Research Update -- May 3, 2018

What’s Here:

- Talking about Sexual Abuse, PTSD Monthly Update - April 2018
- Associations of Time-Related Deployment Variables With Risk of Suicide Attempt Among Soldiers: Results From the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS).
- Suicide Ideation in Female Survivors of Military Sexual Trauma: The Trauma Source Matters.
- MMPI-2-RF characteristics of veterans seeking treatment for military sexual trauma.
- Increased Resilience is Associated with Positive Treatment Outcomes for Veterans with Comorbid PTSD and Substance Use Disorders.
- Sleep Disorders in Patients with Post-Traumatic Stress Disorder.
- Fear Avoidance and Clinical Outcomes from Mild Traumatic Brain Injury.
- Randomized clinical trial pilot study of prolonged exposure versus present centred affect regulation therapy for PTSD and anger problems with male military combat veterans.
- Using Two Intersubjective Perspectives in Combat Deployment: A Military Mental Health Professional's Experience.
• Special Considerations in the Adaptation of Cognitive Behavioral Therapy for Insomnia With Active-Duty U.S. Army Personnel.
• In-Home Sleep Recordings in Military Veterans with Posttraumatic Stress Disorder Reveal Less REM and Deep Sleep <1 Hz.
• Changes in posttraumatic stress disorder (PTSD) and depressive symptoms over the course of prolonged exposure.
• The Use of Virtual Clients for Training Behavioral Health Providers: Promises, Challenges and the Way Ahead.
• Mild Traumatic Brain Injury and Substance Use.
• Religious involvement as a social determinant of sleep: an initial review and conceptual model.
• Individual differences in combat experiences and error-related brain activity in OEF/OIF/OND veterans.
• Toward an interdisciplinary conceptualization of moral injury: From unequivocal guilt and anger to moral conflict and disorientation.
• Effectiveness of Ultra-brief CBTi In A Complex Clinical Population.
• Excessive Daytime Somnolence in Patients with Obstructive Sleep Apnea Adequately Treated with Positive Airway Pressure.
• Assessing Residents' Veteran-Centered Care Skills in the Clinical Setting.
• The Effect of a Service Dog on Salivary Cortisol Awakening Response in a Military Population with Posttraumatic Stress Disorder (PTSD).
• Cortisol, Testosterone, and Prospective Risk for War-zone Stress-Evoked Depression.
• A Clinician's Guide to PTSD Biomarkers and Their Potential Future Use.
• Association between posttraumatic stress disorder and lack of exercise, poor diet, obesity, and co-occurring smoking: A systematic review and meta-analysis.
• Trauma-Associated Sleep Disturbances: a Distinct Sleep Disorder?
• Links of Interest
• Resource of the Week: The Mental Health Workforce: A Primer (CRS)
Talking about Sexual Abuse, PTSD Monthly Update - April 2018

National Center for PTSD (VHA)

In the last year, many women and men have spoken up publicly about being sexually assaulted or sexually harassed.

Many Veterans of all backgrounds have had unwanted sexual experiences during their military service or at other times. Because of this, public discussions about these topics may bring up painful memories and feelings. Even if you think the public discussion is a good thing, it may still be difficult.

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Associations of Time-Related Deployment Variables With Risk of Suicide Attempt Among Soldiers: Results From the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS).


JAMA Psychiatry
Published online April 18, 2018

Key Points
Question
Are time-related deployment variables associated with subsequent risk of suicide attempt among US Army enlisted soldiers?

Findings
This longitudinal cohort study of soldiers who deployed exactly twice examined administrative records from 593 medically documented suicide attempters and 19,034 control person-months. Risk of suicide attempt during or after second deployment was higher for those who initially deployed within the first 12 months of service and those with a dwell time (length of time between deployments) of 6 months or less.
Meaning
Time in service before first deployment and dwell time are modifiable risk factors for suicide attempts among soldiers.


Suicide Ideation in Female Survivors of Military Sexual Trauma: The Trauma Source Matters.

Rebecca K. Blais PhD, Lindsey L. Monteith PhD

Suicide and Life-Threatening Behavior
First published: 20 April 2018
https://doi.org/10.1111/sltb.12464

Abstract
Importance
There has been limited systematic examination of whether risk of suicide attempt (SA) among US Army soldiers is associated with time-related deployment variables, such as time in service before first deployment, duration of first deployment, and dwell time (DT) (ie, length of time between deployments).

Objective
To examine the associations of time-related deployment variables with subsequent SA among soldiers who had deployed twice.

Design, Setting, and Participants
Using administrative data from January 1, 2004, through December 31, 2009, this longitudinal, retrospective cohort study identified person-month records of active-duty Regular Army enlisted soldiers who had served continuously in the US Army for at least 2 years and deployed exactly twice. The dates of analysis were March 1 to December 1, 2017. There were 593 soldiers with a medically documented SA during or after their second deployment. An equal-probability sample of control person-months was selected from other soldiers with exactly 2 deployments (n = 19 034). Logistic regression analyses examined the associations of time in service before first deployment, duration of first deployment, and DT with subsequent SA.
Main Outcomes and Measures
Suicide attempts during or after second deployment were identified using US Department of Defense Suicide Event Report records and International Classification of Diseases, Ninth Revision, Clinical Modification E950 to E958 diagnostic codes. Independent variables were constructed from US Army personnel records.

Results
Among 593 SA cases, most were male (513 [86.5%]), white non-Hispanic (392 [66.1%]), at least high school educated (477 [80.4%]), currently married (398 [67.1%]), and younger than 21 years when they entered the US Army (384 [64.8%]). In multivariable models adjusting for sociodemographics, service-related characteristics, and previous mental health diagnosis, odds of SA during or after second deployment were higher among soldiers whose first deployment occurred within the first 12 months of service vs after 12 months (odds ratio, 2.0; 95% CI, 1.6-2.4) and among those with a DT of 6 months or less vs longer than 6 months (odds ratio, 1.6; 95% CI, 1.2-2.0). Duration of first deployment was not associated with subsequent SA. Analysis of 2-way interactions indicated that the associations of early deployment and DT with SA risk were not modified by other characteristics. Multivariable population-attributable risk proportions were 14.2% for deployment within the first 12 months of service and 4.0% for DT of 6 months or less.

