

# CDP

---



## **Research Update -- January 6, 2022**

### **What's Here:**

- Post-Traumatic Stress Disorder Treatment Outcomes in Military Clinics.
- Mental Health Stigma in Department of Defense Policies: Analysis, Recommendations, and Outcomes.
- Mental Health Care Use Among U.S. Military Veterans: Results From the 2019–2020 National Health and Resilience in Veterans Study.
- Client versus clinicians' standards of clinically meaningful change and the effects of treatment expectations on therapeutic outcomes in individuals with posttraumatic stress disorder.
- Effects of training service dogs on service members with PTSD: A pilot-feasibility randomized study with mixed methods.
- Understanding risk in younger Veterans: Risk and protective factors associated with suicide attempt, homelessness, and arrest in a nationally representative Veteran sample.
- What predicts personal growth following a deployment? An examination of National Guard soldiers through the lens of posttraumatic growth.
- Dual use of cigarettes and smokeless tobacco among active duty service members in the US military.
- Co-occurring alcohol and mental health problems in the military: Prevalence, disparities, and service utilization.
- An Exploration of Implicit Racial Bias as a Source of Diagnostic Error.

- Health symptoms after war zone deployment-related mild traumatic brain injury: contributions of mental disorders and lifetime brain injuries.
- Self-reported neurobehavioral symptoms in combat veterans: An examination of NSI with mBIAS symptom validity scales and potential effects of psychological distress.
- The interplay between social interaction quality and wellbeing in military personnel during their initial two-years of service.
- Family Treatments for Individuals at Risk for Suicide.
- Dream Enactment Behaviors Associated With Posttraumatic Stress Disorder.
- Combat Deployment Experiences and Soldier Mental Health: Examining the Factor Structure of a Combat Experiences Scale.
- Pathways to mental health care in active military populations across the Five-Eyes nations: An integrated perspective.
- Risk Factors and Comorbidities of Eating Disorders in a Large Military Cohort.
- Literature Review of Sex Differences in mTBI.
- Evaluation of a Military Informed Care Training with Private Sector Healthcare Providers.
- Predicting marital health from adverse childhood experiences among United States air force active-duty personnel.
- The role of posttraumatic stress symptoms on memory complaints and performance in active-duty service members.
- Mental health symptoms among American veterans during the COVID-19 Pandemic.
- Risk factors for decline in cognitive performance following deployment-related mild traumatic brain injury: A preliminary report.
- A Pilot Randomized Controlled Trial of the Insomnia Coach Mobile App to Assess Its Feasibility, Acceptability, and Potential Efficacy.
- Links of Interest
- Resource of the Week: Provisional Numbers and Rates of Suicide by Month and Demographic Characteristics: United States, 2020 (Centers for Disease Control and Prevention, Division of Vital Statistics)

-----

<https://doi.org/10.1093/milmed/usab454>

## **Post-Traumatic Stress Disorder Treatment Outcomes in Military Clinics.**

Robert Mclay, MD, PhD, USNR, Susan Fesperman, MPH, Jennifer Webb-Murphy, PhD, Eileen Delaney, PhD, Vasudha Ram, MPH, Bonnie Nebeker, AA, Cleo Mae Burce, MA

Military Medicine

Published: 13 November 2021

### Introduction

Despite a wide literature describing the impact of PTSD on military personnel, there is limited information concerning the results of PTSD treatment within military clinics mental health. Having such information is essential for making predictions about service members' chances of recovery, choosing best treatments, and for understanding if new interventions improve upon the standard of care.

### Materials and Methods

We reviewed data from the Psychological Health Pathways (PHP) database. Psychological Health Pathways is a standardized battery of demographics and psychometric outcome measures, including measurement of PTSD symptom severity, that is collected in military mental health clinics. We examined changes in PTSD symptom severity scores over time and developed logistic regression models to predict who responded to treatment, showed clinical success, or improved to the point that they could likely stay in the military.

### Results

After about 10 weeks in mental health clinics, severity scores for PTSD, sleep, depression, resilience, and disability all improved significantly. Of 681 patients tracked, 38% had clinically significant reductions on the PTSD Checklist (PCL) (i.e., "treatment response"), 28% no longer met criteria for PTSD on the PCL, and 23% did both (i.e., "clinical treatment success"). For the ultimate end point of "military treatment success," defined as meeting criteria for both clinical treatment success and reporting that their work-related disability was mild or better, 12.8% of patients succeeded. Depression scores were the most powerful predictor of treatment failure.

## Conclusions

Recovery from PTSD is possible during military service, but it is less likely in individuals with certain negative prognostic factors, most notably severe depression.

---

<https://doi.org/10.1093/milmed/usab471>

## **Mental Health Stigma in Department of Defense Policies: Analysis, Recommendations, and Outcomes.**

Marjorie Campbell, PhD, Jennifer L Auchterlonie, MS, Zoe Andris, BA, Denise C Cooper, PhD, Tim Hoyt, PhD

Military Medicine

Published: 13 November 2021

### Introduction

Mental health stigma is one of the most frequently reported barriers to mental health help-seeking in the military. Previous research has identified that stigma-increasing language in the United States military policies was a potential deterrent to treatment-seeking. In response to a 2016 Government Accountability Office report recommendation, the current study conducted a comprehensive review of Department of Defense and military service-specific policies to identify stigmatizing language provisions and recommend appropriate language changes.

### Methods

This review of policies comprised three sequential phases. First, a key-term search strategy was conducted on mental health (Phase 1) and substance misuse policies (Phase 2) to identify language that may contribute to stigma. Recommended language changes were identified, and the results of each phase were briefed to service-level Directors of Psychological Health. Approximately three years after initial identification, all mental health policies from Phase 1 for which language change recommendations had been made were examined to determine whether or not recommended changes had been incorporated (Phase 3).

### Results

Out of 285 mental health and substance misuse policies, 191 (67%) contained potentially stigmatizing language. Subsequent review of implementation showed that

partial or full recommended language changes had been made in 58.9% of 129 mental health-related policies that had been re-issued.

