CDP

Uniformed Services University

Research Update -- April 25, 2019

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https://www.ptsd.va.gov/publications/ctu_docs/ctu_v13n2.pdf

Clinician's Trauma Update Online (CTU-Online)

April 2019 Issue: Vol. 13(2)
National Center for PTSD

CTU-Online includes brief updates on the latest clinically relevant research. Content on treatment and assessment is emphasized. Publications on other topics are included if the content has significant clinical implications.

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https://journals.sagepub.com/doi/abs/10.1177/0095327X19842220

Subtypes of Mental Health Stigma and Barriers to Care Among National Guard Personnel: Results of a Latent Class Analysis.

Bryan, C. J., Wood, D., Applegarth, M., & Bryan, A. O.

Armed Forces & Society
First Published April 10, 2019
https://doi.org/10.1177/0095327X19842220

U.S. National Guard (NG) military personnel experience many barriers to care such as limited access to health-care services and geographic separation from service providers. Although stigma and barriers to mental health care have been examined in the military, little is known about how different facets of stigma and barriers to care might impact different military subgroups. In a sample of 965 NG personnel, latent class analysis was used to identify distinct subgroups of stigma and barriers to care. Four groups were identified: no stigma or barriers (31%), mild stigma and barriers (30%), high stigma and career concerns (20%), and moderate stigma and barriers (20%). Classes significantly differed with respect to several demographic characteristics, rates of mental health conditions, and rates of previous suicidal thoughts and behaviors. Results suggest that different subgroups of NG personnel vary with respect to levels of perceived stigma, barriers to care, and mental health needs.

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https://psycnet.apa.org/record/2019-12083-001

Provider perspectives on choosing prolonged exposure of cognitive processing therapy for PTSD: A national investigation of VA residential treatment providers.

Simiola, V., Ellis, A. E., Thompson, R., Schnurr, P. P., & Cook, J. M.

Practice Innovations
Advance online publication
http://dx.doi.org/10.1037/pri0000091

As part of a longitudinal mixed-methods investigation on implementation of 2 evidence-based psychotherapies (EBPs) for Posttraumatic Stress Disorder, 164 mental health providers from 38 Department of Veterans Affairs (VA) residential treatment programs across the United States were asked questions about their decision making for using Prolonged Exposure and Cognitive Processing Therapy. Many providers viewed both EBPs as equally efficacious and encouraged veterans to decide for themselves which treatment they wished to engage in. Some providers said that it was hard to know which EBP would be the most effective for a given patient, and that occasionally they started work with a veteran thinking that a particular EBP would work and were surprised when the veteran did not receive the full potential benefit of the intervention. Other providers noted that their decision making regarding which EBP to use depended on the type and nature of the veterans' index trauma, memory of the trauma, and traumatic stress symptoms (e.g., fear vs. guilt). Additional factors that impacted the choice of EBP included whether the patient already had one of the treatments before or if a provider deemed one as more compatible with their previous training. Implications for clinical practice as well as the design and improvement of training and implementation efforts are discussed. (PsycINFO Database Record (c) 2019 APA, all rights reserved)

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https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2730724

Effectiveness and Acceptability of Cognitive Behavior Therapy Delivery Formats in Adults With Depression: A Network Meta-analysis.

Cuijpers P, Noma H, Karyotaki E, Cipriani A, Furukawa TA

JAMA Psychiatry
Published online April 17, 2019
doi:10.1001/jamapsychiatry.2019.0268

Key Points

Question

Which cognitive behavior therapy delivery format is most effective and acceptable for the treatment of acute depression?

Findings

In this network meta-analysis of 155 trials involving 15 191 patients, no statistically significant differences in effectiveness were found among individual, group, telephone, and guided self-help treatment formats, although acceptability may be somewhat lower for guided self-help format. Unguided self-help therapy was not more effective than care as usual.

Meaning

For acute symptoms of depression, group, telephone-administered, and guided self-help (internet-based or not) cognitive behavior therapy appeared to be effective and may be considered as alternatives to individual therapy.

Abstract

Importance

Cognitive behavior therapy (CBT) has been shown to be effective in the treatment of acute depression. However, whether CBT can be effectively delivered in individual, group, telephone-administered, guided self-help, and unguided self-help formats remains unclear.

Objective

To examine the most effective delivery format for CBT via a network meta-analysis.

Data Sources

A database updated yearly from PubMed, PsycINFO, Embase, and the Cochrane Library. Literature search dates encompassed January 1, 1966, to January 1, 2018.

Study Selection

Randomized clinical trials of CBT for adult depression. The 5 treatment formats were compared with each other and the control conditions (waiting list, care as usual, and pill placebo).

Data Extraction and Synthesis
PRISMA guidelines were used when extracting data and assessing data quality. Data were pooled using a random-effects model. Pairwise and network meta-analyses were conducted.

Main Outcomes and Measures
Severity of depression and acceptability of the treatment formats.

Results
A total of 155 trials with 15 191 participants compared 5 CBT delivery formats with 2 control conditions. In half of the studies (78 [50.3%]), patients met the criteria for a depressive disorder; in the other half (77 [49.7%]), participants scored above the cutoff point on a self-report measure. The effectiveness of individual, group, telephone, and guided self-help CBT did not differ statistically significantly from each other. These formats were statistically significantly more effective than the waiting list (standardized mean differences [SMDs], 0.87-1.02) and care as usual (SMDs, 0.47-0.72) control conditions as well as the unguided self-help CBT (SMDs, 0.34-0.59). In terms of acceptability (dropout for any reason), individual (relative risk [RR] = 1.44; 95% CI, 1.09-1.89) and group (RR = 1.38; 95% CI, 1.06-1.80) CBT were significantly better than guided self-help. Guided self-help was also less acceptable than being on a waiting list (RR = 0.63; 95% CI, 0.52-0.75) and care as usual (RR = 0.72; 95% CI, 0.57-0.90). Sensitivity analyses supported the overall findings.

Conclusions and Relevance
For acute symptoms of depression, group, telephone, and guided self-help treatment formats appeared to be effective interventions, which may be considered as alternatives to individual CBT; although there were few indications of significant differences in efficacy between treatments with human support, guided self-help CBT may be less acceptable for patients than individual, group, or telephone formats.

