Research Update -- August 23, 2018

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Sleep, resilience, and psychological distress in United States military veterans.

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Military Psychology
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Sleep problems are prevalent among veterans. Left untreated, such problems may elevate psychological distress and increase risk of subsequent mental health disorders. Psychological resilience may buffer against negative psychological outcomes, yet the relationship between sleep and resilience has not been studied. This study explored poor sleep, resilience, and psychological distress using questionnaires collected as part of the Study of Post-Deployment Mental Health. Participants (N = 1,118) had served in the U.S. military since September 11, 2001, had one or more overseas deployments, and were free from a past-month DSM-defined mental health disorder. Hierarchical linear regression was used to examine the association between poor sleep quality (Pittsburgh Sleep Quality Index total score) and psychological distress (Global Symptom Index; Symptom Checklist-90-R), controlling for demographic and health characteristics. Moderation analyses tested for a potential buffering effect of resilience (Connor-Davidson Resilience Scale). Poor sleeping veterans had worse physical and psychological health, lower resilience, and endorsed more lifetime traumatic events. Poor sleep was associated with greater psychological distress controlling for health and demographic characteristics. Both resilience factors—adaptability and self-efficacy—
had significant buffering effects on the relationship between poor sleep and psychological distress, suggesting that resilience may protect against negative outcomes in poor sleepers. Additional research is warranted to better understand the relationships between sleep, resilience, and psychological distress. Such research may inform pertinent prevention efforts, including interventions that improve sleep, enhance resilience, and protect against incident mental health diagnoses.

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[https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-018-5938-z](https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-018-5938-z)

“Everything else comes first”: a mixed-methods analysis of barriers to health behaviors among military spouses.

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Background

Military spouses are integral to the health of their families, but have demonstrated elevated levels of stress, depression, and anxiety. Participating in health behaviors such as physical activity and healthy eating may have a positive impact on spouses' physical and mental health, but emerging evidence suggests spouses' participation in these behaviors is scarce. Thus, the purpose of this study was to examine the most frequently reported barriers to health behaviors among military spouses.

Methods

Military spouses were recruited to complete surveys (N = 230) or participate in focus group sessions (N = 22). On the surveys, participants indicated up to 3 of their most frequent barriers to physical activity, diet, social connection, and stress management. Responses were coded and summed to identify the most commonly reported barriers to each health behavior. Subsequently, focus group sessions were conducted to gain a more in-depth understanding of the challenges military spouses face when trying to maintain a healthy lifestyle. Focus group transcripts were coded using thematic data analysis to identify the most frequently discussed barriers for each behavior.

Results

On the surveys, lack of time was the most prevalent barrier for physical activity, social
connection, and stress management, and the second most prevalent barrier for diet. Financial concerns were the most prevalent barrier to maintaining a healthy diet. Barriers related to parent/family responsibilities were commonly reported across all health behaviors. During the focus group sessions, the transient military lifestyle was reported to have a significant impact on all of the health behaviors. Other military-related stressors including deployments and the necessity to “do it all” alone were frequently discussed. Many participants exhibited rigid definitions of what “counts” as exercise or health eating. Overall, participants reported sacrificing participation in health behaviors to attend to other priorities.

Conclusions
Military spouses reported numerous barriers to health behaviors that made it difficult for them to prioritize their own health and well-being. Although some of the barriers reported were similar to barriers reported by civilians, unique stressors associated with military life further impeded participation in health behaviors. These findings can be used to inform future health promotion interventions for military spouses.


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Introduction
The primary objective of this study was to describe the demographic, clinical, and attrition characteristics of active duty U.S. military service members who were aeromedically evacuated from Iraq and Afghanistan theaters with a psychiatric condition as the primary diagnosis. The study links the U.S. Transportation Command Regulating and Command and Control Evacuation System (TRAC2ES) data with the Defense
Manpower Data Center (DMDC) to conduct an examination of the long-term occupational impact of psychiatric aeromedical evacuations on military separations and discharges.

Materials and Methods
Retrospective analyses were conducted on the demographic, clinical, and attrition information of active duty service members (N = 7,023) who received a psychiatric aeromedical evacuation from Iraq or Afghanistan between 2001 and 2013 using TRAC2ES data. Additionally, TRAC2ES database was compared with DMDC data to analyze personal and service demographics, aeromedical evacuation information, and reasons for military separation with the entire 2013 active duty force. Chi-square tests of independence and standardized residuals were used to identify cells with observed frequencies or proportions significantly different than expected by chance. Additionally, OR were calculated to provide context about the nature of any significant relationships.

