Evidence-Based Treatment (NCCTS LC). They will describe how the NCCTS LC addresses the gap between the design of evidence-based interventions and their adoption into community practice, and they will share lessons learned in implementing 50+ LCs and Breakthrough Series Collaboratives throughout the country over the past nine years. The NCCTS LC approach to successful EBT adoption includes a focus on the areas of clinical competence, implementation competence, and quality improvement strategies. Ideas for overcoming common implementation barriers to the adoption and sustainability of EBTs, which come from the field of implementation science and from on-the-ground experiences shared by agency administrators participating in Learning Collaboratives, will be presented. Data will be shared from the use of the NCCTS LC model as part of the statewide implementation platform for rostering trained providers in fidelity-monitored TF-CBT from the Duke Center for Child & Family Health’s North Carolina Child Treatment Program.
Making it Stick: Lessons Learned from NCTSN Sites Around Implementation and Sustainability of Trauma-informed, Evidence-based Practices for Youth and their Families
(Train/Ed/Dis/Surv/Hist//Industrialized)

Burroughs, Jessica¹, Hanson, Rochelle, PhD², Amaya-Jackson, Lisa, MD MPH¹
¹Duke University School of Medicine, Durham, North Carolina, USA
²Medical University of South Carolina, Charleston, South Carolina, USA

Lisa Amaya-Jackson and Jessica Burroughs (National Center for Child Traumatic Stress, or NCCTS) will begin the presentation with an overview of the NCCTS Learning Collaborative Model for the Adoption & Implementation of Evidence-Based Treatment (NCCTS LC). They will describe how the NCCTS LC addresses the gap between the design of evidence-based interventions and their adoption into community practice, and they will share lessons learned in implementing 50+ LCs and Breakthrough Series Collaboratives throughout the country over the past nine years. The NCCTS LC approach to successful EBT adoption includes a focus on the areas of clinical competence, implementation competence, and quality improvement strategies. Ideas for overcoming common implementation barriers to the adoption and sustainability of EBTs, which come from the field of implementation science and from on-the-ground experiences shared by agency administrators participating in Learning Collaboratives, will be presented. Data will be shared from the use of the NCCTS LC model as part of the statewide implementation platform for rostering trained providers in fidelity-monitored TF-CBT from the Duke Center for Child & Family Health's North Carolina Child Treatment Program.

Learning Collaborative Adaptations across Service Settings
(Train/Ed/Dis/Child/Adol//Industrialized)

Dunn, Jerry, PhD
University of Missouri St. Louis, St Louis, Missouri, USA

This presentation will outline the efforts of MoACTS (Missouri Academy for Child Trauma Studies) to disseminate Trauma Focused Cognitive Behavioral Therapy (TF-CBT) across the state. Over the last four years, the University of Missouri-St. Louis MoACTS team has completed seven cohorts of TF-CBT Learning Collaboratives which have spanned the state and trained over 300 participants. The presentation will feature the challenges and adaptations used to accommodate clinicians across a wide variety of urban and rural environments who practice within a broad array of organizations and service settings (e.g. community based mental health centers, residential care facilities, private practice, child advocacy centers). The strengths of a range of funding models used will be explored along with their inherent limitations. Data outlining the successes of novel consultation models and web based rostering efforts as well as lessons learned regarding promotion of statewide sustainability efforts will be discussed.
Symposium
Saturday, November 9
3:00 p.m. to 4:15 p.m.
Franklin 9/10

Updates on Project BEST - Using a Community-based Learning Collaborative Model for Statewide Implementation of Trauma-focused Evidence-based Practices for Youth
(Train/Ed/Dis/Child/Adol//Industrialized)

Hanson, Rochelle, PhD
Medical University of South Carolina, Charleston, South Carolina, USA

This presentation provides an update on Project BEST (Bringing Evidence-Supported Treatments to South Carolina children and families; funded by Duke Endowment), an ongoing statewide initiative designed to support the dissemination and implementation of Trauma-focused Cognitive Behavioral Therapy (TF-CBT). Project BEST utilizes the Community-Based Learning Collaborative (CBLC) dissemination/implementation model to build community capacity to deliver and sustain trauma-informed services to abused children and their families. The CBLC approach trains clinicians to implement TF-CBT with fidelity, and brokers (non-clinical, child abuse professionals) on skills related to evidence-based treatment planning and case management. Since its onset, we have completed five CBLCs, and two are nearing completion. These have involved more than 600 clinical and broker professionals from nearly all of South Carolina’s 46 counties. The presentation will include an update on Project BEST activities to date, focusing on implementation outcomes at the participant, agency, and community levels. There will also be discussion on challenges encountered in this statewide initiative as well as lessons learned to promote sustainability.

Workshop Presentation
Saturday, November 9
3:00 p.m. to 4:15 p.m.
Grand Ballroom B

Lessons Learned from Twenty Years Work as an International Disaster Psychologist
(Global/Disaster/M/Global)

Dodge, Gordon, PhD
American Red Cross, Center City, Minnesota, USA

There are many publications, project reports, theoretical theories, and conference presentations on international psychosocial and disaster mental health work available to aspiring and experienced professionals, and I’ve written my share. This workshop however is for those who wish to hear and discuss lessons that I have learned from my twenty plus years of international psychosocial work in civil war, refugee, and natural disaster assignments. Settings have included Kosovo, Croatia, Serbia, Albania, Kenya, Burmese-Thai refugee camps, Kenya, Guam, India, Nicaragua, Haiti, and Guyana. Key lessons learned topics to be addressed will be intervention premises, psychosocial assessment, program planning and development, capacity building, team development, program evaluation, staff care, colleagues and friendships, and self care. Brief readings and quotes from my
journals will be provided in order to exemplify key conclusions. Participants will be invited to raise questions and offer comment from their own experiences.

**Paper Presentation**
**Saturday, November 9**
**3:00 p.m. to 4:15 p.m.**
**Grand Ballroom C**

**Treatment Needs and Approaches for Military Populations II**

**Mindfulness as a Potential Means to Promote Resilience and Recovery: An Examination of Veterans with Co-occurring Post-Traumatic Stress and Substance Use Disorders**
(Clin Res/Mil/Vets/M/N/A)

Gawrysiak, Michael, PhD\(^1\), Goodson, Jason, PhD\(^1\), Grassetti, Stevie, MA\(^2\)

\(^1\)Philadelphia VA Medical Center/VISN 4 MIRECC, Philadelphia, Pennsylvania, USA
\(^2\)University of Delaware, Newark, Delaware, USA

Among military veterans, a dual-diagnosis of post-traumatic stress disorder (PTSD) and substance use disorder (SUD) is common and associates with greater functional impairment and poorer treatment outcomes than either disorder alone. Emerging evidence suggests mindfulness, a psychological state of deliberately and non-judgmentally paying attention to the present moment, may mitigate a broad array of psychiatric symptoms and promote psychological resilience and adaptive functioning. The current presentation includes data from two ongoing pilot studies investigating mindfulness in veteran samples. First, is an investigation into the effectiveness of a mindfulness-based intervention for veterans with SUD. Preliminary analysis demonstrated pre-post reductions on measures of alcohol craving and PTSD symptom severity (Cohen’s \(d = .56\) and \(.99\), respectively). The second project examines relations between mindfulness, resilience to trauma exposure, PTSD, and SUD severity. While early data acquisition precludes analytic interpretation, preliminary findings are consistent with other studies supporting mindfulness as a unique predictor of adaptive functioning following trauma exposure. Discussion concludes with a focus on plausible cognitive, affective, and neurobiological mechanisms by which mindfulness serves to both bolster resilience to trauma, PTSD, and SUD, and promote recovery.
Seeking Safety Pilot Outcome Study at Walter Reed National Military Medical Center
(Clin Res/Mil/Vets/M/Industrialized)

Najavits, Lisa, PhD\textsuperscript{1}, Lande, Gregory, DO\textsuperscript{2}, Gragnani, Cynthia, PhD\textsuperscript{2}, Isenstein, Deborah, LCSW\textsuperscript{2}, Southard, Stephanie, LCSW\textsuperscript{2}, Schmitz, Martha, PhD, ABPP\textsuperscript{3}
\textsuperscript{1}Harvard Medical School, Newton Centre, Massachusetts, USA
\textsuperscript{2}Walter Reed National Military Medical Center, Bethesda, Maryland, USA
\textsuperscript{3}San Francisco VA Medical Center and UCSF, San Francisco, California, USA

Seeking Safety (SS) is an evidence-based present-focused therapy model for post-traumatic stress disorder (PTSD) and substance use disorder (SUD). PTSD and SUD are two of the most prominent psychiatric disorders among military members. We studied outcome results of a pilot study using SS at Walter Reed National Military Medical Center. SS was conducted as-is to evaluate how it worked with this military population. The sample was 25 service members who attended at least eight sessions of the treatment, recruited over a 1-year period. Inclusion criteria were PTSD and/or substance use disorder. Ten clinicians served on the project after receiving training in SS. An independent expert in SS rated adherence. Results showed significant improvements in the Brief Addiction Monitor; the PTSD Checklist - Military Version (criterion B, criterion D, total score); Zung Depression Scale (total score); BASIS-24 (depression functioning, emotional liability, psychosis, relationships, total score); Coping Self-Efficacy Scale (mean of all items); Trauma Symptom Checklist-40 (anxiety, depression, sexual abuse trauma index, sexual problems, sleep, mean of all items); Sheehan Disability Scale (family, social, work, total score); Brief-Symptom Inventory-18 (anxiety, depression, mean of all items). Satisfaction was strong. Discussion includes strengths and limitations of the study and next steps.

Professional and Para-professional Mental Health Care in the Military
(Clin Res/Mil/Vets/M/Industrialized)

Kim, Paul, MA, Toblin, Robin, PhD, Kok, Brian, BA, Grossman, Sasha, BA, Riviere, Lyndon, PhD, Wilk, Joshua, PhD
Walter Reed Army Institute of Research (WRAIR), Silver Spring, Maryland, USA

Research assessing the extent to which military personnel utilize para-professional/non-professional mental health resources is limited. Additionally, concerns regarding stigma among those using para-professional care are unknown. 847 active duty soldiers reporting PTSD, depression, or anxiety was selected; caseness was determined by standard diagnostic criteria using established self-report measures. Stigma, organizational barriers to care, and negative attitudes toward care were measured using a 17-item scale. Participants reported whether they received help in the past 3 months from a fellow soldier, medic, chaplain/clergy, or an Army resource hotline as well as from a mental health professional or medical doctor. 7% reported using para/non-professional care exclusively; 10% used professional care, and 10% used both types of care. Stigma was significantly higher among those reporting no
care than those who sought professional care, but not significantly different from para-professional/non-professional care use. Negative attitudes about care and organizational barriers concerns were higher among those reporting para-professional care compared to those reporting professional care. This study highlights the importance of para-professionals/non-professionals as alternative military mental health resources, as well as the risks and benefits associated with their use.

