

### Research Update -- August 12, 2021

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### https://doi.org/10.1016/j.jpsychires.2021.07.046

# Disentangling the association between PTSD symptom heterogeneity and alcohol use disorder: Results from the 2019–2020 National Health and Resilience in Veterans Study.

AN Palmisano, BM Fogle, J Tsai, IL Petrakis, R H Pietrzak

Journal of Psychiatric Research Volume 142, October 2021, Pages 179-187

Highlights

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- Associations between the 7-factor model of PTSD symptoms and alcohol use disorder were explored in a sample of U.S. veterans.
- Dysphoric arousal and externalizing behaviors symptom clusters were associated with AUD in the full veteran sample.
- Externalizing behaviors, anxious arousal, and dysphoric arousal symptom clusters were associated with AUD in veterans with PTSD.
- Associations remained significant after controlling for comorbid depressive symptoms.

### Abstract

Veterans are at increased risk of comorbid posttraumatic stress disorder (PTSD) and alcohol use disorder (AUD) relative to civilians. Few studies have explored the association between distinct PTSD symptoms and AUD in veterans, and existing findings are highly discrepant. This study aimed to address this gap and equivocal association by evaluating which PTSD symptom clusters are most associated with AUD in a veteran sample using the 7-factor 'hybrid' model of PTSD. Data were analyzed from the 2019–2020 National Health and Resilience in Veterans Study (NHRVS), a nationally representative survey of 4069 U.S. veterans. Veterans completed self-report measures to assess current PTSD symptoms and AUD. Multivariable logistic regression and relative importance analyses were conducted to examine associations between the 7factor model of PTSD symptoms and AUD. Adjusting for sociodemographic, military, trauma factors, and depressive symptoms, scores on the dysphoric arousal (20.7% relative variance explained [RVE]) and externalizing behaviors (19.0% RVE) symptom clusters were most strongly associated with AUD in the full sample, while externalizing behaviors (47.7% RVE), anxious arousal (23.9% RVE), and dysphoric arousal (12.4%) accounted for the majority of explained variance in veterans who screened positive for

PTSD. Results of this nationally representative study of U.S. veterans highlight the importance of externalizing behaviors and arousal symptoms of PTSD as potential drivers of AUD in this population. The 7-factor hybrid model of PTSD provides a more nuanced understanding of PTSD-AUD associations, and may help inform risk assessment and more personalized treatment approaches for veterans with and at-risk for AUD.

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### https://doi.org/10.1111/sltb.12795

# National Suicide Prevention Lifeline crisis chat interventions: Evaluation of chatters' perceptions of effectiveness.

Madelyn S. Gould PhD, MPH, Saba Chowdhury MPH, Alison M. Lake MA, Hanga Galfalvy PhD, Marjorie Kleinman MS, Michelle Kuchuk MS, Richard McKeon PhD

Suicide and Life-Threatening Behavior First published: 31 July 2021

### Objective

As part of the National Suicide Prevention Lifeline's crisis response system, the Lifeline Crisis Chat Network (LCC) answers chats from hundreds of thousands of at-risk individuals yearly. The study's objective was to assess the effectiveness of these online crisis interventions.

### Method

Data from 39,911 pre-chat surveys and 13,130 linked pre- and post-chat surveys completed by LCC chatters from October 2017–June 2018 were analyzed. The relationship of several effectiveness measures with chatter demographics, pre-chat distress, suicidal ideation, and chatters' perceptions of engagement with their counselors was examined using a series of logistic regression analyses.

### Results

Chatters were significantly and substantially less distressed at the end of the chat intervention than at the beginning. By the end of the chat, two-thirds of suicidal chatters reported that the chat had been helpful, while just under half reported being less suicidal.

Conclusions

Our study offers empirical evidence for the Lifeline's online crisis chat services' effectiveness, but also highlights areas for improvement. This is of critical import in light of the recent designation of 988 as the nationwide number for the Lifeline beginning in 2022, which will increase the Lifeline's prominence in providing suicide prevention and mental health crisis interventions in the United States.

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### https://doi.org/10.1007/s11121-021-01287-8

# Emotion Regulation Difficulties in Military Fathers Magnify Their Benefit from a Parenting Program.

J Zhang, N Zhang, TF Piehler, AH Gewirtz

Prevention Science Published 31 July 2021

Military service members who were exposed to combat-related traumatic events may exhibit emotion regulation problems, which can compromise emotion-related parenting practices (ERPPs). After Deployment, Adaptive Parenting Tools (ADAPT) is a preventive intervention developed for military families to improve parenting behaviors, including ERPPs. Parental emotion regulation difficulties may affect parents' responses to this parenting program. Thus, this study aimed to use a baseline target moderated mediation design to examine the intent-to-treat (ITT) effect of the ADAPT program on deployed fathers' emotion-related parenting practices (ERPPs) at the 1-year follow-up as well as the moderation and mediation effect of fathers' emotion regulation difficulties. The sample consisted of 181 deployed fathers and their 4–13-year-old children. At both baseline and 1 year, fathers' ERPPs (i.e., positive engagement, withdrawal avoidance, reactivity-coercion, and distress avoidance) were observed during a series of structured parent-child interaction tasks. Results of path analyses showed no ITT effects on fathers' ERPPs, but emotion regulation difficulties significantly moderated ITT effects on distress avoidance. Fathers with higher levels of emotion regulation difficulties at baseline showed decreases in distress avoidance behaviors at 1 year if randomized to the intervention condition. Emotion regulation difficulties also significantly mediated the program's effect on reductions in reactivity coercion for fathers with high levels of emotion regulation difficulties at baseline. These findings highlight parental emotion regulation as a key baseline target of the ADAPT program and provide insight into how and for whom a parenting program improves parenting practices.