See also: Can Network Meta-analysis Substitute for Direct Comparisons in Psychotherapy Trials? (editorial)

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https://academic.oup.com/sleep/article-abstract/42/Supplement_1/A81/5451959

Characterizing the Impact of Sleep on Health and Performance in Military Operational Units.

Matthew LoPresti, Jake Choynowski, Vincent Capaldi, Walter Sowden

Sleep
Volume 42, Issue Supplement_1, April 2019, Page A81
https://doi.org/10.1093/sleep/zsz067.197

Introduction

Research has demonstrated that military personnel sleep less and experience poorer quality sleep than the general civilian population and that sleep problems are related to degraded performance. However, differences in methodology for measuring sleep quantity and quality, as well as a lack of operationally-relevant performance metrics have led to challenges in demonstrating the importance of sleep in military populations. The goal of this analysis was to examine novel approaches of deriving sleep quality and quantity statistics and their relationships to health and performance outcomes in military settings.

Methods

Two studies of US Army Soldiers operating in Europe were used in the analysis, one during a training exercise and the other following a combat deployment to Afghanistan. In both studies, Soldiers completed health surveys at multiple time points and wore actigraphs. These data sources were used to examine discrepancies between self-report and objective sleep duration and to examine sleep patterns, including the shifting of sleep onset and offset times. These data, in addition to traditional sleep metrics, were then linked to health and performance outcomes.

Results

167 (Study 1) and 87 (Study 2) Soldiers completed the studies. Initial analysis suggests that novel sleep statistics, such as discrepancies between subjectively and objectively-measured sleep and tendencies towards shifting of normal sleep patterns have a greater impact on the health of Soldiers and performance of military tasks than traditional measures of sleep quantity and quality.

Conclusion

Perceptions of sleep and sleep routines are particularly important factors for maintaining health and optimal performance in Soldiers. A better understanding is needed of the specific aspects and timing of sleep that are most relevant to the unique day-to-day functioning of military personnel in various real-world environments. Training on the impact of insufficient sleep and disruptions to normal sleep routines should be incorporated into the military culture.

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https://academic.oup.com/sleep/article-abstract/42/Supplement_1/A363/5451459

Sleep Disorders in Veterans with Mild Traumatic Brain Injury.

Lissette Jimenez, Aslee Sierra-Gonzalez, Marlene Colón-Feliciano, Nashaly Khaffage-Abuomar, Gerardo Jovet, Isabel C Borras

Sleep
Volume 42, Issue Supplement_1, April 2019, Page A363
https://doi.org/10.1093/sleep/zsz067.902

Introduction
Military personnel are at high risk for traumatic brain injury (TBI). Hispanics are currently 11.4% of the active-duty military forces and the number of minority veterans is increasing. Hispanic ethnicity was reported to double the risk of mortality among veterans clinically diagnosed with TBI. Sleep disorders are common after traumatic brain injury. The purpose of this study was to characterize a population of Puerto Rican veterans with mild Traumatic Brain Injury (mTBI) and to determine the prevalence of chronic sleep disorders in the sample.

Methods
The study was a retrospective evaluation of all patient records of veterans 21-89 years old with a diagnosis of mTBI enrolled in the Polytrauma Clinic at Veterans Affairs Caribbean Healthcare System from January 2010 to April 2017. There were 333 mTBI records reviewed. The data collected included demographics, medications, comorbidities, sleep disorders, type of TBI injury, brain magnetic resonance imaging (MRI), Epworth Sleepiness Scale (ESS) and Neurobehavioral Functioning Inventory (NFI) results.

Results
Subjects were predominantly male (96%), with a mean age of 41 (range 21-89). Blast injury was present in 54% and non-blast in 45%. Eighty five percent were overweight or obese. Ninety three percent had depression, 93% anxiety, 81% cognitive disorders, 79% chronic pain, 77% post-traumatic stress disorder, 66% hypertension. All subjects were on polypharmacy and most had sleep complaints (84%). Ninety two percent had insomnia, 46% obstructive sleep apnea (OSA), 2.7% restless leg syndrome, 1.5% central sleep apnea, 1.2% narcolepsy, 1.2% REM sleep behavior disorder, 0.9% periodic leg movement disorder. Sixty six percent had other parasomnias such as

nightmares or sleepwalking. ESS was abnormal in 82%, NFI in 95% and brain MRI in 16%.

Conclusion
Insomnia, self-reported sleepiness and OSA are more common in Hispanic veterans than what has been published in non-Hispanic veterans. Chronic sleep disorders are highly prevalent in this sample of Puerto Rican veterans. Sleep disorders may contribute to the reported increased risk of mortality among Hispanic veterans with TBI.

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https://academic.oup.com/sleep/article-abstract/42/Supplement_1/A53/5451182

The Intensity And Impact Of Chronic Pain, A Story Of Difficulty Sleeping And Post-traumatic Stress Disorder.

Daniel Maguire, Melissa Milanak, Allison Wilkerson, Mark Ruddock, Diego Cobice, Tara Moore, Cherie Armour

Sleep
Volume 42, Issue Supplement_1, April 2019, Page A53
https://doi.org/10.1093/sleep/zsz067.128

Introduction
Difficulty sleeping is one of the most prevalent symptoms in Post-traumatic stress disorder, occurring in over 90% of cases. High prevalence of sleep disturbance is also noted in populations suffering from chronic pain (71-78%). Increased alcohol use and negative consequences in individuals with depression, PTSD and chronic pain has been postulated to result from insomnia symptoms made worse by alcohol use. Given the hypothesis that self-medication and withdrawal symptoms perpetuate alcohol use disorder in PTSD, it is of interest to examine the relationship between difficulty sleeping, alcohol use, chronic pain and PTSD.

Methods
As part of a larger study, participants who met the CAPS symptom endorsement requirement for PTSD were compared with non-trauma exposed controls. Participants completed inventories of pain, smoking, alcohol use and brief medical history.