**Paper Presentation**
**Saturday, November 9**
**3:00 p.m. to 4:15 p.m.**
**Grand Ballroom C**

**Findings from a Randomized Controlled Trial of Group Delivered Evidence-based PTSD Therapies in OEF/OIF Women Veterans**
*(Clin Res/Mil/Vets/M/N/A)*

**Castillo, Diane, PhD**
*New Mexico VA Healthcare System, Albuquerque, New Mexico, USA*

Exposure and cognitive evidence-based psychotherapies (EBPs) for PTSD are supported in an individual delivery format, with little evidence for superiority in group (Sloan, et al., 2011). Cognitive therapy components can be transferred to a group setting, but exposure therapy faces logistic challenges (e.g., repeated in-session imaginal exposure). This randomized controlled trial (RCT) examined a 16-week group treatment with three blocks (cognitive, exposure, skills) and only 3 participants per group versus a minimal attention wait list arm in 86 Afghanistan and Iraq women Veterans. The sample was young (M=36), educated (M=15 yrs), ethnically diverse (42% Hispanic, 17% Native American), and highly traumatized (66%>25 traumas, 69%>8 trauma types; 46% sexual assault). An ANOVA showed a significant (p<.01) pre/post interaction and Repeated Measures ANOVA a significant (p<.001) 23-point CAPS decrease, maintained 6 months after treatment. Full data analysis will be presented including other outcome results (SF-36 and QOLI), intent-to-treat analysis, account for intraclass correlation (group=unit of analysis), and treatment comparisons on the PCL. This RCT demonstrates the efficacy of a short-term, manualized, combined group EBP model for PTSD in women OEF/OIF Veterans and a unique structure for providing repeated in-session imaginal exposures for all participants in a group setting.
Interpersonal Relationships and Child Outcomes Following Trauma and Treatment

Developmental Trajectories of School Bullying and PTSD Symptoms
(Practice/Child/Adol/M/Industrialized)

Idsoe, Thormod, PhD¹, Idsoe, Ella, PhD¹, Dyregrov, Atle, PhD², Salmivalli, Christina, PhD³
¹University of Stavanger, Stavanger, Norway
²Center for Crisis Psychology, Bergen, Norway
³University of Turku, Turku, Finland

Cross-sectional studies have related school bullying to PTSD symptoms (Idsoe, Dyregrov & Idsoe, 2012), but there is a lack of longitudinal studies. We used data from 1107 Finish adolescents who have been followed up since May 2007, when they were 9-10 years old. Bullying was measured by the procedures of Olweus (1993), while PTSD symptoms were assessed with The Children’s Impact of Event Scale (CRIES-8) (Perrin et al. 2005). While we have yearly data for exposure to bullying, PTSD symptoms were measured for the first time in 2012. Preliminary analyses have demonstrated that the developmental process of being bullied through 5 years predicted PTSD symptoms in year 5 (Idsoe, Idsoe, Dyregrov & Salmivalli, 2013). However, lack of longitudinal information for PTSD symptoms has so far prevented the possibility of investigating a possible parallelism of the two developmental processes across time. We will therefore add to the model described above (that predicted symptoms in year 5) by presenting the second wave of PTSD symptoms measured this spring (2013) – and model how this two-wave process of PTSD symptoms is related to the developmental process of bullying. We will also present information from open-ended questions about onset and duration of the PTSD symptoms.

Interpersonal Violence Exposure as a Predictor of Long-term Treatment Response for Boys with a Disruptive Behavior Disorder
(Clin Res/Child/Adol/M/Industrialized)

Shenk, Chad, PhD¹, Dorn, Lorah, PhD¹, Kolko, David, PhD, ABPP², Rausch, Joseph, PhD¹, Insana, Salvatore, PhD²
¹Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio, USA
²University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, USA

Observational research indicates that a history of interpersonal violence (IPV) is common in children with disruptive behavior disorders (DBDs), affects key neuroendocrine systems related to DBD symptoms, predicts a persistent course of DBD symptoms, and is related to callous-unemotional (CU) traits. These relationships may limit the long-term efficacy of DBD interventions. The current study examined whether exposure to IPV prior to
receiving treatment for a DBD was systematically related to trajectories of resting cortisol, DBD symptoms and CU traits. Boys with a DBD diagnosis (N = 118; Age range = 6-11 years), either oppositional defiant disorder or conduct disorder, participated in a randomized clinical trial and were assessed for three years following treatment. Results indicated that a majority of the sample experienced IPV prior to receiving treatment. Hierarchical linear modeling demonstrated that prior IPV predicted blunted cortisol profiles and higher trajectories of DBD symptoms and CU traits throughout the three-year follow-up. The effect size magnitude of prior IPV exposure was large for each outcome examined. These results highlight the need to include trauma-focused components into existing DBD treatments for those exposed to IPV. Tailoring DBD interventions in this manner can optimize the effects of these interventions when applied with children exposed to IPV.

Paper Presentation
Saturday, November 9
3:00 p.m. to 4:15 p.m.
Franklin 6

Resilience in Children and Adolescents after Child Abuse and Neglect: a Cross-Sectional Analysis of Protective Factors on Different Levels of Resilience (Prevent/Child/Adol/M/Industrialized)

Witt, Andreas, MS, PhD Student¹, Ganser, Helene, MS, PhD Student¹, Goldbeck, Lutz, PhD², Fegert, Joerg, PhD², Münzer, Annika, MS, PhD Student¹, Plener, Paul, PhD¹
¹University Ulm, Department of Child and Adolescent Psychiatry/Psychotherapy, Ulm, Baden-Wuerttemberg, Germany
²University Ulm, Ulm, Baden-Wuerttemberg, Germany

Objectives: Though consequences of child abuse and neglect (CAN) for the victims’ mental health can be severe, some children and adolescents survive even multiple adverse events without clinically relevant effects. These children can be labeled resilient. So far knowledge about resilience factors is limited. This study investigates the association between trauma-related social support, as well as cognitive coping strategies and different levels of resilience (e.g. mental health, level of functioning, academic performance). Methods: Children and adolescents between 4 and 14 years with a known history of CAN are assigned to our research center by local child welfare agencies and institutions. Mental health is assessed by a structured clinical interview (K-SADS-PL). History of CAN is explored by an adaptation of the juvenile victimization questionnaire (JVQ). Those without manifest mental disorder are defined as resilient. Children and adolescents without mental disorders are compared to the clinical group using binary logistic regressions and interference statistical methods. Results: A first cross-sectional baseline analysis on the association between cognitive coping strategies, e.g. recognizing perpetrators responsibility and being able to report CAN, trauma-related social support and different levels of resilience will be provided.

Nixon, Reginald, PhD
Flinders University, School of Psychology, Adelaide, South Australia, Australia

The author has previously reported on the short-term outcome of young people who participated in a randomized trial comparing trauma-focused cognitive-behavior therapy (CBT) with trauma-focussed cognitive therapy (CT) following single-incident trauma (N=33). The purpose of the current presentation is to report (a) the longer-term outcomes of these children (at 1-year follow-up) and (b) the variables that appear to influence children’s response to treatment and maintenance of gains. While data collection is ongoing, final follow-ups will be complete before November. Preliminary findings indicate that at 1-year follow-up children continue to demonstrate significant improvements on both interviewer-rated (blind assessments, CAPS-CA) and self-reported PTSD (CPSS), unhelpful trauma-related beliefs (cPTCI) and depression symptoms (CDI) (ps < .001, treatment effect sizes > 1.0). There was no significance difference between CBT and CT at follow-up. Analyses also suggest that children’s longer-term outcome continues to be moderated by maternal adjustment. Specifically it appears children with high levels of PTS at the beginning of treatment have poorer outcomes when their mothers report higher levels of depressive symptoms and unhelpful beliefs. The implications for better targeting factors likely to impede children’s treatment success will be discussed.

The Rwanda Genocide: New Research Developments

The Wounds of Helping: Addressing Secondary Trauma in Rwandese Healthcare Providers

Sosa, Amy, MA1, Ndagijimana, Jean Pierre, Undergraduate2, Zakowski, Sandra, PhD3
1Argosy University, Chicago, Illinois, USA
2National University Of Rwanda, Butare, Rwanda

Healthcare professionals can be positively and negatively impacted by their work with trauma survivors. Secondary traumatic stress (STS), defined as the presence of trauma symptoms in the helper resulting from their work with survivors, is prevalent and little research has been
done to develop interventions for healthcare providers working in post-conflict countries. We developed a six-week secondary trauma intervention using mindfulness-based and experiential techniques to address STS among 25 Rwandese healthcare providers working at an HIV clinic in Kigali, Rwanda. Assessments of STS and compassion satisfaction were administered at baseline, directly following the intervention, and at two month follow-up. While participants reported that the intervention was helpful in identifying and understanding their symptoms of STS, initial quantitative analyses revealed no significant changes in symptoms following the intervention. Preliminary qualitative results suggest that workload, family stress, death of a loved one, and financial stressors may be risk factors for STS, while spending time with family, physical exercise, sleep, reading, cooking, and religion act as protective factors. Findings will be discussed with respect to procedures and challenges of adapting interventions cross-culturally and implications for future research.

Paper Presentation
Saturday, November 9
3:00 p.m. to 4:15 p.m.
Franklin 8

From Intergenerational Trauma to Intergenerational Resilience: Bearing Witness to Community Empowerment in Post-Genocide Rwanda
(Commun/Surv Hist/M/E & S Africa)

Hedglen, Jenna, Doctoral Student, Cheng, Priscilla, Doctoral Student
Chicago School for Professional Psychology, Chicago, Illinois, USA

This phenomenological study explores the way in which two teachers from post-genocidal Rwanda model resilience for their students through the Children's Hope Club at St. Famille School in Kigali, Rwanda. Through the use of expressive therapies, these teachers empower a second generation of youth who have been significantly impacted by the effects of intergenerational trauma. This study examines intergenerational resilience in a sample of 5 students and 2 teachers from Children's Hope Club. Semi-structured interviews will be analyzed using textural description. This research will explore the following: 1. How Rwandan youth understand their community's and their own experience of resilience post-genocide, 2. How intergenerational methodologies originating from within the community differentially affect children towards resilience when compared to those externally enacted, and 3. How the teachers maintain their own resilience when faced with the community trauma that is experienced by the children with whom they work. This study is expected to demonstrate how intergenerational resilience can be transmitted in a similar manner as intergenerational trauma when adults from within the community model resilience and empower youth. This suggests the need to cultivate community involvement among survivors of mass trauma for the effects of resilience to cascade throughout the community.
The Role of Family Support and Alcohol Abuse on Intimate Partner Violence in Rural Rwandan Families
(Global/Violence/I/E & S Africa)