### https://doi.org/10.1002/jclp.23231

# The path not taken: Distinguishing individuals who die by suicide from those who die by natural causes despite a shared history of suicide attempt.

Eleanor E. Beale, James Overholser, Stephanie Gomez, Sidney Brannam, Craig A. Stockmeier

Journal of Clinical Psychology First published: 31 July 2021

### Objectives

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This study aimed to identify variables that distinguish suicide risk among individuals with previous suicide attempts.

### Method

Using psychological autopsy procedures, we evaluated 86 decedents who had at least one lifetime suicide attempt before eventual death by suicide (n = 65) or natural causes (n = 21).

### Results

The Suicide Death group was more likely to be male, to have alcohol in the toxicology report at time of death, and to have a depression diagnosis, while the Natural Cause Death group was more likely to have personality disorder traits, a polysubstance use disorder, higher reported health stress, and an antidepressant in the toxicology report at time of death. Hopelessness and ambivalence were found to distinguish between groups during the 6 months before death.

### Conclusions

These findings suggest important differences between individuals with a shared history of a suicide attempt who die by suicide versus natural causes.

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### https://doi.org/10.1080/21635781.2021.1953644

### The Role of Posttraumatic Stress Symptoms and Negative Affect in Predicting Substantiated Intimate Partner Violence Incidents Among Military Personnel.

Valerie A. Stander, Kelly A. Woodall, Sabrina M. Richardson, Cynthia J. Thomsen, Joel S. Milner, James E. McCarroll, **David S. Riggs**, Stephen J. Cozza & for the Millennium Cohort Research Team

Military Behavioral Health Published online: 02 Aug 2021

Increasing rates of posttraumatic stress disorder (PTSD) in military populations during recent conflicts have sparked concerns regarding the incidence of other commonly associated problems, such as intimate partner violence (IPV). From a clinical perspective, it is important to understand patterns of PTSD symptomology that may indicate heightened risk for such aggression. To address this, among a longitudinal cohort of U.S. military personnel, we evaluated the association of PTSD symptom clusters and comorbid conditions as predictors of any subsequent Department of Defense Family Advocacy Program incidents of IPV meeting full definitional criteria for physical or psychological abuse. Results suggested that general symptoms of negative affect common in PTSD (e.g., anger/irritability, sleep disruption) and comorbid alcohol dependence were stronger predictors of IPV than trauma-specific PTSD symptomology (e.g., reexperiencing, hypervigilance). Clinical implications and recommendations for future research are discussed.

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https://doi.org/10.1080/00332747.2021.1929770

Combat Experience, New-Onset Mental Health Conditions, and Posttraumatic Growth in U.S. Service Members.

Jacobson, I. G., Adler, A. B., Roenfeldt, K. A., Porter, B., LeardMann, C. A., Rull, R. P., & Hoge, C. W.

Psychiatry 2021 Aug 2;1-15

### Objective:

Studies examining posttraumatic growth (PTG) rely on surveys evaluating PTG in relation to prior traumatic experiences, resulting in psychometric problems due to the linkage of the dependent and independent variables. Few studies have assessed PTG following combat deployment while also controlling for mental health problems.

### Method:

Longitudinal data on PTG, combat experience, and mental health were examined among U.S. Millennium Cohort Study deployers (n = 8732). Scores from a short-form (SF) version of the PTG inventory assessing current-state beliefs (C-PTGI-SF) independent of any predictor variables were assessed at time 1 (T1), before deployment, and change in scores were assessed approximately 3 years later after deployment at time 2 (T2). All participants screened negative for posttraumatic stress disorder (PTSD) and depression at T1.

### Results:

Combat deployment severity was associated with a worsening of C-PTGI-SF scores at T2 among participants with moderate C-PTGI-SF scores at T1. A positive screen for comorbid PTSD/depression was associated with a worsening of C-PTGI-SF scores at T2 among participants with moderate or high C-PTGI-SF scores at T1. At T2, a strong inverse correlation was found between C-PTGI-SF scores and PTSD (r = -0.38) and depression (-0.41). Only 5% of participants who screened positive for a mental health problem at T2 (23/517) also experienced positive growth.

### Conclusions:

These results challenge the clinical utility of the PTG construct. While PTG may be a useful framework for supporting trauma recovery on an individual basis, PTG does not appear to be distinct and independent from the negative psychological impact of traumatic experiences.

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https://doi.org/10.1037/drm0000163

### Lucid dreams in veterans with posttraumatic stress disorder include nightmares.

Miller, K. E., Ross, R. J., & Harb, G. C.

