What’s Here:

- Cognitive Behavioral Therapy and the Implementation of Antiracism (Viewpoint)
- Time Since Injury as a Factor in Post-Concussion Symptom Reporting among Military Service Members with Blast-Related Concussion.
- Underreporting on the MMPI-2-RF extends to extra-test measures of suicide risk.
- Occupational exposure to suicide: A review of research on the experiences of mental health professionals and first responder.
- mHealth Interventions for Self-Harm: Scoping Review.
- The impact of sleep quality on the incidence of PTSD: Results from a 7-Year, Nationally Representative, Prospective Cohort of U.S. Military Veterans.
- Masculinity and stigma among emerging adult military members and veterans: Implications for encouraging help-seeking.
- Moral Injury, Mental Health, and Behavioral Health Outcomes: A Systematic Review of the Literature.
- The interpersonal implications of PTSD and complex PTSD: The role of disturbances in self-organization.
- Trends in Medication Prescribing in Patients With PTSD From 2009 to 2018: A National Veterans Administration Study.
- The risk factors for insomnia and sleep-disordered breathing in military communities: A meta-analysis.
- The impact of moral injury on the wellbeing of UK military veterans.
- Dissecting the heterogeneity of posttraumatic stress disorder: Differences in polygenic risk, stress exposures, and course of PTSD subtypes.
- Psychological distress across the deployment cycle: exploratory growth mixture model.
- "I've Seen What Evil Men Do": Military Mothering and Children’s Outdoor Risky Play.
- The relationship between basic personality, subjective sleep duration, and psychological distress during a military deployment.
- Delayed reward discounting and increased risk for suicide attempts among U.S. adults with probable PTSD.
- Trait Extraversion is Associated with Increased Suicidal Ideation During Total Sleep Deprivation and Insomnia.
- Sex Differences in Suicidal Behaviors and Aggression in US Veterans.
- White-matter alterations are associated with cognitive dysfunction decades following moderate-to-severe traumatic brain injury and/or post-traumatic stress disorder.
- Self-Reported Sleep and Resilience.
- Prevalence and impact of sleep problems in active duty military personnel receiving Cognitive Processing Therapy for PTSD.
- Change in Dysfunctional Sleep-Related Beliefs is Associated with Changes in Sleep and Other Health Outcomes Among Older Veterans With Insomnia: Findings From a Randomized Controlled Trial.
- Risk Factors for Postpartum Depression in Active Duty Women.
- Cohesiveness in previously deployed Army National Guard units: Implications for postdeployment behavioral health.
- Links of Interest
- Resource of the Week -- Report to Congress: Eleven Year Update -- Longitudinal Study on Traumatic Brain Injury Incurred by Members of the Armed Forces in OIF/OEF
Antiracism can be defined as the practice of actively opposing racism and promoting racial equity. Despite decades of efforts to promote health equity, minoritized racial and ethnic groups continue to endure health disparities perpetuated by racism, including structural racism. Medical education has historically struggled to address this problem adequately. In recent years, several medical schools have integrated antiracism and structural competency programming into their curricula. This promising approach aims to teach trainees to recognize the social structures, including structural racism, that affect patient care. However, we believe that the application of this knowledge is a challenging task because racism functions on multiple levels and the magnitude of the problem in health care may necessitate targeted multilevel interventions.

Targeted interventions at the clinician level that complement existing structural competency programming may be beneficial owing to the pervasiveness of implicit racial bias. Medical education prioritizes pattern recognition, which relies on combinations of signs and symptoms to suggest specific diagnoses. This approach, although useful in many clinical scenarios, also runs the risk of priming learners to revert to mental shortcuts and racial stereotypes when faced with stress, time pressure, test vignettes, or unfamiliar clinical situations. Thus, physicians can hold implicit racial biases independent of and often in opposition to conscious antiracist attitudes. When such cognitive dissonance is not processed or resolved, we believe it supports and enables racism in medical practice.

In this Viewpoint, we propose that using psychotherapeutic methods to address clinician-level bias may provide an important means to counter racism in medicine. Cognitive behavioral therapy (CBT) frameworks, already familiar to psychiatrists, may hold promise in the implementation of antiracism in mental health care. Both the scientific literature and professional medical organizations have highlighted that implicit biases and microaggressions play a large role in maintaining structural racism. Thus,
the cognitions perpetuating racism may require intentional interventions to teach physicians to identify, react to, and correct problematic mental shortcuts that hinder the translation of antiracism into action.

https://doi.org/10.1089/neu.2020.7334

Time Since Injury as a Factor in Post-Concussion Symptom Reporting among Military Service Members with Blast-Related Concussion.

Dr. Andrew MacGregor, Ms. Kaeley Shannon, and Mrs. Amber L Dougherty.

Journal of Neurotrauma
Published Online:28 Apr 2021

Over the last decade, much research has been devoted to concussion among military personnel. Post-concussion symptoms after blast-related concussion are common, but it is unknown whether symptom reporting differs over time. This study’s objective was to assess the relationship between time since injury and post-concussion symptom reporting. We conducted a retrospective review of existing records to identify service members who experienced blast-related concussion during deployment between 2007 and 2012 and who responded to a Post-Deployment Health Assessment (PDHA). The study population included 3,690 military personnel grouped by time between injury and PDHA completion: 1–90 days (45.3%, n = 1,673), 91–180 days (33.0%, n = 1,216), or 181–365 days (21.7%, n = 801). Post-concussion symptoms assessed on the PDHA included headache, tinnitus, memory problems, concentration problems, difficulty making decisions, irritability, dizziness, and sleep problems. All post-concussion symptoms were higher for 91–180 days and 181–365 days after injury relative to 1–90 days, with the exception of dizziness. After adjusting for loss of consciousness, mental health morbidity, and other covariates, the odds of reporting three or more post-concussion symptoms were significantly higher in those who completed the PDHA 91–180 days (odds ratio: 1.29; 95% confidence interval: 1.09–1.51) or 181–365 days after injury (odds ratio: 1.33; 95% confidence interval: 1.09–1.61), compared with the 1–90 days group. These findings suggest that refinements to in-theater medical care may be needed to reduce post-concussion symptom burden and improve the prospect of concussion recovery.

-----
Underreporting on the MMPI-2-RF extends to extra-test measures of suicide risk.