Ng, Lauren, PhD\(^1\), Betancourt, Theresa, ScD MA\(^1\), Smith Fawzi, Mary, ScD\(^2\), Sezibera, Vincent, PhD\(^3\), Bizimana, Justin, BS\(^4\), Shema, Evelyne, BA\(^4\)

\(^1\)Harvard School of Public Health/ FXB Center for Health and Human Rights, Boston, Massachusetts, USA
\(^2\)Harvard Medical School, Boston, Massachusetts, USA
\(^3\)National University Of Rwanda, Butare, Southern Province, Rwanda
\(^4\)Rwinkwavu Hospital, Rwinkwavu, Eastern Province, Rwanda

Objectives: In Rwanda, many families are coping with HIV, poverty, and the legacy of the genocide, placing them at risk for intimate partner violence (IPV). Alcohol abuse and family support may impact this risk. This study investigates predictors of IPV in married caregivers of school-aged children in rural Rwanda. Methods: A case-control design identified children who were HIV+, had an HIV+ caregiver, or were non-HIV-affected and their caregivers. Married caregivers (n=327, 71% female) reported on IPV victimization and perpetration, alcohol use, family support, mental health symptoms, and poverty in their families. Multiple logistic regression identified predictors of IPV. Results: 51% of caregivers reported experiencing some type of IPV (32% physical and 23% sexual). 24% reported perpetrating IPV. Victimization was positively predicted by alcohol problems in the family and caregiver mental health, and negatively predicted by family support. Perpetration was positively predicted by economic hardship and caregiver mental health, while family support decreased the odds of perpetration when there were no alcohol problems in the family, but was not as protective when there were. Conclusions: Alcohol abuse and family support predict risk of IPV in multiply stressed Rwandan families. IPV interventions may be strengthened by targeting alcohol abuse and family interactions.

Building Resources and Establishing Hope: Community Counseling Groups for Rwandan Women with Children Born of Genocide Rape
(Commun/Surv Hist/M/E & S Africa)

Hogwood, Jemma, DPsych(Clin)\(^1\), Auerbach, Carl, PhD\(^1\), Munderere, Sam, MA\(^1\), Kambibi, Emilienne, BA\(^1\)

\(^1\)Survivor’s Fund Rwanda, Kigali, Rwanda
\(^2\)Yeshiva University, New York, New York, USA

Rape was used as a weapon of war in the 1994 Rwandan Genocide against the Tutsi, during which thousands of women were brutally raped. This resulted in thousands of children born as a result of rape. Nineteen years on, trauma still remains in society and rape victims face multiple challenges, mental health problems, stigma and social isolation. Despite enormous resilience, their individual resources are severely depleted and for many women, day
to day life focuses on survival. In a pilot program, four Community Counseling groups involving a total of 40 participants were set up to allow the women to meet others, share experiences and explore their role and responsibilities as a mother as well as to think about how to disclose to their child the circumstances around their birth. Results of pre- and post- group questionnaires showed that the women rated their quality of life significantly higher after six months of group counseling. A significant increase in social support networks and acceptance of their child was also found. It appears that the groups facilitated an increase in positive emotions and an opportunity to re-build their resources, improve their family relationships and regain hope for the future.

**Paper Presentation**  
**Saturday, November 9**  
**3:00 p.m. to 4:15 p.m.**  
**Franklin 11/12**

**Trauma and Resilience: The Role of Professionals II**

**Lessons Learned From Sandy Hook: Personal Reflections of Federal Behavioral Health Response Team Members**  
(Practice/Disaster/M/Industrialized)

Kaul, Rachel, LCSW, Formanski, Stephen, PsyD, Goodie, Jeffrey, PhD, ABPP, Schreiber, Merritt, PhD  
1HHS/ASPR, Washington, District of Columbia, USA  
2HHS/ASPR, Philadelphia, Pennsylvania, USA  
3Uniformed Services, University of the Health Sciences, Bethesda, Maryland, USA  
4UC Irvine School of Medicine, Orange, California, USA

This session will present personal observations on "lessons learned" from the US Dept of Health and Human Services, Assistant Secretary of Preparedness and Response acute phase response to the Sandy Hook School Shooting. The session will provide brief overview of the efforts of the HHS Behavioral Health response team on site in Connecticut, coordination with the Office of At Risk Populations, Behavioral Health and Community Resilience and Secretary's Emergency Operations Center in Washington. The presentation will highlight reflections on lessons learned involving: 1. The first use of a behavioral health "safety officer" to enhance the resilience of the 26 Federal field mental health providers from the United States Public Health Service Commissioned Corps 2. The pilot use of the PsySTART emergency mental health triage system to guide incident operations and population level risk/casualty estimation 3. Engagement with community stakeholders, state and other federal agencies on the ground in Newtown 4. Strategies for population level acute phase response efforts Presenters will include mental health officers from the US Public Health Service, Office of the Assistant Secretary of Preparedness and Response and Disaster Medical Assistance Team/National Disaster Medical System members. *all views are solely those of the presenters and do not reflect US government policy.
Paper Presentation
Saturday, November 9
3:00 p.m. to 4:15 p.m.
Franklin 11/12

Post-Traumatic Growth Following Hurricane Katrina: The Influence of Clinicians’ Trauma Histories, Primary and Secondary Traumatic Stress
(Self-Care/Disaster/A/N/A)

Bauwens, Jennifer, PhD1, Tosone, Carol, PhD2
1Clinical Social Work Journal/Other, Princeton, New Jersey, USA
2New York University, New York, New York, USA

This study was a secondary data analysis of 244 clinicians living and working in a post-Katrina environment. Using structural equation modeling, clinicians’ trauma histories and primary and secondary traumatic stress were assessed in relationship to post-traumatic growth. It was expected that a greater number of traumatic life events would be related to higher levels of traumatic experience and growth. It was also expected that traumatic life experience would be associated with growth. Contrary to expectation, the initial evaluation of the path coefficients showed no significant paths between primary trauma and post-traumatic growth. A closer inspection of measures and model diagnostics revealed three distinct constructs pertaining to primary trauma, none of which were highly correlated. A revised model was then re-fit with the inclusion of two latent variables, primary trauma and post-traumatic growth, which yielded a better fit. The new model was statistically overidentified. The results showed that a greater number of traumatic life events were related to both primary and secondary traumatic stress but not growth. The latent variables revealed a statistically significant relationship between traumatic reexperiencing which related to greater post-traumatic growth in the domain, appreciation for life.

Paper Presentation
Saturday, November 9
3:00 p.m. to 4:15 p.m.
Franklin 11/12

Evaluation of an Online Training Program for General Practitioners to Improve Management of Trauma-related Mental Health Problems
(Train/Ed/Dis/Caregvs/I/Industrialized)

Howard, Alexandra, BBSc, MPsy, Wade, Darryl, PhD, Forbes, David, PhD, Cooper, John, MD
Australian Centre for Post-traumatic Mental Health, University of Melbourne, East Melbourne, VIC, Australia

General Practitioners (GPs) are commonly the first ‘port of call’ for people with current or emerging mental health problems, including those affected by disaster and trauma. In Australia, GPs provide more mental health care than any other health professional so are well-placed to respond to the needs of people following trauma. This presentation describes a six-hour online training program that was developed to assist Australian GPs to better manage trauma-related mental health problems. Specifically, the program focuses on delivery of lower-intensity mental health interventions by GPs that promote resilience and recovery, and if necessary, the use of higher-intensity interventions including referral to specialists. The current study examines the effectiveness of this training program to improve GPs’ knowledge and skills to manage trauma-related mental health problems. Specifically, data to be presented will include: (a) the uptake of the program, (b) its effectiveness to increase GPs
knowledge and skills, and (c) the GPs’ satisfaction with the program and its relevance to their practice. The implications of the findings for enhancing a GP’s capacity to provide evidence-based interventions for trauma-related mental health problems will be discussed.

**Paper Presentation**  
**Saturday, November 9**  
**3:00 p.m. to 4:15 p.m.**  
**Franklin 11/12**

**First Responder Stress and Resilience: Generalizability vs Specificity across Different First Responder Groups**  
(Prevent/EmergWrks/A/Industrialized)

**Arnetz, Bengt, MD PhD**, Arble, Eamonn, MS (PhD Student)  
1Wayne State University, School of Medicine, Detroit, Michigan, USA  
2Wayne State University, Detroit, Michigan, USA

The aim of the project is to determine the prevalence of stressors, mental health, and risk and resilience factors across five major First responder groups. Methods: A based survey was distributed to a representative sample of 6240 First responders, of whom 59% responded. The survey consisted of already validated stress, health and performance questions, as well as new questions focusing on professional stressors, resilience and recovery strategies. Results: Nine out of ten respondents felt safe in their job, despite the fact that 60% had been exposed to severe threats or trauma. 46% reported that their work among the public had become more dangerous. Professional stress impaired performance among 42%. 40% stated that family-stressors impacted adversely on their performance. The majority stated there was a lack of organizational strategies to manage job stress. 65% was interested in complimentary means to manage. 70% stated trauma exposures had resulted in post-traumatic growth. Structural equation suggested that First responders that had healthy coping strategies, social support, and were in good physical health were able to withstand professional stress better. Those that avoided professional challenges and used drugs and alcohol to cope, exhibited lower self-rated health. Conclusion: The study also presents a conceptual model linking professional stressors to health.
Concurrent Session Thirteen

Featured Roundtable

Saturday, November 9
4:30 p.m. to 5:45 p.m.
Grand Ballroom A

Creative Thinking on Interventions to Promote Resilience in Trauma-Affected Populations: A Roundtable
(Prevent/N/A/I/Global)

Hobfoll, Stevan, PhD¹, Berliner, Lucy, MSW², King, Kevin, PhD³, Olff, Miranda, PhD⁴, Tol, Wietse, PhD⁵, Weine, Stevan, MD⁶

¹Rush Medical College, Chicago, Illinois, USA
²University of Washington/ Harborview Medical Center, Seattle, Washington, USA
³University of Washington, Seattle, Washington, USA
⁴Academic Medical Center at the University of Amsterdam and Arq Psychotrauma Expert Group, Amsterdam, Noord-Holland, the Netherlands, Netherlands
⁵John Hopkins School of Public Health, New Haven, Connecticut, USA
⁶University of Illinois at Chicago, Chicago, Illinois, USA

The concept of resilience has been increasing as a pivotal, defining and operating construct with policy makers, practitioners and researchers working with trauma-affected populations. Knowledge on how people maintain mental health and wellbeing, despite exposure to potentially traumatic events may have important benefits in the design and selection of mental health interventions. However, research on resilience has been grappling with key questions, including how knowledge on resilience may translate to practical intervention strategies. In this Roundtable we will explore creative solutions to this question through discussion with the audience, subsequent to brief presentations. Brief presentations will outline the Roundtable facilitators’ perspectives on: resilience in children and adolescents; family- and community processes in resilience; relevance of recent biological findings for resilience; and resilience of populations in developing countries.
Symposium  
Saturday, November 9  
4:30 p.m. to 5:45 p.m.  
Grand Ballroom E

New Horizons in PTSD Sleep Research  
(Bio Med/N/A/M/Industrialized)

Chair: Mellman, Thomas, MD\(^1\), Discussant: Neylan, Thomas, MD\(^2\)

\(^1\)Howard University College of Medicine, Washington, District of Columbia, USA  
\(^2\)San Francisco VA Medical Center (VAMC-SF), San Francisco, California, USA

Sleep disturbances are prominent features of PTSD and likely contribute to its pathogenesis. Extant PSG studies of PTSD have provided evidence for and against objective impairment of sleep initiation, maintenance, and depth, and possible abnormalities of rapid eye movement (REM) sleep. Many of the earlier studies featured male combat veterans with very chronic PTSD and utilized laboratory settings. We will provide data from new studies of civilian and young veteran populations with sample sizes that allow for exploration of sex effects and interactions, assessment of environmental variables, and sleep neuroimaging methods. Findings implicate sex effects for PTSD sleep findings and a role for REM sleep in PTSD in resilience. The chair and discussant will provide relevant background and facilitate discussion of possible roles of study populations and environmental contexts, and implications for future studies, mechanisms for sleep resilience, and strategies for prevention and treatment.