Dreaming (2021) 31(2), 117–127

A previous study in military veterans with posttraumatic stress disorder (PTSD) and recurrent nightmares found a high prevalence of lucid dreaming (LD), the awareness while a dream continues that one is dreaming, and an "LD profile" characterized by frequent dream awareness and rare dream content control. Given the importance of the nightmare disturbance in PTSD, this study assessed with questionnaires the prevalence and characteristics of lucid nightmares, specifically, in a sample of 54 veterans with PTSD. Over half the sample endorsed experiencing LD, with nearly all of these individuals explicitly reporting lucidity in nightmares. The lucid nightmare profile was characterized by high awareness and low content control. Veterans reported feeling stuck and anxious, trying unsuccessfully to awaken from lucid nightmares. We conclude that lucid nightmares may occur commonly in veterans with PTSD, with a profile resembling that previously reported for LD experiences generally in this group. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

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### https://doi.org/10.1002/eat.23591

# Prevalence of eating disorders and comorbid psychopathology in a US sample of treatment-seeking veterans.

Vaught, A. S., Piazza, V., & Raines, A. M.

The International Journal of Eating Disorders 2021 Aug 2

Objective:

Eating disorders (EDs) are a well-studied public health issue in the general population. Less is known, however, about the prevalence of such conditions and levels of comorbid psychopathology among military and veteran populations. The current study sought to describe the probable prevalence of EDs and levels of comorbid psychopathology using a racially diverse treatment-seeking sample of US veteran men and women. Method:

Veterans (N =254) presenting for routine clinical care completed self-report questionnaires assessing EDs, posttraumatic stress disorder, depression, and shame.

### Results:

Thirty-one percent of the sample met probable criteria for either bulimia nervosa (BN), binge-eating disorder, or purging disorder. Although overall ED prevalence estimates were similar across men and women, estimates of BN were higher among Black veterans compared to White veterans or veterans who identified as a race other than Black or White. Further, mean levels of psychopathology were significantly higher in veterans with a probable ED compared to those without.

Discussion:

This study extends previous research and highlights the importance of establishing dedicated ED screening programs within the Veterans Health Administration.

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### https://doi.org/10.1080/02791072.2021.1956026

### Co-use of Tobacco Products and Cannabis among Veterans: A Preliminary Investigation of Prevalence and Associations with Mental Health Outcomes.

Reagan E. Fitzke , B.S., Jordan P. Davis, Ph.D. & Eric R. Pedersen, Ph.D.

Journal of Psychoactive Drugs Published online: 01 Aug 2021

While tobacco product (such as combustible cigarettes and nicotine vaping products) and cannabis use rates remain high in the general United States (U.S.) population, veterans from the conflicts in Iraq and Afghanistan (i.e., OEF/OIF veterans) are at high risk of high rates of cannabis and tobacco use. Co-use of tobacco and cannabis (i.e., using both substances within a specified period of time or combining the drugs within the same device for use) is of growing prevalence in the U.S. However, little is understood about the prevalence rates of tobacco and cannabis co-use among U.S. veterans and its associations with mental health symptomatology. The current study conducted a preliminary analysis of co-use patterns of tobacco and cannabis and associated mental health outcomes among a sample of OEF/OIF veterans (N = 1,230). Results indicated high rates of lifetime and past 30-day use of both substances. Past 30-day co-users endorsed significantly higher levels of stress, PTSD, depression, and

anxiety compared to singular product users. Results suggest that the addition of cannabis use in conjunction with tobacco use may be associated with greater mental health symptoms among veterans. Findings indicate veteran tobacco and cannabis co-users may benefit from mental health care to help mitigate poor mental health symptoms.

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### https://doi.org/10.1037/ort0000579

# Association between cumulative risk and protective factors with mental distress among female military spouses.

Sullivan, K. S., Park, Y., Cleland, C. M., Merrill, J. C., Clarke-Walper, K., & Riviere, L. A.

American Journal of Orthopsychiatry Advance online publication

### Objective:

Guided by a resilience framework, this study examines the accumulation of risk and protective factors, as well as the potential buffering effects of protective factors on mental distress among female military spouses. Background: Most research with this population has focused on individual risk factors affecting military spouses. Less frequently have the effects of cumulative risk, risk factors not specifically associated with military service, or protective factors been examined, though there is evidence for their importance.

### Method:

This study used secondary survey data from 334 female Army spouses collected in 2012 as part of the Land Combat Study 2. Cumulative risk and protective factor scores as well as scores within risk (intrapersonal, family, and military-specific) and protective (individual and environmental) factor domains were calculated. Four structural equation models were run to examine main and interaction effects on mental distress, a latent variable representing depression, anxiety, and trauma symptoms.

### Results:

In cumulative risk and protective factor models, cumulative risk was directly, positively associated with mental distress. This relationship was moderated by cumulative protection. In domain-specific models, only family risk was directly associated with mental distress. This relationship was moderated by environmental protective factors.

### Conclusion:

Findings indicate mental distress among military spouses is associated with exposure to cumulative risk and attenuated by the presence of certain domains of protective factors. Family risk factors including marital distress and work-family conflict may be particularly pernicious stressors, but informal and structural supports may be important targets for prevention and intervention efforts. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

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### https://doi.org/10.1037/tra0001047

### Own soul's warning: Moral injury, suicidal ideation, and meaning in life.

Kelley, M. L., Chae, J. W., Bravo, A. J., Milam, A. L., Agha, E., Gaylord, S. A., Vinci, C., & Currier, J. M.

