Research Update -- May 20, 2021

What’s Here:

- Explosive ordnance disposal personnel in the U.S. military have higher risk of insomnia and post-traumatic stress disorder: a large retrospective cohort study.
- Firearm Suicide Among Veterans of the U.S. Military: A Systematic Review.
- Emotion regulation and experiential avoidance moderate the association between posttraumatic symptoms and alcohol use disorder among Israeli combat veterans.
- Women in combat: The effects of combat exposure and gender on the incidence and persistence of posttraumatic stress disorder diagnosis.
- Hardiness Predicts Post-Traumatic Growth and Well-Being in Severely Wounded Servicemen and Their Spouses.
- Vaccine Initiation and Completion Among Active Component Service Members and Health Care Personnel.
- Examining the Interaction Between Potentially Morally Injurious Events and Religiosity in Relation to Alcohol Misuse Among Military Veterans.
- Therapist interventions and skills as predictors of dropout in outpatient psychotherapy.
- The Effect of PTSD Symptom Change on Suicidal Ideation in a Combined Military and Civilian Sample Engaged in Cognitive Processing Therapy.
• A Novel Approach to the Assessment of Fidelity to a Cognitive Behavioral Therapy for PTSD Using Clinical Worksheets: A Proof of Concept With Cognitive Processing Therapy.
• Tailoring Higher Education Options for Smaller Institutions to Meet Veterans’ Needs: Enhancing Inclusion in Higher Education: Practical Solutions by Veterans for Veterans.
• The association of sleep quality and aggression: a systematic review and meta-analysis of observational studies.
• Disentangling the Individual and Group Effects of Masculinity Ideology on PTSD Treatment.
• Association of Borderline Personality Disorder Criteria With Suicide Attempts Among US Adults.
• Cognitive Behavioral Therapy and the Implementation of Antiracism (Viewpoint)
• Sleep and fear conditioning, extinction learning and extinction recall: a systematic review and meta-analysis of polysomnographic findings.
• How Active Duty U.S. Army Fathers’ Knowledge and Attitudes About Child Development Influence Parenting Practices.
• Association between Food Insecurity, Mental Health, and Intentions to Leave the US Army in a Cross-Sectional Sample of US Soldiers.
• The effects of caffeinated products on sleep and functioning in the military population: a focused review.
• Sex Differences in Opioid Use Disorder Prevalence and Multimorbidity Nationally in the Veterans Health Administration.
• Gender as a moderator of the association of military sexual trauma and posttraumatic stress symptoms.
• Self-efficacy and coping style in Iraq and Afghanistan-era veterans with and without mild traumatic brain injury and posttraumatic stress disorder.
Explosive ordnance disposal personnel in the U.S. military have higher risk of insomnia and post-traumatic stress disorder: a large retrospective cohort study.


Annals of Epidemiology
2021 May;57:40-45

Purpose:
We examined the risk of post-traumatic stress disorder (PTSD), affective disorders, alcohol/substance-related disorders, traumatic brain injury (TBI) and insomnia, among explosive ordnance disposal (EOD) technicians compared to the general population of active-duty non-EOD personnel in the U.S. military.

Methods:
We conducted a retrospective cohort study using administrative and healthcare utilization data from fiscal year 2004 (FY2004) to FY2015 for this comparison. We used propensity score matching to balance baseline covariates, and discrete-time hazard models to compare the odds of occurrence of the outcomes.

Results:
EOD personnel had higher odds of having a new diagnosis of insomnia (odds ratio [OR] = 1.33; 95% confidence interval [CI]:1.22-1.45) and PTSD (OR = 1.23; 95% CI:1.08-1.41) than did non-EOD personnel. EOD technicians had lower odds of having a new diagnosis of affective disorders (OR = 0.83; 95% CI:0.79-0.87) and alcohol/substance-related disorders (OR = 0.59; 95% CI:0.54-0.64) than did non-EOD personnel. There was little evidence of a difference in the odds of a TBI diagnosis (OR = 1.07; 95% CI:0.99-1.16).

Conclusions:
As reliance on EOD forces continues, ongoing vigilance of the stressors, health
sequelae and disincentives to access mental health care among this military occupation should be monitored and mitigated wherever possible.

https://doi.org/10.1093/milmed/usaa495

Firearm Suicide Among Veterans of the U.S. Military: A Systematic Review.

Theis, J., Hoops, K., Booty, M., Nestadt, P., & Crifasi, C.

Military Medicine
2021 May 3;186(5-6):e525-e536.

Introduction:
In the United States, firearm suicide represents a major cause of preventable, premature death among veterans. The purpose of this systematic review was to characterize the body of literature on veteran firearm suicide and identify areas for future research, which may facilitate the development of firearm suicide interventions in Veterans Health Administration (VHA) and non-Veterans Health Administration clinical settings.

Materials and methods:
All randomized controlled trials, quasi-experimental, naturalistic, observational, and case study designs published between January 1, 1990 and February 21, 2019 were included in our review. Following title and abstract review, 65 papers were included in our full-text review and 37 studies were included in our analysis. We based our approach on a modification of the Preferred Reporting Items for Systematic Reviews and Meta-Analysis guidelines. Studies were grouped into broad, nonmutually exclusive categories: (1) heterogeneity of datasets and veteran status determination for inclusion, (2) service histories, (3) firearm ownership, storage, behaviors, and risk perceptions, (4) patient and clinician attitudes toward firearm restriction interventions, (5) firearm suicide risk factors by study population, and (6) assessments of clinical firearm interventions.

