

Research Update -- July 1, 2021

What's Here:

- Drinking patterns of post-deployment Veterans: The role of personality, negative urgency, and posttraumatic stress.
- Prevalence of Potentially Morally Injurious Events in Operationally Deployed Canadian Armed Forces Members.
- Intergenerational Transmission of Posttraumatic Stress Disorder in Australian Vietnam Veterans' Daughters and Sons: The Effect of Family Emotional Climate While Growing Up.
- Experiences of children who have been separated from a parent due to military deployment: A systematic review of reviews.
- Treatment of Moral Injury in U.S. Veterans with PTSD Using a Structured Chaplain Intervention.
- Demographic characteristics, mental health conditions, and psychotherapy use of veterans in couples and family therapy.
- Associations of Suicidality Trends With Cannabis Use as a Function of Sex and Depression Status.
- Ten Practical Recommendations for Improving Blinding Integrity and Reporting in Psychotherapy Trials (Viewpoint).
- Associations Between Service Members' Posttraumatic Stress Disorder Symptoms and Partner Accommodation Over Time.

- Suspicion about a partner's deception and trust as roots of relational uncertainty during the post-deployment transition.
- Bi-directional relationships between co-morbid insomnia and sleep apnea (COMISA).
- Sexual health difficulties among service women: The influence of posttraumatic stress disorder.
- Psychophysiology during exposure to trauma memories: Comparative effects of virtual reality and imaginal exposure for posttraumatic stress disorder.
- Moral injury and suicidal behavior among US combat veterans: Results from the 2019-2020 National Health and Resilience in Veterans Study.
- ICD-11 posttraumatic stress disorder (PTSD) and complex PTSD (CPTSD) in treatment seeking veterans: risk factors and comorbidity.
- A rare presentation of sexsomnia in a military service member.
- Inter-channel phase differences during sleep spindles are altered in Veterans with PTSD.
- Sleep Quality Moderates the Relationship between Anxiety Sensitivity and PTSD Symptoms in Combat-exposed Veterans.
- The association of engagement in substance use treatment with negative separation from the military among soldiers with post-deployment alcohol use disorder.
- Variations in Risk and Motivations for Substance Use over the Course of Military Service.
- Examination of measurement invariance of the Acquired Capability for Suicide Scale.
- Rapid Adoption and Implementation of Telehealth Group Psychotherapy During COVID 19: Practical Strategies and Recommendations.
- The prevalence of hazardous and harmful alcohol use across trauma-exposed occupations: A meta-analysis and meta-regression.
- Links of Interest
- Resource of the Week -- Fact Sheet: Mental Health and Security Clearances (Defense Counterintelligence and Security Agency.)

https://doi.org/10.1080/08995605.2021.1902183

Drinking patterns of post-deployment Veterans: The role of personality, negative urgency, and posttraumatic stress.

Ruth C. Brown, Johnnie Mortensen, Sage E. Hawn, Kaitlin Bountress, Nadia Chowdhury, Salpi Kevorkian, Scott D. McDonald, Treven Pickett, Carla Kmett Danielson, Suzanne Thomas & Ananda B. Amstadter

Military Psychology Published online: 21 Jun 2021

Rates of posttraumatic stress disorder (PTSD) and alcohol misuse are known to be high among postdeployment Veterans. Previous research has found that personality factors may be relevant predictors of postdeployment drinking, yet results have been inconsistent and may be influenced by the selection of drinking outcome. This study aimed to examine relations among PTSD, negative urgency, and the five factor models of personality with multiple alcohol consumption patterns, including maximum drinks in a day, number of binge drinking episodes, at-risk drinking, and average weekly drinks in a sample of 397 Operation Enduring Freedom/Operation Iragi Freedom/Operation New Dawn Veterans. The pattern of results suggested that the association among personality, PTSD, and drinking may depend on which drinking outcome is selected. For example, maximum drinks in a day was significantly associated with younger age, male gender, low agreeableness, and an interaction between negative urgency and PTSD, whereas number of binge drinking days was significantly associated with younger age, extraversion, low agreeableness, and negative urgency. This study highlights the heterogeneity of drinking patterns among Veterans and the need for careful consideration and transparency of outcomes selection in alcohol research.

https://doi.org/10.1002/jts.22710

Prevalence of Potentially Morally Injurious Events in Operationally Deployed Canadian Armed Forces Members.