Psychological Trauma: Theory, Research, Practice, and Policy Advance online publication

### Objective:

Moral injury (an inner conflict [or cognitive dissonance] used to describe psychological, ethical, and/or spiritual conflict experienced when an individual's basic sense of humanity is violated) has been associated with suicidal ideation among military populations. However, mechanisms linking moral injury to suicidal ideation, particularly variables that may protect against suicidal ideation, have received limited attention. This study examined whether two domains of meaning in life (presence of meaning in life and searching for meaning in life) mediated the links between self- and other-directed moral injury and suicidal ideation.

### Method:

Participants were a community sample of 269 predominantly recent-era former service members who completed an online, anonymous voluntary survey.

### Results:

When examined in separate models, self-directed moral injury and other-directed moral injury were found to associate with higher suicidal ideation via a lower presence of meaning in life (no significant associations with searching for meaning in life). When examined in an exploratory combined model (i.e., both self-directed and other-directed

moral injury entered in the same model), only the association between self-directed moral injury and suicidal ideation via the presence of meaning in life remained statistically significant.

Conclusions:

Our findings suggest that the presence of meaning in life may serve as a protective factor for veterans experiencing moral injury (particularly self-directed moral injury) that is associated with suicidal ideation. It is possible that guiding veterans with moral injury symptoms to develop more meaning or purpose in their lives may reduce suicidal ideation. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

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### https://doi.org/10.1080/13811118.2021.1932647

### The Impact of Homeostatic and Circadian Sleep Processes on Non-Suicidal Self-Injury and Suicide Urges in Borderline Personality Disorder.

Skye Fitzpatrick, Sonya Varma & Jennifer Ip

Archives of Suicide Research Published online: 04 Aug 2021

### Objective

Borderline personality disorder (BPD) involves high rates of non-suicidal self-injury (NSSI) and suicidal behaviors, which are often preceded by urges. Disrupted sleep processes have been linked to NSSI and suicidal behaviors. However, it is unclear which specific sleep processes influence NSSI and suicide urges at rest (i.e., baseline) or in response to distress (i.e., reactivity) in BPD, and thus require targeting in BPD-specific interventions. This study examined whether two distinct homeostatic sleep processes (i.e., total sleep time [TST] and time in bed [TIB]), and one circadian sleep process (i.e., chronotype, or tendencies toward early versus late bed and rise times) predict baseline NSSI and suicide urges and urge reactivity in BPD.

### Methods

Forty adults with BPD completed a seven-day sleep diary to measure average TST and TIB. They then completed a questionnaire to measure chronotype and underwent an experiment wherein they rated NSSI and suicide urges at baseline and following an emotion induction.

### Results

Generalized estimating equations revealed that higher TST was associated with lower baseline NSSI urges, and lower suicide urge reactivity. Additionally, higher TIB predicted higher NSSI urge reactivity.

### Conclusions

Sleep deprivation and extended time in bed may increase proclivity toward NSSI and/or suicide. Targeting these variables in BPD interventions may ultimately facilitate the reduction of NSSI and suicidal acts.

Highlights

- Higher total sleep time predicts lower baseline NSSI urges, suicide urge reactivity
- Higher time in bed predicts higher NSSI urge reactivity
- Reducing sleep deprivation in BPD may facilitate reductions in suicide, NSSI urges

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### https://doi.org/10.1037/prj0000477

# I feel frozen: Client perceptions of how posttraumatic stress disorder impacts employment.

Lu, W., Bates, F. M., Waynor, W. R., Bazan, C., Gao, C. E., & Yanos, P. T.

Psychiatric Rehabilitation Journal Advance online publication

### Objective:

There is evidence that posttraumatic stress disorder (PTSD) is a hidden barrier to employment among individuals with serious mental illnesses (SMI) among whom PTSD is highly prevalent. This study aimed to explore how PTSD interferes with achieving employment outcomes among persons with SMI.

### Methods:

Participants included 119 individuals with SMI and co-occurring PTSD receiving Supported Employment services. Responses to the question, "In what ways are PTSD symptoms interfering with your work during the past month?" were analyzed. Results:

Six themes emerged: (a) I don't like being around people, (b) I feel frozen and unable to get started, (c) troubling negative affect, (d) mind is scattered and all over the place, (e) feeling fatigued all the time, and (f) flashbacks and triggers can happen whenever.

Conclusions and Implications for Practice:

Findings provide insight into how PTSD symptoms impact work outcomes and suggest that there is a need for Supported Employment providers to screen clients for trauma exposure to identify those in need of additional support in order to improve work outcomes. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

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### https://doi.org/10.1017/S003329172100310X

# Unsound sleep, wound-up mind: A longitudinal examination of acute suicidal affective disturbance features among an eating disorder sample.

Kinkel-Ram, S., Grunewald, W., Bodell, L., & Smith, A.

**Psychological Medicine** 

Published online by Cambridge University Press: 05 August 2021

### Background

Suicide is one of the most commonly reported causes of death in individuals with eating disorders. However, the mechanisms underlying the suicide and disordered eating link are largely unknown, and current assessments are still unable to accurately predict future suicidal thoughts and behaviors. The purpose of this study is to test the utility of two promising proximal risk factors, sleep quality and agitation, in predicting suicidal ideation in a sample of individuals with elevated suicidal thoughts and behaviors, namely those with eating disorders.