Results:
This body of literature consists predominately of cross-sectional studies with mixed definitions and validation of veteran status, which revealed high concordance of increased risk of firearm suicide compared with nonveterans. Veterans have higher rates of firearm ownership than the general population, primarily citing personal protection as the reason for gun ownership. Veterans often exhibit risky firearm usage
and storage behaviors but tend to favor measures that limit access to firearms by at-risk individuals. Despite this, there remains persistent hesitation among clinicians to screen and counsel veterans on firearm safety.

Conclusions:
This systematic review highlights an urgent need to produce higher quality evidence and new data with standard definitions that are critical to inform clinical practice and enhance public health measures to reduce firearm suicide among veterans.

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https://doi.org/10.1016/j.addbeh.2020.106776

Emotion regulation and experiential avoidance moderate the association between posttraumatic symptoms and alcohol use disorder among Israeli combat veterans.

Feingold, D., & Zerach, G.
Addictive Behaviors
2021 Apr;115:106776

Introduction:
the association between Posttraumatic Stress symptoms (PTSS) and Alcohol Use Disorder (AUD) among combat veterans is well established. However, little is known concerning the intertwining effect of distress oriented coping mechanisms on this association. In this study, we sought to explore the moderating role of experiential avoidance (EA), cognitive reappraisal (CR) and expressive suppression (ES) on the association between PTSS and AUD among Israeli combat veterans.

Method:
Participants were 189 Israel Defense Forces (IDF) male combat veterans (mean age = 30.03) who completed a set of validated self-report questionnaires assessing PTSS, AUD, EA, CR and ES. Moderation analyses were conducted using a four-step hierarchical regression analysis and an ordinary least squares regression analysis.

Results:
Analyses indicated that individuals with average or high levels of EA or ES exhibited significant positive association between PTSS and AUD, yet those with low levels of EA or ES exhibited no significant association between PTSS and AUD (b =
0.14, Confidence Interval (CI) [0.06, 0.22, SE = 0.04, t = 3.65, p = .000, 95%] for EA and b = 0.17, CI [0.07, 0.25, SE = 0.04, t = 3.69, p = .000, 95%] for ES). In addition, CR moderated the association between PTSS and AUD (b = 0.18, CI [0.07, 0.29, SE = 0.06, t = 3.24, p = .001, 95%]), so that the association between PTSS and AUD is positive and stronger for higher levels of CR.

Conclusions:
Our findings imply that EA, ES and CR and emotion regulation may be major facilitators of the association between PTSS and AUD among combat veterans. These findings are discussed in the Israeli context as well as in light of a general psychological perspective.

https://doi.org/10.1016/j.jpsychires.2020.12.010

Women in combat: The effects of combat exposure and gender on the incidence and persistence of posttraumatic stress disorder diagnosis.

Journal of Psychiatric Research
2021 Jan;133:16-22

Recent expansions in the roles of women in combat have prompted increased interest in the psychological toll combat exposure may have on female service members as compared to males. This study examined the interactive effects of gender and combat exposure on transitions in posttraumatic stress disorder (PTSD) diagnostic status (presence or absence of PTSD diagnosis). We used administrative data of 20,000 U.S. Army soldiers whose combat exposure was assessed after return from deployment between January 1, 2008 and June 30, 2014; soldiers' PTSD diagnostic status was determined using International Classification of Diseases-9 diagnoses at four time points separated by 12 months. We used a mixed-effects logit transition model to examine the effects of combat and gender on incidence, persistence, and prevalence of PTSD diagnosis. Incidence and prevalence of PTSD diagnosis were higher among women, but persistence of PTSD diagnosis was higher in men. Higher rates of new PTSD diagnosis among women were not dependent on combat exposure, suggesting that other types of trauma may be responsible for increased rates among women. Gender differences in prevalence and persistence of PTSD diagnosis were greater among combat-exposed soldiers than among those not exposed to combat. Men
maintained a PTSD diagnosis over longer periods of time than women suggesting greater PTSD persistence, and this pattern was particularly pronounced among soldiers exposed to combat. These results have implications for the recent policy changes and gender-based prevention strategies, and suggest that women in combat roles may be no more vulnerable to PTSD than are their male counterparts. Though the gender differences were small, they are indicative of healthcare utilization patterns that may be important for prevention and that warrant further exploration.

https://doi.org/10.1093/milmed/usaa250

Hardiness Predicts Post-Traumatic Growth and Well-Being in Severely Wounded Servicemen and Their Spouses.

Bartone, P. T., & Bowles, S. V.

Military Medicine
2021 May 3;186(5-6):500-504

Introduction:
Thousands of military personnel have suffered severe wounds and traumatic amputations in recent overseas conflicts. They face multiple surgeries and long, painful rehabilitation. Despite the tremendous stress for these servicemen and families, many appear to cope quite well and even thrive despite their devastating wounds. Hardiness is a world view or mindset marked by high levels of commitment and engagement in the world, a strong sense of control, and the tendency to see change as a challenge and opportunity to learn and improve. Previous research has shown that military personnel high in hardiness are at lower risk for post-traumatic stress disorder, depression, and other psychiatric symptoms following combat exposure. This study evaluated the impact of personality hardiness on post-traumatic growth (PTG) and psychological well-being in severely wounded service members and their spouses.