Conclusions and Relevance
Time in service before first deployment and DT are modifiable risk factors for SA risk among soldiers.


Suicide Ideation in Female Survivors of Military Sexual Trauma: The Trauma Source Matters.

Rebecca K. Blais PhD, Lindsey L. Monteith PhD

Journal of Traumatic Stress
First published: 20 April 2018
https://doi.org/10.1111/sltb.12464

Female veterans who have experienced military sexual trauma (MST) are at elevated suicide risk, yet knowledge is limited regarding correlates of suicide ideation (SI) in this
population. MST is associated with a higher risk of posttraumatic stress disorder (PTSD) relative to other trauma types; however, no studies have examined whether experiencing SI differs based on the source of PTSD symptoms (MST-related, non-MST-related). Female service members/veterans (SM/Vs; n = 311) who screened positive for MST and reported exposure to a Criterion A event completed an online survey assessing self-reported demographics, PTSD, depression, the source of their PTSD symptoms, and SI. Ninety-one (29.3%) reported experiencing current SI, and 223 (71.7%) identified MST as the source of their current PTSD symptoms. Participants who identified MST as the source of their PTSD symptoms were over two times more likely to report SI, compared to those who described non-MST-related events as the source of their PTSD symptoms. Compared to those who reported the source of their PTSD symptoms as combat/deployment-related, those who identified MST as the source were at least three times as likely to report current SI. Results underscore the importance of efforts to address MST-related PTSD symptoms when working with female SM/Vs.

http://psycnet.apa.org/record/2018-16686-001

**MMPI-2-RF characteristics of veterans seeking treatment for military sexual trauma.**

McManus, E. S., Cucurullo, L.-A. J., Uddo, M., & Franklin, C. L.

*Psychological Assessment* 2081; 30(4), 561-566. http://dx.doi.org/10.1037/pas0000527

Military sexual trauma (MST) is defined as experiences of sexual assault or repeated, threatening, harassment during military service. MST events may not qualify within posttraumatic stress disorder (PTSD) Criterion A, making symptoms associated with MST unique from trauma-related disorders. Little research has been done to understand those presenting for MST treatment. Thus, this article provides Minnesota Multiphasic Personality Inventory 2–Restructured Form (MMPI-2-RF) scores of 33 U.S. veterans who experienced MST in an effort to better understand psychological and personality characteristics of this important and unique group of veterans. Our sample comprised mainly African American, female, U.S. Army veterans seeking treatment of MST at a Department of Veterans Affairs specialty clinic. A majority of participants reported an attempted or actual rape during their service, averaging 1.87 (SD = 1.33) MST events.
The most common diagnoses assigned by diagnosticians at intake were PTSD, mood disorders, and personality disorders. With regard to MMPI-2-RF results, the sample generated elevated scores on somatic, mood, anxiety, and interpersonal dysfunction scales. Implications of these findings and areas of future research are discussed. (PsycINFO Database Record (c) 2018 APA, all rights reserved)

https://www.tandfonline.com/doi/abs/10.1080/15504263.2018.1464237

**Increased Resilience is Associated with Positive Treatment Outcomes for Veterans with Comorbid PTSD and Substance Use Disorders.**

Adam P. McGuire, Natalie P. Mota, Lauren M. Sippel, Kevin M. Connolly & Judith A. Lyons

Journal of Dual Diagnosis
Accepted author version posted online: 18 Apr 2018
DOI: 10.1080/15504263.2018.1464237

**Objective:**
Resilience has been associated with less severe psychiatric symptomatology and better treatment outcomes among individuals with posttraumatic stress disorder (PTSD) and substance use disorders (SUD). However, it remains unknown whether resilience increases during psychotherapy within the comorbid PTSD and SUD population with unique features of dual-diagnosis, including trauma cue-related cravings. We tested whether veterans seeking psychotherapy for comorbid PTSD-SUD reported increased resilience from pre- to post-treatment. We also tested whether increased resilience was associated with greater decreases in post-treatment PTSD and SUD symptoms.

**Method:**
Participants were 29 male veterans (Mage = 49.07, SD = 11.24) receiving 6-week residential day-treatment including cognitive processing therapy for PTSD and cognitive behavioral therapy for substance use disorder. Resilience, PTSD symptoms, and trauma cue-related cravings were assessed at pre- and post-treatment.

**Results:**
Veterans reported a large, significant increase in resilience at post-treatment (Mdif = 14.24, t = -4.22, p < .001, d = 0.74). Greater increases in resilience was significantly associated with fewer PTSD symptoms (β = -0.37, p = .049, sr = -.36) and trauma-cued
cravings ($\beta = -0.39$, $p = .006$, $sr = -.38$) at post-treatment when controlling for pre-treatment scores and baseline depressive symptoms.

Conclusions:
Results suggest evidence-based psychotherapy for comorbid PTSD and SUD may facilitate strength-based psychological growth, which may further promote sustained recovery.

https://journal.chestnet.org/article/S0012-3692(18)30578-6/pdf

Sleep Disorders in Patients with Post-Traumatic Stress Disorder.