Kevin T. Hansen, Charles G. Nelson, Kenneth Kirkwood

Journal of Traumatic Stress First published: 19 June 2021

As moral injury is a still-emerging concept within the area of military mental health, prevalence estimates for moral injury and its precursor, potentially morally injurious events (PMIEs), remain unknown for many of the world's militaries. The present study sought to estimate the prevalence of PMIEs in the Canadian Armed Forces (CAF), using data collected from CAF personnel deployed to Afghanistan, via logistic regressions controlling for relevant sociodemographic, military, and deployment characteristics. Analyses revealed that over 65% of CAF members reported exposure to at least one event that would be considered a PMIE. The most commonly PMIEs individuals reported included seeing ill or injured women and children they were unable to help (48.4%), being unable to distinguish between combatants and noncombatants (43.6%), and finding themselves in a threatening situation where they were unable to respond due to the rules of engagement under which they were required to operate (35.4%). These findings provide support for both the presence of exposure to PMIEs in CAF members and the need for formal longitudinal data collection regarding PMIE exposure and moral injury development.

https://doi.org/10.1002/jts.22700

Intergenerational Transmission of Posttraumatic Stress Disorder in Australian Vietnam Veterans' Daughters and Sons: The Effect of Family Emotional Climate While Growing Up.

Brian I. O'Toole

Journal of Traumatic Stress First published: 13 June 2021

Posttraumatic stress disorder (PTSD) in military veterans increases the risk of PTSD in their offspring, a concept known as "intergenerational transmission;" however, the mechanism by which this transmission may occur is, as yet, undetermined. The present study included a nonclinical sample of 197 Australian Army veterans of the Vietnam War who were interviewed 17 years before in-person interviews of their adult daughters (n = 163) and sons (n = 120) were conducted. Veterans' PTSD symptoms were assessed using the Mississippi Scale for Combat-Related PTSD. Approximately 17 years later, offspring PTSD symptoms were assessed using the Clinician-Administered

PTSD Scale for DSM-IV. In addition, offspring described the family emotional climate during their youth; responses were coded using the Family Affective Attitude Rating Scale (FAARS) to produce scale scores of veterans' negative, positive, and family relationship styles. A path analysis was conducted via structural equation modeling to test for significant path coefficients between veteran PTSD, family emotional climate, and offspring PTSD symptoms. For daughters, significant path coefficients were observed between veteran PTSD scores and FAARS scores, path coefficient = -.268; FAARS scores and offspring CAPS severity scores, path coefficient = -.223; and veteran PTSD scores and daughters' CAPS severity scores, path coefficient = .186. No satisfactory model could be found for sons. The results suggest that a positive emotional climate while growing up may be a significant protective factor against the development of PTSD in veterans' daughters, but other factors remain significant in veteran-to-offspring intergenerational transmission.

https://doi.org/10.1192/bjo.2021.702

Experiences of children who have been separated from a parent due to military deployment: A systematic review of reviews.

Kent, J., Taylor, P., Argent, S., & Kalebic, N.

BJPsych Open

Published online by Cambridge University Press: 18 June 2021

Aims

To conduct a systematic review of reviews to investigate how military deployment of a parent affects his/her child, and the extent to which the child's own perspectives have been documented.

Background

- Lengthy but finite disruptions to parenting in any form may affect child development and mental and physical health.
- Military deployment means weeks or months of separation from one parent.
- 2016 figures for the U.S. military showed that 40.5% of military personnel have children, and of these 1.7 million children the largest percentage are aged between 0–5 years (37.8%).

Method

Seven databases were searched: AMED, Web of Science, Scopus, EMBASE 1947, Joanna Briggs Institute EMP database, Ovid MEDLINE 1946 and PsycINFO 1806 from the inception of each electronic database until 31st March 2018.

Inclusion criteria:

- Child and young adults aged 0-24 years
- English language papers only
- All papers being systematic reviews or meta-analyses
- A focus on documenting the effects on child outcomes

Data extracted included the review methods and child outcomes reported, including educational attainment; physical symptoms; mental illnesses or disorders; changes to behaviours, and effects on peer and parental relationships.

Result

- The eight reviews identified included 32 common and relevant studies.
- Across the various studies, only about 20% of data came directly from children.
- Five papers extracted from the reviews identified parental deployment as having a negative effect on school attainment.
- Nine studies extracted from the review papers found a positive correlation between having a deployed parent and a greater chance of experiencing depressive symptoms and feelings of anxiety.
- Strong correlations of increased prevalence of both externalising & internalising behaviours were conclusively found in 7 of the reviews.
- Increased resilience was detailed in only one study featured in multiple reviews.
- Just one study featured across the reviews reported on physiological measures adolescents with deployed parents had higher blood pressures and significantly higher heart rates and stress scores than civilian children.