Materials and methods:
Male volunteers were surveyed while in hospital for severe battle wounds including loss of limbs. All were married, and all spouses also agreed to participate. Participants (N = 44) completed measures of hardiness, PTG, well-being, and neuroticism, and answered a question regarding potential benefits of their experience.
Results:
Hierarchical multiple regression showed that hardiness significantly predicted both PTG and well-being, while controlling for age, education, family income, and neuroticism. Both service members and spouses indicated they experienced benefits in the following areas: strengthened family ties and connections; greater appreciation for and perspective on life; new career and educational opportunities; stronger, more resilient as a person; and formed new relationships, friends, and connections.

Conclusion:
These results suggest that seriously wounded military members and their spouses who are high in hardiness are more likely to experience PTG and psychological well-being following extremely stressful experiences. Hardiness entails positive reframing of negative experiences as opportunities and challenges to overcome, and taking action to solve problems. Training programs to increase hardiness attitudes and related coping skills may thus be beneficial in facilitating healthy adaptation for severely injured patients.

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Vaccine Initiation and Completion Among Active Component Service Members and Health Care Personnel.

Lang, M. A., Stahlman, S., Wells, N. Y., Fedgo, A. A., Patel, D. M., Chauhan, A., & Mancuso, J. D.

MSMR (Medical Surveillance Monthly Report)
2021 Apr;28(4):2-9

The objective of this study was to assess overall vaccine initiation and completion in the active component U.S. military, with a focus on racial/ethnic disparities. From 11 December 2020 through 12 March 2021, a total of 361,538 service members (27.2%) initiated a COVID-19 mRNA vaccine. Non-Hispanic Blacks were 28% less likely to initiate vaccination (95% confidence interval: 25%-29%) in comparison to non-Hispanic Whites, after adjusting for potential confounders. Increasing age, higher education levels, higher rank, and Asian/Pacific Islander race/ethnicity were also associated with increasing incidence of initiation after adjustment. When the analysis was restricted to
active component health care personnel, similar patterns were seen. Overall, 93.8% of those who initiated the vaccine series completed it during the study period, and only minor differences in completion rates were noted among the demographic subgroups. This study suggests additional factors, such as vaccine hesitancy, influence COVID-19 vaccination choices in the U.S. military. Military leadership and vaccine planners should be knowledgeable about and aware of the disparities in vaccine series initiation.

https://doi.org/10.1002/jclp.23150


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.

https://doi.org/10.1002/jts.22682

Examining the Interaction Between Potentially Morally Injurious Events and Religiosity in Relation to Alcohol Misuse Among Military Veterans.


Journal of Traumatic Stress
First published: 08 May 2021

Given the disproportionate rate of alcohol misuse among veterans and related outcomes as compared to the general population, the examination of predictors of alcohol misuse in this population is imperative. Potentially morally injurious events (PMIEs), defined as severe transgressions of a moral code, have been positively associated with alcohol misuse. Exposure to PMIEs may challenge one's religious beliefs, which may, in turn, influence the strength of the association between PMIEs and alcohol misuse among military veterans. The goal of the current study was to examine the potential moderating role of religiosity in the association between PMIEs and alcohol misuse (i.e., alcohol consumption, drinking behaviors, adverse reactions to drinking, and alcohol-related problems). Participants were 496 military veterans in the community (Mage = 37.80 years, SD = 11.42; 70.5% male). The results of moderation analyses indicated that overall religiosity, organizational religiosity, and intrinsic religiosity significantly moderated the association between PMIEs and alcohol misuse such that the positive relation between PMIEs and alcohol misuse was stronger at high versus low levels of religiosity, R2s = .01. Our findings highlight the importance of considering the role of religiosity in relation to alcohol misuse as a moral injury outcome and the potential utility of tailoring treatments for military veterans who have experienced moral injury.
Therapist interventions and skills as predictors of dropout in outpatient psychotherapy.

Kaitlyn Poster, Björn Bennemann, Stefan G. Hofmann, Wolfgang Lutz

Behavior Therapy
Available online 11 May 2021

Highlights

● Sessions were rated with the Inventory of Therapeutic Interventions and Skills.
● Observer ratings improved dropout prediction beyond intake variables.
● Therapist use of feedback/summaries and treatment difficulty predicted dropout.
● Therapist use of cognitive techniques was also associated with dropout.
● It is important to explore the therapist-patient interaction to understand dropout.

Abstract

The current study employed machine learning to investigate whether the inclusion of observer-rated therapist interventions and skills in early sessions of psychotherapy improved dropout prediction beyond intake assessments. Patients were treated by postgraduate clinicians at a university outpatient clinic. Psychometric instruments were assessed at intake and therapeutic interventions and skills in the third session were routinely rated by independent observers. After variable pre-selection, an elastic net algorithm was used to build two dropout prediction models, one including and one excluding observer-rated session variables. The best model included observer-rated variables and was significantly superior to the model including intake variables only. Alongside intake variables, two observer-rated variables significantly predicted dropout: therapist use of feedback and summaries and treatment difficulty. Although not retained in the final prediction model, the observer-rated use of cognitive techniques was also significantly correlated with dropout. Observer ratings of therapist interventions and skills in early sessions of psychotherapy improve predictors of dropout from psychotherapy beyond intake variables alone. Future research could work toward personalizing dropout predictions to the specific dyad, thereby improving their validity and aiding therapists to recognize and react to increased dropout risk.

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The Effect of PTSD Symptom Change on Suicidal Ideation in a Combined Military and Civilian Sample Engaged in Cognitive Processing Therapy.