Results
Thirty-two participants were included in the study. Participant groups did not differ by

age (37.97 ± 12.1), gender, ethnicity, or BMI. Difficulty sleeping and PTSD status were both significantly associated with 11 different inventories of pain, including ‘Average pain’ and ‘Pain interference with mood’. Furthermore, impact of pain on relationships with others was significantly higher in individuals with PTSD vs. non-trauma exposed controls (p=0.024) but was not related to sleep difficulties. PTSD participants also reported an increased number of alcoholic drinks per week compared to non-trauma exposed controls (p=0.03).

Conclusion
Similar perceptions of pain levels and the impact of pain on quality of life are endorsed by those with difficulties sleeping and those with PTSD. Additionally, increased alcohol use appears to play a role in sleep difficulties for those with PTSD and/or pain. Implications, limitation and future directions will be discussed.

Support (If Any)
This research is funded as part of the Randox Laboratories and Ulster University PhD Academy.

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https://academic.oup.com/sleep/article-abstract/42/Supplement_1/A350/5451131

Suicidality is Associated with Elevated Sleep Heart Rate, BMI, and Snoring in Veterans with Chronic Severe PTSD.

Steven H Woodward, Christina Khan, Andrea Jamison, Ned J Arsenault

Sleep
Volume 42, Issue Supplement_1, April 2019, Pages A350–A351
https://doi.org/10.1093/sleep/zsz067.870

Introduction
Two large epidemiological studies (Lemogne et al, 2011; Chang et al, 2016) have found baseline heart rate, assessed as part of a general health survey, to be a significant, independent, positive predictor of future completed suicide. Sleep provides an excellent opportunity to measure basal heart rate. We hypothesized that sleep heart rate would distinguish Veterans with chronic PTSD who endorsed suicidality from those that did not.

Methods
Participants were 103 male, US Military Veterans engaged in residential treatment for PTSD and in a study of the impact of canine companionship on PTSD symptoms. Their beds were equipped with mattress actigraphs enabling the acquisition of all-night heart rate derived from the thoracic pulse as well as snoring. Participants provided between 7 and 183 nights of data. Suicidality was coded 1 if a participant reported both current suicidal ideation and a history of attempts, and 0 if he reported neither.

Results
Sleep heart rate was 3.81 BPM higher in participants coded as suicidal versus those who were not (67.09 vs 63.28 BPM, $F(1,101) = 4.74$, $p = 0.032$). Snoring was also more prevalent in those coded as suicidal (1.18 vs 0.81 sec/epoch). BMI, though intended for use as a covariate, was also higher in participants coded as suicidal versus those who were not (29.4 vs 27.6). In a logistic regression, 63% of participants were correct classified as suicidal vs non-suicidal based on heart rate, snoring, and BMI.

Conclusion
Veterans, persons with PTSD, and persons with sleep disturbances, are all at elevated risk for suicide (cf. Pigeon et al, 2012). In a relatively small sample combining all three of these risk factors, sleep heart rate, snoring, and BMI, all distinguished those endorsing suicide from those who did not. These findings suggest that sleep parameters obtained longitudinally using unobtrusive methods could be informative regarding changes in suicidality over time.

Support (If Any)
Defense Health Program, Military Operational Medical Research Program, U.S. Army Medical Research and Materiel Command, Award Number: W81XWH-15-2-0005.

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https://journals.sagepub.com/doi/abs/10.1177/0022167819839907

In the Service of Science: Veteran-Led Research in the Investigation of a Theatre-Based Posttraumatic Stress Disorder Treatment.

Ali, A., Wolfert, S., & Homer, B. D.

Journal of Humanistic Psychology
First Published April 15, 2019
https://doi.org/10.1177/0022167819839907

Research data have consistently shown that military veterans are more likely than the general U.S. population to experience mental health problems, as well as homelessness and unemployment. Additionally, data show exceptionally high attrition rates from mainstream mental health treatments for veterans. While several emerging, alternative programs have great potential to support veterans in dealing with trauma and with the transition to civilian life, there is a paucity of research documenting the effectiveness of these programs. This lack of data prevails partly because of biases within the scientific community, which remains largely ignorant of the pervasive difficulties confronting veterans. Our antidote to this problem is a model of veteran-led research. In this article, we outline a set of principles of veteran-led research that we have developed through our ongoing empirical investigation of the DE-CRUIT treatment program, which uses theatre to address traumatic stress and related problems encountered by veterans. We describe the challenges involved in prioritizing the veteran perspective in conducting research within a mainstream scientific context as well as ways of meeting these challenges in order to use the tools of science to better serve our nation's veterans.

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https://academic.oup.com/sleep/article-abstract/42/Supplement_1/A138/5451097

Risk factors and Correlates of Insomnia across U.S. Army Deployment Cycle.

Daniel J Taylor, Kristi E Pruiksma, Brett Messman, Danica Slavish, Sophie Wardle-Pinkston, Douglas E Williamson

Sleep
Volume 42, Issue Supplement_1, April 2019, Pages A138–A139
https://doi.org/10.1093/sleep/zsz067.338

Introduction
The behavioral model of insomnia theorizes predispositions make people susceptible to developing insomnia in the face of precipitants. Few comprehensive longitudinal studies have investigated both predispositions and precipitants in the prediction of the development of insomnia. Many military service members face a significant potential precipitant, deployment. The current study is a prospective examination to identify predispositions and precipitants of insomnia from pre- to post-deployment in military service members.

Methods
Participants were part of a parent study that assessed US Army personnel (N = 4,104) pre-deployment and again in a smaller subsample (n = 1,828) willing to complete post-deployment assessments, using self-report measures of insomnia (i.e., Insomnia Severity Index; ISI) as well demographics, resilience and personality, social support, deployment stress, adversity and trauma, and other mental and physical health symptoms.

Results
In the subsample (n=1,828), 18% had clinically significant insomnia (ISI < 15) at baseline and the rate of insomnia increased to 31% at post-deployment. Pre- to post-deployment change in insomnia symptoms showed that 63% of the sample had no insomnia at both time points, 7% actually had insomnia that remitted (i.e., insomnia at pre-deployment but not post-deployment), 19% had new onset insomnia, and 11% had chronic insomnia (i.e., both time points). Preliminary logistic regression analyses of no insomnia vs. onset insomnia showed fewer deployments and greater insomnia symptoms (despite ISI < 15), history of stressful life events, number of children, PTSD symptoms, history of head injury, anxiety and being enlisted at baseline, all predicted onset insomnia at post-deployment. Future analyses will examine predictors of remitted vs. chronic insomnia and examine differences between all groups on deployment related stressors and post-deployment mental and physical health factors.