### Conclusions

This collaborative effort to identify and modify potentially stigmatizing language contributed to a substantial reduction in problematic policies across the military services. Future efforts should focus on reviewing new and re-issued policies to ensure that stigma-increasing language is not present as part of routine issuance. These efforts are part of ongoing work to address the association that language and terminology have on stigma and barriers to care.

---

<https://doi.org/10.1176/appi.ps.202100112>

### **Mental Health Care Use Among U.S. Military Veterans: Results From the 2019–2020 National Health and Resilience in Veterans Study.**

Alexander C. Kline, Ph.D., Kaitlyn E. Panza, Ph.D., Brandon Nichter, Ph.D., Jack Tsai, Ph.D., Ilan Harpaz-Rotem, Ph.D., Sonya B. Norman, Ph.D., Robert H. Pietrzak, Ph.D., M.P.H.

Psychiatric Services

Published Online: 15 Nov 2021

#### Objective:

Psychiatric and substance use disorders are prevalent among U.S. military veterans, yet many veterans do not engage in treatment. The authors examined characteristics associated with use of mental health care in a nationally representative veteran sample.

#### Methods:

Using 2019–2020 data from the National Health and Resilience in Veterans Study (N=4,069), the authors examined predisposing, enabling, and need factors and perceived barriers to care as correlates of mental health care utilization (psychotherapy, counseling, or pharmacotherapy). Hierarchical logistic regression and relative importance analyses were used.

#### Results:

Among all veterans, 433 (weighted prevalence, 12%) reported current use of mental health care. Among 924 (26%) veterans with a probable mental or substance use

disorder, less than a third (weighted prevalence, 27%) reported care utilization. Mental dysfunction (24%), posttraumatic stress disorder symptom severity (18%), using the U.S. Department of Veterans Affairs as primary health care provider (14%), sleep disorder (12%), and grit (i.e., trait perseverance including decision and commitment to address one's needs on one's own; 7%) explained most of the variance in mental health care utilization in this subsample. Grit moderated the relationship between mental dysfunction and use of care; among veterans with high mental dysfunction, those with high grit (23%) were less likely to use services than were those with low grit (53%).

#### Conclusions:

A minority of U.S. veterans engaged in mental health care. Less stigmatized need factors (e.g., functioning and sleep difficulties) may facilitate engagement. The relationship between protective and need factors may help inform understanding of veterans' decision making regarding treatment seeking and outreach efforts.

---

<https://doi.org/10.1016/j.beth.2021.12.007>

### **Client versus clinicians' standards of clinically meaningful change and the effects of treatment expectations on therapeutic outcomes in individuals with posttraumatic stress disorder.**

Sheradyn R. Matthews, Marja Elizabeth, Larissa N. Roberts, Reginald D.V. Nixon

Behavior Therapy

Available online 28 December 2021

#### Highlights

- There is limited research on clients' benchmarks of what represents clinical change.
- Clients with PTSD had benchmarks that are larger than current research standards.
- However, the majority of these benchmarks (~80%) were within current standards.
- Clients' benchmarks had a small to moderate correlation with actual PTSD outcomes.
- Clients' positive treatment success beliefs correlated with reduced PTSD severity.

## Abstract

There is limited research on the concordance between client perceptions and clinician standards of the degree of symptom change required to achieve meaningful therapeutic improvement. This was investigated in an adult sample (N = 147) who received trauma-focussed cognitive-behavioural therapies for posttraumatic stress disorder (PTSD). We examined whether clients' benchmarks of change were related to actual outcomes and the relationship between client expectations and their treatment outcomes. Clients completed measures indexing the level of symptom reduction required (in their view) to reflect a benefit or recovery from treatment and treatment expectations. Actual PTSD severity was indexed pre- and posttreatment via self-report and clinician-administered interview. Results demonstrated that the amount of change clients said they required to experience a benefit or recovery was significantly larger than typical clinical research standards. Nonetheless, the majority of client benchmarks of change (79.7-81.8%) were consistent with clinical research standards of what constitutes benefit or recovery. Client benchmarks were generally positively correlated with their actual outcomes. Clients' belief that treatment would be successful was associated with greater reductions in PTSD symptoms. These findings provide preliminary evidence that the standards used to determine clinically significant change are somewhat consistent with clients' own perceptions of required symptom change.

-----

<https://doi.org/10.1080/08995605.2021.1984126>

### **Effects of training service dogs on service members with PTSD: A pilot-feasibility randomized study with mixed methods.**

Preetha A. Abraham, Josh B. Kazman, Joshua A. Bonner, Meg D. Olmert, Rick A. Yount & Patricia A. Deuster

Military Psychology

Published online: 19 Nov 2021

This pilot-feasibility randomized control trial examined effects of an adjunctive short-term service dog training program (SDTP) for service members in out-patient treatment for PTSD. Twenty-nine volunteer participants were randomly assigned to either the SDTP (n = 12) or waitlist (n = 17); 20 participants were available for post-treatment evaluation. SDTP protocol consisted of six structured one-hour sessions with a dog-trainer conducted over two weeks, intended to train a service dog to help a fellow

Veteran. SMs completed symptom questionnaires (PTSD, insomnia, stress, depression, anxiety), and the SDTP group completed a post-intervention quantitative interview. Most effect sizes demonstrated moderate symptom reductions, both between-groups and within the SDTP group. Between-group effects were strongest for intrusive thoughts (Hedge's  $g = -0.66$ ; 95%CI:  $-1.72, 0.23$ ) and overall PTSD symptoms ( $g = -0.45$ ; 95%CI:  $-1.47, 0.45$ ); within-SDTP group effects were strongest for stress ( $d = -1.31$ , 95%CI:  $-2.17, -0.42$ ), intrusive thoughts ( $d = -0.78$ , 95%CI:  $-1.55, 0.01$ ) and hypervigilance ( $d = -0.77$ , 95%CI:  $-1.48, -0.04$ ). Qualitative analyses indicated participants found SDTP in some ways challenging yet beneficial in multiple aspects of personal and social lives. Future work should examine optimal treatment parameters (e.g., duration, "dosing") when training dogs as an adjunct to other PTSD treatment.