Clara M. Johnson, Samantha C. Holmes, Michael K. Suvak, Jiyoung Song, ... Candice M. Monson

Behavior Therapy
Volume 52, Issue 3, May 2021, Pages 774-784

Highlights
- Suicidal ideation (SI) decreased during Cognitive Processing Therapy (CPT).
- Posttraumatic stress disorder (PTSD) symptoms predicted SI in the next CPT session.
- SI did not predict PTSD symptoms in the next CPT session.
- Gender and military status did not affect the relationship between PTSD and SI.

Abstract
In light of the well-established relationship between posttraumatic stress disorder (PTSD) and suicidal ideation (SI), there has been a push for treatments that simultaneously improve symptoms of PTSD and decrease SI. Using data from a randomized controlled hybrid implementation-effectiveness trial, the current study investigated the effectiveness of Cognitive Processing Therapy (CPT; Resick, Monson, & Chard, 2016) on PTSD and SI. The patient sample (N = 188) was diverse in military and veteran status, gender, and comorbidity, and 73% of the sample endorsed SI at one or more points during CPT. Participants demonstrated significant improvement in SI over the course of CPT. Multilevel growth curve modeling revealed a significant association between PTSD symptom change and change in SI. Results from cross-lagged multilevel regressions indicated that PTSD symptoms predicted SI in the next session, yet SI in a given session did not predict PTSD symptoms in the next session. Potentially relevant clinical factors (i.e., military status, gender, depression diagnosis, baseline SI, study consultation condition) were not associated with the relationship between PTSD symptoms and SI. These results add to the burgeoning literature suggesting that evidence-based treatments for PTSD, like CPT, reduce suicidality in a range of individuals with PTSD, and that this reduction is predicted by improvements in PTSD symptoms.

Shannon Wiltsey Stirman, Cassidy A. Gutner, Jennifer Gamarra, Michael K. Suvak, ... Patricia A. Resick

Behavior Therapy
Volume 52, Issue 3, May 2021, Pages 656-672

Highlights
- Fidelity scores based on CPT worksheet items correlated with observer ratings of corresponding elements
- Associations were found between patient and therapist skill and PTSD symptom change
- It may be possible to assess fidelity via cognitive processing therapy worksheets

Abstract
Fidelity monitoring is a critical indicator of psychotherapy quality and is central to successful implementation. A major barrier to fidelity in routine care is the lack of feasible, scalable, and valid measurement strategies. A reliable, low-burden fidelity assessment would promote sustained implementation of cognitive behavioral therapies (CBTs). The current study examined fidelity measurement for cognitive processing therapy (CPT) for posttraumatic stress disorder (PTSD) using clinical worksheets. External raters evaluated patient worksheets done as a part of treatment, both guided by the therapist and completed independently as homework. Results demonstrated that fidelity ratings from CPT session worksheets were feasible and efficient. Notably, they were strongly correlated with observer ratings of the fidelity of CPT strategies that were present on the worksheets. Agreement among ratings conducted by individuals with a range of experience with CPT was acceptable to high. There was not a main effect of therapist-guided, in-session worksheet ratings on PTSD symptom change. However, patient competence in completing worksheets independently was associated with greater PTSD symptom decline and in-session, therapist-guided worksheet completion was associated with larger symptom decreases among patients with high levels of competence. With further research and refinement, rating of worksheets may be an efficient way to examine therapist and patient skill in key CPT elements, and their interactions, compared to the gold standard of observer ratings of therapy video-recordings. Additional research is needed to determine if worksheets are an accurate...
and scalable alternative to gold standard observer ratings in settings in which time and resources are limited.

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Ashley A. O'Connor, Amber K. Worthington

Journal of Veterans Studies
2021; 7(1), 131–137

The coronavirus disease 2019 (COVID-19) pandemic and measures taken in response to the pandemic have had a profound impact on people worldwide. The evolution of the pandemic is reported on several official websites, including COVID-19 tracking in real time on an interactive dashboard developed by the Johns Hopkins University Center for Systems Science and Engineering. Measures taken in response to the pandemic vary widely within the United States (US) and include detection and isolation of infected individuals, quarantine measures, compulsory stay-at-home orders, face mask ordinances, physical distancing, and mandated closures of schools and businesses deemed non-essential (Hartley & Perencevich, 2020). Within the state of Alaska, measures taken have included periods of diminished business accessibility and a compulsory stay-at-home order (Municipality of Anchorage, 2020).

Emerging evidence suggests the COVID-19 pandemic and measures taken in response have had detrimental impacts on physical activity (e.g., Jiménez-Pavón et al., 2020; Mattioli et al., 2020) and overall well-being, including environmental, physical, psychological, and social relations well-being (e.g., Ahorsu et al., 2020; Brooks et al., 2020; Center for Disease Control [CDC], 2020), which may be exacerbated in veterans (e.g., Marini et al., 2020). Veterans comprise approximately 7% of the population in the US overall, and Alaska has the highest proportion of veterans at almost 12% of the adult population (Harrington, 2019). Despite the high proportion of veterans living in Alaska, no studies have examined the impact of the COVID-19 pandemic and responses on their physical activity and overall well-being. The goal of this pilot study was to examine the impact of the COVID-19 compulsory stay-at-home order in Alaska on physical activity and overall well-being of veterans living in Alaska.

Belanger, B., Steele, A., & Philhower, K.