Ali A. El-Solh, MD, MPH, Usman Riaz, MD, Jasmine Roberts, MD

CHEST
Accepted Date: 3 April 2018
DOI: 10.1016/j.chest.2018.04.007

A growing body of evidence supports a bidirectional relationship between post-traumatic stress disorder (PTSD) and sleep disturbances. Fragmented sleep induced by sleep-related breathing disorders, insomnia, and nightmares impacts recovery and treatment outcomes and worsens PTSD symptoms. Despite recent attention, management of these disorders has been unrewarding in the setting of PTSD. This review summarizes the evidence for empirically supported treatments of these sleep ailments as it relates to PTSD including psychotherapeutic and pharmacologic interventions. Recent advances in positive airway pressure technology have made treatment of OSA more acceptable however adherence to CPAP represents a significant challenge. The presence of concomitant insomnia, which engenders psychiatric and medical conditions including depression, suicide, alcohol and substance abuse, can be managed with cognitive behavioral therapy (CBT). Hypnotic agents are considered an alternative therapy but concerns about adverse events and lack of high level evidence supporting their efficacy in PTSD have limited their use to resistant cases or as adjunct to behavioral therapy when the response is less than desirable. Intrusion of nightmares can complicate PTSD treatment and exert serious strain on social, occupational and marital relations. Image rehearsal therapy has shown significant reduction in nightmares intensity and frequency. The success of noradrenergic blocking agents has not been consistent among studies with half reporting treatment failure. An integrated stepped care approach that includes components of both behavioral and pharmacologic interventions
customized to patients sleep maladaptive behaviors may offer a solution to delivering accessible, effective, and efficient services for individuals with PTSD.

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Fear Avoidance and Clinical Outcomes from Mild Traumatic Brain Injury.

Dr. Noah D Silverberg, Dr. William Panenka, and Prof. Grant L Iverson

Journal of Neurotrauma
Online Ahead of Editing: April 18, 2018
http://doi.org/10.1089/neu.2018.5662

Characterizing psychological factors that contribute to persistent symptoms after mild traumatic brain injury (MTBI) can inform early intervention. To determine whether fear avoidance, a known risk factor for chronic disability after musculoskeletal injury, is associated with worse clinical outcomes from MTBI, adults were recruited from four outpatient MTBI clinics and assessed at their first clinic visit (M=2.7, SD=1.5 weeks post-injury) and again 4-5 months later. Of 273 patients screened, 102 completed the initial assessment and 87 returned for the outcome assessment. The initial assessment included a battery of questionnaires that measure activity avoidance and associated fears. Endurance, an opposite behavior pattern, was measured with the Behavioral Response to Illness Questionnaire. The multidimensional outcome assessment included measures of post-concussion symptoms (British Columbia Postconcussion Symptom Inventory), functional disability (World Health Organization Disability Assessment Schedule-12 2.0), return to work status, and psychiatric complications (MINI Neuropsychiatric Interview). A single component was retained from principal components analysis of the six avoidance subscales. In generalized linear modeling, the avoidance composite score predicted symptom severity (95% confidence interval [CI] for B= 1.22-6.33) and disability (95% CI for B=2.16-5.48), but not return to work (95% CI for B=-0.68-0.24). The avoidance composite was also associated with an increased risk for depression (OR=1.76, 95% CI=1.02-3.02) and anxiety disorders (OR=1.89, 95% CI=1.16-3.19). Endurance behavior predicted the same outcomes, except for depression. In summary, avoidance and endurance behavior were associated with a range of adverse clinical outcomes from MTBI. These may represent early intervention targets.

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Randomized clinical trial pilot study of prolonged exposure versus present centred affect regulation therapy for PTSD and anger problems with male military combat veterans.

Julian D. Ford, Damion J. Grasso, Carolyn A. Greene, Michelle Slivinsky, Jason C. DeViva

Clinical Psychology and Psychotherapy
First published: 23 April 2018
https://doi.org/10.1002/cpp.2194

A randomized controlled trial pilot study (www.ClinicalTrials.org; NCT01228539) with $N = 31$ U.S. male military recent combat veterans with PTSD and severe anger problems was conducted comparing 10- session individual therapy versions of Trauma Affect Regulation: Guide for Education and Therapy (TARGET) versus prolonged exposure (PE). TARGET had fewer drop-outs than PE (i.e., 29% vs. 64%). At post-test, improvements were found for both interventions in increased emotion regulation and hope, and reduced PTSD symptoms, hostility, experiential avoidance, and mental health problems. At a four-month follow-up, comparable proportions (approximately 40%) of recipients in each therapy maintained clinically significant gains. Self-rated expectancy of therapeutic outcome and working alliance was comparable for both PE and TARGET early in therapy, at mid-treatment, and at the end of treatment. While preliminary, these results suggest that TARGET may be a viable therapeutic option for male military veterans with PTSD and anger problems.


Combat Experience and Posttraumatic Stress Symptoms among Military-Serving Parents: a Meta-Analytic Examination of Associated Offspring and Family Outcomes.

Tessa K. Kritikos, Jonathan S. Comer, Meiqi He, Laura C. Curren, Martha C. Tompson
In this meta-analysis, we review findings on the relationships between parental combat exposure and PTSD/PTSS in military-serving families and (1) parenting problems, (2) family maladjustment, and (3) offspring problems. We systematically searched for studies in PsycInfo, PsychArticles, Psychology and Behavior Sciences Collection, Published International Literature on Traumatic Stress (PILOTS), and PubMed/Medline as well as conducted manual searches. Search procedures identified 22 eligible studies, including 20 studies examining relationships between parental PTSD/PTSS and parenting, family, and/or offspring outcomes and 8 studies examining relationships between parental combat exposure and parenting, family, and/or offspring outcomes. Random effects meta-analytic models estimated omnibus associations between parental combat exposure/PTSD and pooled Family Difficulties, as well as individual relationships between parental combat exposure and PTSD/PTSS and parenting, family adjustment, and offspring outcomes. Small-to-moderate effect sizes were observed in the omnibus meta-analysis examining relationships between parental PTSD/PTSS and pooled Family Difficulties, and in the meta-analysis examining relationships between parental PTSD/PTSS and parenting problems, between parental PTSD/PTSS and poor family functioning, and between parental PTSD/PTSS and offspring problems. Associations between parental combat exposure and pooled Family Difficulties, as well as between parental combat exposure and parenting problems were smaller in magnitude. PTSD/PTSS among military-serving parents is associated with increased problems in the family environment, including parenting problems, family maladjustment, and offspring problems, whereas combat exposure alone is not as strongly associated with such family difficulties. Moderator analyses are presented and discussed as well. When military-serving parents show psychological symptoms, professionals should consider allocating resources to target broader family issues.