Symposium  
Saturday, November 9  
4:30 p.m. to 5:45 p.m.  
Grand Ballroom E

Sleep Neuroimaging in Combat Veterans with and without PTSD  
(Bio Med/Mil/Vets//Industrialized)

Germain, Anne, PhD  
University of Pittsburgh, Pittsburgh, Pennsylvania, USA

Sleep disturbances are core feature of Post-traumatic Stress Disorder (PTSD), but the neural underpinnings of PTSD during sleep are unknown. We use positron emission tomography (PET) to evaluate relative cerebral metabolic rate of glucose (rCMRglc) during rapid-eye movement (REM) sleep or non-REM (NREM) sleep and wakefulness in combat-exposed veterans with and without PTSD, who served in Iraq or Afghanistan. All completed in-lab sleep studies and FDG PET studies during wakefulness, REM sleep, and NREM sleep. Results showed that combat exposed Veterans with PTSD show greater increases in rCMRglc during both REM and NREM sleep in brainstem and forebrain arousal regulating regions, as well as limbic and cortical regions involved in fear and reward responses.
Symposium  
Saturday, November 9  
4:30 p.m. to 5:45 p.m.  
Grand Ballroom E

**Sex-specific Sleep Characteristics in Young Adult African Americans with Civilian Trauma Exposure**  
(Bio Med/N/A//Industrialized)

Kobayashi, Ihori, PhD, Lavela, Joseph, BA, Wilson, Bryonna, BS, Mellman, Thomas, MD  
Howard University College of Medicine, Washington, District of Columbia, USA

Prior polysomnographic (PSG) sleep studies with mainly male combat veterans found shallow sleep and rapid-eye-movement (REM) sleep alterations in chronic PTSD. However, sleep characteristics of women and civilians have been less extensively investigated. The present study examined PSG sleep parameters in young African American men and women with civilian trauma exposure. Participants (age 18-35) with current PTSD (25 women, 16 men), past PTSD ($n=22, 12$), and high impact trauma exposure without PTSD (Resilient, $n=16, 8$), and people without trauma exposure [trauma negative (TN), $n=9, 14$] completed two-consecutive-night PSG monitoring. A 2 (PTSD status) x 2 (sex) ANOVA was performed for each sleep parameter measured on the second night. Exploratory one-way ANOVAs were also performed for men and women separately. Results indicated that TN had greater total sleep time than the current and past PTSD groups ($F=3.97, p=.01$). Results also showed that women had greater REM density than men regardless of PTSD status ($F=6.98, p=.009$). The resilient men had the greater percentage of REM sleep than men with current PTSD ($p=.02$). Longer mean REM segment duration with resilience compared to current PTSD was found in men ($p=.02$). Present results suggest that both sexes have reduced sleep with PTSD whereas REM alterations with PTSD may be specific to men.

Symposium  
Saturday, November 9  
4:30 p.m. to 5:45 p.m.  
Grand Ballroom E

**Sex Differences in Slow Wave and REM Sleep in PTSD and Healthy Control Subjects**  
(Bio Med/Diverse Pop//Industrialized)

Richards, Anne, MD MPH  
UCSF/SF VAMC, San Francisco, California, USA

Prior research indicates that PTSD is associated with reduced slow wave sleep (SWS) and abnormalities in REM sleep but most research has been conducted in male subjects. We therefore sought to compare SWS and REM sleep in male and female PTSD subjects with age and sex-matched control subjects. We used a cross-sectional, 2x2 design (PTSD/control x female/male) involving 83 medically healthy, non-medicated adults aged 19-39 in the inpatient sleep laboratory. Visual analysis of EEG demonstrated that PTSD was associated with lower SWS duration ($F(3,82)=7.63, p=.007$) and SWS percent ($F(3,82)=6.11, p=.016$). There was also a group by sex interaction effect for REM duration ($F(3,82)=4.08, p=.047$) and REM percent ($F(3,82)=4.30, p=.041$), explained by greater REM sleep in PTSD females as compared to control females, a difference not seen in male subjects. Quantitative EEG analysis demonstrated that PTSD was associated with lower energy in the delta spectrum ($F(3,82)=6.79, p=.011$) in NREM sleep. SWS and delta findings were more pronounced in males. These findings support prior evidence that
PTSD is associated with impairment in the homeostatic function of sleep, especially in men with the disorder. Interaction effects of sex and PTSD status on REM sleep raise intriguing questions about the role of REM sleep in sexual dimorphism in PTSD pathophysiology.

**Symposium**  
**Saturday, November 9**  
4:30 p.m. to 5:45 p.m.  
Grand Ballroom F

**Findings from Three, Novel, Randomized Clinical Trials Examining Web-based Interventions for Stress and Trauma**  
(Clin Res/N/A/M/N/A)

Chair: Grills-Taquechel, Amie, PhD LP\(^1\), Discussant: Benight, Charles, PhD\(^2\)  
\(^1\)Boston University, Boston, Massachusetts, USA  
\(^2\)UCCS, Colorado Springs, Colorado, USA

Web-based interventions have the potential to reach many individuals who may not be willing or able to receive traditional in-person therapy. Indeed, a growing body of research supports that such interventions can be effective at reducing psychological distress, including distress associated with traumatic and highly stressful traumatic events. The three presentations in this symposium present the initial outcomes of ongoing randomized clinical trials examining innovative, web-based interventions for stress and traumatic events. For each program, intervention design will be discussed and will be followed by presentation of results from the first stage of examinations comparing the active and control conditions. Results suggest that each intervention has demonstrated significant effects on key variables targeted (e.g., PTSD, alcohol misuse, stress). Implications of the findings for further development of online interventions for trauma and stressful life events are discussed.

**Symposium**  
**Saturday, November 9**  
4:30 p.m. to 5:45 p.m.  
Grand Ballroom F

**The From Survivor to Thriver Program: Initial Results of an RCT for an Online Program for Rape Victims with PTSD**  
(Clin Res/Violence//Industrialized)

Littleton, Heather, PhD\(^1\), Grills-Taquechel, Amie, PhD\(^2\), Drum, Katherine, PsyD\(^1\)  
\(^1\)East Carolina University, Greenville, North Carolina, USA  
\(^2\)Boston University, Boston, Massachusetts, USA

Although up to 50% of rape victims develop PTSD (Walsh et al., 2012), many do not seek treatment, suggesting a need to develop ways to circumvent help-seeking barriers. Therefore, we report on an ongoing RCT of an online therapist-facilitated intervention for rape-related PTSD: the From Survivor to Thriver (S2T) program. The efficacy of the S2T program is compared to a PTSD-focused psycho-educational website. Thus far, 30 college women with rape-related PTSD have been randomized to one of these two interventions, and 23 (76.7%) completed post-testing. Among participants, 48% were ethnic minorities, with a mean age of 25 years. A total of 73% of women in
the S2T program experienced clinically significant improvement (i.e., a significant reliable change index score) in interview-assessed PTSD symptoms, as did 55% of women assigned to the psycho-educational website. In addition, 40% of women in the S2T program reported improvement in self-reported depression symptoms, as compared to 11% of women assigned to the website. Finally, 83% of women in the S2T program experienced improvement in at least one of the three types of negative cognitions assessed by the Post-traumatic Cognitions Inventory, as compared to 63% of women assigned to the website. Implications of the findings for the development of online interventions are discussed.

Symposium
Saturday, November 9
4:30 p.m. to 5:45 p.m.
Grand Ballroom F

Evaluating an Online Stress Management Intervention for College Students
(Clin Res/Child/Adol//Industrialized)

Frazier, Patricia, PhD, Meredith, Liza , BS, Greer, Christiaan, PhD Candidate, Howard, Kelli, MA, Paulsen, Jacob , BA, Vu, Anna Marie, BA, Van Kampen, Emily , MA, Bermingham, Therese, BA, Kim, Shinsig , BA, Belgrade, Andrea, BA, Hintz, Samuel, PhD Candidate
University of Minnesota, Minneapolis, Minnesota, USA

Stress and trauma exposure are important problems for students. To address these problems, we developed an online intervention that focuses on increasing perceived control over stress. The intervention consists of four interactive online modules incorporating research on stress and control, information from other students on stress in their lives, and several weeks of stress logs. We present the results of four RCTs testing intervention efficacy at a research University (RU; 2 studies) and a community college (CC; 2 studies). In the first RU study (n = 233), the mean between-group effect sizes comparing our intervention to a stress-information only comparison group on four measures of depression, anxiety and stress were d = .31 at posttest and an even larger d = .42 at 3-week follow-up. In the first CC study (n = 194), the post-test effect size was similar (d = .33) although the follow-up effect was smaller. Second RU (n = 513) and CC (n = 213) studies will be completed in May 2013. These results also will be reported. Further analyses will examine childhood trauma exposure as a moderator of treatment efficacy. Results to date suggest that this is a cost-effective means of decreasing the effects of stress.
Web-Based CBT for Veterans with PTSD Symptoms and Substance Misuse: Program Development and Preliminary Results  
(Tech/Mil/Vets/N/A)

Possemato, Kyle, PhD¹, Fuentes, Juanita, MPH², Lantinga, Larry, PhD², Maisto, Stephen, PhD²

¹Department of Veteran Affairs, Syracuse, New York, USA  
²Syracuse Veterans Affairs Medical Center, Syracuse, New York, USA

An interactive web-based intervention that utilizes evidence-based cognitive behavioral treatment strategies to target substance use, PTSD and other problems common among OEF/OIF veterans has been developed and is currently being tested. This presentation will describe our development process, content of the web-based program and preliminary results from the RCT. Our iterative develop process included gathering systematic feedback from clinician experts, and conducted focus groups and individual feedback sessions with combat veterans. The final program includes 11 core and 13 optional modules, each about 20 minutes in length. Veterans are being recruited from primary care clinics at four VA medical centers. Participants are randomized to primary care treatment as usual (TAU) or TAU plus the web-based treatment. Currently, 38 participants have been enrolled in the RCT. Preliminary results reveal decreases for participants randomized to the web-based condition in PTSD symptoms (baseline PCL mean= 45, post PCL mean= 33, F(1,14)= 3.07, p=.10) and binge drinking days in the past month (baseline days= 12, post days= 5, F(1,14)= 3.11, p=.112) that approach statistical significance when compared to the TAU condition. Given the current rate of recruitment we expect to present results for about 85 participants at the symposium.