Journal of Veterans Studies
2021; 7(1), 138–147

As veterans leave the service, they are seeking higher education degrees in increasing numbers (Semer & Harmening, 2015). Thanks to the Post-9/11 GI Bill (Molina & Morse, 2017; Steele et al., 2010) and a fundamental shift in military culture towards an emphasis on “transition services” (Warrior Transition Command, 2014), more veterans are pursuing college degrees than ever before (Walton et al., 2016). Higher education institutions are adapting to the demand by creating centralized programs designed to meet the needs of student veterans. Programs such as “SERV” (Supporting Education for the Returning Veterans), established at Cleveland State University (Semer & Harmening, 2015), help students navigate administrative barriers and offer support services (Rumann & Hamrick, 2010). This type of programming may suit the needs of larger institutions with financial resources, who receive large numbers of veterans, but this model remains out of reach for smaller institutions who lack the space, funding, and personnel to manage such an endeavor. From a practical standpoint, most smaller institutions also lack the veteran volume to warrant such an undertaking. Smaller institutions have a duty to recognize and address the needs of veterans and provide affordable alternatives to for-profit institutions where veterans accrue disproportionate debt despite the educational benefits provided by the Post-9/11 GI Bill (DiRamio, 2017).

Today’s veterans take advantage of opportunities to accrue college credits while on active duty. Many obtain an associate degree before they transfer into a brick-and-mortar college to continue their education towards a bachelor’s degree (Walton et al., 2016). As a result, veterans arrive on college campuses as transfer students. National trends reflect age gaps as well as social and cultural differences that set student veterans apart from their younger classmates (Cable et al., 2021; Rattray et al., 2019; Molina & Morse, 2017).
The association of sleep quality and aggression: a systematic review and meta-analysis of observational studies.

M.M. Van Veen, M. Lancel, E. Beijer, S. Remmelzwaal, F. Rutters

Poor sleep quality is closely related to aggression, but despite the promise of new therapeutic possibilities, a systematic synthesis of observational research on the association between sleep quality and aggression is lacking.

This systematic review and meta-analysis examined the association between sleep quality and aggression, using the academic databases PubMed and PsycINFO. Subjective and objective measures of sleep quality were included, as well as multiple measures of aggression, assessing aggressive and externalizing behavior, anger, hostility and irritability.

Ninety-two observational articles, containing 96 studies, encompassing a total of 58,154 children, adolescents and adults were sourced out of 7161 references identified. Methodological quality was moderate or strong in 76% of studies. Data for meta-analysis was available from 74 studies.

Poorer sleep quality was associated with higher aggression in 80.8% of studies. Pooled results showed a correlation of 0.28 (95%CI 0.25-0.31; I²=90.1%) and odds ratio of 3.61 (95%CI 1.13-11.51; I²=88.3%). Effect estimates and heterogeneity varied according to population type and measurement instruments, but not according to article quality or age group.

Our findings confirm that poor sleep quality is consistently associated with higher aggression. As most evidence is cross-sectional, more prospective and high-quality experimental evidence is required to elucidate cause-effect and optimize prevention and treatment of aggression.

Disentangling the Individual and Group Effects of Masculinity Ideology on PTSD Treatment.
Endorsement of traditional masculinity ideology is frequently associated with interference in the treatment of posttraumatic stress disorder (PTSD); however, there is little empirical basis for this association. Moreover, there is increasing attention on masculinity ideology being contextual in nature, which may have important implications for our understanding of its impact on treatment. Here, we examine how the outcome of a group-based treatment for veterans with PTSD was impacted by traditional masculinity facets held at the individual level, and among other group members. Our sample consisted of (N = 255) Canadian veteran men. Results indicated that the degree of individual self-reliance and dominance attenuated positive treatment outcomes, with respect to total PTSD symptom change and PTSD-related avoidance symptoms. Self-reliance also attenuated symptom change in negative alterations in cognitions and mood and hyperarousal clusters. Other group members’ degree of masculinity did not appear to impact individual participants’ pre- to post-treatment PTSD symptom change. The R2 for significant results ranged from .01-.05. This study provides evidence that, within the context of group-based treatment, an individual’s endorsement of traditional masculinity ideology may impede reduction of PTSD symptomatology, but the effect of other group members’ masculinity endorsement does not.


Association of Borderline Personality Disorder Criteria With Suicide Attempts Among US Adults.

Carlos M. Grilo, PhD; Tomoko Udo, PhD

JAMA Network Open
May 11, 2021

Key Points
Question
Are borderline personality disorder (BPD) and its specific criteria associated with suicide attempts among US adults?
Findings
In this cross-sectional study of a nationally representative sample of 36,309 US adults, after adjusting for demographic and other clinical variables, lifetime BPD diagnosis and the specific criteria of self-injurious behaviors and chronic feelings of emptiness were significantly associated with increased risk for lifetime and past-year suicide attempts.

Meaning
The findings suggest that specific BPD criteria of self-injurious behaviors and chronic feelings of emptiness should be routinely considered in suicide risk assessment.

Abstract
Importance
Rates of suicide are increasing. Although borderline personality disorder (BPD) and other psychiatric disorders are associated with suicide, there is a dearth of epidemiological research on associations between BPD and suicide attempts (SAs). Delineating the SA risk associated with BPD and its specific criteria in a nationally representative sample of individuals could inform recognition and intervention efforts for SAs.

Objective
To examine the association of a BPD diagnosis and specific BPD criteria with SAs in US adults.

Design, Setting, and Participants
This cross-sectional study analyzed data from the National Epidemiological Survey on Alcohol and Related Conditions–III (NESARC-III), a psychiatric epidemiological survey of noninstitutionalized US adults aged 18 or older conducted from April 2012 to June 2013. Eligible adults were randomly selected from households within census-defined counties or groups of counties. Data were analyzed from December 2020 to January 2021.