Psychological Assessment
Advance online publication

Detection of underreporting in suicide risk assessment remains a significant concern in clinical practice. The aim of this research is to examine whether underreporting based on elevated Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF) K-r and L-r scale scores may aid in identifying patients with suppressed scores on the Suicide/Death Ideation scale (SUI) and extra-test measures of suicide risk. We anticipated that, in voluntarily admitted psychiatric inpatients (N = 1,011) and individuals receiving outpatient services in a university-affiliated psychology clinic (N = 521), those indicated as underreporting would produce lower mean scores across SUI and extra-test measures of suicide risk, and that the magnitudes of the associations between SUI and extra-test scores would be strongest for those underreporting. A series of t tests and correlational analyses were conducted in both samples. Although those classified as underreporting consistently produced lower mean scores for SUI and extra-test measures of suicide risk, the magnitudes of the associations were consistently significant and stronger only in outpatients without K-r or L-r scale elevations. Clinical implications for this research include examining K-r elevations when assessing suicide risk and incorporating a therapeutic assessment approach to suicide risk assessment. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

Occupational exposure to suicide: A review of research on the experiences of mental health professionals and first responder.

Lyra RLd, McKenzie SK, Every-Palmer S, Jenkin G

PLoS ONE
2021; 16(4): e0251038.
Suicide is a global health and social issue, with an estimated 800,000 people dying by suicide each year [1]. The social and psychological costs of suicide are high. For every suicide, it has been estimated that between six and 20 people, usually family members and acquaintances of those who died, are adversely affected psychologically and emotionally [1, 2]. This phenomenon has been described as 'exposure to suicide'. It is the impact of exposure to suicide on these two professional groups—mental health professionals and first responders—that underpins this scoping review.

In this review, we are particularly interested in two groups of people, who because of their occupations, have greater exposure to suicide than the rest of the population; mental health professionals and first responders [3, 4]. As well as having greater than usual exposure to suicide, these groups are distinct from bereaved family and friends due to the professional nature of their relationship with the person who died by suicide. Mental health professionals and first responders, will in most cases, be unrelated to the person who died and be unlikely to have had a social or personal relationship with them. Yet these two groups of professionals are distinct from each other in that mental health professionals will often have established a therapeutic alliance with the person who died by suicide, while first responders will usually be unknown to the person prior to their suicide. Because the nature of the relationship with the deceased by suicide is different for mental health professionals than for first responders, we might expect the impacts of the exposure to suicide on these two groups to be different.

-----

https://doi.org/10.2196/25140

mHealth Interventions for Self-Harm: Scoping Review.

Cliffe B, Tingley J, Greenhalgh I, Stallard P

Journal of Medical Internet Research
Vol 23, No 4 (2021): April

Background:
Self-harm is a growing issue with increasing prevalence rates; however, individuals who self-harm do not often receive treatment. Mobile health (mHealth) interventions are a possible solution to some of the barriers that individuals face when seeking support, and they have also been found to be effective in improving mental health. Thus far, reviews of mHealth interventions for self-harm have been limited by study type. Therefore, we
determined that a broader scoping review will provide a more exhaustive understanding of mHealth interventions for self-harm.

Objective:
This scoping review aims to identify mHealth interventions for self-harm within the literature, understand the types and features of interventions that have been developed and evaluated, highlight research findings around mHealth interventions for self-harm, and determine what outcomes are typically used to assess the efficacy of interventions.

Methods:
A search was conducted using Embase, PubMed, PsycINFO, PsycEXTRA, Web of Science, and the Cochrane Library. Studies were included if they described an mHealth intervention designed to have a direct (ie, if the intervention was designed for self-harm or for people who self-harm) or indirect (ie, if self-harm was measured as an outcome) treatment effect and if the paper was available in English. There were no exclusion criteria based on the study design.

Results:
A total of 36 papers were included in the review, and most of them were randomized controlled trials published within the last 4 years. The interventions were mostly smartphone apps and calling or texting services, with 62% (21/34) having underlying therapeutic models to inform the intervention content. They were generally shown to be promising and appealing, but only 5 were widely available for use. Outcomes focused on a reduction of self-harm and suicidality, mood, and the users’ experiences of the intervention. Samples were typically nondiverse, and there was limited variety in the study designs and in the measurements of self-harm recovery.

Conclusions:
Promising and appealing mHealth interventions have been developed but are not widely available. Research could benefit from greater diversity as well as a broader and more nuanced understanding of recovery from self-harm.

-----

https://doi.org/10.1016/j.janxdis.2021.102413

The impact of sleep quality on the incidence of PTSD: Results from a 7-Year, Nationally Representative, Prospective Cohort of U.S. Military Veterans.

Jason C. DeViva, Elissa McCarthy, Steven M. Southwick, Jack Tsai, Robert H. Pietrzak
Highlights

- Poor sleep is associated with a 60% greater likelihood of subsequent PTSD development
- Over 22% of a nationally representative sample of veterans report poor sleep quality
- Lifetime depression is associated with higher likelihood of PTSD development

Abstract

Sleep and posttraumatic stress disorder (PTSD) have a complex relationship, with some studies showing that disrupted sleep is associated with subsequent development of PTSD. The purpose of the current study was to examine the relationship between sleep quality and the development of probable PTSD in U.S. veterans surveyed as part of the National Health and Resilience in Veterans Study, a 7-year, nationally representative, prospective cohort study with four waves of data collection. Sociodemographic, military, trauma, and clinical variables were entered into a multivariate analysis to examine independent determinants of new-onset PTSD. A total of 142 (7.3%) veterans developed PTSD over the 7-year study period. Poor/fair sleep quality at Wave 1 was associated with 60% greater likelihood of developing PTSD, with more than twice as many veterans who developed PTSD reporting poor sleep quality at Wave 1 (47.8% vs. 20.7%). Younger age, using the VA as a primary source of healthcare, greater traumas since Wave, and lifetime depression were additionally associated with this outcome. Results of this study underscore the importance of self-reported sleep quality as a potential risk factor for the development of PTSD in the U.S. veteran population.

https://doi.org/10.1007/s12144-021-01768-7

Masculinity and stigma among emerging adult military members and veterans: Implications for encouraging help-seeking.

Clary, K.L., Pena, S. & Smith, D.C.