### Methods

Women (N = 97) receiving treatment at an eating disorder treatment center completed weekly questionnaires assessing suicidal ideation, agitation, and sleep. General linear mixed models examined whether agitation and/or sleep quality were concurrently or prospectively associated with suicidal ideation across 12 weeks of treatment.

### Results

There was a significant interaction between within-person agitation and sleep quality on

suicidal ideation [B(s.e.) = -0.02(0.01), p < 0.05], such that on weeks when an individual experienced both higher than their average agitation and lower than their average sleep quality, they also experienced their highest levels of suicidal ideation. However, neither agitation nor sleep quality prospectively predicted suicidal ideation.

### Conclusions

This study was the first to examine dynamic associations between interpersonal constructs and suicidal ideation in individuals with eating disorders. Results suggest that ongoing assessment for overarousal symptoms, such as agitation and poor sleep quality, in individuals with eating disorders may be warranted in order to manage suicidal ideation among this vulnerable population.

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### https://doi.org/10.5664/jcsm.9206

# The Military Service Sleep Assessment: an instrument to assess factors precipitating sleep disturbances in U.S. military personnel.

Mysliwiec, V., Pruiksma, K. E., Brock, M. S., Straud, C., Taylor, D. J., Hansen, S., Foster, S. N., Gerwell, K., Moore, B. A., Carrizales, F. A., Young-McCaughan, S., Vanecek, R., Mintz, J., Peterson, A. L., & STRONG STAR Consortium

Journal of Clinical Sleep Medicine 2021 Jul 1; 17(7): 1401-1409

### Study objectives:

Military personnel frequently experience sleep difficulties, but little is known regarding which military or life events most impact their sleep. The Military Service Sleep Assessment (MSSA) was developed to assess the impact of initial military training, first duty assignment, permanent change of station, deployments, redeployments, and stressful life events on sleep. This study presents an initial psychometric evaluation of the MSSA and descriptive data in a cohort of service members.

### Methods:

The MSSA was administered to 194 service members in a military sleep disorders clinic as part of a larger study.

### Results:

Average sleep quality on the MSSA was 2.14 (on a Likert scale, with 1 indicating low

and 5 indicating high sleep quality), and 72.7% (n = 140) of participants rated their sleep quality as low to low average. The events most reported to negatively impact sleep were stressful life events (41.8%), followed by deployments (40.6%). Military leadership position (24.7%) and birth/adoption of a child (9.7%) were the most frequently reported stressful life events to negatively impact sleep. There were no significant differences in current sleep quality among service members with a history of deployment compared with service members who had not deployed.

### Conclusions:

The MSSA is the first military-specific sleep questionnaire. This instrument provides insights into the events during a service member's career, beyond deployments, which precipitate and perpetuate sleep disturbances and likely chronic sleep disorders. Further evaluation of the MSSA in nontreatment-seeking military populations and veterans is required.

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https://doi.org/10.1093/sleep/zsab024

Incidence of insomnia and obstructive sleep apnea in active duty United States military service members.

Moore, B. A., Tison, L. M., Palacios, J. G., Peterson, A. L., & Mysliwiec, V.

Sleep 2021 Jul 9; 44(7): zsab024

### Study objectives:

Epidemiologic studies of obstructive sleep apnea (OSA) and insomnia in the U.S. military are limited. The primary aim of this study was to report and compare OSA and insomnia diagnoses in active duty the United States military service members.

Method:

Data and service branch densities used to derive the expected rates of diagnoses on insomnia and OSA were drawn from the Defense Medical Epidemiology Database. Single sample chi-square goodness of fit tests and independent samples t-tests were conducted to address the aims of the study.

### Results:

Between 2005 and 2019, incidence rates of OSA and insomnia increased from 11 to

333 and 6 to 272 (per 10,000), respectively. Service members in the Air Force, Navy, and Marines were diagnosed with insomnia and OSA below expected rates, while those in the Army had higher than expected rates (p < .001). Female service members were underdiagnosed in both disorders (p < .001). Comparison of diagnoses following the transition from ICD 9 to 10 codes revealed significant differences in the amounts of OSA diagnoses only (p < .05).

### Conclusion:

Since 2005, incidence rates of OSA and insomnia have markedly increased across all branches of the U.S. military. Despite similar requirements for overall physical and mental health and resilience, service members in the Army had higher rates of insomnia and OSA. This unexpected finding may relate to inherent differences in the branches of the military or the role of the Army in combat operations. Future studies utilizing military-specific data and directed interventions are required to reverse this negative trend.

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https://doi.org/10.1093/sleep/zsab004

Identifying and characterizing longitudinal patterns of insomnia across the deployment cycle in active duty Army soldiers.

Miller, K. E., Ramsey, C. M., Boland, E. M., Klingaman, E. A., & Gehrman, P.

Sleep 2021 Jul 9; 44(7): zsab004

### Study objectives:

The present study characterized a sample of 4,667 Army soldiers based on their patterns of insomnia before, during, and after deployment, and explored pre-deployment factors predictive of these patterns.

Methods: Data were analyzed from the Army Study to Assess Risk and Resilience in Service members (STARRS)-Pre/Post Deployment Study (PPDS), using surveys that captured data approximately 1-2 months pre-deployment, and 3- and 9-month postdeployment from soldiers deployed to Afghanistan. Patterns of insomnia across time were examined. Theoretically derived variables linked to sleep disturbance were examined as predictors of the insomnia patterns.