---

<https://doi.org/10.1080/08995605.2021.1982632>

**Understanding risk in younger Veterans: Risk and protective factors associated with suicide attempt, homelessness, and arrest in a nationally representative Veteran sample.**

Emily R. Edwards, Ariana Dichiara, Molly Gromatsky, Jack Tsai, Marianne Goodman & Robert Pietrzak

Military Psychology

Published online: 27 Dec 2021

Accumulating research suggests unique patterns of suicide risk, homelessness, and criminal-justice involvement in younger (age < 40) relative to older (aged 40+) cohorts of Veterans. However, potential explanations for these differences remain unclear. To address this gap, we analyzed data from a nationally representative sample of more than 4,000 US military Veterans to compare risk and protective correlations of prior suicidal behavior, homelessness, and justice-involvement in younger versus older Veterans. Results revealed that younger Veterans were significantly more likely than older Veterans to have a history of suicide attempt(s) (13.9% vs. 2.7%) and homelessness (22.5% vs. 8.7%). They also scored higher on measures of risk factors and lower on measures of protective factors. However, some factors – specifically, resilience, grit, impulsiveness, perceptions of the effect of the military on one's life and social support – were less strongly associated with a history of adverse events in younger versus older Veterans. Findings highlight the need for preventative



homelessness and mental health services for younger Veterans that are tailored to the unique characteristics and needs of this age cohort.

---

<https://doi.org/10.1080/08995605.2021.2002105>

**What predicts personal growth following a deployment? An examination of National Guard soldiers through the lens of posttraumatic growth.**

Adam M. Farero, Adrian J. Blow, Ryan P. Bowles, Lisa (Gorman) Ufer, Michelle Kees & Danielle Guty

Military Psychology

Published online: 27 Dec 2021

National Guard soldiers experience unique reintegration challenges. In addition to managing the consequences of combat-related trauma, they also navigate multiple transitions between military and civilian life. Despite these obstacles, many soldiers report positive outcomes and personal growth due to deployment, a phenomenon most commonly referred to in the literature as posttraumatic growth (PTG). The current study explored PTG in National Guard soldiers using a multidimensional longitudinal approach, with the goal of validating reports of PTG in soldiers. Data were collected from National Guard soldiers at pre-deployment, reintegration, one year post-deployment and two years post-deployment. Informed by PTG theory, three PTG constructs were measured (perceived ability to handle stress, social support seeking, and purpose in life) at each of the four time points, with increases in these constructs indicating growth. Potential predictors of growth in these PTG constructs were also explored. Results from a repeated measure latent profile analysis indicated that PTG did occur in certain soldiers, and that higher optimism and less severe PTSD symptoms predict this growth. These findings emphasize the importance of making efforts to facilitate PTG in soldiers.

---

<https://doi.org/10.1080/08995605.2021.2004046>

**Dual use of cigarettes and smokeless tobacco among active duty service members in the US military.**

Jie Lin, Kangmin Zhu, Aida M. Soliván-Ortiz, Stacy L. Larsen, Scott P. Irwin, Thomas R. Schneid, Craig D. Shriver & Sukhyung Lee

Military Psychology

Published online: 27 Dec 2021

The high prevalence of dual use of cigarettes and smokeless tobacco is a unique tobacco use behavior in the US military population. However, dual tobacco use has rarely been addressed in active duty populations. We aimed to identify factors contributing to dual tobacco use among active duty service members from Army and Air Force. We also compared age at initiation, duration of use, and amount of use between dual users and exclusive users. The study included 168 exclusive cigarette smokers, 171 exclusive smokeless tobacco users, and 110 dual users. In stepwise logistic regression, smokeless tobacco use among family members (OR = 4.78, 95% CI = 2.05–11.13 for father use vs. no use, OR = 3.39, 95% CI = 1.56–7.37 for other relatives use vs. no use), and deployment history (serving combat unit vs. combat support unit: OR = 4.12, 95% CI = 1.59–10.66; never deployed vs. combat support unit: OR = 3.32, 95% CI = 1.45–7.61) were factors identified to be associated with dual use relative to exclusive cigarette smoking. Cigarette smoking among family members (OR = 1.96, 95% CI = 1.07–3.60 for sibling smoking), high perception of harm using smokeless tobacco (OR = 2.34, 95% CI = 1.29–4.26), secondhand smoke exposure (OR = 4.83, 95% CI = 2.73–8.55), and lower education (associated degree or some college: OR = 2.76, 95% CI = 1.01–7.51; high school or lower: OR = 4.10, 95% CI = 1.45–11.61) were factors associated with dual use relative to exclusive smokeless tobacco use. Compared to exclusive cigarette smokers, dual users started smoking at younger age, smoked cigarettes for longer period, and smoked more cigarettes per day. Our study addressed dual tobacco use behavior in military population and has implications to tobacco control programs in the military.

---

<https://doi.org/10.1037/adb0000804>

**Co-occurring alcohol and mental health problems in the military: Prevalence, disparities, and service utilization.**

Ayer, L., Ramchand, R., Karimi, G., & Wong, E. C.

Psychology of Addictive Behaviors

2021 Dec 30

#### Objective:

To examine the prevalence of co-occurring alcohol and mental health (MH) problems (COPs), perceived MH service need, and MH service utilization among active duty service members, and to identify differences in gender, race/ethnicity, age, and sexual orientation and gender identity.

#### Method:

16,699 active duty service members participated in the Department of Defense's 2015 Health Related Behaviors Survey. Measures included demographics, combat deployment, smoking status, problematic alcohol use (Alcohol Use Disorders Identification Test-C, AUDIT-C), posttraumatic stress disorder (PTSD Checklist, Civilian Version, PCL-C), depression (Patient Health Questionnaire-9, PHQ-9), anxiety (Generalized Anxiety Disorder-7, GAD-7), and perceived need for and use of MH services. We examined groups of service members with probable: COP, alcohol problem only, MH problem only, and neither.

#### Results:

Eight percent of service members reported COPs, 26.89% reported alcohol use problem only, and 9.41% reported a MH condition only. COPs were more common among those who were lesbian, gay, bisexual, and transgender (LGBT), those who had three or more combat deployments, and smokers, and less common among those aged 35 years and older, Asian or Black, and in the Air Force and Coast Guard (relative to Navy). Those reporting a probable MH problem only were significantly less likely to report use of past year MH counseling than those with probable COPs; otherwise, patterns of service utilization and perceived need were similar.