Current Psychology
Published 01 May 2021
Emerging adult military members face occupational stressors that can lead to mental health issues including anxiety, depression, substance use, and PTSD. Serious mental health issues, including depression, and suicidality are increasing among young veterans. More than half of those experiencing a mental health problem do not seek help and could benefit from therapy. This qualitative study (1) revealed barriers to accessing mental health treatment and (2) provided ways to decrease stigma and encourage help seeking. We conducted semi-structured interviews with 26 emerging adult military members and asked about (1) barriers to mental health treatment and (2) ways to decrease these obstacles. Following a thematic analysis approach, two coders employed rigorous coding procedures using reflexive meetings and debriefings to find patterns using Excel and NVivo. Barriers to accessing mental health treatment exist at the systems, peers and leadership, and self-stigma (i.e., internalized) levels due to hegemonic masculinity tenants in the military. Suggestions to improve and encourage mental health treatment include implementing changes at the structural level in the military, increasing knowledge among the public sector, and improving education and training among helping professionals who are serving emerging adult military populations. Destigmatizing mental health treatment is no easy task but working collaboratively with emerging adult military members to understand their perceptions and attitudes can move us in a positive direction.

https://doi.org/10.1002/cpp.2607

Moral Injury, Mental Health, and Behavioral Health Outcomes: A Systematic Review of the Literature.

Hall, NA, Everson, AT, Billingsley, MR, Miller, MB

Clinical Psychology & Psychotherapy
First published: 30 April 2021

Background

Despite a burgeoning of research on moral injury in the past decade, existing reviews have not explored the breadth of consequences and the multitude of pathways through which moral injury and potentially morally injurious experiences (PMIEs) influence mental and behavioral health outcomes.

Purpose

To identify associations between moral injury on mental and behavioral health.
Procedure
Literature searches of psychological and medical databases were conducted through April 2020. Eligible studies measured moral injury or PMIEs, and health outcomes (e.g., depression, substance use, suicidality).

Main findings
Fifty-seven publications representing 49 separate samples were included. Studies examined the impact of moral injury on PTSD (n=43); depression (n=32); anxiety (n=15); suicide (n=15); substance use (n=14); and “other” health outcomes, including pain, burnout, sleep disturbance, and treatment-seeking behaviors (n=11). The majority of studies found significant positive associations between moral injury-related constructs, mental health, and behavioral health outcomes; however, the majority were also cross-sectional and focused on military samples. Proposed mediators included lack of social support, negative cognitions, and meaning-making. Moderators included self-compassion, pre-deployment mental health education, and mindfulness.

Conclusions
Moral injury is associated with a variety of negative health outcomes. Research is needed to determine the mechanisms by which moral injury may influence these outcomes over time.

https://doi.org/10.1016/j.jad.2021.04.075

The interpersonal implications of PTSD and complex PTSD: The role of disturbances in self-organization.

R Bachem, Y Levin, G Zerach, M Cloitre, Z Solomon

Journal of Affective Disorders
Available online 1 May 2021

Highlights
- The novel diagnosis of complex posttraumatic stress disorder (CPTSD) comprises PTSD symptoms and disturbances in self-organization (DSO).
- DSO symptoms drive the transmission of posttraumatic stress among spouses to a more significant extent than PTSD symptoms.
DSO symptoms have a broader impact on couples’ dyadic adjustment than PTSD symptoms.
Addressing DSO in therapy may prevent trauma transfer and strengthen the couple relationship.

Abstract
Background
In the aftermath of trauma not only the primary traumatized survivors’ mental health is affected but often also their significant others. The current study explores the specific associations of ICD symptoms of posttraumatic stress disorder (PTSD) and disturbances in self organization (DSO) for secondary traumatic stress and dyadic adjustment among both spouses.

Methods
Male Israeli veterans and their wives (N=216) were assessed 30 years after the war. Primary PTSD/DSO symptoms of the veterans and secondary posttraumatic stress symptoms (secondary PTSS)/DSO of the wives were assessed. Actor Partner Independence Modelling (APIM) evaluated the differential effects of PTSD and DSO for trauma transmission and dyadic adjustment.

Results
While primary veterans’ PTSD only related to secondary PTSS of the wives, the veterans’ DSO predicted the wives’ secondary PTSS as well as DSO. Moreover, the APIM revealed that the primary and secondary DSO of both partners were associated with dyadic adjustment while their PTSD symptoms were not.

Limitations
The cross-sectional data did not allow to identify directional or causal effects and DSO symptoms were not assessed with an ICD-specific instrument as such scales did not exist at the time of data collection.

Conclusions
ICD DSO symptoms seem to drive the transmission of posttraumatic stress among spouses to a more significant extent than PTSD symptoms. As DSO are also strongly implicated in decreased dyadic adjustment, they are valuable targets for couple therapy after one spouse experienced severe trauma, both in order to prevent interpersonal trauma transfer as well as to enhance dyadic adjustment.
Trends in Medication Prescribing in Patients With PTSD From 2009 to 2018: A National Veterans Administration Study.

Nicholas Holder, PhD; Anne Woods, MS; Thomas C. Neylan, MD; Shira Maguen, PhD; Karen H. Seal, MD, MPH; Nancy Bernardy, PhD; Ilse Wiechers, MD; Annie Ryder, BA; Ana-Marie Urbieta, MSW; and Beth E. Cohen, MD, MAS

Objective:
To evaluate longitudinal prescription practice trends for patients diagnosed with posttraumatic stress disorder (PTSD) using a national cohort of veterans who engaged in Veterans Health Administration (VHA) care from 2009 to 2018.

Methods:
Using ICD-9 and ICD-10 codes to determine diagnoses, 1,353,416 patients diagnosed with PTSD in VHA care were retrospectively identified who were not diagnosed with bipolar or psychotic spectrum disorder. Veterans were included in the analytic sample starting in the year of their first PTSD diagnosis for each year that they were active in VHA care. Outpatient prescription records were examined from 2009 to 2018 for medications that are commonly used as recommended (selective serotonin reuptake inhibitors [SSRIs], serotonin-norepinephrine reuptake inhibitors [SNRIs]) or second-line/adjunctive (atypical antipsychotics [AAPs], mirtazapine, prazosin, trazodone, tricyclic antidepressants, and non-benzodiazepine hypnotics) medications for PTSD. Benzodiazepine prescriptions were also examined.