Conclusion

More research obtaining the viewpoint of the child directly and observation of such children is required to properly understand the effects on children with a deployed parent, without the interference of parent or teacher reporting bias. Additionally, with only one study reporting on increased offspring resilience there has been limited exploration of potential positive correlates, so further research regarding these is important.

https://doi.org/10.1007/s10943-021-01312-8

Treatment of Moral Injury in U.S. Veterans with PTSD Using a Structured Chaplain Intervention.

Donna Ames, Zachary Erickson, Chelsea Geise, Suchi Tiwari, Sergii Sakhno, Alexander C. Sones, Chaplain Geoffrey Tyrrell, Chaplain Robert B. Mackay, Chaplain William Steele, Therese Van Hoof, Heidi Weinreich & Harold G. Koenig

Journal of Religion and Health Published 20 June 2021

Moral injury is a complex phenomenon characterized by spiritual, psychological, and moral distress caused by actions or acts of omission inconsistent with an individual's moral and ethical values. We present two cases from an ongoing randomized controlled trial of a spiritually integrated structured intervention delivered by chaplains for individuals suffering from moral injury. Chaplains met with Veterans for twelve 50-min sessions that each focused on a specific domain of moral injury. Participants were asked to complete validated scales assessing symptoms of moral injury and PTSD, including the PTSD Checklist for DSM-5 (PCL-5), Moral Injury Symptom Scale-Military Version Short Form, and Moral Injury Symptom Scale-Military Version Long Form. We report on two Veterans who completed the intervention and demonstrated significant improvement in moral injury and PTSD symptoms.

https://doi.org/10.1037/cfp0000185

Demographic characteristics, mental health conditions, and psychotherapy use of veterans in couples and family therapy.

McKee, G. B., McDonald, S. D., Karmarkar, A., & Ghatas, M. P.

Couple and Family Psychology: Research and Practice Advance online publication

The purpose of this descriptive study was to characterize demographic information, military service-connected mental health conditions, and information about the provision of couple and family therapy within the Department of Veterans Affairs (VA) Healthcare System. This study used a population-based cohort design to obtain electronic health record data from 97,302 veterans who attended couple or family therapy in 1,075 VA facilities from 2014 to 2019. More than 59% had a mental health disorder connected with military service, the most common of which was posttraumatic stress disorder (39.92%). Over one-third had evidence of military combat exposure, and 9% reported military sexual trauma. Approximately 90% attended 10 or fewer sessions, and among the 78,028 veterans who initiated therapy after progress note tracking of evidencebased psychotherapy was mandated in 2015, 12% had evidence of receiving an evidence-based psychotherapy for family difficulties, suggesting that many veterans may not receive a full course of conjoint therapy. Exploratory analyses revealed that attending five or more sessions of couple or family therapy was associated with identifying as female, younger age, identifying as non-Hispanic White, combat exposure, military sexual trauma, service connection for any mental health condition, and service connection for posttraumatic stress disorder, major depressive disorder, and chronic adjustment disorder. Further empirical work on understanding veterans' psychiatric and family concerns is necessary to ensure that the VA Healthcare System is able to meet the needs of veterans with complex symptom profiles and to determine whether current therapeutic approaches may be effectively tailored to meet those needs. (PsycInfo Database Record (c) 2021 APA, all rights reserved)

https://doi.org/10.1001/jamanetworkopen.2021.13025

Associations of Suicidality Trends With Cannabis Use as a Function of Sex and Depression Status.

Han B, Compton WM, Einstein EB, Volkow ND

JAMA Network Open June 22, 2021

Key Points

Question

Are there associations between cannabis use and suicidality trends in young adults, and do they vary as a function of sex and depression?

Findings

This survey study examined 281 650 adult participants in the 2008-2019 National Surveys of Drug Use and Health data and found associations of past-year cannabis use

disorder, daily cannabis use, and nondaily cannabis use with higher prevalence of pastyear suicidal ideation, plan, and attempt in both sexes, but significantly more in women.

Meaning

In this study, cannabis use was associated with higher prevalence of suicidal ideation, plan, and attempt among US young adults with or without depression, and the risks were greater for women than men.

Abstract

Importance

During the past decade, cannabis use among US adults has increased markedly, with a parallel increase in suicidality (ideation, plan, attempt, and death). However, associations between cannabis use and suicidality among young adults are poorly understood.

Objective

To determine whether cannabis use and cannabis use disorder (CUD) are associated with a higher prevalence of suicidality among young adults with or without depression and to assess whether these associations vary by sex.