Conclusion
These are the first data to our knowledge to attempt to identify true predispositions and precipitants for the development of insomnia in either a civilian or a military sample. Implications will be discussed in depth at the conference.

Support (If Any)
W81XWH-08-2-0110 (Dr. Williamson),W81XWH-08-02-109 (Dr. Peterson), and W81XWH-10-1-0828 (Dr. Taylor) and 1I01CU000144-01 (Dr. Peterson, Dr. Williamson, and Dr. Taylor).

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https://academic.oup.com/sleep/article-abstract/42/Supplement_1/A139/5451106

Traumatic Stressors Associated with Elevated Insomnia Risk among Deployed Soldiers.

Elizabeth A Klingaman, Janeese A Brownlow, Michele E Jenkins, Philip R Gehrman

Sleep
Volume 42, Issue Supplement_1, April 2019, Page A139
https://doi.org/10.1093/sleep/zsz067.339

Introduction

Military service is associated with an increased risk of trauma and associated sleep problems. Although soldiers experience an elevated risk of lifetime and deployment-related traumatic stressors, few studies have examined the types of traumatic events that predict insomnia. Examining the types of trauma associated with elevated insomnia risk in active-duty military personnel is of critical importance.

Methods

Data were obtained from the All Army Study of the Army Study to Assess Risk and Resilience in Servicemembers (STARRS; unweighted N=21,449; weighted N=670,335; 18-61 years; 13.5% female). Soldiers completed the Brief Insomnia Questionnaire; DSM-5 criteria were applied to determine current insomnia status. Participants completed a 15-item lifetime trauma inventory and a 15-item deployment-related trauma inventory. Separate binomial logistic regressions identified predictors of insomnia from each inventory. Analyses adjusted for psychiatric disorders.

Results

Regarding lifetime traumatic stressors, the likelihood of insomnia was highest for those who endorsed combat death of a close friend or relative (OR=1.19, Chi-Square=1287.79, p<.001) followed by being bullied (ongoing comments or behaviors) during childhood or adolescence (OR=1.11, Chi-Square=1241.16, p<.001). For deployment-related traumatic stressors, the likelihood of insomnia was highest for those who endorsed being hazed or bullied by one or more unit members (OR=1.63, Chi-Square=597.27, p<.001) followed by having a close call (e.g., equipment shot off body, IED exploded nearby; OR=1.24, Chi-Square=315.19, p<.001).

Conclusion

In a large nationally-representative sample of Army soldiers, specific types of trauma over one’s lifetime and during deployment significantly increase the likelihood of insomnia. These findings highlight the importance of addressing traumatic stress prior to and during deployment to facilitate and optimize treatment of sleep disturbance.

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https://academic.oup.com/sleep/article-abstract/42/Supplement_1/A139/5451116

Men and Women Veterans' Military Experiences and Associated Risk of Insomnia.

Sleep
Volume 42, Issue Supplement_1, April 2019, Pages A139–A140
https://doi.org/10.1093/sleep/zsz067.340

Introduction
Experiences during military deployment may predispose Veterans to symptoms of insomnia (difficulty falling or staying asleep, waking early) following discharge. The most recent cohort of Veterans (OEF/OIF/OND) is diverse, including a high percentage of women exposed to combat conditions. It is crucial to determine which service-related experiences are associated with insomnia after discharge and potential sex differences in those relations.

Methods
Women Veterans' Cohort Study participants (N=802, Mage=43.77, 53% women) self-reported demographics, health, and military service. Hierarchical multiple regression examined the influence of service-related experiences on insomnia symptoms (Insomnia Severity Index). Age, sex, race, education, BMI, and chronic pain were entered first as controls. Deployment preparation and combat experiences [Deployment Risk & Resilience Inventory-2], number of deployments, traumatic brain injury (TBI), military sexual trauma (MST), and posttraumatic stress disorder [PTSD Checklist-Military]) were added next. Regressions were conducted by sex to assess within-group relations.

Results
Simple and full models both predicted insomnia ($F(8,793)=11.19$, $R2=.10$, $p<.001$; $F(14,787)=22.77$, $R2=.29$, $p<.001$), with the full model explaining an additional 19% of variance. Amount of preparation ($\beta=-.11$, $p=.001$) was inversely related, and combat trauma ($\beta=.14$, $p<.001$) and PTSD ($\beta=.34$, $p<.001$) were directly related to insomnia. MST, TBI, and number of deployments were unrelated. When examining men and women separately, all models predicted insomnia (p's<.001). Combat trauma and PTSD were associated with insomnia in men ($\beta=.13$, $p=.007$; $\beta=.32$, $p<.001$). For women, poor training ($\beta=-.13$, $p=.003$), number of deployments ($\beta=.11$, $p=.010$), combat trauma ($\beta=.14$, $p=.002$), and PTSD ($\beta=.35$, $p<.001$) related to insomnia.

Conclusion
While the psychological imprint of combat is known, these findings offer new evidence

about the importance of training and the potential lasting physical toll of deployment on insomnia. For women, perceived inadequate preparation conflicts with increasing exposure to combat conditions, which may interact to negatively impact health. Researchers must determine the trajectory of Veterans' sleep from pre- to post-deployment to understand how insomnia develops and identify opportunities for intervention.

Support (If Any)
Dr. Gaffey's efforts were sponsored by an Advanced Fellowship in Women's Health via the VA Office of Academic Affairs.

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https://academic.oup.com/sleep/article-abstract/42/Supplement_1/A140/5451132

Longitudinal Examination of Military-Specific Factors Affecting Sleep Quantity and Quality among U.S. Service Members.

Adam D Cooper, Rachel R Markwald, Claire A Kolaja, Isabel G Jacobson, Evan D Chinoy

Sleep
Volume 42, Issue Supplement_1, April 2019, Page A140
https://doi.org/10.1093/sleep/zsz067.341

Introduction
Sleep of insufficient quantity and/or quality is common in the military due to the demands of training, missions, and irregular work schedules or sleeping environments. These challenges can negatively affect the health and performance of military members, thereby impacting mission safety and success. We examined which military-specific factors affect sleep quantity and quality over time and across U.S. service branches.