Results:
From 2009 to 2018, the percentage of patients active in VHA care who received at least one of the examined recommended or second-line/adjunctive medications for PTSD in a calendar year declined by 9.0% (absolute change). The largest absolute change in rates of prescribing for medication classes over the last decade were observed among SSRIs (−12.3%) and SNRIs (+6.4%). AAP use decreased 5.4% from 2009 to 2018, with most of this change (−4.3%) occurring from 2009 to 2013.

Conclusions:
Consistent with clinical practice guidelines, SSRIs/SNRIs were the most common prescriptions for patients in the current study. Reductions in the percentage of patients receiving PTSD medications may reflect concerns regarding effectiveness, adverse side effects, increases in access to evidence-based psychotherapy for PTSD, and/or symptom improvement such that medication was no longer needed.
The risk factors for insomnia and sleep-disordered breathing in military communities: A meta-analysis.


PLoS One
2021 May 6;16(5):e0250779

Background:
Many reviews and meta-analyses had been conducted to investigate risk factors for sleep disorders in the general population. However, no similar research has been performed in the military population though insomnia and sleep-disordered breathing are quite prevalent in that population.

Objectives:
To investigate risk factors for insomnia and sleep-disordered breathing in military personnel.

Methods:
A systematic literature search was performed from inception to March 2021 and 6496 records were produced. Two authors independently screened records for eligibility. Results were presented as odds ratios, and a random-effect model was used to pool results. Data analysis was performed respectively according to military personnel type (i.e., veteran, active-duty personnel). Risk factors were sorted into three categories: sociodemographic, army-specific, and comorbidity. This meta-analysis was registered in PROSPERO before data analysis (registration No: CRD42020221696).

Results:
Twenty-seven articles were finally included in the quantitative analysis. For sleep-disordered breathing in active-duty personnel, four sociodemographic (i.e., overweight/obesity, higher body mass index, male gender, >35 years old) and one comorbidity (i.e., depression) risk factors were identified. For insomnia in active-duty personnel, four sociodemographic (i.e., aging, alcohol dependence, white race, and female gender), two army-specific (i.e., deployment experience, combat experience),
and four comorbidity (i.e., depression, post-traumatic stress disorder, traumatic brain injury, and anxiety) risk factors were identified. For insomnia in veterans, one army-specific (i.e., combat experience) and one comorbidity (i.e., post-traumatic stress disorder) risk factor was identified.

Conclusions:
Several risk factors were identified for insomnia and sleep-disordered breathing in the current meta-analysis. Risk factors for veterans and active-duty personnel were partially different. Research on sleep breathing disorders remains limited, and more convincing evidence would be obtained with more relevant studies in the future.

https://doi.org/10.1186/s40359-021-00578-7

The impact of moral injury on the wellbeing of UK military veterans.

Williamson, V., Murphy, D., Stevelink, S., Allen, S., Jones, E., & Greenberg, N.

BMC Psychology
2021 May 5;9(1):73

Background:
Experiences of potentially morally injurious events (PMIEs) have been found to negatively impact the mental health of US personnel/veterans, yet little is known about the effect of PMIEs on the mental health of the UK Armed Forces (AF). This cross-sectional study aimed to examine the association between PMIEs and the mental health outcomes of UK AF veterans.

Method:
Assessments of PMIE exposure and self-report measures of common mental disorders were administered using an online questionnaire to 204 UK veterans. Subjects were classified as having experienced a morally injurious event (n = 66), a non-morally injurious traumatic event (n = 57), a 'mixed' event (n = 31), or no event (n = 50).

Results:
Potentially morally injurious experiences were associated with adverse mental health outcomes, including likely anxiety disorders and suicidal ideation, compared to those who reported no event exposure. The likelihood of meeting criteria for probable PTSD was greatest in those who had experienced a non-morally injurious trauma. No
statistically significant association between alcohol misuse and experiencing a PMIE or traumatic event was observed.

Conclusions:
The results provide preliminary evidence that potentially morally injurious experiences are associated with adverse mental health outcomes in UK AF veterans. Further work is needed to better understand the interplay between morally injurious events and threat-based trauma in order to design effective pathways for prevention and intervention for people exposed to highly challenging events.

https://doi.org/10.1017/S0033291721000428

Dissecting the heterogeneity of posttraumatic stress disorder: Differences in polygenic risk, stress exposures, and course of PTSD subtypes.


Psychological Medicine
2021 May 5;1-9

Background:
Definition of disorder subtypes may facilitate precision treatment for posttraumatic stress disorder (PTSD). We aimed to identify PTSD subtypes and evaluate their associations with genetic risk factors, types of stress exposures, comorbidity, and course of PTSD.

Methods:
Data came from a prospective study of three U.S. Army Brigade Combat Teams that deployed to Afghanistan in 2012. Soldiers with probable PTSD (PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition ≥31) at three months postdeployment comprised the sample (N = 423) for latent profile analysis using Gaussian mixture modeling and PTSD symptom ratings as indicators. PTSD profiles were compared on polygenic risk scores (derived from external genomewide association study summary statistics), experiences during deployment, comorbidity at three months postdeployment, and persistence of PTSD at nine months postdeployment.
Results:
Latent profile analysis revealed profiles characterized by prominent intrusions, avoidance, and hyperarousal (threat-reactivity profile; n = 129), anhedonia and negative affect (dysphoric profile; n = 195), and high levels of all PTSD symptoms (high-symptom profile; n = 99). The threat-reactivity profile had the most combat exposure and the least comorbidity. The dysphoric profile had the highest polygenic risk for major depression, and more personal life stress and co-occurring major depression than the threat-reactivity profile. The high-symptom profile had the highest rates of concurrent mental disorders and persistence of PTSD.

Conclusions:
Genetic and trauma-related factors likely contribute to PTSD heterogeneity, which can be parsed into subtypes that differ in symptom expression, comorbidity, and course. Future studies should evaluate whether PTSD typology modifies treatment response and should clarify distinctions between the dysphoric profile and depressive disorders.

-----

https://doi.org/10.1192/bjo.2021.50

Psychological distress across the deployment cycle: exploratory growth mixture model.

Cabrera, O. A., & Adler, A. B.

BJPsych Open
2021 May 4;7(3):e89

Background
Prior research has identified behavioural health outcomes as key sequelae to combat deployment. However, relatively little is known about differential patterns of change in depression or generalised anxiety linked to deployment to a combat zone. In this paper, we add to the existing trajectory literature and examine key predictive factors of behavioural health risk.