Influence of Interpersonal Characteristics on Post-Traumatic Response  
(Practice/Violence/M/Industrialized)

Chair: Yalch, Matthew, MA PhD Student, Discussant: Levendosky, Alytia, PhD  
Michigan State University, East Lansing, Michigan, USA

Traumatic life experience and interpersonal functioning have a reciprocal relation with each other. A consistent body of research indicates that exposure to trauma adversely affects interpersonal functioning through a number of psychological symptoms (e.g., symptoms of depression, PTSD). Interpersonal characteristics may also influence the expression of post-traumatic psychological sequelae, although studies on this topic have only recently begun to emerge. In this symposium, we will discuss empirical and clinical issues surrounding how interpersonal characteristics influence survivors’ responses to trauma. Katherine Thomas will examine how interpersonal style influences the chronicity of PTSD in a clinical sample. Matthew Yalch will report an empirical study illustrating how interpersonal style influences the expression of DSM-5 symptom clusters in a sample of young adult women reporting dating violence. Lauren Szkodny will demonstrate how narcissism moderates the association between
PTSD symptoms and specific kinds of interpersonal problems in a sample of traumatized young adults. Finally, Alytia Levendosky will conclude with a discussion of the role of interpersonal characteristics in the response to trauma and the implications for future research and clinical practice.

**Symposium**
**Saturday, November 9**
**4:30 p.m. to 5:45 p.m.**
**Franklin 5**

**Interpersonal Profile Influences PTSD Symptom Expression in a Sample of Young Adult Survivors of Dating Violence**
(Assess Dx/Violence/Industrialized)

Yalch, Matthew, MA PhD Student, Levendosky, Alytia, PhD, Lannert, Brittany, MA PhD Student
Michigan State University, East Lansing, Michigan, USA

Dating violence is associated with a number of adverse psychological conditions, including symptoms of post-traumatic stress disorder (PTSD). However, not every woman who experiences dating violence exhibits PTSD symptoms. Research suggests that interpersonal style may be one factor that influences both the severity and type of symptoms women experience following trauma, although this idea has not yet been extended to research on women who have experienced dating violence. In this study, we measured PTSD symptoms and interpersonal characteristics in a large sample of young adult women who reported dating violence (N = 349). We sorted women into eight profiles according to their latent standing on interpersonal characteristics. We then compared women within these profiles in terms of their endorsement on each of the four clusters of PTSD symptoms from the DSM-5. Results indicate that women whose interpersonal style was characterized by moderate interpersonal warmth were the least likely to endorse PTSD symptoms independent of the severity of their dating violence exposure. In contrast, women whose interpersonal styles were submissive or over-accommodating had higher endorsement of PTSD symptoms. These results suggest characteristic interpersonal style may function as both resiliency and vulnerability factors among women exposed to dating violence.

**Symposium**
**Saturday, November 9**
**4:30 p.m. to 5:45 p.m.**
**Franklin 5**

**Personality Typologies as Indicators of Risk and Resilience in PTSD**
(Assess Dx/Violence/Industrialized)

Thomas, Katherine, MA1, Hopwood, Christopher, PhD1, Wright, Aidan, PhD2, Morey, Leslie, PhD3
1Michigan State University, East Lansing, Michigan, USA
2State University of New York at Buffalo, Buffalo, New York, USA
3Texas A&M Health Science Center, College Station, Texas, USA

Research on personality typologies of individuals with post-traumatic stress disorder (PTSD) has consistently identified low pathology, internalizing, and externalizing groups, which indicate the severity and comorbidity of psychopathology among individuals with PTSD. Interpersonal models of personality, based on the dimensions of dominance and warmth, suggest an alternative typology in which groups differ in qualitative aspects of social
functioning that may be important for indicating resilience; however, interpersonal typologies of PTSD have not been previously examined. We employed Latent Profile Analysis to compare the established temperament typology, using the Schedule for Nonadaptive and Adaptive Personality (SNAP), to a novel interpersonal typology, using Interpersonal Circumplex (IPC) traits, in a clinical sample of individuals with PTSD (n = 155). A three-profile solution that replicated the low pathology, internalizing, and externalizing typology was found using the SNAP traits and a four-profile solution with groups varying in interpersonal style was found using the IPC traits. These models were non-redundant. Temperament traits indicated global dysfunction and comorbidity, whereas interpersonal traits predicted PTSD 10-year symptom course. Results suggest that striving for agency and communion is one mechanism by which resilient individuals recover from PTSD.

Symposium
Saturday, November 9
4:30 p.m. to 5:45 p.m.
Franklin 5

Scar or Safeguard? The Effect of Narcissism on Post-Traumatic Symptoms in Relation to Interpersonal Dysfunction
(Assess Dx/N/A/N/A/N/A)

Szkodny, Lauren, MSc, Pincus, Aaron, PhD
Penn State University, University Park, Pennsylvania, USA

Personality influences interpersonal style and coping strategies used in response to traumatic stressors. When narcissistic individuals’ self-concept is punctuated by trauma, they may seek to restore their injured self-esteem. This study examines the effect of narcissism on the relationship between trauma-related symptoms and interpersonal dysfunction. University students (N=142) who experienced trauma completed measures of PTSD-related constructs, pathological narcissism, and interpersonal problems. Hierarchical multiple regressions with the interpersonal circumplex octants as criterion variables were conducted. Narcissism differentially moderated the relationship between PTSD symptoms and interpersonal dysfunction. Avoidance/numbing symptoms significantly predicted a decrease in agentic interpersonal problems in participants high on narcissism. However, the opposite pattern was observed in the interaction between hyperarousal symptoms and narcissism on interpersonal dysfunction. Whereas avoidance/numbing symptoms may shield narcissistic individuals’ fragile sense of self from further traumatic injury, the experience of hyperarousal symptoms and subsequent anticipation of re-traumatization may facilitate an increase in self-protective dominant behaviors, such as exploiting others. This study underscores the role of personality in individuals’ emotional responses to trauma.
Symposium  
Saturday, November 9  
4:30 p.m. to 5:45 p.m.  
Franklin 6

Strategies to Engage Veterans, Improve Access and Prepare for Treatment: A Presentation of Research Findings and New Directions  
(Prevent/Mil/Vets/I/Industrialized)

Chair: Bernardy, Nancy, PhD  
National Center for PTSD, White River Junction, Vermont, USA

Evidence based PTSD clinical practice guidelines support the use of effective first line psychotherapies for patients with PTSD. Treatment dropout rates, however, from these therapies remain a concern, particularly the increased rates among Veterans who have served in Iraq and Afghanistan (Erbes et al., 2009). Research is now examining the best methods to engage Veterans in the VA and help them benefit from the efficacious treatments. This symposium brings together speakers from the VA to present research findings and information on attempts to engage Veterans in care. The first speaker will present on strategies to optimize mental health and well-being among Veterans to establish a sustained relationship with an emphasis on a holistic approach. This speaker will present qualitative data on barriers and facilitators that clinicians identify in their referrals to psychotherapy treatments. The second speaker will present data on a brief group motivational enhancement treatment program to engage Veterans in evidence-based treatment. The third speaker will discuss the use of new technologies including telephone apps and online products to engage Veterans and increase knowledge about appropriate care. Dr. J. Richard Monroe will reflect on the broader implications of all the presentations and the scaling up of efforts to improve engagement in treatment for this population.

Symposium  
Saturday, November 9  
4:30 p.m. to 5:45 p.m.  
Franklin 6

Strategies to Optimize Mental Health and Well-Being in Veterans  
(Prevent/Mil/Vets/I/Industrialized)

Bernardy, Nancy, PhD  
National Center for PTSD, White River Junction, Vermont, USA

The Department of Veterans Affairs (VA) has developed a groundbreaking proactive, population-based approach to move to a holistic approach to mental health care. Focus is now on the Veteran as a whole person and includes the community where he or she lives and the inclusion of health strategies and approaches that optimize mental health and well-being. The underlying idea is that until we employ a personalized strategy that considers the Veterans’ unique conditions, needs and circumstances, we will not optimally help Veterans minimize the impact of disease and optimize their health. This approach also should work to engage Veterans in treatment and make it more possible for them to benefit from evidence-based therapies. Recent research with VA psychiatrists and other prescribers has noted that both providers and Veterans need to be educated about recommendations from clinical
practice guidelines so they can advocate for themselves to receive the best care possible. The more stakeholders push the VA healthcare system to deliver evidence-based treatments, the more likely change is to occur.

Symposium  
Saturday, November 9  
4:30 p.m. to 5:45 p.m.  
Franklin 6

Engaging Veterans in Evidence Based PTSD treatment: The Role of Motivational Enhancement Groups  
(Clin Res/Mil/Vets//Industrialized)

Voss Horrell, Sarah, PhD  
Salem VA Medical Center, Salem, Virginia, USA

VA Medical Centers are now required to offer evidence based treatments for veterans diagnosed with Post Traumatic Stress Disorder (PTSD), including Cognitive Processing Therapy (CPT) and Prolonged Exposure Therapy (PE). Attrition rates can be high in CPT and PE, with some studies reporting dropout rates over 35% (Bradley et al., 2005; Chard et al., 2010; Schnurr et al., 2007). Developing interventions to increase retention rates in evidence based treatments could ultimately increase the number of veterans with PTSD who are successfully treated and able to actively engage in their lives again. Clinicians providing evidence based PTSD treatments at a VA in southwest Virginia recently instituted a 4-session motivational enhancement group for veterans referred for PTSD treatment. The group is based on the protocol by Murphy and colleagues (2009). It is hypothesized that individuals who attend the Motivational Enhancement Therapy (MET) group will be more likely to initiate and complete PTSD treatment. Data will be presented from approximately 40 veterans who engaged in MET group prior to trauma treatment. Comparisons will be drawn between MET completers and non-completers to determine the effectiveness of the intervention. The impacts of these results on clinical practice will be discussed.