Methods
New onsets of sleep problems and insufficient sleep hours were analyzed using data from the Millennium Cohort Study, a longitudinal study tracking military members' experiences, behaviors, and health during and after service through triennial surveys. Eligible participants joined the military within 4 years of taking their baseline survey, had not deployed before baseline, and were actively serving between baseline and first follow-up. Those who reported sufficient sleep (7-8 hours and no trouble sleeping) and

screened negative for mental health conditions at baseline were included (n=7,614). Complementary log-log models included military, demographic, and health factors measured at the survey prior to the sleep outcomes.

Results
The study population was primarily white males born after 1980, with over half being active duty, 75% enlisted, and a third had experienced combat. Army, Navy, and Marine Corps members were found to exhibit approximately an 85%, 35%, and 98% increased risk of reporting sleeping ≤5 hours a night, respectively, versus Air Force members. Furthermore, military-specific factors including combat deployment, service years, deployment length, separation status, component status, and pay grade were significantly associated with an increased risk of reporting an average of sleeping ≤5 hours per night, and reporting having one or more sleep problems.

Conclusion
Sleep quantity and quality in military members are affected by factors specific to the military experience. Strategies that improve work schedules, sleeping conditions, and screening/treatment of sleep problems should be tested and utilized when possible, within the bounds of military training and operations, to mitigate the negative impact of military factors on sleep quantity and quality over time.

Support (If Any)
The Millennium Cohort Study is core funded by the Defense Health Agency.

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https://onlinelibrary.wiley.com/doi/abs/10.1002/jclp.22776

Investigating the reliability of suicide attempt history reporting across five measures: A study of US military service members at risk of suicide.

Melanie A. Hom, Ian H. Stanley, Mary E. Duffy, Megan L. Rogers, Jetta E. Hanson, Peter M. Gutierrez, Thomas E. Joiner

Journal of Clinical Psychology
First published: 16 April 2019
https://doi.org/10.1002/jclp.22776

Objective
Utilizing a sample of military service members at risk of suicide, this study aimed to: (a) identify patterns of suicide attempt (SA) history reporting across five measures and (b)

evaluate whether consistent SA reporters (i.e., individuals who consistently report an SA history across measures) differ from inconsistent SA reporters on other clinical severity indices.

Method
Participants (N = 984) completed five validated SA history measures and self-report psychiatric symptom measures.

Results
Of the sample, 35.4% inconsistently responded to SA history measures. Inconsistent reporters disclosed more severe suicide threat histories than consistent reporters. On all other clinical severity indices, inconsistent reporters evinced either less severe or comparable symptom levels.

Conclusions
A nontrivial portion of service members may respond inconsistently to different assessments of SA history. Research is needed to identify factors that account for inconsistent SA history reporting and to improve the accuracy of SA history assessments among military personnel.

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https://link.springer.com/article/10.1007/s10943-019-00817-7

Dimensions of Religiosity and PTSD Symptom Clusters in US Veterans and Active Duty Military.

Koenig, H.G., Youssef, N.A., Ames, D. et al.

Journal of Religion and Health
First Online: 15 April 2019
https://doi.org/10.1007/s10943-019-00817-7

We examined multiple dimensions of religiosity and their relationship to the four DSM-5 PTSD symptom clusters among US Veterans and Active Duty Military (ADM), hypothesizing that religiosity would be most strongly inversely related to negative cognitions/emotions (Criterion D symptoms) and less strongly to neurobiologically based symptom clusters (B, C, and E). This cross-sectional multisite study involved 591 Veterans and ADM from across the southern USA. Inclusion criteria were having served in a combat theater and the presence of PTSD symptoms. Measures of religious

beliefs/practices, social involvement, and PTSD symptoms were administered, and bivariate and multivariate analyses were conducted in the overall sample, and in exploratory analyses, in the sample stratified by race (White, Black, and Hispanic). In the overall sample, multivariate analyses revealed that the only PTSD symptom cluster inversely related to religiosity was Criterion D, and only to organizational ($b = -0.08$, $P = 0.028$) and cognitive/intrinsic religiosity ($b = -0.06$, $P = 0.049$), relationships that were fully explained by social factors. Religious struggles, in contrast, were positively related to all four symptom clusters. Inverse relationships with Criterion D symptoms were particularly strong in Blacks, in whom inverse relationships were also present with Criterion E symptoms. In contrast, only positive relationships with PTSD symptom clusters were found in Hispanics, and no relationships (except for religious struggles) were present in Whites. As hypothesized, the inverse relationship between religious involvement and PTSD symptoms in Veterans and ADM was strongest (though modest) for Criterion D negative cognitions/emotions, especially in Blacks.

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https://onlinelibrary.wiley.com/doi/10.1002/jts.22399

Validation of an Electronic Medical Record–Based Algorithm for Identifying Posttraumatic Stress Disorder in U.S. Veterans.

Harrington, K. M., Quaden, R. , Stein, M. B., Honerlaw, J. P., Cissell, S. , Pietrzak, R. H., Zhao, H. , Radhakrishnan, K. , Aslan, M. , Gaziano, J. M., Concato, J. , Gagnon, D. R., Gelernter, J. , Cho, K.

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We developed an algorithm for identifying U.S. veterans with a history of posttraumatic stress disorder (PTSD), using the Department of Veterans Affairs (VA) electronic medical record (EMR) system. This work was motivated by the need to create a valid EMR-based phenotype to identify thousands of cases and controls for a genome-wide association study of PTSD in veterans. We used manual chart review (n = 500) as the gold standard. For both the algorithm and chart review, three classifications were possible: likely PTSD, possible PTSD, and likely not PTSD. We used Lasso regression with cross-validation to select statistically significant predictors of PTSD from the EMR and then generate a predicted probability score of being a PTSD case for every participant in the study population (range: 0–1.00). Comparing the performance of our

probabilistic approach (Lasso algorithm) to a rule-based approach (International Classification of Diseases [ICD] algorithm), the Lasso algorithm showed modestly higher overall percent agreement with chart review than the ICD algorithm (80% vs. 75%), higher sensitivity (0.95 vs. 0.84), and higher accuracy (AUC = 0.95 vs. 0.90). We applied a 0.7 probability cut-point to the Lasso results to determine final PTSD case-control status for the VA population. The final algorithm had a 0.99 sensitivity, 0.99 specificity, 0.95 positive predictive value, and 1.00 negative predictive value for PTSD classification (grouping possible PTSD and likely not PTSD) as determined by chart review. This algorithm may be useful for other research and quality improvement endeavors within the VA.