### Results:

Five longitudinal patterns of insomnia characterized the majority of the sample: "No Insomnia" (no insomnia symptoms at any timepoint; 31%), "Deployment-related Insomnia" (no pre-deployment insomnia, developed insomnia symptoms during deployment and recovered; 40%), "Incident Insomnia" (development insomnia during or shortly after deployment that did not remit; 14%), "Chronic Insomnia" (insomnia both pre- and post-deployment; 11%), and "Other Insomnia" (reported insomnia at ≥1 timepoint, but no clear pattern across the deployment cycle; 4%). Several pre-deployment factors were predictive of insomnia trajectories, including lifetime major depressive episodes, traumatic brain injury history, posttraumatic stress disorder, and past year personal life stressors.

### Conclusions:

Distinct longitudinal patterns of insomnia were identified, with more than half of the sample reporting insomnia at some point in the deployment cycle. Identifying mental health conditions that are associated with different insomnia patterns prior to deployment can inform targeted interventions to reduce long-term sleep difficulty.

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### https://doi.org/10.1016/j.jad.2021.05.089

### Sexual health difficulties among service women: the influence of posttraumatic stress disorder.

Kolaja, C. A., Schuyler, A. C., Armenta, R. F., Orman, J. A., Stander, V. A., & LeardMann, C. A.

Journal of Affective Disorders 2021 Sep 1; 292: 678-686

### Background

Sexual health among service women remains understudied, yet is related to health and quality of life. This study examined if the associations between recent combat and sexual assault with sexual health difficulties were mediated by mental disorders and identified factors associated with sexual health difficulties among service women.

### Methods

Data from two time points (2013 and 2016) of the Millennium Cohort Study, a large military cohort, were used. The outcome was self-reported sexual health difficulties.

Mediation analyses examined probable posttraumatic stress disorder (PTSD) and major depressive disorder (MDD) as intermediate variables between recent combat and sexual assault with the sexual health difficulties. Multivariable logistic regression modeling was used to examine the association of demographic, military, historical mental health, life stressors, and physical health factors with sexual health difficulties.

### Results

Of the 6,524 service women, 13.5% endorsed experiencing sexual health difficulties. Recent combat and sexual assault were significantly associated with sexual health difficulties. Probable PTSD mediated the associations of recent combat and sexual assault with sexual health difficulties; probable MDD did not mediate these relationships. Other significant factors associated with sexual health difficulties included enlisted rank, historical mental disorders, childhood trauma, and disabling injury.

### Limitations

Use of self-reported data, outcome not assessed using a standardized measure and future studies may benefit from examining other mediators. Conclusion Our findings that combat and sexual assault may have negative effects on service women's sexual health suggest that treatment options and insurance coverage for sexual health problems should be expanded.

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https://doi.org/10.1186/s12888-021-03296-x

Military and demographic predictors of mental ill-health and socioeconomic hardship among UK veterans.

Burdett, H., Fear, N. T., Wessely, S., & Rona, R. J.

BMC Psychiatry 2021 Jul 6; 21(1): 304

Background:

Around 8% of the UK Armed Forces leave in any given year, and must navigate unfamiliar civilian systems to acquire employment, healthcare, and other necessities. This paper determines longer-term prevalences of mental ill health and socioeconomic outcomes in UK Service leavers, and how they are related to demographic factors, military history, and pre-enlistment adversity.

### Methods:

This study utilised data from a longitudinal sample of a cohort study UK Armed Forces personnel since 2003. A range of self-reported military and sociodemographic factors were analysed as predictors of probable Post-Traumatic Stress Disorder, common mental disorders, alcohol misuse, unemployment and financial hardship. Prevalences and odds ratios of associations between predictors and outcomes were estimated for regular veterans in this cohort.

### Results:

Veteran hardship was mostly associated with factors linked to socio-economic status: age, education, and childhood adversity. Few military-specific factors predicted mental health or socio-economic hardship, except method of leaving (where those leaving due to medical or unplanned discharge were more likely to encounter most forms of hardship as veterans), and rank which is itself related to socioeconomic status.

### Conclusion:

Transition and resettlement provisions become increasingly generous with longer service, yet this paper shows the need for those services becomes progressively less necessary as personnel acquire seniority and skills, and instead could be best targeted at unplanned leavers, taking socioeconomic status into consideration. Many will agree that longer service should be more rewarded, but the opposite is true if provision instead reflects need rather than length of service. This is a social, political and ethical dilemma.

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### https://doi.org/10.1016/j.jad.2021.05.074

# The protective role of reasons for living on suicidal cognitions for military affiliated individuals with a positive PTSD screen in primary care settings.

Rozek, D. C., Crawford, J. N., LoSavio, S. T., Myers, U. S., Dabovich, P., Warnecke, A., Smith, N. B., & Bryan, C. J.

Journal of Affective Disorders 2021 Sep 1; 292: 424-429

### Background:

Identifying and enhancing protective beliefs is essential in reducing suicide risk among military-affiliated individuals. The goal of this study was to examine if specific reasons

for living impact the relationship between PTSD and suicidal cognitions among militaryaffiliated individuals in primary care settings.