#### Conclusions:

COPs are common enough that screening for and attention to their co-occurrence are needed in the military, and some subgroups of service members are at particularly high risk for COPs. Future research and policy should delve deeper into how the needs of service members with COPs can be addressed. (PsychoInfo Database Record (c) 2021 APA, all rights reserved).

---

<https://doi.org/10.1057/s11231-021-09327-6>

**An Exploration of Implicit Racial Bias as a Source of Diagnostic Error.**

Levin E. C.

American Journal of Psychoanalysis

2021 Dec; 81(4): 496-510

Recent events led this author to realize that an error made during the Vietnam War by him and others had been due to focusing too narrowly on predisposing factors for PTSD while failing to consciously acknowledge acute systemic stressors. In not accepting that along with the stress of combat, Black troops daily experienced acute pervasive systemic racism, he failed to understand correctly their disproportionately higher levels of PTSD when compared to white troops. Motivating factors to examine this error included a recent movie by Spike Lee. Oral histories of Black veterans were then used to research the experience of Blacks in the military in two world wars and the Vietnam War. Little change in the treatment of Black service members was evident across the time frame which included WWI, WWII and the Vietnam War. An understanding of Shay's concept of moral injury was found very valuable in understanding the consequences of PTSD.

---

<https://doi.org/10.1080/02699052.2021.1959058>

**Health symptoms after war zone deployment-related mild traumatic brain injury: contributions of mental disorders and lifetime brain injuries.**

McDonald, S. D., Walker, W. C., Cusack, S. E., Yoash-Gantz, R. E., Pickett, T. C., Cifu, D. X., Mid-Atlantic Mirecc Workgroup, V., & Tupler, L. A.

Brain Injury

2021 Sep 19; 35(11): 1338-1348

Primary objective:

To gain a better understanding of the complex relationship between combat deployment-related mild traumatic brain injury (mTBI) and persistent post-concussive symptoms (PPCSs), taking into consideration a wide range of potentially mediating and confounding factors.

Research design:

Cross-sectional.

#### Methods and procedures:

Subjects were 613 U. S. military Veterans and Service Members who served during operations Enduring Freedom, Iraqi Freedom, or New Dawn (OEF/OIF/OND) and completed a structured interview of mental disorders and a battery of questionnaires. Hierarchical binary logistic regression analyses were used to test the hypotheses.

#### Main outcomes and results:

After accounting for mental disorders, lifetime mTBIs outside of OEF/OIF/OND deployment, medical conditions, and injury/demographic characteristics, deployment-related mTBI continued to be associated with several PPCSs (headaches, sleep disturbance, and difficulty making decisions). Deployment-related mTBI was also associated with two symptoms not normally associated with mTBI (nausea/upset stomach and numbness/tingling).

#### Conclusions:

After adjusting for a wide range of factors, OEF/OIF/OND deployment-related mTBI was still associated with PPCSs on average 10 years after the injury. These findings suggest that mTBI sustained during OEF/OIF/OND deployment may have enduring negative health effects. More studies are needed that prospectively and longitudinally track health and mental health outcomes after TBI.

----

<https://doi.org/10.1037/pas0001047>

### **Self-reported neurobehavioral symptoms in combat veterans: An examination of NSI with mBIAS symptom validity scales and potential effects of psychological distress.**

Shura, R. D., Armistead-Jehle, P., Rowland, J. A., Taber, K. H., & Cooper, D. B.

Psychological Assessment

2021 Dec; 33(12): 1192-1199

This study evaluated symptom validity scales from the Neurobehavioral Symptom Inventory (NSI) and mild Brain Injury Atypical Symptom Scale (mBIAS) in a sample of 338 combat veterans. Classification statistics were computed using the Structured Inventory of Malingered Symptomatology (SIMS) as the validity criterion. Symptom distress was assessed with the Patient Health Questionnaire-9 and Posttraumatic Stress Disorder (PTSD) Checklist-5. At SIMS > 14, the NSI total score resulted in the

highest area under the curve (AUC; .91), followed by Validity-10 (AUC = .88) and mBIAS (AUC = .67). At SIMS > 23, both NSI total and Validity-10 AUCs decreased to .88; in contrast, mBIAS AUC increased to .75. The NSI total score and Validity-10 were interpreted to reflect symptom magnification, whereas the mBIAS may reflect symptom fabrication. There was a subsample with elevated Patient Health Questionnaire-9 (PHQ-9) and PTSD Checklist-5 scores who were significantly distressed but not deemed invalid on the NSI; however, there appears to be an upper threshold on the NSI total score (>69) beyond which nobody produced an invalid score on the SIMS. A recommended approach is provided for using NSI-related validity measures. (PsyInfo Database Record (c) 2021 APA, all rights reserved).

---

<https://doi.org/10.1080/08995605.2021.2015937>

### **The interplay between social interaction quality and wellbeing in military personnel during their initial two-years of service.**

Monique F. Crane, David Forbes, Virginia Lewis, Meaghan O'Donnell & Lisa Dell

Military Psychology

Published online: 06 Jan 2022

This research examined the nature of social interaction profiles in the initial two-years of military service, profile association to early vulnerability to psychological distress, and the association between supervisor interaction qualities in the likelihood of profile membership. Data were collected as part of a larger longitudinal study. Participants who completed key variables at either 3–12 months post-enlistment (N = 5,233; 85.6% male) or 15–24 months post-enlistment (N = 2,162; 79.2% male) were included in the cross-sectional profile analysis of social interaction quality from military and nonmilitary sources. Cross-sectional latent profile analyses and transition analysis were used to investigate the social interaction profiles at each time-point, the effect of leader interactions on movement between profiles, and related psychological distress outcomes. Social interaction quality, and in particular colleague interactions, was predictably associated with psychological distress. Leadership interactions were associated with the nature of colleague social interactions. Greater positive social interactions with leadership was related to a reduced likelihood of experiencing less frequent negative interactions with colleagues. The findings implicate a possible role for supervisors in perpetuating positive or negative colleague interactions. Moreover, a

trajectory of vulnerability to psychological distress may start in the initial two-years of military service and emerge from the psychosocial context.