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Associations Between Trauma-Related Rumination and Symptoms of Posttraumatic Stress and Depression in Treatment-Seeking Female Veterans.

Arditte Hall, K. A., Davison, E. H., Galovski, T. E., Vasterling, J. J. and Pineles, S. L.

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Trauma-related rumination is a cognitive style characterized by repetitive negative thinking about the causes, consequences, and implications of a traumatic experience. Frequent trauma-related rumination has been linked to posttraumatic stress disorder (PTSD) and depression in civilian samples but has yet to be examined among military veterans. This study extended previous research by examining trauma-related rumination in female veterans who presented to a Veterans Affairs women's trauma recovery clinic (N = 91). The study had two main aims: (a) to examine associations between trauma-related rumination and specific PTSD symptoms, adjusting for the overlap between trauma-related rumination and other relevant cognitive factors, such as intrusive trauma memories and self-blame cognitions; and (b) to assess associations between trauma-related rumination, PTSD, and depression, adjusting for symptom comorbidity. At intake, patients completed a semistructured interview and self-report questionnaires. Primary diagnoses were confirmed via medical record review. Trauma-related rumination was common, with more than 80% of patients reporting at least sometimes engaging in this cognitive style in the past week. After adjusting for other relevant cognitive factors, trauma-related rumination was significantly associated with

several specific PTSD symptoms, rps = .33–.48. Additionally, the severity of trauma-related rumination was associated with overall PTSD symptom severity, even after adjusting for comorbid depression symptoms, rp2 = .35. In contrast, the association between trauma-related rumination and depressive symptom severity was not significant after adjusting for comorbid PTSD symptoms, rp2 = .008. These results highlight trauma-related rumination as a unique contributing factor to the complex clinical presentation for a subset of trauma-exposed veterans.

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Invariance of the Construct of Posttraumatic Stress Disorder: A Systematic Review.

Contractor, A. A., Caldas, S. V., Dolan, M. , Natesan, P. and Weiss, N. H.

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We conducted a systematic review of studies that have evaluated invariance of the construct of posttraumatic stress disorder (PTSD) to summarize their conclusions related to invariance/noninvariance and sources of noninvariance. In November 2017, we searched Pubmed, PSYCINFO, PILOTS Web of Science, CINAHL, Medline, and Psychological and Behavioral Science Collection for abstracts and articles with these inclusionary criteria: peer-reviewed, including DSM-IV or DSM-5 PTSD invariance as a main study aim, use of multigroup confirmatory factor analyses, and use of an independent PTSD instrument or module. In total, 45 articles out of 1,169 initially identified abstracts met inclusion criteria. Research assistants then followed Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to complete a secondary search and independently extract data. Results indicated that DSM-IV dysphoric arousal and DSM-5 hybrid model factors demonstrated the most stability; sources of instability were some intrusion (distress to trauma cues), dysphoria/numbing (traumatic amnesia, foreshortened future, emotional numbness, detachment), and arousal (hypervigilance) items. The PTSD Checklist and PTSD Reaction Index were most often used to assess PTSD in studies investigating its invariance; however, these measures demonstrated partial conceptual equivalence of PTSD across subgroups. Instead, clinician-administered measures demonstrated more conceptual equivalence across subgroups. Age, gender, cultural/linguistic factors, and

sample diversity had the least moderating effect on PTSD's symptom structure. Our review demonstrates the need to examine invariance of the PTSD construct following recommended guidelines for each empirical and clinical trial study to draw meaningful multigroup comparative conclusions.

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Examination of Treatment Effects on Hazardous Drinking Among Service Members With Posttraumatic Stress Disorder.

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Posttraumatic stress disorder (PTSD) and alcohol use disorder are frequently comorbid and present significant treatment challenges. Unfortunately, since the September 11, 2001, terrorist attacks in the United States, the rates of PTSD and hazardous drinking among active duty service members have increased significantly. Previous research on PTSD has typically excluded participants with current substance abuse. However, there is some research examining independent treatments for PTSD and substance abuse provided consecutively, concurrently, or as enhancements to other treatment. The current study examined the association between current hazardous drinking and PTSD treatment among 108 active duty service members with PTSD in a randomized controlled trial of group cognitive processing therapy and group present-centered therapy. Total scores above 8 on the Alcohol Use Disorders Identification Test defined hazardous alcohol use. At baseline, 25.0% of the sample was categorized as hazardous drinkers, and the hazardous and nonhazardous drinking groups did not differ in PTSD symptom severity, $F(1, 106) = 0.08$, $p = .777$, $d = 0.06$. Over the course of treatment, the two groups also did not differ significantly in PTSD symptom severity change on the PTSD Checklist, $F(1, 106) = 1.20$, $p = .280$, $d = 0.33$. Treatment for PTSD did not exacerbate hazardous drinking, and the hazardous drinking group showed significant reductions in drinking following PTSD treatment. Limitations and implications for treatment considerations are discussed.

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The Association Between Negative Trauma-Related Cognitions and Pain-Related Functional Status Among Veterans With Posttraumatic Stress Disorder and Alcohol Use Disorder.

Curry, I. , Malaktaris, A. L., Lyons, R. , Herbert, M. S. and Norman, S. B.