Results
Compared with the active duty comparison sample, those with a psychiatric aeromedical evacuation tended to be younger, female, white, divorced or widowed, and less educated. They were also more likely to be junior enlisted service members in the Army serving in a Combat Arms military occupational specialty. The primary psychiatric conditions related to the aeromedical evacuation were depressive disorders (25%), adjustment disorders (18%), post-traumatic stress disorder (9%), bipolar disorders (6%), and anxiety disorders (6%). Approximately, 3% were evacuated for suicidal ideation and associated behaviors. Individuals who received a psychiatric aeromedical evacuation were almost four times as likely (53%) to have been subsequently separated from active duty at the time of the data analysis compared with other active duty service members (14%). The current study also found that peaks in the number of aeromedical evacuations coincided with significant combat operational events. These peaks almost always preceded or followed a significant operational event. An unexpected finding of the present study was that movement classification code was not predictive of subsequent reasons for separation from the military. Thus, the degree of clinical supervision and restraint of a service member during psychiatric aeromedical evacuation from deployment proved to be unrelated to subsequent service outcome.

Conclusions
Psychiatric conditions are one of the leading reasons for the aeromedical evacuation of active duty military personnel from the military combat theater. For many active duty military personnel, a psychiatric aeromedical evacuation from a combat theater is the start of a military career-ending event that results in separation from active duty. This finding has important clinical and operational implications for the evaluation and
treatment of psychiatric conditions during military deployments. Whenever possible, deployed military behavioral health providers should attempt to treat psychiatric patients in theater to help them remain in theater to complete their operational deployments. Improved understanding of the factors related to psychiatric aeromedical evacuations will provide important clinical and policy implications for future conflicts.

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Engaging Men in Psychological Treatment: A Scoping Review.

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Tailoring psychological treatments to men’s specific needs has been a topic of concern for decades given evidence that many men are reticent to seek professional health care. However, existing literature providing clinical recommendations for engaging men in psychological treatments is diffuse. The aim of this scoping review was to provide a comprehensive summary of recommendations for how to engage men in psychological treatment. Four electronic databases (MEDLINE, PubMed, CINAHL, PsycINFO) were searched for articles published between 2000 and 2017. Titles and abstracts were reviewed; data extracted and synthesized thematically. Of 3,627 citations identified, 46 met the inclusion criteria. Thirty articles (65%) were reviews or commentaries; 23 (50%) provided broad recommendations for working with all men. Findings indicate providing male-appropriate psychological treatment requires clinicians to consider the impact of masculine socialization on their client and themselves, and how gender norms may impact clinical engagement and outcomes. Existing literature also emphasized specific process micro-skills (e.g., self-disclosure, normalizing), language adaption (e.g., male-oriented metaphors) and treatment styles most engaging for men (e.g., collaborative, transparent, action-oriented, goal-focused). Presented are clinical recommendations for how to engage men in psychological treatments including paying attention to tapping the strengths of multiple masculinities coexisting within and across men. Our review suggests more empirically informed tailored interventions are needed, along with formal program evaluations to advance the evidence base.
Mental Health Clinician and Community Clergy Collaboration to Address Moral Injury in Veterans and the Role of the Veterans Affairs Chaplain.

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Moral injury in veterans with posttraumatic stress disorder includes symptoms of guilt and shame, and these symptoms are often not responsive to evidence-based mental health treatments. Clergy provide a pathway for relieving the guilt and shame. However, there is a long history of mistrust between clergy and mental health clinicians and not enough Veterans Health Administration chaplains to meet this need. The goal of this study was to gather qualitative interview data from relevant stakeholders regarding whether and how Veterans Affairs (VA) mental health clinicians and community clergy could collaborate to address moral injury issues such as guilt and shame in veterans being treated for posttraumatic stress disorder. The stakeholders for this study were veterans, mental health clinicians, and clergy. Qualitative data were organized into three domains: barriers, facilitators, and intervention suggestions. These data were used to develop a new intervention for moral injury that includes a central role for the Veterans Affairs chaplain.

Association between Trust and Mental, Social, and Physical Health Outcomes in Veterans and Active Duty Service Members with Combat-Related PTSD Symptomatology.