---

<https://doi.org/10.1027/0227-5910/a000828>

## **Family Treatments for Individuals at Risk for Suicide.**

Sarah R. Sullivan, Angela Page Spears, Emily L. Mitchell, Samantha Walsh, Chase Love, and Marianne Goodman

Crisis

Published Online: November 11, 2021

### Background:

This PRISMA scoping review explored worldwide research on family-based treatments for suicide prevention. Research on this topic highlights the importance of facilitating familial understanding of a suicidal individual. Aim: The review sought evidence of outcomes of trials in which both the patient and family member in the intervention arm attended the same sessions at which suicide was openly discussed.

### Method:

To explore this topic, the authors searched for randomized and nonrandomized controlled trials using Medline (Ovid), PsycINFO (Ovid), Social Services Abstracts (EBSCO), and Web of Science on July 8, 2020.

### Results:

Ten different studies were included that spanned five treatment modalities. Specifically, of the interventions in these 10 articles, 40% employed some sort of cognitive-behavioral therapy, 20% examined attachment-based family therapy, 20% used family-based crisis intervention, and the remaining 20% were distinct interventions from one another. Additionally, several of these articles demonstrated rigorous study methodology and many of the articles reported significant improvements in suicidal ideation or behaviors.

### Conclusion:

Several important research gaps were identified. While this approach has been largely understudied, and to date has been primarily researched in adolescent populations, family interventions have great potential for treatment and prevention of suicidality.

---

<https://doi.org/10.1176/appi.neuropsych.21050115>

### **Dream Enactment Behaviors Associated With Posttraumatic Stress Disorder.**

Melissa B. Jones, M.D., Ritwick Agrawal, M.D., Amir Sharafkhaneh, M.D., Mark E. Kunik, M.D., Ricardo E. Jorge, M.D., Laura Marsh, M.D.

The Journal of Neuropsychiatry and Clinical Neurosciences  
Published Online: 12 Nov 2021

The investigators aimed to draw attention to current debates surrounding the etiologies of dream enactment behaviors in patients with posttraumatic stress disorder (PTSD). The phenomenological overlap between PTSD-related nocturnal symptoms, rapid eye movement sleep behavior disorder (RBD), and trauma-associated sleep disorder (TASD) is discussed. Strategies used to diagnose and manage dream enactment behaviors, whether due to RBD or another confounding sleep disorder, are considered. Finally, the need for further research on the pathophysiological overlap and integrated treatment of PTSD, RBD, and, possibly, TASD is highlighted.

---

<https://doi.org/10.1093/milmed/usab456>

### **Combat Deployment Experiences and Soldier Mental Health: Examining the Factor Structure of a Combat Experiences Scale.**

Haley Sherman, MS, CFLE, Nicky Frye-Cox, PhD, Mallory Lucier-Greer, PhD, LMFT

Military Medicine  
Published: 10 November 2021

#### **Introduction**

Researchers and practitioners are invested in understanding how deployment experiences impact the nearly 193,000 U.S. service members who deploy in a given year. Yet, there remains a need to adequately identify salient deployment experiences through survey measurement tools and understand how differential experiences are uniquely related to mental health outcomes. Therefore, this study examined the factor



structure of an established combat experiences measure from the Army Study to Assess Risk and Resilience in Service members (Army STARRS) dataset to identify underlying survey constructs that reflect nuanced deployment experiences. Then, we examined the association between diverse combat experiences and current mental health symptoms (i.e., anxiety and depressive symptoms) and the mediating role of coping.

### Materials and Methods

Data were drawn from the Army STARRS data (N = 14,860 soldiers), specifically the All Army Study component. A principal component analysis (PCA) was conducted to examine the dimensionality of the combat experiences scale, and then a path model was conducted to examine the relationships between combat experiences, coping with stress following a deployment, and mental health symptoms while controlling for relevant individual and interpersonal factors.

### Results

Results from the principal component analysis suggested that the Army STARRS combat experiences scale encompasses two components, specifically: “Expected combat experiences” and “Responsible for non-enemy deaths.” Both “Expected combat experiences” and “Responsible for non-enemy deaths” were associated with higher levels of anxiety and depressive symptoms, respectively, and “Responsible for non-enemy deaths” was also indirectly linked to these mental health outcomes through coping with stress after deployment.

### Conclusions

These findings provide insight into the dimensionality of combat experiences and offer practitioners a more nuanced understanding of how to process unique combat experiences that differentially relate to mental health symptoms.

---

<https://doi.org/10.1016/j.cpr.2021.102100>

### **Pathways to mental health care in active military populations across the Five-Eyes nations: An integrated perspective.**

Fikretoglu, D., Sharp, M. L., Adler, A. B., Bélanger, S., Benassi, H., Bennett, C., Bryant, R., Busuttil, W., Cramm, H., Fear, N., Greenberg, N., Heber, A., Hosseiny, F., Hoge, C. W., Jetly, R., McFarlane, A., Morganstein, J., Murphy, D., O'Donnell, M., Phelps, A., ... Pedlar, D.

Clinical Psychology Review  
2021 Nov 11; 91: 102100

Military service is associated with increased risk of mental health problems. Previous reviews have pointed to under-utilization of mental health services in military populations. Building on the most recent systematic review, our narrative, critical review takes a complementary approach and considers research across the Five-Eyes nations from the past six years to update and broaden the discussion on pathways to mental healthcare in military populations. We find that at a broad population level, there is improvement in several indicators of mental health care access, with greater gains in initial engagement, time to first treatment contact, and subjective satisfaction with care, and smaller gains in objective indicators of adequacy of care. Among individual-level barriers to care-seeking, there is progress in improving recognition of need for care and reducing stigma concerns. Among organizational-level barriers, there are advances in availability of services and cultural acceptance of care-seeking. Other barriers, such as concerns around confidentiality, career impact, and deployability persist, however, and may account for some remaining unmet need. To address these barriers, new initiatives that are more evidence-based, theoretically-driven, and culturally-sensitive, are therefore needed, and must be rigorously evaluated to ensure they bring about additional improvements in pathways to care.