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Using Two Intersubjective Perspectives in Combat Deployment: A Military Mental Health Professional's Experience.

Phil E. Miller
The stress and demands of combat deployment create challenges for a military mental health provider (MMHP) to operate in a helper role in an environment adverse to the helping process. A case is presented featuring the experience of a MMHP while deployed to establish the existence of two types of intersubjective space in a combat environment. Modern attachment theory and interpersonal neurobiology are used as a theoretical framework, and concepts of emotional self-regulation, implicit communication, and attunement are applied to the case. The work of the MMHP is shown within and between the two types of intersubjective space and emphasize the seizing of unexpected clinical moments. The MMHP must remain emotionally regulated to participate in the implicit communicative process and rapidly form a therapeutic relationship. Creative and improvisational methods are demonstrated by the MMHP that challenge rigid adherence to clinical models. Applicability is significant to the specialty field of MMHP’s to improve deployment preparation, clinical skill development, and personal health management. Work with veterans can be enhanced by understanding deployment experiences and recognizing the importance of attunement by regulating affect for both the provider and client.

https://www.sciencedirect.com/science/article/pii/S1077722918300397

Special Considerations in the Adaptation of Cognitive Behavioral Therapy for Insomnia with Active-Duty U.S. Army Personnel.

Kristi E. Pruiksma, Brooke Fina, Jessica R. Dietch, Katherine A. Dondanville, Jacob Williams, Edward C. Wright, Alma Molino, Brittany Hall-Clark, Karin L. Nicholson, Alan L. Peterson, Daniel Taylor

Insomnia is highly prevalent among active-duty military service members. Cognitive Behavioral Therapy for Insomnia (CBT-I) is a well-established and effective treatment; however, research and treatment recommendations have primarily focused on civilian or veteran populations. A multitude of military-specific factors directly impact service
members’ sleep and the subsequent treatment recommendations. This article provides treatment considerations for the use of CBT-I with active-duty U.S. Army personnel. First, an overview of the theoretical model of insomnia, including military-specific predisposing, precipitating, and perpetuating factors, is presented, followed by a review of common comorbid conditions among service members with insomnia. Finally, discussion focuses on considerations and strategies for implementing components of CBT-I with service members, managing sleep during deployments, and adjusting sleep to accommodate overnight duties. Additional training resources and supplemental video examples (with actors) are provided.


In-Home Sleep Recordings in Military Veterans with Posttraumatic Stress Disorder Reveal Less REM and Deep Sleep <1 Hz.

Julie A Onton, Scott C Matthews, Dae Y Kang and Todd P Coleman

Frontiers in Human Neuroscience
Accepted: 23 Apr 2018
doi: 10.3389/fnhum.2018.00196

Veterans with posttraumatic stress disorder (PTSD) often report suboptimal sleep quality, often described as lack of restfulness for unknown reasons. These experiences are sometimes difficult to objectively quantify in sleep lab assessments. Here, we used a streamlined sleep assessment tool to record in-home 2-channel electroencephalogram (EEG) with concurrent collection of electrodermal activity (EDA) and acceleration. Data from a single forehead channel were transformed into a whole-night spectrogram, and sleep stages were classified using a fully automated algorithm. For this study, 71 control subjects and 60 military-related PTSD subjects were analyzed for percentage of time spent in Light, Hi Deep (1–3 Hz), Lo Deep (<1 Hz), and rapid eye movement (REM) sleep stages, as well as sleep efficiency and fragmentation. The results showed a significant tendency for PTSD sleepers to spend a smaller percentage of the night in REM (p < 0.0001) and Lo Deep (p = 0.001) sleep, while spending a larger percentage of the night in Hi Deep (p < 0.0001) sleep. The percentage of combined Hi+Lo Deep sleep did not differ between groups. All sleepers usually showed EDA peaks during Lo, but not Hi, Deep sleep; however, PTSD sleepers were more likely to lack EDA peaks altogether, which usually coincided with a lack of Lo Deep sleep. Linear regressions with all subjects showed that a decreased percentage of REM sleep in
PTSD sleepers was accounted for by age, prazosin, SSRIs and SNRIs (p < 0.02), while decreased Lo Deep and increased Hi Deep in the PTSD group could not be accounted for by any factor in this study (p < 0.005). Linear regression models with only the PTSD group showed that decreased REM correlated with self-reported depression, as measured with the Depression, Anxiety and Stress Scales (DASS; p < 0.00001). DASS anxiety was associated with increased REM time (p < 0.0001). This study shows altered sleep patterns in sleepers with PTSD that can be partially accounted for by age and medication use; however, differences in deep sleep related to PTSD could not be linked to any known factor.

http://psycnet.apa.org/record/2018-17848-005

Changes in posttraumatic stress disorder (PTSD) and depressive symptoms over the course of prolonged exposure.


Journal of Consulting and Clinical Psychology
2018; 86(5), 452-463.
http://dx.doi.org/10.1037/ccp0000292

Objective:
Prior studies of prolonged exposure therapy (PE) suggested that reduction of posttraumatic stress disorder (PTSD) precedes reduction in depression, yet no research has collapsed data across multiple studies to examine whether the directionality of reduction remains consistent in larger and diagnostically diverse samples. Thus, the objective of this study is to conduct an evaluation of bidirectional associations between PTSD and depression in PE.

Method:
Participants (n = 216) from three randomized controlled trials of PE alone, PE + alcohol use disorder treatment, and PE + nicotine use disorder treatment completed weekly PTSD and depression severity measures. First, we analyzed the directional relationship between PTSD and depression over time in 2 single models to separately examine the effects of PTSD on depression and vice versa. Second, we analyzed a combined model to examine the simultaneous effects of reduction in PTSD on reduction in depression over and above the effects of reduction in depression on reduction in PTSD, and vice versa.
Results:
Two single models suggested that reductions in PTSD lead to reductions in depression and vice versa. The combined models suggested that both directions of change are important and reciprocal. The strength of predictive power from PTSD to depression, and vice versa, is approximately equal. Most significant prediction of PTSD from depression and vice versa occurred early in treatment.