Symposium  
Saturday, November 9  
4:30 p.m. to 5:45 p.m.  
Franklin 6

Using Technology and Communications to Help Overcome Barriers to Care  
(Prevent/Mil/Vets//Global)

Slone, Laurie, PhD  
VA National Center for PTSD, Executive Division, White River Jct, Vermont, USA

The first two presentations, on implementing clinical and holistic methods and obtaining provider perspectives, are examples of top down strategies. Top down strategies can be combined with bottom up strategies to increase access and engagement in PTSD care. Bottom up strategies help motivate those suffering with PTSD to overcome barriers to care such as lack of knowledge about effective PTSD treatments, stigma, lack of trauma survivors’ willingness to admit to self that help is needed, and problems getting care, such as how to find a therapist. We present data and discuss the need for ongoing research on several of these strategies: early screening, technology based strategies, awareness and outreach campaigns, and targeted messaging approaches. VA’s National Center for PTSD provides a wealth of research-based educational material, including "treatment companion apps" which
are being developed for use between a therapist and patient during EBT. Self help tools intended to engage and empower those who have been through trauma (PTSD Coach Online and App) and social media and PTSD Awareness Month campaigns are being used for education and outreach. Data are presented that speak to the effects of these efforts.

Symposium
Saturday, November 9
4:30 p.m. to 5:45 p.m.
Franklin 6

Strategies to Engage Veterans and Prepare for Treatment: A Presentation of Research Findings and New Directions
(Practice/Caregivers/Industrialized)

Monroe, J., PhD
Department of Veteran Affairs, Hines, Illinois, USA

As the discussant of this Symposium, Dr. Monroe will reflect on the broader implications of all the presentations and the scaling up of efforts to improve engagement in treatment for this population. The focus of the discussion will be on reviewing clinical and administrative best practices for fostering successful courses of treatment.

Symposium
Saturday, November 9
4:30 p.m. to 5:45 p.m.
Franklin 9/10

Individual and Contextual Influences on Children’s Adjustment Post-Disaster
(Clin Res/Disaster/M/Industrialized)

Chair: Felix, Erika, PhD\(^1\), Discussant: Wind, Leslie, PhD LCSW CTS\(^2\)
\(^1\)University of California, Santa Barbara, Santa Barbara, California, USA
\(^2\)University of Southern California, Irvine, California, USA

Disaster-related distress and life disruption of even a year or less may negatively affect children, at least in the short term. Unfortunately, research on how children fare post-disaster has greatly lagged behind that of adults, partly because of the challenges of accessing children for this research, measurement issues, and innate difficulties in understanding the interplay of complex developmental influences. This symposium presents current research on the individual, family, and disaster-related contextual influences on children's adjustment post-disaster. We present research on how disaster exposure, life stressors since the disaster, mental health and coping affect family functioning and post-traumatic growth among parents and children. Another study examines the longitudinal trajectories of distress among children, and the correlates of resilient, recovering, and chronic distress patterns of adjustment. A final study explores the influence of primary caregivers on children's long-term adjustment, including caregiver-child conflict and caregiver education. Implications for research and practice will be discussed.
Family Functioning and Post-Traumatic Growth among Parents and Children following Wildfire Disasters
(Clin Res/Disaster//Industrialized)

**Felix, Erika, PhD**, Afifi, Tamara, PhD, Kia-Keating, Maryam, PhD, Afifi, Walid, PhD, Reyes, Gilbert, PhD, Sprague-Knapp, Cally, MA

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

Disasters can affect the functioning and resiliency of families, but the struggle in the recovery process can also result in positive change in family members, such as post-traumatic growth (PTG). Following a series of wildfires that affected one community, 50 sets of parents and their children (aged 9-22 years) participated in this study of how fire exposure, perceived-fire related stress, life stressors since the disaster, mental health, and coping influence family functioning/resiliency (FFR) and PTG. Families either had been evacuated during one of the fires, or had their home damaged or destroyed. Parent and child report of FFR were significantly correlated, r=.32, p<.05, but parent and child PTG were not. A series of regression analyses indicated the strongest correlates of FFR and PTG for parents and children. Parent perception of FFR was most strongly influenced by life stressors experienced since the disaster, β=-.32, p<.05. For child FFR, life stressors since the disaster, β=-.37, p<.01, and parent FFR, β=.26, p<.05, was most strongly related. For parent PTG, the overall stress levels of family members seemed to influence PTG, but individual variables did not emerge as significant. For children, their PTG was influenced by greater objective fire exposure, β=.32, p<.05, and coping, β=.30, p<.05. Implications for family-related disaster services will be discussed.

Children’s Trajectories of PTS Symptoms after a Hurricane: Predicting Chronic Distress
(Prevent/Child/Adol//Industrialized)

**La Greca, Annette, PhD**, Lai, Betty, PhD, Llabre, Maria, PhD

1 *University of Miami, Coral Gables, Florida, USA*

More than 66.5 million children are affected by natural disasters annually. We examined trajectories of children’s distress the year after a natural disaster and the predictors of the trajectories. A conceptual model guided the selection of predictors. 3-months postdisaster, 568 children (55% girls; 56% minorities) directly affected by Hurricane Andrew completed measures of exposure, stressors, social support, coping, anxiety, and life events. Children reported post-traumatic stress (PTS) symptoms at 3-, 7-, and 10-months postdisaster. Latent growth mixture modeling identified 3 trajectories of PTS reactions: resilient (37%; low PTS), recovering (43%; high PTS but declining over time), and chronic distress (20%; consistently high PTS). Compared to the resilient pattern, girls had
greater odds of falling in the recovering and chronically distressed groups, as were children with higher anxiety and coping strategies reflecting poor emotion regulation. Compared to the recovering pattern, children with higher anxiety, less support, more life events, and use of poor emotion regulation strategies had greater odds of falling in the chronic distress group. After a destructive disaster, most youth are resilient or recover. Data did not support the existence of a delayed trajectory, as found with adults. Results provide guidance on key variables to consider for early screening efforts.

Symposium
Saturday, November 9
4:30 p.m. to 5:45 p.m.
Franklin 9/10

Children’s Adjustment Following Hurricane Katrina: The Role of Primary Caregivers
(Assess Dx/Child/Adol//Industrialized)

Gil-Rivas, Virginia, PhD; Kilmer, Ryan, PhD
*University of North Carolina at Charlotte, Charlotte, North Carolina, USA*

Hurricane Katrina severely disrupted the lives of many children and families in the central Gulf Coast. Exposure to such a disaster can contribute to psychological, behavioral, and academic difficulties (Scheeringa & Zeanah, 2008) among children. Disasters, however, do not always lead to clinically significant symptoms in children. Rather, the impact of these events is contingent on a variety of individual and contextual factors. The caregiver-child relationship is a central, proximal influence within children’s social contexts and thus is of particular importance post-disaster (Kilmer & Gil-Rivas, 2010). Findings will be presented from a study of child-caregiver dyads that was conducted approximately one year post-hurricane (T1) and 6 to 10 months later (T2). Results provided partial support for the importance of the caregiving context to children’s post-traumatic stress (PTSS) and depressive symptoms. Specifically, higher levels of caregiver-child conflict at T1 were associated with more PTSS at T2. In contrast, higher levels of caregiver education were negatively related to child PTSS at T2. After adjusting for T1 objective hurricane exposure and symptoms, none of the caregiving variables were related to child-reported depressive symptoms at T2. The implications of these findings for efforts to promote children’s adjustment after disaster will be discussed.

Symposium
Saturday, November 9
4:30 p.m. to 5:45 p.m.
Franklin 11/12

Cohort Profiles: Population-based Studies of Trauma and its Aftermath
(Res Meth/N/A/M/Global)

Chair: Gradus, Jaimie, ScD ¹, Discussant: Schnurr, Paula, PhD ²
¹VA Boston Health Care System/Boston University, Boston, Massachusetts, USA
²VA National Center for PTSD, Executive Division, White River Junction, Vermont, USA

This symposium will include presentations of three population-based cohort studies aimed at examining the aftermath of trauma. Each presentation will include an overview of the study methodology (including, but not
limited to, sample selection, descriptions of longitudinal follow-up, and data collection methods). Further, sample descriptive and research findings will be presented if available. The symposium will also include a discussion of the unique role of cohort studies within the larger world of trauma and PTSD research.

**Symposium**
**Saturday, November 9**
**4:30 p.m. to 5:45 p.m.**
**Franklin 11/12**

**The Danish National Reaction to Severe Stress Cohort**
(Res Meth/N/A//Global)

Gradus, Jaimie, ScD¹, Bozi, Imre, MSc², Svensson, Elisabeth, PhD, MSc², Frøslev, Trine, MSc², Lash, Timothy, ScD³, Resick, Patricia, PhD, ABPP⁴, Hansen, Jens Georg, MD², Toft Sørensen, Henrik, MD, PhD²

¹VA Boston Health Care System/Boston University, Boston, Massachusetts, USA
²Aarhus University, Aarhus, Denmark
³Emory University, Atlanta, Georgia, USA
⁴National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA

With the exception PTSD, population-based research on ICD-10 Reaction to Severe Stress (RSS) disorders (acute stress reaction, adjustment disorder, other reactions to severe stress, and reactions to severe stress unspecified) is limited. The lack of research on these disorders is likely due to the difficulty in obtaining population-based cohort study samples in psychiatric research. The cohort studies that do exist have greatly advanced the study of trauma and associated disorders, but they can be limited in number of diagnoses examined, and subject to biases found in studies that utilize population subsets. The goal of this project was to create a national cohort of all Danish-born citizens with incident RSS diagnoses from 1995-2011 using linked medical and social databases. In addition, we created a comparison cohort of Danish-born adults and children without RSS diagnoses, matched to RSS cases on birth year and gender. Extensive data on somatic and psychiatric diagnoses, prescriptions, social variables, and mortality are routinely recorded in Denmark and these cohorts can be updated with outcome data as it becomes available. In total, 96,736 Danish-born adults and children received RSS diagnoses from 1995-2011. 483,680 comparison cohort members were also selected. Demographic characteristics of the cohorts will be compared with US population-based samples.
Project VALOR: Design and Preliminary Results of a Longitudinal Veterans PTSD Registry

Keane, Terence, PhD1, Marx, Brian, PhD2, Holowka, Darren, PhD1, Litman, Heather, PhD3, Fang, Shona, ScD3, Rosen, Raymond, PhD3

1 National Center for PTSD, VA Boston Healthcare System, Boston University School of Medicine, Boston, Massachusetts, USA
2 National Center for PTSD, VA Boston Healthcare System and Boston University, Boston, Massachusetts, USA
3 New England Research Institutes, Inc., Watertown, Massachusetts, USA

Project VALOR (Veterans’ After-discharge Longitudinal Registry) is a longitudinal patient registry designed to assess the causes, consequences and course of combat-related PTSD among Veterans of the wars in Iraq and Afghanistan. Aims of this ongoing study include investigating patterns and predictors of progression or remission of PTSD and treatment utilization within the Department of Veterans Affairs (VA) Healthcare System. The registry includes 1213 Veterans (50% female) with a recent diagnosis of PTSD in the VA electronic medical record (EMR) and a comparison group of 436 Veterans without such a diagnosis, allowing for comparisons of the two groups. Data were collected from the EMR, self-report questionnaires, and a semi-structured diagnostic telephone interview. Measures included assessment of combat exposure, PTSD and associated psychopathology, traumatic brain injury (TBI), suicidality and functional impairment. The project is currently entering the second wave of data collection with 2 additional interviews and 3 additional questionnaire administrations taking place over the next 4 years, along with ongoing EMR data abstraction. Preliminary analyses of Phase I data have examined diagnostic concordance, mild traumatic brain injury and psychosocial functioning, new DSM5 PTSD criteria, depression and suicidal ideation. Select results will be presented and discussed.