Design, Setting, and Participants

This survey study examined data from 281 650 adults aged 18 to 34 years who participated in the National Surveys on Drug Use and Health. Data were collected from January 1, 2008, to December 31, 2019.

Exposures

Prevalence of past-year daily or near-daily cannabis use (≥300 days in the past year), CUD, and major depressive episode (MDE). Past-year CUD and MDE were based on DSM-IV diagnostic criteria.

Main Outcomes and Measures Past-year suicidal ideation, plan, and attempt.

Results

Among the 281 650 adults aged 18 to 34 (men, 49.9% [95% CI, 49.6%-50.2%]; women, 50.1% [95% CI, 49.8%-50.4%]) included in the analysis, past-year suicidal ideation and plan along with daily cannabis use increased among all examined sociodemographic subgroups (except daily cannabis use among current high-school students), and past-year suicide attempt increased among most subgroups. National trends in adjusted prevalence of past-year suicidal ideation, plan, and attempt varied by daily and nondaily

cannabis use and CUD among adults with or without MDE. After controlling for MDE, CUD, cannabis use status, and potential confounding factors, the adjusted prevalence of suicidal ideation, plan, and attempt increased 1.4 to 1.6 times from the 2008-2009 to 2018-2019 periods (adjusted risk ratio [ARR] for suicidal ideation, 1.4 [95% CI, 1.3-1.5]; ARR for suicide plan, 1.6 [95% CI, 1.5-1.9]; ARR for suicide attempt, 1.4 [95% CI, 1.2-1.7]), with 2008 to 2009 as the reference period. Past-year CUD, daily cannabis use, and nondaily cannabis use were associated with a higher prevalence of past-year suicidal ideation, plan, and attempt in both sexes (eg, among individuals without MDE, prevalence of suicidal ideation for those with vs without CUD was 13.9% vs 3.5% among women and 9.9% vs 3.0% among men; P < .001), but significantly more so in women than men (eg, suicide plan among those with CUD and MDE was 52% higher for women [23.7%] than men [15.6%]; P < .001).

Conclusions and Relevance

From 2008 to 2019, suicidal ideation, plan, and attempt increased 40% to 60% over increases ascribed to cannabis use and MDE. Future research is needed to examine this increase in suicidality and to determine whether it is due to cannabis use or overlapping risk factors.

https://doi.org/10.1001/jamapsychiatry.2021.1419

Ten Practical Recommendations for Improving Blinding Integrity and Reporting in Psychotherapy Trials (Viewpoint).

Mataix-Cols D, Andersson E

JAMA Psychiatry Published online June 23, 2021

It is notoriously difficult to fully blind clinical trials of psychological interventions. At most, psychotherapy trials are said to be single blinded, because study participants typically know what group they have been allocated to and therapists know the treatments they deliver. It is somewhat easier to ensure that the study investigators, outcome assessors, and other study personnel remain blinded to treatment allocation. A review of psychotherapy trial reports1 published in 6 top psychiatry journals in 2017 and 2018 revealed that only 59% of the included trials reported adequate blinding of outcome assessors. Participants, therapists, data managers, data safety and monitoring committees, statisticians, and those making conclusions were typically either not

blinded, or it was unclear whether blinding was performed.1 Many psychotherapy trials are not blinded at all and rely on participant self-reports as their primary outcome measures. This inevitably results in lower-quality scores in meta-analyses using risk of bias tools.2 Thus, it is clear that more needs to be done to improve the planning of blinding procedures (and their reporting) in psychotherapy trials. The simple message is that all study personnel and participants who can potentially be blinded should be blinded.

https://doi.org/10.1002/jts.22645

Associations Between Service Members' Posttraumatic Stress Disorder Symptoms and Partner Accommodation Over Time.

Allen, E., Renshaw, K., Fredman, S.J., Le, Y., Rhoades, G., Markman, H. and Litz, B.