Main Outcomes and Measures
Prevalence of Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition) psychiatric and personality disorders, BPD and its specific criteria, SAs, and adverse childhood experiences (ACEs), as assessed by structured diagnostic or clinical interviews; prevalence is expressed as weighted means. Multivariable-adjusted logistic regression was used to compare the risk of lifetime and past-year SAs by BPD diagnosis and by each specific BPD criterion. Analyses were adjusted for demographic and clinical factors, including psychiatric comorbidity, age at BPD onset, and ACEs.
Results
Of 36,309 respondents, 20,442 (56.3%) were women and 52.9% were non-Hispanic White; the mean (SD) age was 45.6 (17.5) years. The prevalence (SE) of lifetime and past-year SAs among participants with a lifetime diagnosis of BPD based on original NESARC-III diagnostic codes was 22.7% (0.8%) (adjusted odds ratio [AOR], 8.40; 95% CI, 7.53-9.37) and 2.1% (0.2%) (AOR, 11.77; 95% CI, 7.86-17.62), respectively. With use of diagnostic codes requiring 5 BPD criteria to meet social-occupational dysfunction, prevalence (SE) of lifetime and past-year SAs was 30.4% (1.1%) (AOR, 9.15; 95% CI, 7.99-10.47) and 3.2% (0.4%) (AOR, 11.42; 95% CI, 7.71-16.91), respectively. After excluding the BPD criterion of self-injurious behavior (to eliminate criterion overlap), the prevalence (SE) of lifetime and past-year SAs was 28.1% (1.1%) (AOR, 7.61; 95% CI, 6.67-8.69) and 3.0% (0.4%) (AOR, 9.83; 95% CI, 6.63-14.55), respectively. In analyses adjusting for sociodemographic variables, psychiatric disorders, age at BPD onset, and ACEs, BPD diagnosis and specific BPD criteria of self-injurious behaviors and chronic feelings of emptiness were significantly associated with increased odds of lifetime SAs (BPD diagnosis: AOR, 2.10; 95% CI, 1.79-2.45; self-injurious behaviors: AOR, 24.28; 95 CI, 16.83-32.03; feelings of emptiness: AOR, 1.58; 95% CI, 1.16-2.14) and past-year SAs (BPD diagnosis: AOR, 11.42; 95% CI, 7.71-16.91; self-injurious behaviors: AOR, 19.32; 95% CI, 5.22-71.58; feelings of emptiness: AOR, 1.99; 95% CI, 1.08-3.66). In analysis with BPD criteria simultaneously entered (excluding self-injurious behavior), chronic feelings of emptiness were significantly associated with increased odds of lifetime SAs (AOR, 1.66; 95% CI, 1.23-2.24) and past-year SAs (AOR, 2.45; 95% CI, 1.18-5.08).

Conclusions and Relevance
In a national sample of adults, after adjusting for demographic and clinical variables, a BPD diagnosis and the specific BPD criteria of self-injurious behaviors and chronic emptiness were significantly associated with increased SA risk. Although BPD is a complex heterogeneous diagnosis, the results of this study suggest that the criteria of self-injurious behaviors and chronic feelings of emptiness should be routinely considered in suicide risk assessment.


Cognitive Behavioral Therapy and the Implementation of Antiracism (Viewpoint)

Tashalee R. Brown, MD, PhD; Kevin Y. Xu, MD, MPH; Anne L. Glowinski, MD, MPE
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.

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https://doi.org/10.1016/j.smrv.2021.101501

Sleep and fear conditioning, extinction learning and extinction recall: a systematic review and meta-analysis of polysomnographic findings.


Sleep Medicine Reviews
Available online 13 May 2021

Sleep may contribute to the long-lasting consolidation and processing of emotional memories. Experimental fear conditioning and extinction paradigms model the development, maintenance, and treatment of anxiety disorders. The literature provides compelling evidence for the involvement of rapid eye movement (REM) sleep in the consolidation of such memories. This meta-analysis correlated polysomnographic sleep findings with psychophysiological reactivity to the danger (CS+) and safety stimuli (CS-), to clarify the specific role of sleep stages before and after fear conditioning, extinction learning and extinction recall. Overall, there was evidence that more pre-learning sleep stage 2 and less slow wave sleep was associated with higher psychophysiological reactivity to the safety stimulus during extinction learning. Preliminary evidence found here support the role of REM sleep during the post-extinction consolidation sleep phase in clinical populations with disrupted sleep, but not in healthy controls. Furthermore, the meta-regressions found that sex moderated the associations between sleep and psychophysiological reactivity throughout the paradigm providing evidence for diverging
correlations in male and females. Specifically, increased post-extinction REM was associated with poorer extinction and safety recall in females while the opposite was found in males. These results have implications for future research in the role of sleep in emotional memory processing.

https://doi.org/10.1007/s10826-021-01969-5

How Active Duty U.S. Army Fathers’ Knowledge and Attitudes About Child Development Influence Parenting Practices.