Conclusion:
The relationship between reductions in PTSD and depression during PE is transactional. Regardless of whether PTSD or depression decreases first, reduction in the other symptom cluster is likely to follow. (PsycINFO Database Record (c) 2018 APA, all rights reserved)


The Use of Virtual Clients for Training Behavioral Health Providers: Promises, Challenges and the Way Ahead.

Kintzle, S., Munch, C., Alday, E. et al.

Journal of Technology in Behavioral Science
First Online: 23 April 2018
https://doi.org/10.1007/s41347-018-0058-2

Providing opportunities for training behavioral health providers in clinical practice remains a challenge within the helping professions. To date, the field has relied mostly on role-playing and the use of standardized actors to provide realistic clinical simulations to students. Although highly utilized, both methods come with significant challenges. As technology rapidly develops, so does its role and application within the framework of behavioral health training. One such role is its potential use in providing realistic clinical simulations to develop clinical skills. Along with reviewing the application as well as advantages and challenges to the current training models used to mimic clinical interactions, role play, and standardized actor patients, the purpose of this concept article is to present an alternate clinical skills training model, the use of a virtual client. Described is the use of virtual clients in behavioral health training, including how virtual clients work and their current applications, the advantages and challenges associated with their use and the way forward with their use in behavioral health
training. Authors conclude virtual clients have potential as an impactful tool in the development of clinical skills.

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Mild Traumatic Brain Injury and Substance Use.

Amy L. Haycraft, DNP, PMHNP, Taylor A. Glover, BSN, RN

The Journal for Nurse Practitioners
Available online 24 April 2018
https://doi.org/10.1016/j.nurpra.2018.02.014

An evidence review of mild TBI (mTBI) sequela was undertaken to explore associations between mTBI and substance use in college students. The pilot study included a convenience sample of college students. The results did not support a statistically significant relationship between mTBI and substance use disorders (SUDs). These findings were contradictory from existing and emerging evidence; however, the magnitude of this relationship remains unclear and further supports the need for continued research.

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Religious involvement as a social determinant of sleep: an initial review and conceptual model.

Terrence D. Hill, Reed Deangelis, Christopher G. Ellison

Sleep Health
Available online 24 April 2018
https://doi.org/10.1016/j.sleh.2018.04.001

Although numerous empirical studies show that religious involvement is associated with better health and longer life expectancies, researchers have virtually ignored possible links between religious involvement and sleep. To spark greater attention to this important and understudied area of sleep research, we review previous population-
based studies, propose an initial conceptual model of the likely pathways for these associations, and offer several avenues for future research. Our review and critical examination suggest that religious involvement is indeed a social determinant of sleep in the United States. More religious adults in particular tend to exhibit healthier sleep outcomes than their less religious counterparts. This general pattern can be seen across large population-based studies using a narrow range of religion measurements and sleep outcomes. Our conceptual model, grounded in the broader religion and health literature, suggests that religious involvement may be associated with healthier sleep outcomes by limiting mental, chemical, and physiological arousal associated with psychological distress, substance use, stress exposure, and allostatic load. As we move forward, researchers should incorporate (1) more rigorous longitudinal research designs, (2) more sophisticated sleep measurements, (3) more complex conceptual models, (4) more comprehensive measurements of religion and related concepts, and (5) more measures of religious struggles to better assess the “dark side” of religion. Research along these lines would provide a more thorough understanding of the intersection of religious involvement and population sleep.


Individual differences in combat experiences and error-related brain activity in OEF/OIF/OND veterans.


Abstract
Increased error-related negativity (ERN) has been implicated in the pathophysiology of multiple forms of psychopathology. Although there is increasing evidence that the ERN can be shaped by environment and experience, no studies to date have examined this question in a clinical sample. In the current study, we examined the influence of combat exposure on the ERN using electroencephalogram (EEG) in a sample of military veterans with a high prevalence of psychopathology. Participants included sixty-seven U.S. military veterans from Operations Enduring Freedom, Iraqi Freedom, and New Dawn (OEF/OIF/OND). The degree of combat exposure was assessed using the Deployment Risk and Resilience Inventory-2 (DRRI-2) and Combat Exposure Scale.
(CES). A well-validated flanker task was used to elicit the ERN during continuous EEG recording. Results revealed that veterans who reported experiencing greater combat exposure exhibited a more enhanced ERN, even when adjusting for broad anxiety and posttraumatic stress disorder (PTSD) symptoms. The association between combat exposure and ERN was not moderated by PTSD symptom severity. The current study demonstrates that greater combat exposure is associated with a more enhanced ERN among OEF/OIF/OND veterans. This enhanced ERN may be one mechanism that places veterans at greater risk for developing psychiatric disorders following exposure to combat. Future longitudinal studies are needed to directly test whether the ERN mediates the relation between level of combat exposure and the development of internalizing disorders.


Toward an interdisciplinary conceptualization of moral injury: From unequivocal guilt and anger to moral conflict and disorientation.

Tine Molendijk

New Ideas in Psychology
Volume 51, December 2018, Pages 1-8
https://doi.org/10.1016/j.newideapsych.2018.04.006

While the concept of moral injury has been embraced in academic, clinical and public discourses, it is still nascent and needs development regarding the ‘moral’ in ‘moral injury’. When questions about the complex nature of morality go unaddressed, clinical practice is based on unsubstantiated and possibly reductive assumptions about the moral dimensions of traumas. Current conceptualizations of moral injury approach morality implicitly as a harmonious belief system. However, people always have multiple moral commitments that may co-exist in tension. What are the implications of moral tension in the experience of distress, and what are the implications of the complex nature of morality for the theoretical understanding of moral injury? This article addresses these questions, drawing on relevant literature from the fields of philosophy and social sciences, and on 80 in-depth qualitative interviews with Dutch veterans, thus contributing to a refined, interdisciplinary concept of moral injury.