---

<https://apps.dtic.mil/sti/pdfs/AD1151209.pdf>

### **Risk Factors and Comorbidities of Eating Disorders in a Large Military Cohort.**

Shira Maguen, Ph.D.

Northern California Institute for Research and Education

Report prepared for U.S. Army Medical Research and Development Command Fort Detrick, Maryland 21702-5012

The goal of this study is to determine the prevalence of eating disorders (EDs) among military personnel and examine risk factors for their onset and recurrence, especially military-specific exposures. We additionally aim to describe the patterns of comorbidity between EDs and other mental health conditions (e.g. PTSD, depression, and problem drinking), particularly regarding order of onset. Finally, the study explores whether certain family system stressors as well as individual or relationship factors, are

associated with EDs in military spouses. In the first year of the study all subtasks were completed on schedule. Preliminary estimates from self-report survey data from military personnel suggest that approximately 9-20% of men and 14-22% of women are either at risk for or meet the criteria for a probable eating disorders. Risk and protective factors as well as comorbid conditions were additionally calculated by survey cycle and eating disorder status (Table 2). Finally, when examining new onset EDs in military spouses using logistic regression, we found that spouse PTSD, body mass index (overweight or obese), social isolation, former smoker status, and financial problems were significant predictors of new onset Binge Eating Disorder. These findings have implications for the assessment and treatment of military personnel and spouses with eating disorders.

---

<https://doi.org/10.1080/21635781.2021.2000904>

## **Evaluation of a Military Informed Care Training with Private Sector Healthcare Providers.**

Elisa Borah, Valerie Rosen, Jessica Fink & Christopher Paine

Military Behavioral Health

Published online: 13 Nov 2021

Military cultural competence that supports military-informed care (MIC) of veterans and service members is a necessity for healthcare systems to effectively care for 22 million veterans who receive healthcare outside of the Department of Veterans Affairs (VA). This study evaluated a 2-hour military informed care training with 77 healthcare providers that was developed based on input from veteran patients. Changes in knowledge, attitudes and skills were assessed with the Assessment of Military Cultural Competence (AMCC). Trainees showed improvements in knowledge ( $t(73) = 17.19, p < .000$ ), attitudes and skills. Respondents' attitudes improved regarding whether the respondent's cultural background influences their delivery of care,  $t(75) = -3.24, p = .002$ , whether a patient's military or cultural background can impact their perception of care,  $F(1, 147) = 5.26, p = .023$ , whether the respondent's cultural beliefs can be at odds with other cultures or the military,  $F(1, 148) = 11.66, p = .001$ , and whether the military is a culture,  $t(76) = -3.70, p < .000$ . Trainees' skills improved in two of four areas, including looking up unfamiliar cultural phrases or military terms  $F(1, 150) = 4.13, p = .044$ , and screening for diseases/disorders based on prevalence within a culture or within the military,  $F(1, 150) = 18.22, p < .001$ .

---

<https://doi.org/10.1093/milmed/usab472>

## **Literature Review of Sex Differences in mTBI.**

Nicole Haynes, MC, USNR, Tress Goodwin, MD

Military Medicine

Published: 13 November 2021

### Introduction

Traumatic brain injury (TBI) remains a significant source of morbidity worldwide and is of particular concern for the military. Scientific literature examining sex differences in TBI is highly contradictory with some reporting better outcomes in men, others reporting better outcomes in women, and others reporting mixed results or no difference. While the exact cause is currently debated, the existence of such differences has important implications for surveillance techniques, treatment options, and management of long-term consequences. As the number of women within the U.S. military ranks increases and with the opening of combat roles to women in 2013, increased awareness of probable sex differences regarding TBI responses will enable better standard of care.

### Materials and Methods

Using the PubMed database, a keyword search using gender, “sex factors”, “sex dependent”, “gender disparity”, TBI, “traumatic brain injury”, mTBI (mild TBI), and “cranial trauma” was used to identify articles of interest. Results were filtered for written in the last 5 years, English, and free full text. References of relevant articles were cross-checked for additional publications. Articles familiar to the authors were also included.

### Results

We review literature that includes analysis of age as an interaction in TBI, hypothesized mechanisms to explain variations in outcomes between men and women, and the need for inclusion of sex as a criterion in future studies.

### Conclusions

Emerging studies underscore the complexity of interpreting sex differences in TBI. The long-held belief that women have a neuroprotective advantage compared to men based on higher levels of sex hormones is being re-evaluated. Past conclusions have relied extensively on clinical studies that include a disproportionate number of men or do not

stratify results based on sex. While sex hormones may be neuroprotective, underlying mechanisms are far from clarified. Future TBI studies must include women and gonadal hormone levels should be measured to address potential variables. Given the significant number of TBIs within the military, an improved understanding of TBI pathophysiology and outcomes is important considerations for mission success and servicemember longevity.

---

<https://doi.org/10.1037/cfp0000207>

### **Predicting marital health from adverse childhood experiences among United States air force active-duty personnel.**

Cigrang, J., Balderrama-Durbin, C., Snyder, D. K., Parsons, A. M., Lorko, K., Gupta, A., Smith Slep, A. M., Heyman, R. E., Mitnick, D. M., Wijdenes, K. L., & Yahle, C.