Journal of Traumatic Stress Volume 34, Issue 3 June 2021, Pages 596-606

When service members manifest symptoms of posttraumatic stress disorder (PTSD), intimate partners may engage in behaviors to accommodate their partners' experiences (e.g., helping service members avoid situations that could make them uncomfortable, not expressing own thoughts and feelings to minimize PTSD-related conflict), which may inadvertently serve to maintain or increase PTSD symptoms over time. In a sample of 274 male service member/female civilian couples, we evaluated hypothesized bidirectional pathways between self-reported service member PTSD symptoms and partner accommodation, assessed four times over an approximately 18-month period. A random-intercept cross-lagged panel model disaggregating between and within effects revealed that, on average, couples in which the service member had higher levels of total PTSD symptoms also scored higher in partner accommodation, between-couple correlation, r = .40. In addition, at time points when service members' PTSD symptoms were higher relative to their own average symptom level, their partners' level of accommodation was also higher than their personal average, within-couple correlation r = .22. Longitudinally, service member PTSD symptom scores higher than their personal average predicted subsequent increases in partner accommodation, β = .19, but not vice versa, $\beta = .03$. Overall, the findings indicate both stable and time-specific significant associations between service member PTSD symptoms and partner accommodation and suggest that higher levels of PTSD symptoms are a significant driver of later

increases in partner accommodation. These findings add further support for treating PTSD in an interpersonal context to address the disorder and concomitant relational processes that can adversely impact individual and relational well-being.

https://doi.org/10.1177/0265407520970645

Suspicion about a partner's deception and trust as roots of relational uncertainty during the post-deployment transition.

Knobloch, L. K., Knobloch-Fedders, L. M., Yorgason, J. B., Basinger, E. D., Abendschein, B., & McAninch, K. G.

Journal of Social and Personal Relationships 2021; 38(3), 912–934

Relational uncertainty is both prominent and pivotal during the transition from deployment to reintegration. Most prior research has considered the outcomes rather than the origins of relational uncertainty, hampering the development of interventions for military couples. We theorize about two predictors of relational uncertainty during the post-deployment transition: suspicion about a partner's deception and trust. Results of an 8-wave longitudinal study involving 287 U.S. military couples (N = 4,147 observations) revealed that relational uncertainty increased over the transition for both returning service members and at-home partners. Suspicion about a partner's deception, and particularly trust, predicted the relational uncertainty of military couples at homecoming and over time. These findings advance knowledge about the roots of relational uncertainty and suggest ways to assist military couples upon reunion.

https://doi.org/10.1016/j.smrv.2021.101519

Bi-directional relationships between co-morbid insomnia and sleep apnea (COMISA).

Alexander Sweetman, Leon Lack, R Doug McEvoy, Simon Smith, ... Peter Catcheside

Sleep Medicine Reviews Available online 23 June 2021 Insomnia and obstructive sleep apnea (OSA) commonly co-occur. Approximately 30-50% of patients with OSA report clinically significant insomnia symptoms, and 30-40% of patients with chronic insomnia fulfil diagnostic criteria for OSA. Compared to either SUMMinsomnia or OSA alone, co-morbid insomnia and sleep apnea (COMISA) is associated with greater morbidity for patients, complex diagnostic decisions for clinicians, and reduced response to otherwise effective treatment approaches. Potential bi-directional causal relationships between the mechanisms and manifestations of insomnia and OSA could play an integral role in the development and management of COMISA. A greater understanding of these relationships is required to guide personalized diagnostic and treatment approaches for COMISA.

This review summarizes the available evidence of bi-directional relationships between COMISA, including epidemiological research, case studies, single-arm treatment studies, randomized controlled treatment trials, and objective sleep study data. This evidence is integrated into a conceptual model of COMISA to help refine the understanding of potential bi-directional causal relationships between the two disorders. This theoretical framework is essential to help guide future research, improve diagnostic tools, determine novel therapeutic targets, and guide tailored sequenced and multi-faceted treatment approaches for this common, complex, and debilitating condition.

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 Jun 5; 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.

https://doi.org/10.1002/da.23141

Psychophysiology during exposure to trauma memories: Comparative effects of virtual reality and imaginal exposure for posttraumatic stress disorder.

Gramlich, M. A., Smolenski, D. J., Norr, A. M., Rothbaum, B. O., Rizzo, A. A., Andrasik, F., Fantelli, E., & Reger, G. M.

Depression and Anxiety 2021 Jun; 38(6): 626-638

Background:

This investigation involved an in-depth examination of psychophysiological responses during exposure to the trauma memory across 10 sessions among active duty soldiers

with combat-related posttraumatic stress disorder (PTSD) treated by Prolonged Exposure (PE) or Virtual Reality Exposure (VRE). We compared psychophysiological changes, session-by-session, between VRE and traditional imaginal exposure.

Methods:

Heart rate (HR), galvanic skin response (GSR), and peripheral skin temperature were collected every 5 min during exposure sessions with 61 combat veterans of Iraq/Afghanistan and compared to the PTSD Checklist (PCL-C) and Clinician-Administered PTSD Scale (CAPS) outcomes using multilevel modeling.