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Background:
Trust represents a complex emotion and interpersonal concept which assumes abandoning control over a given situation or set of circumstances, in turn yielding such control to another party. Advances in our knowledge of post-traumatic stress disorder and moral injury have underscored the need to more closely examine how trust stands to impact health outcomes in these disorders. The aim of the present study is to examine and identify relationships linking general trust with select health outcomes in a mixed sample of Veterans and Service members with a self-reported history of deployment to a combat theater and PTSD symptomatology.

Methods:
This study applied a cross-sectional methodology, surveying n = 427 participants recruited across six sites, including 373 Veterans and 54 active duty Service members. Measures included demographic characteristics, combat exposure, general trust, post-traumatic stress disorder symptomatology, depressive/anxiety symptomatology, alcohol use, social involvement, religiosity, and physical health. Data were analyzed descriptively as well as using Pearson correlations, Student's t-test, and multivariate regression.

Results:
Several significant relationships were identified, indicating an inverse relationship between trust and PTSD, depressive, and anxiety symptomatology. Greater levels of trust were also significantly associated with increased social interaction and religiosity. Lastly, no significant associations were identified with either physical functioning or pain level.

Conclusion:
The findings suggest that trust plays an important role in a variety of health outcomes in Veterans and Service members affected by combat-related PTSD. Additional, hypothesis-driven research, informed by longitudinal data, is needed to better understand how trust stands to impact health outcomes, including the development of strategies and intervention options for repairing trust.


Religious Involvement, Anxiety/Depression, and PTSD Symptoms in US Veterans and Active Duty Military.
Religious involvement is associated with mental health and well-being in non-military populations. This study examines the relationship between religiosity and PTSD symptoms, and the mediating effects of anxiety and depression in Veterans and Active Duty Military (V/ADM). This was a cross-sectional multi-site study involving 585 V/ADM recruited from across the USA. Inclusion criteria were having served in a combat theater and PTSD symptoms. Demographics, military characteristics, and social factors were assessed, along with measurement of religiosity, PTSD symptoms, depression, and anxiety. Bivariate and multivariate analyses examined the religiosity–PTSD relationship and the mediating effects of anxiety/depression on that relationship in the overall sample and stratified by race/ethnic group (White, Black, Hispanic). In bivariate analyses, the religiosity–PTSD relationship was not significant in the overall sample or in Whites. However, the relationship was significant in Blacks ($r = -0.16$, $p = 0.01$) and in Hispanics ($r = 0.30$, $p = 0.03$), but in opposite directions. In the overall sample, religiosity was inversely related to anxiety ($r = -0.07$, $p = 0.07$) and depression ($r = -0.21$, $p < 0.0001$), especially in Blacks ($r = -0.21$, $p = 0.001$, and $r = -0.34$, $p < 0.0001$, respectively); however, in Hispanics, religiosity was positively related to anxiety ($r = 0.32$, $p = 0.02$) as it was to PTSD symptoms. When anxiety/depression was controlled for in multivariate analyses, the religiosity–PTSD relationship in the overall sample reversed from negative to positive, approaching statistical significance ($B = 0.05$, SE = 0.03, $p = 0.079$). In Blacks, the inverse association between religiosity and PTSD was explained by quality of relationships, whereas the positive relationship in Hispanics was explained by anxiety symptoms. In conclusion, religiosity was inversely related to PTSD symptoms in Blacks, positively related to PTSD in Hispanics, and unrelated to PTSD in the overall sample and in Whites. Anxiety/depression partially mediated the relationship in the overall sample and in Hispanics. Although longitudinal studies will be necessary to determine how these relationships come about, consideration should be given to spiritual/religious interventions that target anxiety/depression in V/ADM with PTSD.
Sleep Disturbance Among Firefighters: Understanding Associations with Alcohol Use and Distress Tolerance.

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Sleep disturbance is related to a variety of health issues and represents a prominent occupational concern among firefighters. Two potential predictors relevant to disturbed sleep are alcohol use and distress tolerance, which refers to the perceived ability to withstand negative emotional states. Main and interactive effects of alcohol use and distress tolerance on sleep disturbance were examined, after controlling for the covariates of service years and occupational stress. Participants included 652 firefighters (93.7% male; 77.9% white; Mage = 38.4 years), of whom 23.5% screened positive for hazardous alcohol use and 48.6% for disturbed sleep. Results indicated that higher alcohol misuse and lower distress tolerance were each significantly associated with greater sleep disturbance. Distress tolerance moderated the association between alcohol misuse and sleep disturbance, and the total model accounted for 28% of variance. Results indicate that firefighters with higher levels of hazardous alcohol use and lower levels of distress tolerance may exhibit higher levels of sleep disturbance.

http://psycnet.apa.org/buy/2018-28825-001

Evidence based and intensity specific services in the integrated care setting: Ethical considerations for a developing field.