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Assessing Residents' Veteran-Centered Care Skills in the Clinical Setting.

Paula T. Ross, James T. Fitzgerald, Divy Ravindranath, Paul N. Pfeiffer, Mamta K. Singh, Saul J. Weiner, Deborah M. Rooney, Stacie Buckler, Laurie Whitman, Brook Watts, Dorian Jones, Adam S. Tremblay, and Monica L. Lypson

Journal of Graduate Medical Education
Accepted: February 13, 2018
https://doi.org/10.4300/JGME-D-17-00700.1

Background
Despite their placement in Veterans Health Administration centers nationwide, residents receive variable, and often insufficient, training and assessment in veteran-centered care.

Objective
We assessed residents' ability to recognize and address mental health issues that affect US military veterans.

Methods
Two unannounced standardized patient (SP) cases were used to assess internal medicine residents' veteran-centered care skills from September 2014 to March 2016. Residents were assessed on 7 domains: military history taking, communication skills, assessment skills, mental health screening, triage, and professionalism, using a 36-item checklist. After each encounter, residents completed a questionnaire to assess their ability to recognize knowledge deficits. Residents' mean scores were compared across training levels, between the 2 cases, and by SP gender. We conducted analysis of variance (ANOVA) tests to analyze mean performance differences across training levels and descriptive statistics to analyze self-assessment questionnaire results.

Results
Ninety-eight residents from 2 internal medicine programs completed the encounter; 53 completed the self-assessment questionnaire. Residents performed best on professionalism (0.92 ± 0.20, percentage of the maximal score) and triage (0.87 ± 0.17), and they scored lowest on posttraumatic stress disorder (0.52 ± 0.30) and military sexual trauma (0.33 ± 0.39). Few residents reported that they sought out training to enhance their knowledge and skills in the provision of services and support to military and veteran groups beyond their core curriculum.
Conclusions
This study suggests that additional education and assessment in veteran-centered care may be needed, particularly in the areas of posttraumatic stress disorder and military sexual trauma.

Effectiveness Of Ultra-brief CBTi In A Complex Clinical Population.

D H Loewy

Sleep
Volume 41, Issue suppl_1, 27 April 2018, Pages A153,
https://doi.org/10.1093/sleep/zsy061.401

Introduction
The first line treatment for chronic insomnia is cognitive behavioral therapy for insomnia (CBTi) as endorsed by the American College of Physicians (2016). CBTi is a constellation of behavioral and cognitive techniques for improving natural sleep. Randomized, controlled studies of CBTi typically involve 4 to 8 treatment sessions and participants are often highly selected. In clinical practice, insomnia patients can be complicated and there may be limits on the number of allowable treatment sessions. The purpose of this study was to assess the effectiveness of ultra-brief CBTi in a complex clinical population.

Methods
Subjects included 366 female and male patients (18 to 90 years) referred for CBTi. The only inclusion criterion was a diagnosis of chronic insomnia and/or circadian rhythm disorder. The Insomnia Severity Index (ISI) was administered at consultation (baseline) and at each follow up. A retrospective analysis was conducted with change on the ISI between baseline and final CBTi visit as the primary outcome measure. A decrease of 6 points on the 28-point scale represents minimal clinically significant change. Secondary measure of interest was change in sedative hypnotic use. The presence of co-morbid sleep and psychiatric disorders was recorded.

Results
Of the 366 CBTi consults, 234 (63.9%) returned for at least one follow up. Median
number of follow up visits was 2.0 (range 1 to 6). Median ISI score for the 234 follow up patients was 19.0 at baseline and 12.0 at final visit for a delta of -7.0 (p < .0001; Mann-Whitney Test). At baseline, 62.6% of patients were using at least one hypnotic. At final CBTi visit, 27.0% discontinued all sleep medications, 32.7 reduced sleep medications, 36.5% were unchanged, and 2.9% increased or added a sleep medication. One co-morbid condition was present in 60.7% and more than one in 23.1% of all patients.

Conclusion
Ultra-brief CBTi can be beneficial for complex insomnia patients.

Support (If Any)
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https://academic.oup.com/sleep/article-abstract/41/suppl_1/A193/4988552

Excessive Daytime Somnolence in Patients with Obstructive Sleep Apnea Adequately Treated with Positive Airway Pressure.

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Sleep, Volume
41, Issue suppl_1, 27 April 2018, Pages A193
https://doi.org/10.1093/sleep/zsy061.514

Introduction
Patients with obstructive sleep apnea (OSA) commonly experience residual excessive daytime sleepiness (EDS) despite treatment with positive airway pressure (PAP). Yet, there are currently no guidelines on the evaluation of this common clinical problem. The purpose of this study was to determine the percentage of patients with OSA adequately treated with PAP who had objective residual sleepiness.

Methods
We conducted a retrospective review of 31 adults (ages 18–64; 80.6% male) with OSA on PAP therapy who underwent an evaluation for EDS. For inclusion criteria, patients had to have subjective sleepiness by the Epworth Sleepiness Scale (ESS) and an attended in-lab polysomnogram with PAP followed by a multiple sleep latency test (MSLT) to determine objective sleepiness.
Results
All patients were subjectively sleepy with an ESS score of >10 and met minimal PAP usage of 4 hours a night for at least 70% of nights with a residual AHI <10. The average PAP usage was 7 hours/night. On MSLT testing, 10 (32.2%) patients had an average sleep onset latency (SOL) <8 minutes, 10 (32.2%) had a SOL between 8 and 11 minutes, and 11 (35.4%) had SOL > 11 minutes. Sixteen (51.6%) patients had a comorbid disorder (anxiety, depression, chronic pain, PTSD). Approximately 81% (13) of the patients with a comorbid disorder had non-congruent subjective and objective sleepiness.