Aims
The primary aim is to leverage growth mixture modelling to ascertain trajectories of psychological distress, operationalised as a coherent construct combining depression and generalised anxiety, and to identify factors that differentiate adaptive and maladaptive patterns of change.
Method
Data were collected from a brigade combat team prior to a combat deployment to Afghanistan, during deployment, at immediate re-integration and approximately 2–3 months thereafter. The main outcome was measured using the Patient Health Questionnaire Anxiety and Depression Scale (PHQ-ADS).

Results
Three latent trajectories were identified: a low–stable trajectory, a declining trajectory and a rising trajectory. Most individuals aligned with the low–stable trajectory. A conditional model using covariates measured during deployment showed that the low–stable trajectory differed consistently from the remaining trajectories on self-reported loneliness and non-combat deployment stressors.

Conclusions
The examination of differential patterns of adaptation, to identify individuals at higher risk, is critical for the efficient targeting of resources. Our findings further indicate that loneliness may be a useful leverage point for clinical and organisational intervention.

https://doi.org/10.1080/01490400.2021.1920521


Michelle E. E. Bauer, Audrey R. Giles & Mariana Brussoni

Leisure Sciences
Published online: 05 May 2021

The restrictions on children’s outdoor risky play is emerging as a pressing public health concern. To the best of our knowledge, no research has examined military mothers’ perspectives on outdoor risky play. Military mothers have unique knowledge of war and combat and potential threats to children’s safety due to their communications with their partners in combat arms occupations. Their perspectives on outdoor risky play are important to consider to expand scholarly understandings of risk discourses in the context of military culture. We conducted semi-structured interviews with 16 military mothers from across Canada. The results of our reflexive thematic analysis are threefold: (1) Outdoor risky play in close physical proximity to strangers and cars is
dangerous for children; (2) outdoor risky play should not result in children experiencing serious injuries; and (3) outdoor risky play can teach children to assess and manage risks.

The relationship between basic personality, subjective sleep duration, and psychological distress during a military deployment.

Walter Sowden, Alexxa Bessey, Julie Merrill, Ashlee Mckeon, Jake Choynowski, Janna Mantua

Sleep
Volume 44, Issue Supplement_2, May 2021, Page A121

Introduction
Extended, overseas operations (deployments) increase the likelihood that military personnel will experience psychological distress. Reduced sleep during deployments is a key correlate of psychological distress. Thus, it is imperative to identify mechanisms that adaptively modulate the relationship between insufficient sleep and psychological distress. Research has recently connected basic personality traits (i.e., the Big Five: extraversion, agreeableness, conscientiousness, neuroticism, and openness) to more sleep. The current project aimed to examine the relationship between basic personality traits, subjective sleep duration (SSD), and psychological distress during an operational deployment.

Methods
488 soldiers took surveys both prior to and half-way through a nine-month deployment. The pre-deployment survey included the Big Five Index, and three standardized measures of psychological distress commonly used to screen military personnel for anxiety (Generalized Anxiety Disorder; GAD-7), depression (Patient Health Questionnaire; PHQ-8), and post-traumatic stress (Posttraumatic Symptom Disorder Checklist; PCL-4). The mid-deployment survey included an item from the Pittsburgh Sleep Quality Index measuring SSD and the same psychological distress measures from the pre-deployment survey. General linear models were used to test the interaction between SSD and each basic personality trait on each measure of psychological distress at mid-deployment while accounting for psychological distress at pre-deployment.
Results
Of the Big Five, conscientiousness was the only trait to significantly moderate the relationship between SSD and anxiety, $t = 2.11, p = .035$, where higher conscientiousness weakened the relationship. Further only agreeableness attenuated the relationship between depression and SSD, $t = 2.10, p = .036$. Interestingly, the only Big Five trait that moderated the relationship between SSD and PTS was openness, insomuch that openness strengthened the relationship, $t = -1.92, p = .055$.

Conclusion
The relationship between SSD and psychological distress was uniquely impacted by different personality traits. These results reinforce the age-old concept that behavior is the product of a complex, nuanced, and puzzling interaction between the individual and the environment. The current research motivates further research into personality as an adaptive mechanism for optimizing military wellbeing.

Support (if any)
Support for this study came from the Military Operational Medicine Research Program (MOMRP) of the United States Army Medical Research and Development Command (USAMRDC).

https://doi.org/10.1016/j.janxdis.2021.102414

Delayed reward discounting and increased risk for suicide attempts among U.S. adults with probable PTSD.

Craig J. Bryan, AnnaBelle O. Bryan

Journal of Anxiety Disorders
Volume 81, June 2021

Highlights
- PTSD is associated with increased risk for suicidal behaviors.
- Delay discounting is associated with suicide attempts, but has not been studied in PTSD.
- High PTSD symptoms and a recent suicide attempt were associated with increased delay discounting.
Among suicidal adults with high PTSD symptoms, delay discounting distinguished those who recently attempted.

Abstract
Background
PTSD is an established risk factor for suicide attempts and suicide death, but the mechanisms underlying this association remain unknown. The present study examined associations among delayed reward discounting—the balance between smaller immediate available rewards versus larger delayed rewards—self-reported PTSD symptoms, and recent suicide attempts among individuals reporting suicide ideation within the past year.

Methods
A cross-sectional survey of U.S. adults completed the Primary Care PTSD Screen for DSM-5, the 21-item Monetary Choice Questionnaire, and the Self-Injurious Thoughts and Behaviors Interview-Revised. Analyses of variance and multinomial regression models were used to test associations among variables.

Results
Among participants reporting suicide ideation within the past year, discount rates were significantly higher among those reporting more PTSD symptoms and a past-year suicide attempt, suggesting these participants expressed a preference for immediately available rewards.

Conclusions
Choice behavior among individuals reporting many PTSD symptoms and a recent suicide attempt is influenced to a greater degree by immediately available rewards. Sensitivity to immediate rewards at the expense of larger delayed rewards may reflect a vulnerability for suicidal behavior among individuals screening positive for PTSD.

https://doi.org/10.1093/sleep/zsab072.783

Trait Extraversion is Associated with Increased Suicidal Ideation During Total Sleep Deprivation and Insomnia.