Maragakis, Alexandros; Lindeman, Sarah; Nolan, Jon

Behavior Analysis: Research and Practice
Jun 21, 2018

The brief nature of service delivery in the integrated care (IC) setting raises concerns in
regard to American Psychological Association (APA) guidelines based on traditional mental health service delivery. Interventions in the IC setting, at the moment, lack empirical support when compared to those used in traditional settings. Furthermore, the services available in an IC setting may not be adequate for patients with more severe presentations. This article discusses and provides recommendations for these ethical concerns in relation to the relevant APA guidelines. Furthermore, a focus on evidence-based principles, quality improvement, patient pathways, community-based approaches, and stepped care protocols are recommended to ensure that providers’ actions meet ethical standards and provide adequate patient care. (PsycINFO Database Record (c) 2018 APA, all rights reserved)


Latent factor structure of PTSD symptoms in veterans with a history of mild traumatic brain injury and close-range blast exposure.


OBJECTIVE:
Confirmatory factor analysis (CFA) has previously been employed to examine the latent factor structure of posttraumatic stress disorder (PTSD) symptoms with mixed results. A limited number of studies examined PTSD factor structure among veterans of recent military conflicts. This study examined the relationship between PTSD factor structure and the hallmark conditions of these conflicts, mild traumatic brain injury (mTBI) and close-range blast exposure (CBE).

METHOD:
The fit of previously proposed PTSD factor models was compared in a cohort of 387 combat-exposed veterans, with stratified analyses comparing factor structure models between those with a history of military-related mTBI and CBE (n = 106) and those without either of these antecedents (n = 151). CFAs were conducted using criteria from the Diagnostic and Statistical Manual of Mental Disorders (4th ed.; DSM-IV; American Psychiatric Association, 1994).

RESULTS:
The 4-factor emotional numbing (EN) model yielded the best fit when using a clinician-
administered assessment of PTSD symptoms regardless of mTBI/CBE exposure status. However, when using a self-report measure of PTSD symptom severity, the EN model yielded best fit for those with mTBI/CBE exposure history while the 5-factor dysphoric arousal (DA) model was preferable among combat-exposed veterans with no history of mTBI/CBE exposure.

CONCLUSIONS:
Factors including mTBI and blast exposure and type of assessment tools must be considered when determining preferable PTSD latent factor structure models. (PsycINFO Database Record (c) 2018 APA, all rights reserved).


Relations between PTSD and Depression Symptom Clusters in Samples Differentiated by PTSD Diagnostic Status.

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Journal of Anxiety Disorders
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Highlights
• Sample consisted of 368 trauma-exposed individuals recruited from Amazon's MTurk.
• We examined PTSD-depression cluster-relations in two subsamples (with/without probable PTSD).
• We found an optimal Hybrid Model in each subsample.
• Dysphoric arousal had the strongest association with somatic depression.
• NACM and AAR (excluding anxious arousal) had the strongest relation with non-somatic depression.

Abstract
Co-occurring posttraumatic stress disorder (PTSD) and depression following traumatic experiences are cumulatively associated with functional impairment. To examine mechanisms for the PTSD-depression comorbidity, we investigated their cluster-level associations. Using data obtained from Amazon’s Mechanical Turk platform, 368 trauma-exposed participants were split into two subsamples: those with (n = 163) and without (n = 185) probable PTSD. In both subsamples, confirmatory factor analyses
indicated an optimal seven-factor PTSD Hybrid Model. Results of Wald tests of parameter constraints indicated that, in both subsamples, PTSD's dysphoric arousal cluster strongly related to somatic depression compared to all/most other Hybrid Model clusters. Additionally, in both subsamples, PTSD's negative affect, externalizing behaviors, and anhedonia clusters each strongly related to non-somatic depression compared to PTSD's anxious arousal cluster. Our results indicate that PTSD’s dysphoric arousal symptoms mainly account for PTSD’s shared variance with somatic depression, while the negative alterations in cognitions and mood (NACM)/dysphoria and arousal symptoms (primarily externalizing behaviours) mainly account for PTSD’s shared variance with non-somatic depression. Our findings have implications for the discussion on PTSD’s specific/non-specific clusters tied to diagnostic modifications, for understanding mechanisms underlying PTSD-depression comorbidity, and for the use of transdiagnostic and multi-component treatment protocols for PTSD-depression symptoms.