Conclusion
Despite subjective symptoms, the majority of OSA patients were not objectively sleepy. Subjective and objective sleepiness corresponded in only 32.2% of our cohort. This questions the clinical practice of using wake promoting agents in this population without objective testing and/or evaluation for other etiologies of subjective symptoms.


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Psychoneuroendocrinology
Available online 27 April 2018
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Recent studies suggest a therapeutic effect of psychiatric service dogs for military veterans with posttraumatic stress disorder (PTSD), but are limited by self-report biases. The current study assessed the effect of PTSD service dogs on the salivary cortisol awakening response (CAR) and arousal-related functioning in a population of military veterans with PTSD. Participants included 73 post-9/11 military veterans with PTSD including 45 with a service dog and 28 on the waitlist to receive one. Saliva samples were collected on two consecutive weekday mornings at awakening and 30 minutes later to quantify the cortisol awakening response (CAR) and its area under the curve (AUCi) in addition to standardized survey measures of anxiety, anger, sleep quality and disturbance, and alcohol abuse. There was a significant main effect of
having a service dog on both the CAR and the AUCi, with individuals with a service dog exhibiting a higher CAR and AUCi compared to those on the waitlist. Results also revealed that those with a service dog reported significantly lower anxiety, anger, and sleep disturbance as well as less alcohol abuse compared to those on the waitlist, with medium to large effect sizes. Although those with a service dog reported significantly less PTSD symptom severity, CAR was not significantly associated with PTSD symptoms within or across group. In conclusion, results indicate that the placement of a PTSD service dog may have a significant positive influence on both physiological and psychosocial indicators of wellbeing in military veterans with PTSD. Although clinical significance cannot be confirmed, a higher CAR/AUCi among those with a service dog corresponded with higher psychosocial functioning and lower PTSD severity. Future within-subject, longitudinal research will be necessary to determine potential clinical significance and impact of individual differences.


Cortisol, Testosterone, and Prospective Risk for War-zone Stress-Evoked Depression.

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Military Medicine
Published: 27 April 2018
https://doi.org/10.1093/milmed/usy065

Introduction
The major challenges of efforts to reveal biological risk factors and biomarkers of depression include the complexity of underlying systems, interactions with other systems, and contextual factors governing their expression. Altered endocrine function is believed to be a central contributor to depressive illness, but across studies, evidence for a link between endocrine markers and depression has been mixed, inconclusive, or conditional in nature. In the present study, we evaluated basal testosterone (T), cortisol (C), and CO2 inhalation-stress-reactivity measures of these hormones (TR, CR) as pre-deployment moderators of the later impact of war-zone stressors on depression symptoms in-theater.
Materials and Methods
At pre-deployment, U.S. soldiers (N = 120) completed demographic, clinical and hormone measures, and during deployment, they completed monthly, web-based assessments of war-zone stressors and depression symptoms (N = 533 observations). Mixed effects models estimated the effects of the pre-deployment hormone profiles in moderating war-zone stressors’ impact on in-theater depression. Models also tested whether hormonally linked risk for later stress-evoked depression depends on pre-existing depression.

Results
Controlling for pre-deployment depression, high T was protective; whereas TR had depressogenic effects that were amplified by pre-deployment depression. Further, high C was protective, but heightened CR was depressogenic, but only among those with elevated pre-deployment depression.

Conclusions
Findings highlight the importance of examining basal and reactivity measures of endocrine function, and use of prospective, longitudinal models to test hypothesized causal pathways associated with depression vulnerability in the war-zone. Results also suggest that pre-existing depression and cortisol may work in tandem to increase vulnerability for later stress-evoked depression in the war-zone.

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Suzanne Yang, M.D., Gary H. Wynn, M.D., Robert J. Ursano, M.D.

Focus: The Journal of Life-Long Learning in Psychiatry
Volume 16, Issue 2, Spring 2018, pp. 143-152
Biomarkers in Psychiatry

No clinically validated biomarkers have yet been found to assist in the diagnosis and
treatment of posttraumatic stress disorder (PTSD). Innovation in clinical trial design, however, has led to the study of biomarkers as part of testing new medications and psychotherapies. There may soon be viable biomarkers to assist in diagnosis of PTSD and prediction of illness trajectory, severity, and functional outcomes; subtyping; and treatment selection. Processes for the identification and validation of biomarker findings are complex, involving several stages of clinical testing before use. The authors provide an overview of issues regarding the clinical use of PTSD biomarkers and examine a set of genetic, epigenetic, and other blood-based markers along with physiological markers currently proposed as candidate tests for PTSD. Studies that have identified candidate biomarkers with relevance to treatment selection in PTSD are discussed as a promising area of research that may lead to changes in clinical practice.


Association between posttraumatic stress disorder and lack of exercise, poor diet, obesity, and co-occurring smoking: A systematic review and meta-analysis.

van den Berk-Clark, C., Secrest, S., Walls, J., Hallberg, E., Lustman, P. J., Schneider, F. D., & Scherrer, J. F.

Health Psychology
http://dx.doi.org/10.1037/hea0000593

Objectives:
Research has shown that posttraumatic stress disorder (PTSD) increases the risk of development of cardiometabolic disease (CMD) including cardiovascular disease and diabetes. Whether PTSD is also associated with behavioral risk factors (e.g., diet, exercise, smoking and obesity) for CMD, is less clear.

Methods:
PubMed, Web of Science, and Scopus databases were searched to obtain papers published between 1980–2016. Studies were reviewed for quality using the Quality of Cohort screen. Significance values, odds ratios (OR), 95% confidence intervals (CI), and tests of homogeneity of variance were calculated.

Principal Findings:
A total of 1,349 studies were identified from our search and 29 studies met all eligibility
criteria. Individuals with PTSD were 5% less likely to have healthy diets (pooled adjusted OR = 0.95; 95% CI: 0.92, 0.98), 9% less likely to engage in physical activity (pooled adjusted OR = 0.91; 95% CI: 0.88, 0.93), 31% more likely to be obese (pooled adjusted OR = 1.31; 95% CI: 1.25, 1.38), and about 22% more likely to be current smokers (pooled adjusted OR = 1.22; 95% CI: 1.19, 1.26), than individuals without PTSD.