Couple and Family Psychology: Research and Practice  
Advance online publication

Marital dysfunction in military samples demands special scrutiny because of its concurrent and prospective linkages with a broad spectrum of mental and physical health disorders, as well as its demonstrated adverse impact on military readiness. Although previous research has shown higher risk for marital distress and divorce among female service members (SMs), particularly at the enlisted ranks, contributing factors to this elevated risk remain largely undetermined. The present study examined the antecedent contributing influence of exposure to adverse childhood experiences (ACEs) on current marital health in a sample of 373 early-career active-duty Airmen, as well as the potential moderating effect of sex on the magnitude of adverse impact. Results indicated higher prevalence of ACEs for this military sample compared with a community sample and higher prevalence of ACEs for female SMs compared with their male counterparts. Moreover, findings revealed the relatively greater adverse impact of childhood abuse or neglect for female SMs in increasing their likelihood of both IPV perpetration and victimization. Overall, these findings indicate the importance of screening for both antecedent and concurrent indicators of marital health in military settings and developing brief intervention protocols targeting relationship distress and its comorbid conditions in this population. (PsychoInfo Database Record (c) 2021 APA, all rights reserved)

---

<https://doi.org/10.1080/13854046.2021.1998635>

## **The role of posttraumatic stress symptoms on memory complaints and performance in active-duty service members.**

Seth G. Disner, Elsa K. Mattson, Nathaniel W. Nelson & Patrick Armistead-Jehle

The Clinical Neuropsychologist

Published online: 15 Nov 2021

### Objective:

Memory complaints are the most common form of cognitive limitation reported by military service members, but prior research suggests that posttraumatic stress symptoms (PTSS) may account for the link between subjective cognitive complaints and objective cognitive performance. The mechanisms underlying this relationship are largely unknown, including whether the finding applies to memory complaints and performance, which clinical dimensions are involved, and how the association varies when memory complaints are non-credible.

### Method:

Using a sample of 196 US military service members, the present study aims to address these gaps by modeling the relationship between objective memory performance and plausible/implausible subjective memory complaints, then evaluating how the association is influenced by PTSS and clinical traits commonly found within PTSS (e.g. depression, anxiety, and somatic concerns).

### Results:

Overall memory complaints were associated with immediate and delayed recall, but both associations were fully mediated by PTSS (95% CI  $-0.14$ ,  $-0.01$ ; 95% CI  $-0.14$ ,  $-0.02$ , respectively). Implausible memory complaints, however, were inconsistently linked to memory performance, and no PTSS mediation was observed. Of the clinical traits, only depression moderated the impact of PTSS, specifically by influencing the link between PTSS and overall memory complaints ( $\beta = -0.02$ ,  $SE = 0.004$ ,  $p < .001$ ).

### Conclusions:

These results corroborate the importance of assessment for PTSS and depression in service members who report subjective memory complaints and highlight how targeted intervention for these conditions may play a key role in the management of memory complaints.

-----  
<https://doi.org/10.1016/j.psychres.2021.114292>

## **Mental health symptoms among American veterans during the COVID-19 Pandemic.**

ER Pedersen, JP Davis, J Prindle, RE Fitzke, DD Tran, S Saba

Psychiatry Research  
Volume 306, December 2021

### Highlights

- Veteran participants assessed throughout one year of the COVID-19 pandemic experienced significant increases in their symptoms of posttraumatic stress disorder, depression, and anxiety over time.
- Those who screened positive for pre-pandemic alcohol use disorder or cannabis use disorder had higher symptoms prior to the pandemic and throughout the course of the pandemic.
- Outreach, prevention, and intervention efforts are needed for veterans in the post-pandemic period, especially for those with co-occurring substance use disorders and mental health symptoms.

### Abstract

We examined the symptom trajectories of posttraumatic stress disorder (PTSD), depression, and anxiety among 1,230 American veterans assessed online one month prior to the COVID-19 outbreak in the United States (February 2020) through the next year (August 2020, November 2020, February 2021). Veterans slightly increased mental health symptoms over time and those with pre-pandemic alcohol and cannabis use disorders reported greater symptoms compared to those without. Women and racial/ethnic minority veterans reported greater symptoms pre-pandemic but less steep increases over time compared to men and white veterans. Findings point to the continued need for mental health care efforts with veterans.

-----

<https://doi.org/10.1080/13554794.2021.2002912>

**Risk factors for decline in cognitive performance following deployment-related mild traumatic brain injury: A preliminary report.**

Maya Troyanskaya, Nicholas J. Pastorek, Elisabeth A. Wilde, Kathryn A. Tombridge, Alyssa M. Day, Harvey S. Levin & Randall S. Scheibel

Neurocase

Published online: 16 Nov 2021

Thorough identification of risk factors for delayed decline in cognitive performance following combat-related mild traumatic brain injury (mTBI) is important for guiding comprehensive post-deployment rehabilitation. In a sample of veterans who reported at least one deployment-related mTBI, preliminary results indicate that factors including a history of loss of consciousness over 1 min, current obesity and hypertension, and Black race were more prevalent in those with decreased scores on a measure of memory function. These factors should be considered by clinicians and researchers working with current and former military personnel.

---

<https://doi.org/10.1016/j.beth.2021.11.003>

**A Pilot Randomized Controlled Trial of the Insomnia Coach Mobile App to Assess Its Feasibility, Acceptability, and Potential Efficacy.**

E Kuhn, KE Miller, D Puran, J Wielgosz, SLY Williams, JE Owen, BK Jaworski, HW Hallenbeck, S McCaslin, K Taylor

Behavior Therapy

Available online 19 November 2021

Highlights

- The Insomnia Coach mobile app is a scalable, self-guided method to deliver CBT-I.
- Veterans with insomnia symptoms found the app feasible and acceptable to use.
- Insomnia Coach showed improvements on select sleep and mental health symptoms.



## Abstract

Insomnia is highly prevalent among military veterans but access to cognitive behavioral therapy for insomnia (CBT-I) is limited. Thus, this study examined the feasibility, acceptability, and potential efficacy of Insomnia Coach, a CBT-I-based, free, self-management mobile app. Fifty U.S. veterans, who were mostly male (58%) and mean age 44.5 (range = 28 to 55) years with moderate insomnia symptoms were randomized to Insomnia Coach (n = 25) or a waitlist control condition (n = 25) for 6 weeks. Participants completed self-report measures and sleep diaries at baseline, post-treatment, and follow-up (12 weeks post-randomization), and app participants (n = 15) completed a qualitative interview at post-treatment. Findings suggest that Insomnia Coach is feasible to use, with three-quarters of participants using the app through 6 weeks and engaging with active elements. For acceptability, perceptions of Insomnia Coach were very favorable based on both self-report and qualitative interview responses. Finally, for potential efficacy, at post-treatment, a larger proportion of Insomnia Coach (28%) than waitlist control participants (4%) achieved clinically significant improvement ( $p = .049$ ) and there was a significant treatment effect on daytime sleep-related impairment ( $d = -0.6$ ,  $p = .044$ ). Additional treatment effects emerged at follow-up for insomnia severity ( $d = -1.1$ ,  $p = .001$ ), sleep onset latency ( $d = -0.6$ ,  $p = .021$ ), global sleep quality ( $d = -0.9$ ,  $p = .002$ ), and depression symptoms ( $d = -0.8$ ,  $p = .012$ ). These findings provide preliminary evidence that among veterans with moderate insomnia symptoms a CBT-I-based self-management app is feasible, acceptable, and promising for improving insomnia severity and other sleep-related outcomes. Given the vast unmet need for insomnia treatment in the population, Insomnia Coach may provide an easily accessible, convenient public health intervention for individuals not receiving care.