Journal of Child and Family Studies
Published: 13 May 2021

Abstract
Little research regarding the influence of parental knowledge and attitudes about child development on parenting practices includes fathers. The wartime military provides a specific context for fathering with frequent separations, which may impact soldiers’ knowledge and attitudes about their young children’s development. The purpose of the current study is to explore how military fathers’ knowledge and attitudes about their young children’s development influence their parenting behaviors across the deployment cycle. Fifteen active duty U.S. Army fathers with young children completed qualitative interviews, which were coded and analyzed to identify major themes. Many fathers had accurate knowledge of typical development and adapted their parenting responsively. Some knew less and were unsure how to respond to their children’s behavior. Many believed separations did not negatively affect young children. This attitude may reduce concern about deployment’s impact and keep these fathers mission-focused, but may also lead to missed opportunities to prepare young children for transitions. Overall, these fathers wanted to be involved, responsive parents. While many faced challenges navigating parenting throughout the deployment cycle, nearly all described positive adaptation, often with support from the homefront parent. These findings suggest that efforts to enhance military fathers’ knowledge should be tied to their children’s developmental stages and needs, focusing on parenting within the
military context. Practitioners can respect Army families’ cultural values by aligning family readiness as necessary to mission readiness.

Highlights

- Fathers’ knowledge and attitudes about child development likely influence their parenting.
- The wartime military provides a specific context for fathering.
- Fifteen active duty U.S. Army fathers with young children were interviewed.
- Fathers tried to adapt their parenting to their children’s developmental stage.
- Some fathers underestimated the impact of separations on young children.

https://doi.org/10.1093/jn/nxab089

Association between Food Insecurity, Mental Health, and Intentions to Leave the US Army in a Cross-Sectional Sample of US Soldiers.

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The Journal of Nutrition
Published: 12 May 2021

Background

Previous research has demonstrated that certain groups in the United States are at a greater risk for food insecurity. However, food insecurity has not been sufficiently characterized in active duty military populations.

Objectives

The primary objective of this study was to determine the prevalence of marginal food insecurity at a large US Army installation. The secondary objective was to determine how marginal food insecurity may be associated with intentions to leave the US Army after the current service period (“intentions to leave”).

Methods

A cross-sectional, online survey was administered by the US Army Public Health Center at an Army installation in 2019 (n = 5677). The main predictor was the 2-item food insecurity screener (Hunger Vital Signs), and the main outcome was a 5-point Likert question, “How likely are you to leave the army after your current enlistment/service
period?” that was dichotomized for this analysis. Multiple logistic regression was used to assess the association between marginal food insecurity and intentions to leave. Mental health covariates were analyzed as a potential mediator.

Results
The sample was primarily male (83%), age >25 y (49%), and White (56%). One-third of respondents were classified as marginally food insecure using the Hunger Vital Signs, and 52% had intentions to leave. There was no significant association between marginal food insecurity and intentions to leave in the composite multivariable model, but mediation analyses revealed that food insecurity was significantly and independently associated with anxiety, depression, and suicidal ideation, which was in turn associated with intentions to leave.

Conclusions
The association between marginal food insecurity and mental health showed that addressing food insecurity could improve mental health and subsequently reduce intentions to leave. Solutions to reduce military food hardship include expanding Supplemental Nutrition Assistance Program eligibility requirements, improving food resources communication, and expanding healthy food choices on-post.

https://doi.org/10.1016/j.pbb.2021.173206

The effects of caffeinated products on sleep and functioning in the military population: a focused review.

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Pharmacology Biochemistry and Behavior
Available online 15 May 2021

Highlights
- Military personnel report mean daily consumption of 212-285 mg/day
- Coffee was the primary caffeine source for military personnel over the age of 25 years, but Energy Drink use was common for those 25 years of age and younger
- Energy Drink use was associated with sleep disturbances.
- Caffeine/ED use had beneficial effects on performance after prolonged sleep deprivation.
Abstract
Military personnel rely on caffeinated products such as coffee or energy drinks (ED) to maintain a maximal level of vigilance and performance under sleep-deprived and combat situations. While chronic caffeine intake is associated with decreased sleep duration and non-restful sleep in the general population, these relationships are understudied in the military. We conducted a focused review of the effects of caffeinated products on sleep and the functioning of military personnel. We used a pre-specified search algorithm and identified 28 peer-reviewed articles published between January 1967 and July 2019 involving military personnel. We classified the findings from these studies into three categories. These categories included descriptive studies of caffeine use, studies evaluating the association between caffeinated products and sleep or functioning measures, and clinical trials assessing the effects of caffeinated products on functioning in sleep-deprived conditions. Most of the studies showed that military personnel used at least one caffeine-containing product per day during active duty and coffee was their primary source of caffeine. Their mean caffeine consumption varied from 212-285 mg/day, depending on the type of personnel and their deployment status. Those who were younger than 30 years of age preferred ED use. Caffeine use in increasing amounts was associated with decreased sleep duration and increased psychiatric symptoms. The consumption of caffeinated products during sleep deprivation improved their cognitive and behavioral outcomes and physical performance. Caffeine and energy drink consumption may maintain some aspects of performance stemming from insufficient sleep in deployed personnel, but excessive use may have adverse consequences.

https://doi.org/10.1080/15504263.2021.1904162

Sex Differences in Opioid Use Disorder Prevalence and Multimorbidity Nationally in the Veterans Health Administration.


Journal of Dual Diagnosis
Published online: 13 May 2021

Objective
Opioid use disorder (OUD) is a significant problem among US veterans with increasing
rates of OUD and overdose, and thus has substantial importance for service delivery within the Veterans Health Administration (VHA). Among individuals with OUD, several sex-specific differences have begun to emerge regarding co-occurring medical, psychiatric and pain-related diagnoses. The rates of such multimorbidities are likely to vary between men and women with OUD and may have important implications for treatment within the VHA but have not yet been studied.