Ongoing Cohorts Studying Mental Health among US Reserve Forces

Galea, Sandro, MD PhD

Columbia University, Mailman School of Public Health, New York, New York, USA

During Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), the reserve forces, comprised of the United States National Guard and Reserve, experienced unprecedented deployment in overseas combat. It is well known that exposure to war and combat is related to mental health consequences such as post-traumatic stress disorder, depression and alcohol disorders. It is not well understood, however, how reserve forces are affected by combat, work is inconclusive on whether reserve forces are at elevated risk for psychopathology relative to their active duty counterparts, or critically, what the course of psychopathology is in these groups. Two ongoing cohort
studies adopt a lifecourse approach to answer questions about the trajectory of psychopathology among reserve forces in the US. The first is a cohort of 2,500 national guard members in Ohio that has been followed annually for the past 4 years. The second is a national cohort of reserve and guard forces, also followed for the past 4 years. Both cohorts include structured interviews and genotyping on a subsample. The presentation shall summarize cohort characteristics, methods of recruitment and follow-up and proposed analyses.

Panel Presentation
Saturday, November 9
4:30 p.m. to 5:45 p.m.
Grand Ballroom C

Promoting Resilient Populations: What Philadelphia is Doing to Become a Trauma-informed City
(Social/Diverse Pop/M/Industrialized)

Bloom, Sandra, MD¹, Ambrose, Anne Marie, JD², Evans, Arthur, PhD², Mintz, Dainette, BA², Schwarz, Donald, MD MPH²
¹Drexel University School of Public Health, Philadelphia, Pennsylvania, USA
²City of Philadelphia, Philadelphia, Pennsylvania, USA

Increased urbanization around the world is putting enormous pressure on public agencies to address a wide variety of traumatic experiences as not just individual problems but also as major public health emergencies. As one of the most challenged cities in America, key city agencies in Philadelphia have taken deliberate steps in the past decade to wrestle with the issues of trauma, violence and adversity in the population they serve. In this panel moderated by former ISTSS President, Sandra Bloom, the Health Commissioner and Deputy Mayor of Philadelphia, Donald Swarz, M.D, M.P.H; Commissioner of the Department of Behavioral Health and Intellectual Disability Services, Dr. Arthur Evans, PhD; Commissioner of Human Services, AnnMarie Ambrose, J.D.; and Director of the Office of Supportive Housing, Dainette Mintz will describe and discuss their combined efforts in helping Philadelphia's diverse and economically vulnerable populations to bounce back from multiple adversities.
Survivors and Responders to Disaster and Terror

Shame in the Aftermath of Terror – The Study of Survivors of the Utøya Island Massacre, Norway
(Assess Dx/Disaster/M/Industrialized)

Aakvaag, Helene, MA PhD Student; Thoresen, Siri, PhD, Wentzel-Larsen, ToRe, MSc, Dyb, Grete, MD PhD
Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway

Background: Trauma-related shame (TRS) has been found in victims of crime and survivors of sexual abuse, and has been associated with mental ill-health. Some studies have found more TRS in women, however the evidence is inconclusive. We aim to investigate if TRF also occurs in victims of terror. We further aim to examine gender differences. Methods: Shame and symptoms of PTSD and anxiety/depression were assessed in survivors of the Utøya Island massacre (N=325, response rate 66%). Multiple linear regression analyses were used to test the associations between shame and PTSD, and shame and anxiety/depression. Gender was entered as a moderator. Results: 30 percent of respondents reported shame four months after the shooting. Women reported significantly more shame than men. Shame was univariately associated with both symptoms of PTSD and anxiety/depression, and withstood adjustment for demographic characteristics and terror exposure in both cases. Gender did not significantly moderate the associations. Conclusions: The findings indicate that TSR is not unique to private, secret or stigmatized events, but may impact mental health for victims of mass trauma, such as terror or disasters. The association with mental health problems suggests that addressing shame may be of importance to trauma survivors, especially so for women.

Social Support and Psychological Distress in Terror Victims: Exploring the Buffer Hypothesis and the Social Selection Hypothesis in Survivors from the Shooting at the Utøya Island, Norway 2011
(Assess Dx/Disaster/M/Industrialized)

Thoresen, Siri, PhD1, Jensen, Tine, PsyD2, Wentzel-Larsen, ToRe, MSc1, Dyb, Grete, MD PhD1
1Norwegian Center for Violence and Traumatic Stress Studies (NKVTS), Oslo, Norway
2University of Oslo, Oslo, Norway

Research has repeatedly demonstrated associations between perceived social support and psychological distress, usually interpreted as a buffering effect of social support. However, the social selection hypothesis proposes that loss of social support may be a result of mental ill-health. This study investigates the temporal relationships between social support and mental health in terror victims. Survivors from the shooting at the Utøya Island in
Norway 22. July 2011 participated in face-to-face interviews approximately 5 months (T1) and 14 months (T2) after the shooting. T1: N = 325, response rate = 66%. Preliminary results for T2 is a response rate of approximately 60%. At both time points, participants completed the Duke-UNC Functional Social Support Questionnaire (FSSQ), the UCLA Post-Traumatic Stress Disorder Reaction Index (PTSD-RI), Hopkins Symptom Checklist (HSCL-8), and various demographic and exposure-related measures. We investigate the buffer hypothesis and the social selection hypothesis by analyzing both the relationship between social support at T1 and distress at T2, and the relationship between distress at T1 and social support at T2, adjusting for other relevant factors. A better understanding of the relationship between social support and mental health may have important implications for clinical practice with trauma victims.

Paper Presentation
Saturday, November 9
4:30 p.m. to 5:45 p.m.
Grand Ballroom D

Santa Maria Nightclub Fire: Promoting Resilience after Mass Disaster in Brazil
(Prevent/Disaster/I/Latin Amer & Carib)

Kristensen, Christian, PhD¹, Lobo, Beatriz, BS, MS², Mello, Patricia, MS (PhD Student)¹, Pozobon, Luciane, MSc², dos Santos, Renato, BS, MS², Grassi-Oliveira, Rodrigo, MD, PhD¹
¹Pontifical Catholic University of Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, Brazil
²Federal University of Santa Maria, Santa Maria, Rio Grande do Sul, Brazil

The Kiss nightclub fire on 27/01/2013 in Santa Maria (Brazil) is the third deadliest nightclub fire in history, mostly students from the Federal University of Santa Maria (UFSM). Working with public health authorities, Brazilian Air Force, NGOs, and volunteers, our team (NEPTE) went to Santa Maria to work in three coordinated fronts: providing Psychological First Aid (PFA) to survivors, family members and rescue workers (over 150 people), training professionals and volunteers to provide PFA (over 1900 people were trained), structuring the UFSM to the return of the students to campus. The main goal of this presentation is to describe all the procedures taken to organize the UFSM as a major factor in the promotion of resilience to the university community. A mental health center was established. Recommendations and materials from the PFA for Schools were adapted to a university setting. A meeting was held with professors from those departments with the greatest loss of students providing specific guidelines on how to handle the return of students to the university. An official statement was sent to the entire university community, along with links to practical tips on common reactions after trauma, common reactions after the loss of a loved one, guidance on what to do, social support, use of medication, drugs and alcohol, tips for relaxation, guidelines on media exposure.
Comparison and Components Analysis of Psychological First Aid Frameworks
(Train/Ed/Dis/Caregvr/Intl/Global)

Shultz, James, PhD¹, Mack, Amy, PsyD²
¹University of Miami Miller School of Medicine, Miami, Florida, USA
²SAMHSA DTAC, Fairfax, Virginia, USA

Background: Psychological First Aid (PFA) has been promoted as a multi-strategy framework for early psychological intervention for disaster survivors, focusing on providing practical support, diminishing distress, and promoting active coping. Despite the popularity of PFA, recent reviews have found no evidence that PFA is a “safe, effective, and feasible intervention.” Multiple versions of PFA are circulating and there has been no attempt to compare versions, nor to conduct components analysis, to determine which elements of PFA could be analyzed to demonstrate effectiveness. Methods: We are conducting a content and components analysis of well-recognized PFA frameworks. We examined PFA models based on programmatic foci on promoting the elements of safety, calming, connectedness, self-efficacy, and hope. We compared PFA models based on pedagogic standards of clarity, complexity, ease of training and application, and ease of evaluation for effectiveness. Results: PFA models differ in terms of content, operational principles, understandability, clarity, complexity, and potential for evaluation. Conclusion: Expert consensus is an important but insufficient rationale for continued promotion and implementation of PFA in the absence of attempts to conduct evaluation for effectiveness. The present content and components analysis is an important step toward evidence-based evaluation.

Longitudinal and Experimental Investigations of Adult PTSD

Head injury and Loss of Consciousness Raise the Likelihood of Developing and Maintaining PTSD Symptoms
(Practice/Acc/Inj/M/N/A)

Roitman, Pablo, MD
Hadassah University Hospital, Jerusalem, Israel

Background: Mild traumatic brain injury has been associated with higher prevalence of PTSD. The extent to which initially observed head injury (HI) or loss of consciousness (LOC) predicts PTSD is unknown. Objectives: To prospectively evaluate the contribution of HI and LOC to the occurrence of PTSD. Method: Longitudinal evaluation of 1260 motor vehicle accidents survivors admitted to a general hospital emergency department (ED) with HI (n=287), HI and LOC (n=115) or neither (NoHI; n=858). Telephone-administered Post-traumatic Symptoms Scale inferred PTSD and quantified PTSD symptoms ten days and eight months after admission. Results: The
study groups had similar ED heart rate, blood pressure and pain levels. There were more male participants in the LOC. Eight months’ PTSD was seen in 22.0% NoHI (OR=1), 27% HI (OR: 1.26; 95% CI: 1.01,1.58) and 42.6% LOC participants (OR: 2.44; CI 1.64, 3.64). LOC and HI were associated with higher levels of PTSD symptoms. Repeated measures ANOVA using PTSD symptoms as dependent variable and controlling for gender differences showed significant Group (p < 0.001), Time (p < 0.001), and a trend towards Group-by-Time Interaction (p = 0.051). Discussion ED-reported HI and LOC robustly predict subsequent PTSD as well as slower decline of early PTSD symptoms.