Results:

Over the course of treatment, participants in the PE group had higher HR arousal compared to participants in the VRE group. With reference to GSR, in earlier sessions, participants demonstrated a within-session increase, whereas, in later sessions, participants showed a within-session habituation response. A significant interaction was found for GSR and treatment assignment for within-session change, within-person effect, predicting CAPS (d = 0.70) and PCL-C (d = 0.66) outcomes.

Conclusion:

Overall, these findings suggest that exposure to traumatic memories activates arousal across sessions, with GSR being most associated with reductions in PTSD symptoms for participants in the PE group.

https://doi.org/10.1002/da.23145

Moral injury and suicidal behavior among US combat veterans: Results from the 2019-2020 National Health and Resilience in Veterans Study.

Nichter, B., Norman, S. B., Maguen, S., & Pietrzak, R. H.

Depression and Anxiety 2021 Jun; 38(6): 606-614

Background:

Recent research suggests that exposure to potentially morally injurious experiences (PMIEs) may be associated with increased risk for suicidal behavior among US combat veterans, but population-based data on these associations are scarce. This study examined the association between PMIEs with current suicidal ideation (SI), lifetime

suicide plans (SP), and suicide attempts (SA) in a contemporary, nationally representative sample of combat veterans.

Methods:

Data were analyzed from the 2019-2020 National Health and Resilience in Veterans Study, which surveyed a nationally representative sample of US combat veterans (n = 1321). PMIEs were assessed using the Moral Injury Events Scale (MIES). Multivariable logistic regression analyses were conducted to examine associations between MIES total scores and specific types of PMIEs with suicidal behavior.

Results:

Thirty-six point three percent of veterans reported at least one PMIE. Perceived transgressions by self, others, and betrayal were associated with SI, SP, and SA (odds ratios [ORs] = 1.21-1.27, all p s < .05), after adjusting for sociodemographic, trauma, and psychiatric characteristics. MIES total scores were significantly, albeit weakly, associated with SP (OR = 1.03, p < .01), but not SI/SA. Depression, posttraumatic stress disorder (PTSD), and age emerged as the strongest correlates of SI/SP/SA (14.9%-38.1% of explained variance), while PMIEs accounted for a comparatively modest amount of variance (3.3%-8.9%).

Conclusions:

Reports of potentially morally injurious experiences are prevalent among US combat veterans, and associated with increased risk for suicidal behavior, above and beyond severity of combat exposure, PTSD, and depression. Implications for clinical practice and future research are discussed, including the need for methodological advancements in the measurement of moral injury.

https://doi.org/10.1007/s00127-021-02028-6

ICD-11 posttraumatic stress disorder (PTSD) and complex PTSD (CPTSD) in treatment seeking veterans: risk factors and comorbidity.

Murphy, D., Karatzias, T., Busuttil, W., Greenberg, N., & Shevlin, M.

Social Psychiatry and Psychiatric Epidemiology 2021 Jul; 56(7): 1289-1298

Purpose:

Emerging evidence suggests that ICD-11 CPTSD is a more common condition than PTSD in treatment seeking samples although no study has explored risk factors and comorbidities of PTSD and CPTSD in veteran populations. In this study, risk factors and comorbidity between veterans meeting criteria for PTSD or CPTSD using the ICD-11 International Trauma Questionnaire (ITQ) were explored.

Methods:

A sample of help-seeking veterans who had been diagnosed with a mental health difficulty (n = 177) was recruited. Participants completed a range of mental health and functioning measures. Multinomial logistic regression analysis was conducted to explore differences in the above factors between participants meeting case criteria for PTSD, CPTSD or another mental health disorder.

Results:

Those with CPTSD appeared to have taken longer to seek help, reported higher rates of childhood adversity and more experiences of emotional or physical bullying during their military careers. Further, participants with CPTSD reported a greater burden of comorbid mental health difficulties including high levels of dissociation, anger, difficulties related to moral injury and common mental health difficulties and greater degree of impairment including social isolation, sleep difficulties and impaired functioning.

Conclusions:

Considering that CPTSD is a more debilitating condition than PTSD, there is now an urgent need to test the effectiveness of new and existing interventions in veterans with CPTSD.

https://doi.org/10.5664/jcsm.8832

A rare presentation of sexsomnia in a military service member.