William Killgore, Vincent Capaldi, Michael Grandner, Gary Kamimori
Introduction
It is known that sleep disturbance is associated with increased suicidal thinking, and completed suicides are most common during the late night/early morning hours, but no studies have examined the role of trait-like individual differences in vulnerability to suicidal ideation during sleep deprivation or insomnia. In two separate studies, we examined whether the trait of extraversion is predictive of changes in suicidal thinking following two nights of sleep deprivation and among individuals meeting criteria for insomnia.

Methods
Study 1: Twenty-five healthy military personnel (20 males), ages 20–35 completed the NEO-PI-R Extraversion scale and the Suicidal Ideation (SUI) scale of the Personality Assessment Inventory (PAI). Participants completed 77 hours of continuous sleep deprivation. After 56 hours of sleep deprivation, participants completed the SUI scale a second time. Study 2: 1,011 adults aged 18–79 (470 males) were divided into two groups based on the clinical threshold (≥15) on the Insomnia Severity Index (ISI) and completed measures of extraversion and depression, including the suicide item of the Patient Health Questionnaire-9 (PHQ9).

Results
Study 1: After controlling for caffeine group and changes in PAI Depression, Extraversion scores were used to predict changes in SUI scores using stepwise multiple linear regression. Higher Extraversion was significantly associated with increased non-clinical suicidal ideation following sleep loss, β=.463, partial r=.512, p=.013. Study 2: After controlling for depression, extraversion was more strongly correlated with greater suicidal ideation, particularly for those meeting criteria for insomnia, β=.340, partial r=.387, p<.0000001, compared to those below the threshold, β=.185, partial r=.218, p<.0000001.

Conclusion
Higher trait extraversion was associated with increased vulnerability to suicidal ideation between rested baseline and total sleep deprivation, and was associated with greater suicidal ideation among those meeting criteria for clinically severe insomnia. These findings point to a potential trait-like vulnerability factor that may further our understanding of sleep disruption in the phenomenology of suicide.
Sex Differences in Suicidal Behaviors and Aggression in US Veterans.

Erin McGlade, Elliott Bueler, Jennifer DiMuzio, Chandni Sheth, ... Deborah Yurgelun-Todd

Psychiatry Research
Available online 5 May 2021

Female Veterans are the fastest growing demographic group in the Department of Veterans Affairs. Moreover, suicide rates in female Veterans are increasing, making suicide in female Veterans a topic of vital clinical and research significance. The current study examined the association between suicide, aggression, and mood symptoms by sex. Participants consisted of 264 Veterans (female=54, male=210) ages 18-55. Veterans completed well-validated measures of suicidal behaviors, aggression, anxiety, and depression. Male Veterans reported higher physical aggression, verbal aggression, anger, hostility, and total aggression compared to female Veterans. In male Veterans, lifetime suicidal behavior including ideation and attempts was correlated with total aggression and subscales of physical aggression, verbal aggression, anger, and hostility. However, in female Veterans lifetime suicidal behavior was significantly associated with hostility and anger. There were no between-group differences in measures of suicidal behaviors, anxious or depressive symptoms. These results suggest important differences in the association between aggression and suicidal behavior by sex. These data have significant clinical implications, as males with aggressive traits and females who endorse hostility and anger may be more likely to engage in suicidal behaviors.

-----

White-matter alterations are associated with cognitive dysfunction decades following moderate-to-severe traumatic brain injury and/or post-traumatic stress disorder.

Abdalla Z. Mohamed, Paul Cumming, Fatima A. Nasrallah, Department of Defense Alzheimer's Disease Neuroimaging Initiative
Background
Possible white matter (WM) alterations following moderate-to-severe TBI and post-traumatic stress disorder (PTSD) and their relationship to clinical outcome have yet to be investigated decades post trauma. We utilized structural MRI and diffusion tensor images to investigate brain volume and WM alterations in Vietnam War veterans with moderate-severe TBI and/or PTSD examined five decades post-trauma.

Methods
Data from 160 veterans with history of moderate-to-severe TBI (n = 23), TBI+PTSD (n = 36), PTSD (n = 53), and control veterans (n = 48) were obtained from the Department of Defense Alzheimer’s Disease Neuroimaging Initiative database. Voxel-based morphometry and tract-based spatial statistics were used to investigate ongoing brain morphometry and WM abnormalities. The fractional anisotropy (FA) and mean diffusivity were then correlated with neuropsychological scores and amyloid deposition in the trauma groups.

Results
Compared to controls, the three trauma groups showed grey-matter atrophy, lower FA, and distinctly higher diffusivity in the major WM tracts included the corpus callosum, external and internal capsules, cingulum, inferior and superior longitudinal fasciculi. The FA and mean diffusivity correlated with the cognitive deficits in the trauma groups. Furthermore, the FA in the cingulum correlated negatively with amyloid deposition in the posterior cingulate cortex of all three trauma groups.

Conclusion
DTI detected WM abnormalities that correlated with the severity of present cognitive dysfunction and the degree of cortical amyloid deposition decades following moderate-to-severe TBI and/or PTSD. These results may hint that PTSD secondary to TBI may incur late cognitive sequelae and persistence of brain microstructures alterations.

https://doi.org/10.1093/sleep/zsab072.105

Self-Reported Sleep and Resilience.

Michelle Persich, Sara Cloonan, Michael Grandner, William Killgore
Introduction
Psychological resilience is the ability to withstand setbacks, adapt positively to challenges, and bounce back from the adversities of life. While the construct of resilience is broadly understood, the specific individual factors that contribute to the ability to be resilient and persevere in the face of difficulties remain poorly understood. We recently showed that psychological resilience during the COVID-19 pandemic was associated with a number of factors, including fewer complaints of insomnia, and others have suggested that sleep is an important contributor. We therefore tested the hypothesis that sleep quality and acute sleep quantity would combine to predict measures of psychological resilience and perseverance (i.e. “grit”).

Methods
We asked 447 adults (18–40 yrs; 72% female) to report the number of hours of sleep obtained the night before their assessment session (SLEEP), and complete several questionnaires, including the Pittsburgh Sleep Quality Index (PSQI), the Connor-Davidson Resilience Scale (CD-RISC), Bartone Dispositional Resilience Scale (Hardiness), and the Grit Scale. Sleep metrics were used to predict resilience, hardiness, and grit using multiple linear regression.