-----

## Links of Interest

Military suicides are increasing. Theater of War is offering more than just a show of sympathy.

Through performance and discussion, soldiers find new meaning in ancient Greek drama

<https://www.washingtonpost.com/theater-dance/2022/01/01/theater-of-war-suicide-prevention/>

Staff Perspective: Digging Deeper

<https://deploymentpsych.org/blog/staff-perspective-digging-deeper>

Eight Tips to Get Better, More Restful Sleep

<https://www.health.mil/News/Articles/2022/01/03/Eight-Tips-to-Get-Better-More-Restful-Sleep>

Why Less Sunlight in the Wintertime Can Put You at Risk of Depression

<https://www.health.mil/News/Articles/2021/12/07/Why-Less-Sunlight-in-the-Wintertime-Can-Put-You-at-Risk-of-Depression>

More people are joining the Air Force in their late 30s

<https://www.airforcetimes.com/news/your-air-force/2022/01/05/more-people-are-joining-the-air-force-in-their-late-30s/>

Turning Pain Into Prose

<https://www.maketheconnection.net/read-stories/turning-pain-into-prose/>

Air Force to Announce Working Group to Study Resilience, Mental Health

<https://www.airforcemag.com/air-force-to-announce-working-group-resilience-mental-health/>

-----

**Resource of the Week: [Provisional Numbers and Rates of Suicide by Month and Demographic Characteristics: United States, 2020](#)**

From the Centers for Disease Control and Prevention, Division of Vital Statistics:

**Objectives**

This report presents provisional numbers of deaths due to suicide by demographic characteristics (sex and race and Hispanic origin) and by month for 2020 and compares them with final numbers for 2019. Both age-adjusted and age-specific suicide rates are presented by sex and race and Hispanic origin and compared with final 2019 rates.

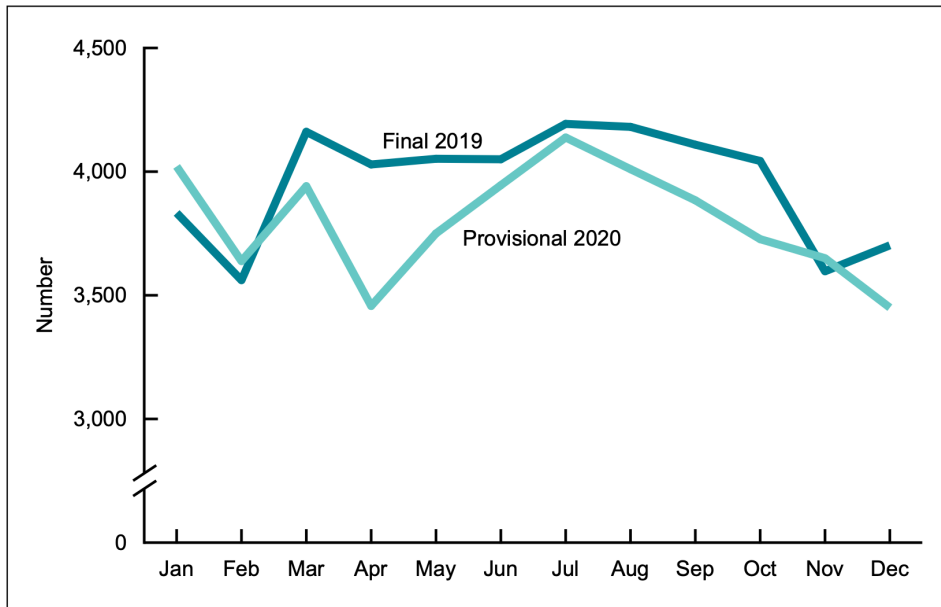
**Methods**

Data are based on 99% of all 2020 death records received and processed by the National Center for Health Statistics as of May 19, 2021. Comparisons are made with final 2019 data. Deaths due to suicide were identified using International Classification of Diseases, 10th Revision underlying cause-of-death codes U03, X60–X84, and Y87.0.

## Results

The provisional number of suicides in 2020 (45,855) was 3% lower than in 2019 (47,511). The provisional age-adjusted suicide rate was also 3% lower in 2020 (13.5 per 100,000) than in 2019 (13.9). The monthly number of suicides was lower in 2020 than in 2019 in March through October and December. The largest percentage difference between monthly numbers for 2019 and 2020 occurred in April, where the provisional number in 2020 (3,468) was 14% lower than in 2019 (4,029). The age-adjusted suicide rate was 2% lower in 2020 than in 2019 for males (21.9 compared with 22.4) and 8% lower for females (5.5 compared with 6.0). Females in all race and Hispanic-origin groups experienced declines in suicide rates between 2019 and 2020, although only the 10% decline for non-Hispanic white females was significant. Rates declined for non-Hispanic white and non-Hispanic Asian males but increased for non-Hispanic black, non-Hispanic American Indian or Alaska Native, and Hispanic males.

Figure 1. Number of suicides, by month: United States, final 2019 and provisional 2020



NOTE: Suicides are identified with *International Classification of Diseases, 10th Revision* codes U03, X60–X84, and Y87.0.  
SOURCE: National Center for Health Statistics, National Vital Statistics System, Mortality.

-----

Shirl Kennedy, BS, MA

Research Editor

Henry M. Jackson Foundation employee collaborating with Center for Deployment Psychology

Office: (727) 537-6160

Email: shirley.kennedy.ctr@usuhs.edu