Journal of Traumatic Stress
First published: 26 March 2019
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Among veterans with posttraumatic stress disorder (PTSD), alcohol use disorders (AUDs) are highly prevalent. Furthermore, PTSD frequently co-occurs with chronic pain (CP), and CP is associated with an increased risk of AUD. Pain-related beliefs and appraisals are significantly associated with poorer pain-related functional status, yet few studies have examined negative trauma-related cognitions and their impact on pain-related functional disability in veterans with co-occurring PTSD and AUD. Accordingly, we examined the association between negative trauma-related cognitions and pain severity and pain disability in 137 veterans seeking treatment for PTSD and AUD. Using hierarchical multiple linear regression, we found that higher levels of negative trauma-related cognitions (e.g., “I am completely incompetent”) were associated with a higher level of pain severity, after controlling for PTSD symptom severity and frequency of alcohol use, total R2 = .07, ΔR2 = .06. Additionally, as hypothesized, we found that higher levels of negative trauma-related cognitions were associated with higher levels of pain disability, after controlling for PTSD symptom severity, frequency of alcohol use, and pain severity, total R2 = .46, ΔR2 = .03. Given that negative trauma-related cognitions contributed to pain severity and pain disability, even when controlling for PTSD severity and frequency of alcohol use, future studies should explore the potential impact of interventions that address negative trauma-related cognitions (e.g., prolonged exposure or cognitive processing therapy) on pain severity and disability.

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Supporting a Spouse With Military Posttraumatic Stress: Daily Associations With Partners’ Affect.

Carter, S. P., Giff, S. T., Campbell, S. B. and Renshaw, K. D.

Journal of Traumatic Stress
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Service members and veterans (SM/Vs) with posttraumatic stress disorder (PTSD) can receive significant benefits from social support by a spouse or romantic partner. However, little is known about how providing support impacts partners. This study sought to identify (a) how provision of support is associated with partners' daily negative and positive affect and (b) how SM/Vs' PTSD symptom severity might moderate such associations. In a 14-day daily-diary study that assessed 64 couples in which one member was an SM/V with PTSD symptoms, partners reported nightly on whether or not they provided instrumental support and/or emotional support that day as well as their current negative and positive affect. Multilevel modeling showed that the provision of emotional and instrumental support were both significantly related to partners' lower levels of negative affect, f 2 = 0.09, and higher levels of positive affect, f 2 = 0.03, on that same day but not the next day. The positive same-day effects were seen if any support was given, with no additive effects when both types of support were provided. Severity of SM/V PTSD moderated the association between provision of emotional support and lower same-day negative affect such that the association was significant only when PTSD symptoms were more severe. Overall, these findings indicate that support provision to a partner with PTSD is associated with improved affect for the romantic partner providing support. However, given that only same-day affect was associated with support, the findings may also suggest that positive affect increases the provision of support.

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https://onlinelibrary.wiley.com/doi/10.1002/jts.22396

The Impact of Military Status on Cognitive Processing Therapy Outcomes in the Community.

Dillon, K. H., LoSavio, S. T., Henry, T. R., Murphy, R. A. and Resick, P. A.

Journal of Traumatic Stress
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https://doi.org/10.1002/jts.22396

Military-affiliated individuals (i.e., active duty personnel and veterans) exhibit high rates of posttraumatic stress disorder (PTSD). Although existing evidence-based treatments for PTSD, such as cognitive processing therapy (CPT), have demonstrated effectiveness with military-affiliated patients, there is evidence to suggest these individuals do not benefit as much as civilians. However, few studies have directly compared the effects of PTSD treatment between civilian and military-affiliated participants. The current study compared treatment outcomes of military-affiliated and civilian patients receiving CPT. Participants with PTSD who were either civilians (n = 136) or military-affiliated (n = 63) received CPT from community-based providers in training for CPT. Results indicated that military-affiliated participants were equally likely to complete treatment, Log odds ratio (OR) = 0.14, p = .648. Although military-affiliated participants exhibited reductions in PTSD, B = −2.53, p < .001; and depression symptoms, B = −0.65, p < .001, they experienced smaller reductions in symptoms relative to civilians: B = 1.15, p = .015 for PTSD symptoms and B = 0.29, p = .029 for depression symptoms. Furthermore, variability estimates indicated there was more variability in providers' treatment of military-affiliated versus civilian participants (i.e., completion rates and symptom reduction). These findings suggest that military-affiliated patients can be successfully retained in trauma-focused treatment in the community at the same rate as civilian patients, and they significantly improve in PTSD and depression symptoms although not as much as civilians. These findings also highlight community providers' variability in treatment of military-affiliated patients, providing support for more military-cultural training.

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https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2731312

Efficacy of Integrated Exposure Therapy vs Integrated Coping Skills Therapy for Comorbid Posttraumatic Stress Disorder and Alcohol Use Disorder: A Randomized Clinical Trial.

Norman SB, Trim R, Haller M, et al.

JAMA Psychiatry
Published online April 24, 2019
doi:10.1001/jamapsychiatry.2019.0638

Key Points

Question

Is integrated prolonged exposure therapy tolerable and more efficacious than present-centered integrated coping skills therapy for reducing posttraumatic stress disorder symptoms and alcohol use in patients with comorbid posttraumatic stress disorder and alcohol use disorder?

Findings

In this randomized clinical trial of 119 patients, exposure therapy reduced posttraumatic stress disorder symptoms significantly more than coping skills therapy after treatment and at 3- and 6-month follow-ups. Participants in both treatment arms had reductions in heavy drinking days over time.

Meaning

Integrated prolonged exposure therapy was well tolerated and had greater efficacy for reducing posttraumatic stress disorder symptoms than present-centered integrated coping skills therapy.

Abstract

Importance

Co-occurrence of posttraumatic stress disorder (PTSD) and alcohol use disorder (AUD) is common and associated with psychiatric and functional problems. Understanding whether exposure therapy is tolerable and efficacious for treating PTSD and AUD is critical to ensure that best practice treatments are available.

Abstract

Objective

To compare the efficacy of integrated (ie, targeting both PTSD and alcohol use) prolonged exposure (I-PE) therapy with present-centered integrated coping skills (I-CS) therapy, a more commonly available treatment, in reducing PTSD symptoms and alcohol use.

Design, Setting, and Participants

This prospective randomized clinical trial with masked assessments considered 186 veterans seeking Veterans Affairs mental health services. A total of 119 veterans with PTSD and AUD were randomized. Data were collected from February 1, 2013, to May 31, 2017, before treatment, after treatment, and at 3- and 6-month follow-ups. Intention-to-treat analyses were performed.

Interventions

Veterans underwent I-PE (Concurrent Treatment of PTSD and Substance Use Disorder Using Prolonged Exposure) or I-CS (Seeking Safety) therapy.