### Methods:

Participants included 2,685 U.S. military personnel and their adult beneficiaries recruited from primary care clinics. Participants completed the Primary Care Posttraumatic Stress Disorder Screen, Suicide Cognitions Scale, and Brief Reasons for Living Inventory.

### Results:

Responsibility to family and survival and coping beliefs-were related to suicidal cognitions with higher levels associated with less suicidal cognitions and a weaker relationship between PTSD and suicidal cognitions. By contrast, fear of suicide and fear of social disapproval were associated with more suicidal cognitions, and the link between positive PTSD screen and suicidal cognitions was stronger for individuals with higher levels of fear of social disapproval. Moral objection did not predict suicidal cognitions.

### Limitations:

The limitations of the study include that measures were done in primary care and brief screeners were often used. Additionally, the study is cross-sectional in nature, whereas some of the symptoms and outcome variables likely fluctuate over time.

### Conclusions:

Findings suggest not all reasons for living are not equally influential and, among military-affiliated individuals with a positive PTSD screen, bolstering reasons for living related to responsibility to family and survival and coping skills could be particularly impactful in reducing suicide cognitions.

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### https://doi.org/10.1016/j.addbeh.2021.107081

The buffering role of higher romantic relationship satisfaction on the association of hazardous drinking with PTSD and depression symptoms among female military service members/veterans.

Rebecca K. Blais, Ryan A. Hess, Sarfaraz Serang

Addictive Behaviors Available online 8 August 2021

### Highlights

- PTSD, depression increase risk for hazardous drinking in service members/veterans.
- Moderators of this association are understudied in women.
- Relationship satisfaction weakened the association of PTSD, depression with hazardous drinking.
- Bolstering relationship satisfaction may decrease hazardous drinking.

### Abstract

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Studies show that more positive relationship satisfaction can mitigate the effects of posttraumatic stress disorder (PTSD) and depression severity on hazardous drinking in military samples. However, past studies were not circumscribed to female service members/veterans (SM/V), who represent the fastest growing demographic in the military. Moreover, studies did not examine moderators of specific symptom clusters of PTSD and depression with hazardous drinking. Indeed, recent studies have shown that the more depressive and cognitive clusters are associated with greater dysfunction. The current study extended this literature in a convenience sample of 584 female SM/V who completed self-report measures of hazardous drinking, PTSD, depression, and relationship satisfaction. PTSD or depression severity, relationship satisfaction, and their interaction, were examined as correlates of hazardous drinking after accounting for relationship, demographic, and military characteristics. For both overall PTSD and depression severity, higher relationship satisfaction weakened their association with hazardous drinking. Such results were consistent when global scores were replaced with PTSD-related negative alterations in cognitions and mood and somatic depression symptom clusters, but not for PTSD-related dysphoric arousal, anhedonia, or nonsomatic depression symptom clusters. Findings suggest that to lessen the association of PTSD or depressive symptoms with problematic drinking, interventions aimed at improving relationship satisfaction may be worth considering among women in relationships. Moreover, symptom cluster analyses show that the cognitive and depressive components of PTSD, as well as the physical symptoms of depression, are most problematic, pinpointing specific areas of function on which to intervene.

### https://doi.org/10.1080/15402002.2021.1960350

# Does Daylength Affect Sleep and Mental Health Symptoms during Behavioral Interventions for Insomnia?

K Hamill, K Porcheret, ER Facer-Childs, A Mellor, SPA Drummond

Behavioral Sleep Medicine Published online: 07 Aug 2021

### Background

Approximately 11–33% of Australian adults experience Insomnia Disorder, which is associated with higher rates of psychiatric comorbidities, and lower quality of life. Non-pharmacological interventions are the front-line treatments for insomnia. Despite the known impact of light on the sleep/wake cycle via the circadian system, it is not yet known whether seasonal variations in environmental light levels (i.e., daylength) influence treatment outcome. We aimed to determine whether seasonal differences in daylength influenced baseline symptoms of Insomnia Disorder or treatment outcome.

### Participants

One hundred treatment-seeking individuals with Insomnia Disorder (age:  $49.3 \pm 14.4y$ , range: 18-82 years; 58 F) enrolled in a Randomized Control Trial in Australia over a 29-month period.

### Methods

Clients completed a seven-session behavioral intervention for insomnia over a maximum of 12 weeks. Individuals completed questionnaires assessing insomnia symptoms, diurnal preference, depression and anxiety symptoms, and daily sleep diaries. Objective rest/activity patterns were monitored using wrist actigraphy for the duration of the treatment period.

### Results

Baseline daylength, sunset and sunrise times, and change in daylength over treatment, were not related to baseline insomnia severity or mental health symptoms. However, longer daylength at baseline predicted greater improvements in insomnia symptoms and anxiety, but not depression, symptoms. These improvements were also associated with later sunset and/or earlier sunrise at baseline.

### Conclusions

Our results show greater treatment-related improvements in subjective sleep and

mental health symptoms during spring and summer months. This suggests that daylength could have a role to play in the outcomes of a behavioral insomnia treatment. Future research is needed to provide recommendations.

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### https://doi.org/10.1016/j.janxdis.2021.102461

### A randomized clinical trial of in-person vs. home-based telemedicine delivery of Prolonged Exposure for PTSD in military sexual trauma survivors.