Journal of Clinical Sleep Medicine 2021 Jan 1; 17(1): 107-109

Sexsomnias are unconscious sexual behaviors during sleep (parasomnias) that are garnering more attention as they become increasingly evident in forensic cases. Presentations of sexsomnia in active duty service members are seldom described, and often evaluation is clouded by intoxication with substances such as alcohol, sleep

deprivation, untreated sleep disturbances, or criminal behavior masquerading as a medical disorder. We present a case of a 40-year-old male soldier evaluated in our sleep clinic for multiple episodes of sleep masturbation occurring over a period of 2 years. The patient was concerned about his suitability for deployment to a combat zone and participation in field training exercises (both require sleeping in groups in an open environment). Video polysomnography confirmed moderate obstructive sleep apnea, and the patient showed improvement with continuous positive airway pressure therapy. The authors also discuss the relevance of this case compared with previously reported sexsomnia cases and expand on parasomnia topics that are more common in military populations.

https://doi.org/10.1016/j.nicl.2020.102390

Inter-channel phase differences during sleep spindles are altered in Veterans with PTSD.

Wang, C., Laxminarayan, S., David Cashmere, J., Germain, A., & Reifman, J.

NeuroImage: Clinical 2020; 28: 102390

Sleep disturbances are common complaints in patients with post-traumatic stress disorder (PTSD). To date, however, objective markers of PTSD during sleep remain elusive. Sleep spindles are distinctive bursts of brain oscillatory activity during non-rapid eye movement (NREM) sleep and have been implicated in sleep protection and sleepdependent memory processes. In healthy sleep, spindles observed in electroencephalogram (EEG) data are highly synchronized across different regions of the scalp. Here, we aimed to investigate whether the spatiotemporal synchronization patterns between EEG channels during sleep spindles, as quantified by the phaselocking value (PLV) and the mean phase difference (MPD), are altered in PTSD. Using high-density (64-channel) EEG data recorded from 78 combat-exposed Veteran men (31 with PTSD and 47 without PTSD) during two consecutive nights of sleep, we examined group differences in the PLV and MPD for slow (10-13 Hz) and fast (13-16 Hz) spindles separately. To evaluate the reproducibility of our findings, we set apart the first 47 consecutive participants (18 with PTSD) for the initial discovery and reserved the remaining 31 participants (13 with PTSD) for replication analysis. In the discovery analysis, compared to the non-PTSD group, the PTSD group showed smaller MPDs during slow spindles between the frontal and centro-parietal channel pairs on both

nights. We obtained reproducible results in the replication analysis in terms of statistical significance and effect size. The PLVs during slow or fast spindles did not significantly differ between groups. The reduced inter-channel phase difference during slow spindles in PTSD may reflect pathological changes in the underlying thalamocortical circuits. This novel finding, if independently validated, may prove useful in developing sleep-focused PTSD diagnostics and interventions.

https://doi.org/10.1080/15402002.2020.1726749

Sleep Quality Moderates the Relationship between Anxiety Sensitivity and PTSD Symptoms in Combat-exposed Veterans.

McNett, S., Lind, M. J., Brown, R. C., Hawn, S., Berenz, E. C., Brown, E., McDonald, S. D., Pickett, T., Danielson, C. K., Thomas, S., & Amstadter, A. B.

Behavioral Sleep Medicine Mar-Apr 2021; 19(2): 208-220

Objective/Background:

Posttraumatic stress disorder (PTSD) and related conditions (e.g., depression) are common in Operation Enduring Freedom, Operation Iraqi Freedom, and Operation New Dawn (OEF/OIF/OND) veterans. High anxiety sensitivity (AS), defined as fear of anxiety and anxiety-related consequences, is related to greater PTSD and depressive symptoms; however, few studies have identified possible modifiers of these associations. The current study examined the moderating role of sleep quality in the associations between AS and PTSD and depressive symptoms.

Participants:

Participants were 155 OEF/OIF/OND community veterans ages 21-40 (12.3% women).

Methods:

Participants completed a semi-structured clinical interview for DSM-IV PTSD symptoms (Clinician Administered PTSD Scale; CAPS) and self-report measures of anxiety sensitivity (Anxiety Sensitivity Index), sleep quality (Pittsburgh Sleep Quality Index global score; PSQI), and depressive symptoms (Beck Depression Inventory-II; BDI-II).

Results:

Results of hierarchical linear regression models indicated that the main effects of AS

and global PSQI score were significantly associated with greater PTSD and depressive symptoms (both with sleep items removed), above and beyond the covariates of trauma load and military rank. Sleep quality moderated the relationship between AS and PTSD symptoms (but not depressive symptoms), such that greater AS was associated with greater PTSD symptoms for individuals with good sleep quality, but not poor sleep quality.