Methods:
The present study utilized a data set that included all veterans receiving VHA health care during Fiscal Year (FY) 2012 (October 1, 2011 through September 30, 2012), who were diagnosed during the year with opioid dependence or abuse. VHA patients diagnosed with OUD nationwide in FY 2012 were compared by sex on proportions with OUD, and among those with OUD, on sociodemographic characteristics, medical, psychiatric and pain-related diagnoses, as well as on service use, and psychotropic and opioid agonist prescription fills.

Results:
During FY 2012, 48,408 veterans were diagnosed with OUD, 5.77% of whom were women. Among those veterans with OUD, few sociodemographic differences were observed between sexes. Female veterans had a higher rate of psychiatric diagnoses, notably mood, anxiety and personality disorders, as well as higher rates of pain-related diagnoses, such as headaches and fibromyalgia, while male veterans were more likely to have concurrent, severe medical co-morbidities, including hepatic disease, HIV, cancers, peripheral vascular disease, diabetes and related complications, and renal disease. There were few differences in health service utilization, with women reporting greater receipt of prescriptions for anxiolytic/sedative/hypnotics, stimulants and lithium. Men and women did not differ in receipt of opioid agonist medications or mental health/substance use treatments.

Conclusions:
There are substantial sex-specific differences in patterns of multimorbidity among veterans with OUD, spanning medical, psychiatric and pain-related diagnoses. These results illustrate the need to view OUD as a multimorbid condition and design interventions to target such multimorbidities. The present study highlights the potential benefits of sex-specific treatment and prevention efforts among female veterans with OUD and related co-occurring disorders.
Gender as a moderator of the association of military sexual trauma and posttraumatic stress symptoms.

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Journal of Clinical Psychology
First published: 15 May 2021

Objective
The current study examined the moderating role of gender on the association of military sexual trauma (MST) type (harassment-only vs. assault) and posttraumatic stress symptoms (PTSS) using the 6-factor Anhedonia Model.

Methods
Participants were 1321 service members/veterans. Two-part hurdle models assessed the moderating role of gender on the association of MST type with the presence (at least “moderate” symptoms endorsed within each cluster) or severity of PTSS and symptom clusters.

Results
Among those who experienced assault MST, women were at higher risk for the presence of intrusive, avoidance, negative affect, and anhedonia symptoms, and higher risk for more severe negative affect symptoms. Among those who experienced harassment-only MST, men were at higher risk of more severe PTSS symptoms overall and in the intrusive and dysphoric arousal symptom clusters. No other significant differences were observed.

Conclusions
Gathering information on MST type may be helpful in treatment planning.

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Self-efficacy and coping style in Iraq and Afghanistan-era veterans with and without mild traumatic brain injury and posttraumatic stress disorder.
Objective
To examine self-efficacy and coping style in combat-exposed Veterans with and without mild traumatic brain injury (mTBI) history and posttraumatic stress disorder (PTSD).

Methods
Veterans (N = 81) were categorized into four groups: comorbid mTBI and PTSD (n = 23), PTSD-only (n = 16), mTBI-only (n = 25), and combat-exposed controls (n = 17). Outcomes included the Self-Efficacy for Symptom Management Scale and the Brief Coping Orientation to Problems Experienced.

Results
Significant group effects were found on self-efficacy and coping style, even when adjusting for total mTBIs and psychiatric comorbidities. Post-hoc analyses revealed that the comorbid and PTSD-only groups generally had lower self-efficacy than the mTBI-only and control groups and that the PTSD-only group used less action-focused coping than the mTBI-only and control groups.

Conclusion
Our results suggest that self-efficacy and coping style vary as a function of mTBI history and PTSD status and that it may be important to integrate these malleable factors into interventions for this population.

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Links of Interest:

Laughter really is among the best medicines, says Air Force nurse
https://health.mil/News/Articles/2021/05/12/Laughter-really-is-among-the-best-medicines-says-Air-Force-nurse

Support for victims of sexual violence, trauma continues year round
https://health.mil/News/Articles/2021/05/13/Support-for-victims-of-sexual-violence-trauma-continues-year-round
Transgender airmen, guardians guaranteed equal opportunity under new policy

Air Force Says Suicide Rates are Dropping in 2021 After Two Years of Increases

As we move military families, we need to accelerate change or families lose
(commentary)
https://www.militarytimes.com/opinion/commentary/2021/05/14/as-we-move-military-families-we-need-to-accelerate-change-or-families-lose/

Reducing the stigma and encouraging mental health care in the military

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Resource of the Week: Telemedicine and e-Health - Mental Health Awareness Month - Special Collection on Telemedicine and Mental Health

From Mary Ann Lierbert, Inc. Publishers:

Telemedicine has been a significant tool in providing mental health services for decades. Early work in the 1950s in Nebraska helped set the stage for the broad applications and utility seen today. Over the years, the Telemedicine and e-Health Journal has published some outstanding original research and perspectives on telemental health and telebehavioral health. During this pandemic, many individuals are isolated, either because of government mandates or simply fear of interacting with others. The ability to reach out and see a provider remotely, especially in this pandemic, adds great value to one’s health and well-being. The tools available today, our computers and smartphones, and the wide variety of apps that permit real-time interaction, have provided an excellent foundation for interaction, awareness, and comfort. As May is mental health awareness month, the Journal is delighted to highlight these previously published manuscripts. Chosen from a large pool of published work from the past 2 years, they cover a wide variety of topics, many of which have been written by the journal’s editorial board members. I hope you find these noteworthy originals of value in your clinic or your research. Stay safe.