Ron Acierno, Anna E. Jaffe, Amanda K. Gilmore, Anna Birks, ... Anouk L. Grubaugh

Journal of Anxiety Disorders Available online 8 August 2021

Highlights

- Veterans with military sexual trauma drop out of PTSD treatment at high rates.
- We compared in-person to home-based telemedicine (HBT) treatment delivery.
- There was no difference in treatment dose received between in-person and HBT.
- Increased treatment dose corresponded to increased treatment response.
- There were no differences in PTSD symptom reductions across treatment modality.

### Abstract

Posttraumatic stress disorder (PTSD) is common in women who experienced Military Sexual Trauma (MST). Despite Veterans Affairs Medical Center-wide screening and tailored MST services, substantial barriers to care exist, and about 50% of those who start evidence-based treatment for PTSD drop out prematurely. Home-based telemedicine (HBT) may reduce logistical and stigma related barriers to mental health care, thereby reducing dropout. The current randomized clinical trial (NCT02417025) for women veterans with MST-related PTSD (N = 136) compared the efficacy of HBT delivery of Prolonged Exposure (PE) to in-person delivery of PE on measures of PTSD and depression, as well as on "PE dose" received. Hypotheses predicted that women in the HBT PE group would complete more sessions, and evince greater PTSD and depression symptom reduction compared to in-person PE. Results revealed that there were no differences in dose received or PTSD symptom reduction between in-person and HBT conditions; however, dose (i.e., more sessions) was related to reduced PTSD symptom severity. Future research should examine other factors associated with high PTSD treatment dropout among MST patients.

### https://doi.org/10.1016/j.jad.2021.08.009

# Associations of socioeconomic status and sleep disorder with depression among US adults.

W Li, W Ruan, Y Peng, Z Lu, D Wang

Journal of Affective Disorders Volume 295, 1 December 2021, Pages 21-27

Highlights

- Socioeconomic status (SES) was associated with increased prevalence of depression.
- Sleep disorder was associated with increased prevalence of depression.
- Significant U-shaped relationship between sleep time and depression was found.
- Joint effects of SES and sleep trouble in relationship to depression were found.

### Abstract

### Objective

We aimed to evaluate the relationship between socioeconomic status (SES), sleep disorder across adulthood and the prevalence of depression.

### Methods

Participants from the National health and Nutrition Examination Surveys (NHANES 2005~2018) were included in the present study. Multiple logistic regression models were used to explore the associations between SES, sleep disorder and depression. Restricted cubic splines with 4 knots were used to explore the relationship between sleep time and depression.

### Results

A total of 3021 (8.85%) individuals among 34128 participants reported depressive symptom. The multiple adjusted odds ratios (ORs) and 95% confidential intervals (CIs) were 2.09 (1.78-2.46) for population with low SES, 4.12 (3.74-4.55) for individuals with sleep trouble, 1.84 (1.63-2.07) for insufficient sleep and 1.44 (1.21-1.72) for excessive sleep, respectively. In addition, significant U-shaped relationship between sleep time and depression, and joint effects of SES and sleep trouble in relationship to depression were found.

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Conclusions

SES and sleep disorder are associated with increased prevalence of depression. And our study supports an important role of healthy sleep habits and socioeconomic equity in improving mental health.

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### Links of Interest

'A Poison in the System': The Epidemic of Military Sexual Assault <u>https://www.nytimes.com/2021/08/03/magazine/military-sexual-assault.html</u>

A small tweak to how the Army trains new soldiers is dramatically reducing sexual assault reports

https://taskandpurpose.com/news/army-basic-training-sharp-program/

VA continues to struggle with military sexual assault claims: VAOIG report <u>https://www.militarytimes.com/veterans/2021/08/06/va-continues-to-struggle-with-military-sexual-assault-claims-vaoig-report/</u>

Commentary: Support is needed for women warriors living with PTSD <u>https://www.militarytimes.com/opinion/commentary/2021/08/06/support-is-needed-for-women-warriors-living-with-ptsd/</u>

Senior Green Berets debunk mental health rumors, fight stigma in podcast series <u>https://www.armytimes.com/news/your-army/2021/08/05/senior-green-berets-debunk-mental-health-rumors-fight-stigma-of-seeking-help-in-podcast-series/</u>

Afghanistan: How Veterans can learn from Vietnam Veterans <u>https://blogs.va.gov/VAntage/92731/afghanistan-how-veterans-can-learn-from-vietnam-veterans/</u>

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### Resource of the Week: Beyond MST

From the Department of Veterans Affairs (VA) Mobile Mental Health team at the National Center for PTSD:

Beyond MST was designed to help people heal from sexual assault or harassment during military service, also called military sexual trauma (MST). The app is a free, secure, and private self-help tool that survivors can use at their own pace in their recovery. It features over 30 specialized tools to help users build skills to cope with problems, manage symptoms, and improve their quality of life. Users can set self-care goals, track their recovery progress, and learn more about MST and common concerns that survivors experience. Users can also learn more about important sources of support for MST survivors and find inspiration to continue on their recovery journeys. This app can be used by people who are in mental health treatment and those who are not. No account or password is required, no identifiable data is collected, and there is an option to enable a PIN lock for extra privacy. You are not alone: the Beyond MST app can help.

### For iOS and Android



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