Results
For resilience, PSQI (β=-.201, p<.00003) and SLEEP (β=.155, p<.001) each contributed uniquely to prediction of CD-RISC (R2=.08, p<.00001). Hardiness was also predicted (R2=.08, p<.00001) by a combination of PSQI (β=-.218, p<.00001) and SLEEP (β=.128, p=.007). Interestingly, worse sleep quality over the past month on the PSQI (β=.13, p=.008) in combination with more SLEEP the night before the assessment (β=.137, p=.005) each contributed uniquely to higher Grit (i.e., perseverance; R2=.03, p=.003).

Conclusion
Self-reported sleep quality and quantity were both independently associated with greater self-reported resilience, hardiness, and grit. While better sleep quality and more sleep the night before testing each uniquely predicted greater resilience and hardiness, a different pattern emerged for Grit. The combination of lower quality sleep over the past month followed by greater recent sleep duration was associated with increased perseverance. Whereas sleep quality appears to be more important for general resilience/hardiness, recent sleep time appears more important for the subjective
perception of perseverance. Because these data are purely self-report and cross sectional, future work will need to determine the longitudinal effects on behavior.

https://doi.org/10.1093/sleep/zsab072.727

Prevalence and impact of sleep problems in active duty military personnel receiving Cognitive Processing Therapy for PTSD.

Kristi Pruiksma, Daniel Taylor, Jennifer Schuster Wachen, Casey Straud, Willie Hale, Jim Mintz, Stacey Young-McCaughan, Alan Peterson, Jeffrey Yarvis, Elisa Borah, Katherine Dondanville, Brett Litz, Patricia Resick

Sleep Volume 44, Issue Supplement_2, May 2021, Page A285

Introduction
Sleep disturbances are common in active duty military personnel and play a key role in the development and maintenance of posttraumatic stress disorder (PTSD). Research indicates that although insomnia and nightmares improve with successful PTSD treatment, they may remain clinically significant. Few previous PTSD studies have assessed sleep disorder constructs using validated instruments. The objectives of this study were to examine the proportion of active duty military personnel seeking treatment for PTSD who reported clinically significant insomnia, nightmares, sleep duration, and excessive daytime sleepiness and to examine the impact PTSD treatment had on these sleep constructs using validated self-report questionnaires.

Methods
Sleep was evaluated in 223 active duty service members participating in a randomized clinical trial comparing group and individual Cognitive Processing Therapy (CPT) for PTSD. Sleep constructs were assessed using the Insomnia Severity Index (ISI), Trauma-Related Nightmare Survey (TRNS), Self-Assessment of Sleep (SAS), and Epworth Sleepiness Scale (ESS) at baseline and 2 weeks posttreatment.

Results
At baseline, 82% of participants reported clinically significant insomnia and 75% reported at least 1 moderately severe nightmare per week. Participants reported averaging 4.76 hours of sleep per night, and 65% reported excessive daytime sleepiness. Over the course of PTSD treatment, there were statistically significant
improvements in insomnia, nightmares, and excessive daytime sleepiness, but scores remained in clinically significant ranges. Minimal increases were seen in sleep duration. Of the participants who no longer met criteria for PTSD at posttreatment, 50% continued to report clinically significant insomnia, 52% continued to report clinically significant nightmares, and 44% continued to report excessive daytime sleepiness.

Conclusion
Consistent with previous research, sleep problems persisted for a significant number of service members who completed treatment for PTSD. Insomnia, nightmare, and sleep extension interventions are likely an important part of comprehensive PTSD treatment plans.

Support (if any)
Funding for this work was made possible by the U.S. Department of Defense through the U.S. Army Medical Research and Materiel Command, Congressionally Directed Medical Research Programs, Psychological Health and Traumatic Brain Injury Research Program awards W81XWH-08-02-109 (Alan Peterson), W81XWH-08-02-0116 (Patricia Resick), W81XWH-10-1-0828 (Daniel Taylor), and W81XWH-08-02-0114 (Brett Litz).

https://doi.org/10.1093/abm/kaab030

Change in Dysfunctional Sleep-Related Beliefs is Associated with Changes in Sleep and Other Health Outcomes Among Older Veterans With Insomnia: Findings From a Randomized Controlled Trial.

Yeonsu Song, PhD, RN, Monica R Kelly, PhD, Constance H Fung, MD, MSHS, Joseph M Dzierzewski, PhD, Austin M Grinberg, PhD, Michael N Mitchell, PhD, Karen Josephson, MPH, Jennifer L Martin, PhD, Cathy A Alessi, MD

Annals of Behavioral Medicine
Published: 04 May 2021

Background
Cognitive behavioral therapy for insomnia (CBTI) targets changing dysfunctional sleep-related beliefs. The impact of these changes on daytime functioning in older adults is unknown.
Purpose
We examined whether changes in sleep-related beliefs from pre- to post-CBTI predicted changes in sleep and other outcomes in older adults.

Method
Data included 144 older veterans with insomnia from a randomized controlled trial testing CBTI. Sleep-related beliefs were assessed with the Dysfunctional Beliefs and Attitudes about Sleep-16 (DBAS-16, subscales: Consequences, Worry/Helplessness, Sleep Expectations, Medication). Outcomes included sleep diary variables, actigraphy-measured sleep efficiency, Pittsburgh Sleep Quality Index (PSQI), Insomnia Severity Index (ISI), Epworth Sleepiness Scale (ESS), Flinders Fatigue Scale (FFS), Patient Health Questionnaire-9, and health-related quality of life. Analyses compared slope of change in DBAS subscales from baseline to posttreatment between CBTI and control, and assessed the relationship between DBAS change and the slope of change in outcomes from baseline to 6 months.

Results
Compared to controls, the CBTI group demonstrated stronger associations between improvement in DBAS-Consequences and subsequent improvement in PSQI, ISI, ESS, and FFS. The CBTI group also demonstrated stronger associations between improvement in DBAS-Worry/Helplessness and subsequent improvements in PSQI, ISI, and FFS; improvements in DBAS-Medication and PSQI; and improvements in DBAS-Sleep Expectations and wake after sleep onset (sleep diary) and FFS (all p < .05).

Conclusions
Significant reduction in dysfunctional sleep-related beliefs following CBTI in older adults predicted improvement in several outcomes of sleep and daytime functioning. This suggests the importance of addressing sleep-related beliefs for sustained improvement with CBTI in older veterans.

https://doi.org/10.1093/milmed/usab161

Risk Factors for Postpartum Depression in Active Duty Women.