Main Outcomes and Measures
A priori planned outcomes were PTSD symptoms (Clinician Administered PTSD Scale for DSM-5) and percentage of heavy drinking days (Timeline Follow-Back) before treatment, after treatment, and at 3- and 6-month follow-ups.

Results
A total of 119 veterans (mean [SD] age, 41.6 [12.6] years; 107 [89.9%] male) were randomized. Linear mixture models found that PTSD symptoms decreased in both conditions, with a significantly greater decrease for I-PE treatment compared with I-CS treatment (treatment × time interaction, −2.83; F3,233.1 = 4.92; Cohen d = 0.41; P = .002). The percentage of heavy drinking days improved in both conditions but was not statistically different between I-PE and I-CS treatment (treatment × time interaction, 1.8%; F3,209.9 = 0.18; Cohen d = 0.04; P = .91).

Conclusions and Relevance
The I-PE arm had a greater reduction in PTSD symptoms than the I-CS arm and comparable drinking decreases. The study provides evidence that exposure therapy is more efficacious in treating PTSD than a more commonly available integrated treatment without exposure for comorbid PTSD and AUD.

Trial Registration
ClinicalTrials.gov identifier: NCT01601067

Links of Interest

Military sexual assault is a national security issue
Can we talk about this now?
https://inkstickmedia.com/military-sexual-assault-is-a-national-security-issue/

How Mindfulness Can Reshape Negative Thought Patterns
https://www.psychologytoday.com/intl/blog/mindfulness-insights/201904/how-mindfulness-can-reshape-negative-thought-patterns

Number of Female Generals, Admirals Has Doubled Since 2000, Report Finds
https://www.military.com/daily-news/2019/04/17/number-female-generals-admirals-has-doubled-2000-report-finds.html

Military service academies begin to follow transgender ban
https://www.militarytimes.com/news/your-military/2019/04/17/military-service-academies-begin-to-follow-transgender-ban/

Using mind over matter to help treat chronic pain
https://www.health.harvard.edu/newsletter_article/using-mind-over-matter-to-help-treat-chronic-pain

VA Won't Ramp Up Security After Rash of Suicides on Premises. Here's Why.
https://www.military.com/daily-news/2019/04/20/va-wont-ramp-security-after-rash-suicides-premises-heres-why.html

Treating Mental Health Impacts of Sexual Assault in Service Members: Pilot Update and Next Steps
https://www.pdhealth.mil/news/blog/treating-mental-health-impacts-sexual-assault-service-members-pilot-update-and-next-steps

Veterans, military families want out of Afghanistan: poll
https://www.militarytimes.com/news/pentagon-congress/2019/04/24/veterans-military-families-want-out-of-afghanistan-poll/

Seven seconds of Spiderman viewing yields a 20% phobia symptom reduction
https://www.eurekalert.org/pub_releases/2019-04/bu-sso042319.php

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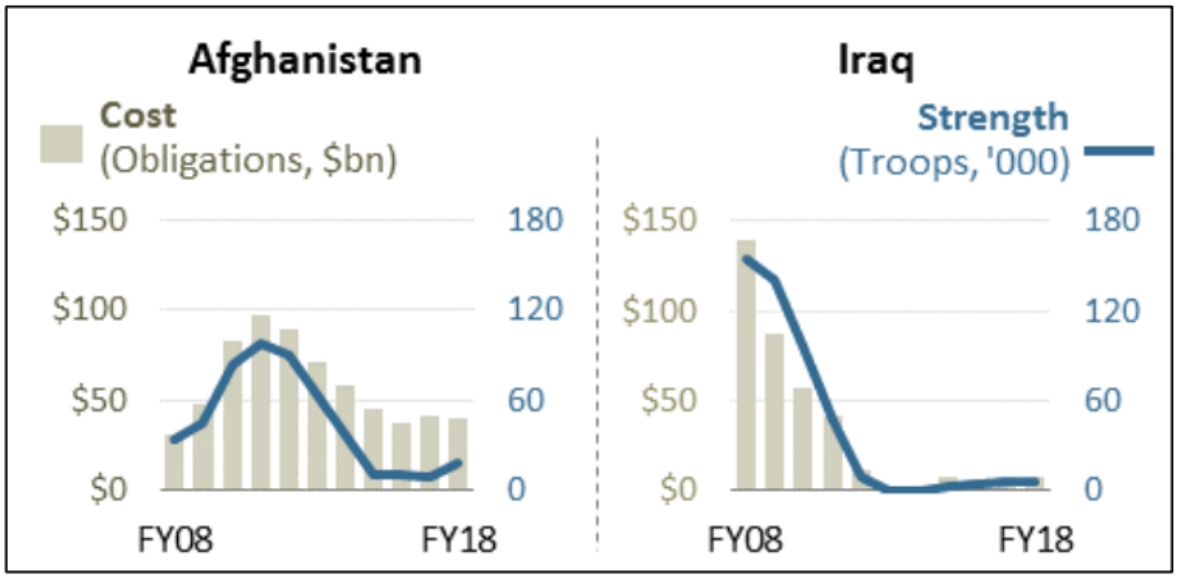
Resource of the Week: U.S. War Costs, Casualties, and Personnel Levels Since 9/11

New, from the Congressional Research Service:

> Seventeen years have passed since the U.S. initiated major military operations following the September 11, 2001, terrorist attacks. In the intervening period, operations first classified as Global War on Terror (GWOT) and later Overseas Contingency Operations (OCO) have varied in scope. Though primarily focused on locations in Afghanistan and Iraq, they have also included territories throughout Central and Southeastern Asia, the Middle East, and Africa. This In Focus summarizes major expenditures on U.S. war operations, reconstruction assistance, troop levels and casualties, and ongoing issues for Congress. This

analysis narrowly defines war/non-war costs as OCO- designated appropriated funds associated with overseas operations as designated in DOD's official "Cost of War (CoW)" report. Other observers may define war operations or costs more broadly (see "Issues for Congress" section).

Figure 1. Iraq and Afghanistan: War Spending and Troop Levels Since 2008



Source: For costs, DOD "Cost of War," September 2018; for troop levels, FY2020 DOD Comptroller "Defense Budget Request Overview."

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