**Paper Presentation**

**Saturday, November 9**

**4:30 p.m. to 5:45 p.m.**

**Franklin 7**

**Hypervigilance without Threat: Eye-Movements Reveal Vigilant Behaviours**

(Assess Dx/Mil/Vets/M/Industrialized)

**Stewart, Lorna, PhD**¹, Brewin, Chris, PhD¹, Muggleton, Neil, PhD³, Javardi, Amir, PhD¹, Tcheang, Lili, PhD¹

¹University College London, London, United Kingdom
²University College London, Taiwan, Taiwan

Hypervigilance to threat is a core symptom of post-traumatic stress disorder (PTSD). The present study reports a relationship between reported hypervigilance and eye-tracking patterns in two novel tasks with non-threatening stimuli. Trauma-exposed British ex-servicemen with (N=12) and without (N=16) a diagnosis of PTSD freely viewed static photographs of street scenes whilst eye-movements were tracked. Despite rating scenes as more threatening, the PTSD group did not show hyperscanning behaviours compared to the non-PTSD group. However, participants reporting more severe hypervigilance made more saccades and fixations of shorter duration. In a second experiment participants wore a portable eye-tracking device whilst walking along unfamiliar London streets. In this task, hypervigilance severity was not related to either saccade frequency or duration. However, PTSD participants made less frequent saccades than non-PTSD participants. PTSD symptomatology also correlated negatively with saccade duration. The results from the present study suggest that reported hypervigilance has measurable eye movement correlates in the absence of actual threat. The observed discrepancy in findings between the two paradigms highlights the difficulty of generalising from laboratory to real-world.
A Longitudinal Study on the Impact of War Captivity on Spouses of Former Prisoners of War
(Self-Care/Mil/Vets/I/Industrialized)

Greene, Talya, MPH, PhD¹, Solomon, Zahava, PhD², Lahav, Yael, PhD Candidate², Bronstein, Raeli, PhD²
¹University of Haifa, Haifa, Israel
²Tel Aviv University, Tel Aviv, Israel

This study aims to assess (i) the effects of war captivity on spouses of former prisoners of war (ex-POWs), (ii) the implications of the husband’s PTSD on the spouse’s secondary traumatisation and (iii) the relationship between the husband’s PTSD trajectory and the spouse’s secondary traumatisation. Data on the ex-POWs were collected at 18, 30, and 35 years after the Yom Kippur War and compared with a control group of Israeli combat veterans from the same war who were matched for personal and military background (control group). Data on the spouses were collected during the second and third wave of data collection. Outcome measures include PTSD, functional disability, psychiatric symptoms, self-rated health, self-rated social functioning and physical health complaints. Results found that spouses of ex-POWs had worse results across all outcome variables as compared with controls. More specifically, spouses of ex-POWs with PTSD group had worse results across all the outcome variables apart from the hostility subscale on the SCL-90 and self-rated social functioning (SF-36), Spouses of ex-POWs with a resilient trajectory scored significantly higher compared with spouses of ex-POWs with chronic PTSD, spouses of ex-POWs with delayed PTSD, and the spouses of the control group. Spouses of ex-POWs with PTSD should be considered a high-risk group and given appropriate support.

Examining Post-Traumatic Growth within the Framework of Post-Traumatic Stress
(Assess Dx/Mil/Vets/M/N/A)

Dekel, Sharon, PhD, Solomon, Zahava, PhD
Tel Aviv University, Tel Aviv, Israel

With the body of research showing that post-traumatic growth (PTG) may co-exist with post-traumatic stress (PTS), we conducted a longitudinal study in order to examine the relationship between PTG and PTSD over time with respect to PTG predictors, trajectories, and the possible transgenerational transmission of growth. A sample of Israeli ex-prisoners of war and matched controls were followed over 17 years, including a sub-sample of veterans whose parents were Holocaust survivors. The analysis of cross-lagged modeling showed that symptoms of PTSD predicted later PTG. Also, while negative appraisal of the trauma predicted both PTG and PTSD, other predictors were not shared by the outcomes. Finally, veterans with a family Holocaust history reported less growth across times. The findings underscore the multifaceted relationship between negative and positive trauma outcomes and are discussed in the context of the adaptive value of psychological growth following trauma.
Psychological Impact of War across the Globe

Traumatic Postmemory: the Children of the Colonial War
(CulDiv/Surv Hist I/N/A)

Sales, Luisa, MD¹, Calafate Ribeiro, Margarida, PhD¹, Dias, Aida, Doctoral Student², Sousa Ribeiro, António, PhD¹
¹Military Hospital of Coimbra, Coimbra, Coimbra, Portugal
²Utrecht University, Utrecht, Netherlands

Drawing on the results of a transdisciplinary research project aimed at analysing the transgenerational effects of trauma among children of former participants in the Portuguese Colonial War (1961-1974), the paper will pursue two lines of inquiry: first, the perspective of psychology, an analysis of the responses to several psychometric questionnaires (IES-r – Impact Event Scale Revised, PDS – Post Traumatic Diagnostic Scale, CTQ – Childhood Trauma Questionnaire – Short Form, YSQ – Young Schema Questionnaire, BSI – Brief Symptom Inventory) which provide clear evidence of the increased vulnerability to trauma of the second generation; second, a discourse-analytic approach to a wealth of collected interviews, on the one hand, and, on the other, to other types of testimony as expressed, in particular, in the discourse of literature and the arts. The results of such a combined approach provides fresh insights to show how the overwhelming public silence on the most traumatic experienced in recent Portuguese history may be countenanced by the emergence of a multitude of voices which are awaiting to be heard and which reject the position of the victim by claiming a status of authorship.

Role of Life Problems in Explaining the Association Between Experienced Trauma and Mental Distress in Survivors of the Civil War in Sri Lanka
(Global/Civil/Ref/M/S Asia)

Jayawickreme, Nuwan, PhD¹, Jayawickreme, Eranda, PhD², Goonasekera, Michelle, MBBS, MRCPCH³
¹Manhattan College, Bronx, New York, USA
²Wake Forest University, Winston-Salem, North Carolina, USA
³Oxford University Hospital, Oxford, United Kingdom

We tested the hypothesis that life problems mediate the relationship between experienced trauma and mental distress in populations affected by mass violence (Miller & Rasmussen, 2010). 197 individuals living in North-Eastern Sri Lanka were administered the Tamil language Penn/RESIST/Peradeniya War Problems Questionnaire (PRPWPQ; Jayawickreme et al., 2009), an measure of experienced trauma, war-related psychological problems, and five different domains of life problems: family problems, economic problems, social problems, lack of basic needs, and physical problems. The PRPWPQ was developed specifically for this population using qualitative data
and the psychological problems subscale has been demonstrated to be a superior measure of mental distress in this population compared to established self-report measures of depression and anxiety (Jayawickreme et al., 2012). Mediation analyses were conducted to assess the role the five different domains of life problems measured by the PRPWPQ each had in explaining the relationship between experienced trauma and war-related psychological problems. Family problems, social problems and physical problems were found to mediate the relationship between experienced trauma and war-related psychological problems. Implications of these results for provision of psychosocial services to populations impacted by mass violence are discussed.

Paper Presentation
Saturday, November 9
4:30 p.m. to 5:45 p.m.
Franklin 8

Cambodians' Responses to the Khmer Rouge Tribunal: Findings from the Third Wave of a National Longitudinal Study
(Global/Surv/Hist/M/E Asia & Pac)

Sonis, Jeffrey, MD MPH\(^1\), Gibson, James, PhD\(^2\), de Jong, Joop, PhD\(^3\), Hean, Sokhom, PhD\(^4\)

\(^1\)University of North Carolina at Chapel-Hill, Chapel Hill, North Carolina, USA
\(^2\)Washington University in St Louis, St Louis, Missouri, USA
\(^3\)Vrije Universiteit, Amsterdam, Netherlands
\(^4\)Center for Advanced Study, Phnom Penh, Cambodia

The effect of human rights tribunals on individuals in post-conflict societies is unclear. Do trials facilitate survivors’ quest for justice or do they exacerbate PTSD? We previously reported the findings of the first two waves of data collection of a national longitudinal study of Cambodians’ responses to the Tribunal. We now extend the findings to the third wave, which permits us to report within-person changes in attitudes and mental health. In 2009, prior to the start of the first trial (of “Duch”, Director of a notorious prison for regime enemies), we conducted the first wave (response rate 89%) of a national study (N = 1,800) in Cambodia. The second wave (response rate 94%) was conducted in 2010, shortly after Duch was found responsible for at least 12,000 murders and sentenced by the Tribunal to 35 years in prison. The third wave (response rate 92%) was conducted in 2012, shortly after the Tribunal’s Supreme Court changed Duch’s sentence to life imprisonment. In this presentation, we will report findings on individual trajectories, over the course of the trial, in mental health (PTSD and depression) and attitudes (perceived justice for Khmer Rouge atrocities, desire for revenge, fairness of the trial). To our knowledge, this is the first national longitudinal pre-post study of individual responses to a human rights tribunal or truth commission.
Increase in Prosociality among Survivors of the Sierra Leonean Civil War: Behavioral Gains from Adversity and Trauma
(Global/Civil/Ref/M/W & C Africa)

Neugebauer, Richard, PhD, MPH\textsuperscript{1}, Behrendt, Alice, Dipl Psych\textsuperscript{2}, Ghailian, Monica, MA\textsuperscript{3}, Suardi, Enrico, MD\textsuperscript{4}

\textsuperscript{1}Columbia University and New York State Psychiatric Institute, New York, New York, USA
\textsuperscript{2}Plan International, Surrey, Surrey, United Kingdom
\textsuperscript{3}Private Practice, New York, New York, USA
\textsuperscript{4}Adventist Behavioral Health Rockville, Rockville, Maryland, USA

Objectives. The adverse effects of exposure to violence on youth behavior are amply documented. To identify conditions that might modify this association, we examined correlates of prosocial behavior in a sample of youth heavily traumatized by the Civil War in Sierra Leone. Methods. The study sample, comprised 94 orphans age 8-20, and a comparison group of youth with at least one living, able parent. Orphans were drawn from among community youth irrespective of behavior or mental health status. Exposure to violence was assessed with locally devised checklists, current prevalence of PTSD with the MINI; prosociality, with the Prosocial Subscale of Goodman’s Strengths and Difficulties Questionnaire. All reported results derive from controlled analyses. Results. Overall, prosociality was lower among orphans than among parented youth. Among orphans, pro-sociality rose with increasing levels of violence (p<.05); among parented children, it declined (p<.05). Conclusion. Increased prosociality among violence-exposed orphans suggests that certain adverse conditions produce developmentally atypical behavioral responses to exposure to violence. These findings, while inconsistent with most empirical research, are nonetheless consistent with theoretical models in evolutionary psychology. Further studies are required to explain or explain away these results.
Healing Lives and Communities:
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