Valencia Garcia, MD, Eric Meyer, MD, Catherine Witkop, MD, MPH

Military Medicine
Published: 07 May 2021
Introduction
Postpartum depression (PPD) is a common perinatal complication. Risk factors previously found to correlate with PPD in civilians include prenatal depression, childcare stress, limited social support, difficult infant temperament, and maternity blues. Previously identified risk factors in military spouses include spouse deployment/redeployment cycles. It is unclear if these previously identified risk factors are also a risk factor for AD women or if the additional stressors associated with being on active duty (AD) are risk factors for PPD. The purpose of this review is to determine if civilian risk factors have been found to put AD women at risk for PPD and to identify unique risk factors for PPD in AD women.

Materials and Methods
A scoping literature review was performed using PubMed, Defense Technical Information Center, and PsychINFO. The searches were conducted using relevant medical subject headings and keywords. The inclusion criteria included articles published since 1948 (the year women were legally allowed to join the military) that reference risk factors for postpartum/peripartum depression in AD women serving in the U.S. military. The following exclusion criteria were also applied: in a language other than English, opinion papers, and/or not published in a peer-reviewed journal. Articles meeting criteria were evaluated and mapped to stressors previously identified in the literature for civilian and military spouses with PPD with novel stressors identified as mapping outside this framework.

Results
Only two articles met the inclusion criteria. The first study included 87 AD women. The second study, a cohort study between 2001 and 2008, included 1660 AD women. Unique risk factors identified in AD women include previous deployments, serving in the Army, smoking status, alcohol use, and low self-esteem.

Conclusions
Few studies have investigated the risk factors for PPD in AD women. It appears that AD women share many risk factors, or variants of those risk factors, for PPD as their civilian and AD spouse counterparts, but there are also unique risks to consider. More work is needed to improve screening and prevention efforts.

-----

Finkelstein-Fox, L., Sinnott, S. M., Lee, S. Y., Carney, L. M., Park, C. L., Mazure, C. M., & Hoff, R.

Journal of Clinical Psychology
First published: 07 May 2021

Objective
Post-9/11 military deployment is commonly reported as stressful and is often followed by psychological distress after returning home. Yet veterans also frequently report experiencing meaningful military engagement (MME) that may buffer detrimental effects of military stressors. Focusing on the under-investigated topic of association of MME with post-deployment psychological adjustment, this study tests gender differences in MME and post-deployment outcomes.

Method
This cross-sectional study examined the relationship of MME with deployment stressors, subsequent psychological distress (posttraumatic stress symptoms (PTSS) and depression), and gender among 850 recent-era U.S. veterans (41.4% female).

Results
On average, both male and female veterans reported high MME. Greater MME was associated with less PTSS and depression following combat and general harassment, and more depression after sexual harassment. For men only, MME associated with less PTSS after sexual harassment.

Conclusions
MME is high among post-9/11 veterans, but its stress-buffering effects depend on gender and specific stressor exposure.

Cohesiveness in previously deployed Army National Guard units: Implications for postdeployment behavioral health.
A major health policy concern of deployed U.S. military personnel has been the observed high occurrence of postdeployment behavioral health problems. Unit cohesiveness is considered one of several protective factors against the negative effects of combat exposure. Studies, however, have not examined cohesiveness’ group-level effects on the relationship of combat stressors to behavioral health problems. These relationships were examined both at the soldier level and unit level using hierarchical linear modeling. Recently, returned deployed Army National Guard soldiers (N = 4,567 in 50 companies) responded to questions about combat exposure, postdeployment unit cohesiveness, and behavioral health problems. Combat events were associated with more suicidal thoughts, alcohol misuse, and behavioral health problems. By comparison, unit cohesiveness was associated with fewer behavioral health problems both at the individual level (all three outcome variables) and unit level (alcohol misuse and behavioral health problems). At the soldier level, the buffering effect of unit cohesiveness was evident only for alcohol misuse. At the unit level the protective factor of unit cohesiveness on unit members’ behavioral health was evident for alcohol misuse and behavioral health problems. In addition, the relationship of combat events to suicidal thoughts was less evident among units having higher rather than lower levels of unit cohesiveness (cross-leveling effect). Findings suggest that integrative unit relationships better enable soldiers to adjust to combat exposure.

(PsycInfo Database Record (c) 2021 APA, all rights reserved)
“I Believe You.” How to Support Soldiers Who Have Experienced Sexual Trauma
https://juniorofficer.army.mil/i-believe-you/

Is PTSD overdiagnosed?
https://www.bmj.com/content/373/bmj.n787.full

Tiny uptick in 2020 military sex assault reports, officials say

VA to create specialists to handle military sexual trauma claims

-----

Resource of the Week -- Report to Congress: Eleven Year Update -- Longitudinal Study on Traumatic Brain Injury Incurred by Members of the Armed Forces in OIF/OEF

This 11-Year Update report summarizes significant findings regarding TBI outcome complexities, and provides 7 conclusions with 25 data-driven areas of emphasis to enhance existing support for Service members, veterans, their families, and providers. TBI recovery varies across Service members and veterans, highlighting the importance of identifying factors early that might complicate recovery, such as mental health problems, chronic pain, and sleep disturbances or disorders. Co-occurring physical and mental health problems are widespread following TBI and link to poor outcomes, underscoring the need for multi-disciplinary care. Further, the report reveals that those with chronic TBI may experience barriers to care due to disability or lack of family support. The report conveys that family education and support are critical components of acute inpatient rehabilitation. TBI-related difficulties affect the family more broadly than the immediate caregiver. Caregiving families experience health problems frequently, while TBI caregivers report poor mental health and lower quality of life. Therefore, assessment of the family unit as a whole may be necessary to achieve optimal outcomes.
Eleven-Year Update: Longitudinal Study on Traumatic Brain Injury Incurred by Members of the Armed Forces in Operation IRAQI FREEDOM and Operation ENDURING FREEDOM

May 2021


The estimated cost of this report or study for the Department of Defense (DoD) is approximately $24,000.00 in Fiscal Years 2020-2021. This includes $0.00 in expenses and $24,000.00 in DoD labor.

Generated on 2020Nov10
RefID: D-1F58499

-----

Shirl Kennedy
Research Editor (HJF)
Center for Deployment Psychology
www.deploymentpsych.org
shirley.kennedy.ctr@usuhs.edu
240-535-3901