Conclusions:
Evidence shows PTSD is associated with reduced healthy eating and physical activity, and increased obesity and smoking. The well-established association between PTSD and metabolic and cardiovascular disease may be partly due to poor diet, sedentary lifestyle, high prevalence of obesity, and co-occurring smoking in this population. The well-established association of PTSD with CMD is likely due in part to poor health behaviors in this patient population. (PsycINFO Database Record (c) 2018 APA, all rights reserved)

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Trauma-Associated Sleep Disturbances: a Distinct Sleep Disorder?

Tara D. Rachakonda, Nadir M. Balba, Miranda M. Lim

Current Sleep Medicine Reports
Sleep and Neurological Disorders (JL DeWolfe, Section Editor)
First Online: 26 April 2018
https://doi.org/10.1007/s40675-018-0119-2

Purpose of Review
This paper describes a newly proposed sleep disorder, trauma-associated sleep disorder (TSD). Whether or not this represents a truly unique condition is controversial. In this paper, we describe the overlapping features and differences between TSD, post-traumatic stress disorder (PTSD), and rapid eye movement (REM) sleep behavior disorder (RBD).

Recent Findings
While REM sleep without atonia (RWA) and dream enactment are part of the diagnostic criteria for both RBD and TSD, only TSD features nightmares that occur both in non-REM and REM. A key difference between TSD and PTSD is the presence of symptoms
during wakefulness in the latter, though the relationship between the two disorders is, as of yet, unclear. It is unknown whether or not a relationship exists between TSD and neurodegeneration; thus, this needs to be explored further.

Summary
Additional research, such as application of TSD diagnostic criteria to more diverse population, would help to determine whether or not TSD is a distinct clinical entity, its relationships to PTSD, as well as the association of this condition with the development of neurodegeneration.

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Links of Interest

Military sex assault reports jump 10 percent

Pentagon chief calls sexual assault a cancer in military

A soldier just got authorization to wear a beard because of his Norse pagan faith

How to avoid common misconceptions when diagnosing, treating insomnia
https://www.healio.com/family-medicine/sleep-medicine/news/online/(a14949a3-1667-4b6c-9baf-b6e09251e162)/how-to-avoid-common-misconceptions-when-diagnosing-treating-insomnia

Rescuing the rescuers from the trauma of seeing buddies crash to their deaths

Deployed and can’t go to school? You may still be able to get that promotion
Army issues waivers to more than 1,000 recruits for bipolar, depression, self-mutilation

A Growing Problem for the Military Transgender Ban — Facts

An Army Veteran Confronts His Own Trauma With a Camera

Six Apps To Help You De-Stress

Army investigates 101st Airborne chaplains accused of dismantling on-post programs for Jewish soldiers

173rd Airborne Brigade Likely to Get its 1st Female Infantry Officer

Can’t sleep? Insomnia cure starts with fixing your mindset, not meds

Pentagon’s Focus on Sexual Assault Has Spurred Reporting, But Also Created ‘Training Fatigue

Mental Health Services Key to Effective Pain Management

Shoulder-fired weapons can cause traumatic brain injuries, study finds
Resource of the Week: The Mental Health Workforce: A Primer

New (April 20, 2018) from the Congressional Research Service:

Congress has held hearings and some Members have introduced legislation addressing the interrelated topics of the quality of mental health care, access to mental health care, and the cost of mental health care. The mental health workforce is a key component of each of these topics. The quality of mental health care depends partially on the skills of the people providing the care. Access to mental health care relies on, among other things, the number of appropriately skilled providers available to provide care. The cost of mental health care depends in part on the wages of the people providing care. Thus an understanding of the mental health workforce may be helpful in crafting policy and conducting oversight. This report aims to provide such an understanding as a foundation for further discussion of mental health policy.

No consensus exists on which provider types make up the mental health workforce. This report focuses on the five provider types identified by the Health Resources and Services Administration (HRSA) within the Department of Health and Human Services (HHS) as mental health providers: clinical social workers, clinical psychologists, marriage and family therapists, psychiatrists, and advanced practice psychiatric nurses. The HRSA definition of the mental health workforce is limited to highly trained (e.g., graduate degree) professionals; however, this workforce may be defined more broadly elsewhere. For example, the Substance Abuse and Mental Health Services Administration (SAMHSA) definition of the mental health workforce includes mental health counselors and paraprofessionals (e.g., case managers).

An understanding of typical licensure requirements and scopes of practice may help policymakers determine how to focus policy initiatives aimed at increasing the quality of the mental health workforce. Most of the regulation of the mental health workforce occurs at the state level because states are responsible for licensing providers and defining their scope of practice. Although state licensure requirements vary widely across provider types, the scopes of practice converge into provider types that generally can prescribe medication (psychiatrists and advanced practice psychiatric nurses) and provider types that generally cannot prescribe medication (clinical psychologists, clinical social workers, and marriage and family therapists). The mental health provider types can all provide
psychosocial interventions (e.g., talk therapy). Administration and interpretation of psychological tests is generally the province of clinical psychologists.

Access to mental health care depends in part on the number of mental health providers overall and the number of specific types of providers. Clinical social workers are generally the most plentiful mental health provider type, followed by clinical psychologists, who substantially outnumber marriage and family therapists. While less abundant than the three aforementioned provider types, psychiatrists outnumber advanced practice psychiatric nurses. Policymakers may influence the size of the mental health workforce through a number of health workforce training programs.

Policymakers may assess the relative wages of different provider types, particularly when addressing policy areas where the federal government employs mental health providers or pays for their services through government programs such as Medicare. Psychiatrists are typically the highest earners, followed by advanced practice psychiatric nurses and clinical psychologists. Marriage and family therapists earn more than clinical social workers. The relative costs of employing different provider types may be a consideration for federal agencies that employ mental health providers.
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