Greater sleep disturbance and longer sleep onset latency facilitate SCR-specific fear reinstatement in PTSD.

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Behaviour Research and Therapy
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https://doi.org/10.1016/j.brat.2018.08.005

Highlights
• Sleep quality is a key factor in PTSD and fear extinction recall.
• Fear reinstatement has not been investigated in PTSD.
• PTSD was not associated with impaired fear reinstatement in isolation.
• Sleep disturbance and sleep onset latency moderated reinstatement in PTSD.

Abstract
Fear reinstatement is one of several paradigms designed to measure fear return following extinction, as a laboratory model for the relapse of Posttraumatic Stress Disorder (PTSD) symptoms. Sleep is a key factor in emotional memory consolidation, and here we examined the relationship between sleep quality and fear reinstatement in PTSD, relative to trauma-exposed and non-exposed controls. The Pittsburgh Sleep
Quality Index (PSQI) was used as a subjective measure of sleep quality, and skin conductance responses (SCR) and unconditioned stimulus (US)-expectancy ratings were used to index threat responses during a differential fear conditioning, extinction, and reinstatement paradigm. There were no significant between-group differences in the reinstatement of conditioned responding. Sleep disturbance and sleep onset latency were significant moderators between reinstatement of fear and PTSD symptom severity, such that there was a positive relationship between PTSD symptoms and fear reinstatement for higher levels – but not lower levels – of sleep disturbance and sleep onset latency. To our knowledge, this is the first study to investigate PTSD-specific reinstatement patterns and sleep as a boundary condition of reinstatement. Future research using polysomnographic measures of sleep-wave architecture may further clarify the relationship between fear reinstatement and sleep quality in clinical samples with PTSD relative to controls.

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Links of Interest

Report finds kids in Army housing at risk of lead poisoning

The U.S. Air Force Is Working Harder to Retain Female Officers, and Here’s How

Exposure Therapy Administered by Nonspecialty Healthcare Workers Effective in Treating Adolescent PTSD

Small study suggests benefits of computer-guided CBT for substance abuse
https://www.health.harvard.edu/blog/small-study-suggests-benefits-of-computer-based-cbt-for-substance-abuse-2018082014434

Dear Veterans Nonprofits: Sometimes I Just Want To Go Rock Climbing
https://taskandpurpose.com/veterans-nonprofits-therapy-transition/
Night Owl – Sleep Coach CBT-I App Created by Behavioral Sleep Medicine Expert
http://www.sleepreviewmag.com/2018/08/night-owl-sleep-coach-app/

To help patients quash pain, researcher develops practical guide for health care providers

Report: VA may have mishandled thousands of sexual assault cases

'We are just tired of this fight:' Special-needs families say military is still failing them

The Army wants more male sexual assault survivors to file reports

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**Resource of the Week:** Understanding and Overcoming the Challenge of Obesity and Overweight in the Armed Forces -- Proceedings of a Workshop—in Brief

New, from the National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Food and Nutrition Board; Roundtable on Obesity Solutions:

Obesity and overweight pose significant challenges to the armed forces in the United States, affecting service members (including active duty, guard, and reserve components), veterans, retirees, and their families and communities. The consequences of obesity and overweight in the armed forces influence various aspects of its operations that are critical to national security.

On May 7, 2018, the National Academies of Sciences, Engineering, and Medicine, held a workshop titled “Understanding and Overcoming the Challenge of Obesity and Overweight in the Armed Forces.” Speakers examined how obesity and overweight are measured in the armed forces and how they affect recruitment, retention, resilience, and readiness; discussed service-specific issues related to these problems and highlighted innovative strategies to address
them through improved nutrition, physical activity, and stress management; and offered perspectives from outside of the armed forces on approaches to prevent and treat obesity. They also discussed the challenges and opportunities related to overcoming the concerns posed by obesity and overweight in the armed forces, military families, and their communities, including potential cross-sector opportunities. This publication summarizes the presentations and discussions from the workshop.