Conclusions:

Sleep quality and AS account for unique variance in PTSD and depressive symptoms in combat-exposed veterans. AS may be less relevant to understanding risk for PTSD among combat-exposed veterans experiencing poor sleep quality.

https://doi.org/10.1016/j.drugalcdep.2021.108647

The association of engagement in substance use treatment with negative separation from the military among soldiers with post-deployment alcohol use disorder.

Gray, J. C., Larson, M. J., Moresco, N., Ritter, G. A., Dufour, S., Milliken, C. S., & Adams, R. S.

Drug and Alcohol Dependence 2021 Apr 1; 221: 108647

Background:

Alcohol use disorder (AUD) reduces the health of soldiers and the readiness of the Armed Forces. It remains unknown if engagement in substance use treatment in the Military Health System improves retention in the military.

Methods:

The sample consisted of active duty soldiers returning from an Afghanistan/Iraq deployment in fiscal years 2008-2010 who received an AUD diagnosis within 150 days of completing a post-deployment health re-assessment survey (n = 4,726). A Heckman probit procedure was used to examine predictors of substance use treatment initiation and engagement in accordance with Healthcare Effectiveness Data and Information Set (HEDIS) criteria. Cox proportional hazard modeling was used to examine the association between treatment engagement and retention, defined as a negative separation for a non-routine cause (e.g., separation due to misconduct, poor

performance, disability) from the military in the two years following the index AUD diagnosis.

Results:

40 % of soldiers meeting HEDIS AUD criteria initiated and 24 % engaged in substance use treatment. Among soldiers diagnosed with AUD, meeting criteria for treatment engagement was associated with a significantly higher hazard of having a negative separation compared to soldiers who did not engage in treatment.

Conclusions:

Rates of initiation and engagement in substance use treatment for post-deployment AUD were relatively low. Soldiers with AUD who engaged in substance use treatment were more likely to have a negative separation from the military than soldiers with AUD who did not engage. Our findings imply that in the study cohort, treatment did not mitigate negative career consequences of AUD.

https://doi.org/10.1080/10826084.2021.1887257

Variations in Risk and Motivations for Substance Use over the Course of Military Service.

Vest, B. M., Brady, L. A., Brimmer, M. J., & Homish, G. G.

Substance Use & Misuse 2021; 56(4): 559-566

Epidemiological data identify risk factors related to substance use among military service members to inform prevention and treatment. Less is known about how motivations and risks for substance use vary over a military service career. The study goal was to explore substance use patterns and motivations among a sample of United States undergraduate student veterans in order to identify periods of risk.

Methods:

Qualitative interviews were conducted (n = 31) between December 2018 and April 2019. Transcripts were coded in ATLAS.ti using thematic content analysis.

Results: Interviews revealed complex motivations around substance use and identified key periods of risk. 1) Pre-service: Participants reported using alcohol and marijuana, primarily during social activities. 2) During service: Participants described a culture of heavy alcohol and tobacco use in social contexts, but little use of other substances. Post-deployment was a notable exception, when some reported heavier alcohol use and use of other drugs, including opiates, cocaine, and ecstasy. 3) Post-service: Transitioning out of the military was described as difficult; some participants reported heavier use of substances during this period. Some participants quit smoking after military service, or switched to vaping. Others reported use of alcohol and/or marijuana to calm themselves, relieve stress, and enable sleep.

Conclusions:

These data indicate that the periods immediately following deployment and transition out of the military may be especially high-risk for heavy substance use and use of a broader range of substances. This highlights the need for tailored interventions and messaging at different points of military service, particularly during periods of greatest risk.

https://doi.org/10.1037/pas0000998

Examination of measurement invariance of the Acquired Capability for Suicide Scale.

Rogers, M. L., Bauer, B. W., Gai, A. R., Duffy, M. E., & Joiner, T. E.

Psychological Assessment 2021 May; 33(5): 464-470

Capability for suicide is frequently assessed using the Acquired Capability for Suicide Scale (ACSS) or the Acquired Capability for Suicide Scale-Fearlessness About Death (ACSS-FAD); however, the measurement invariance of these self-report measures across relevant demographic groups has not been tested. The current study aimed to examine the measurement invariance of the ACSS and ACSS-FAD across (a) gender; (b) suicide attempt status; and (c) military deployment history in a sample of 2,551 participants (M = 28.92, SD = 10.73; 56.7% male, 68.5% White) who participated in one of several studies funded by the Military Suicide Research Consortium. Results indicated that the ACSS exhibited poor model fit; thus, further investigation of measurement invariance was not conducted. Furthermore, although partial measurement invariance of the ACSS-FAD was met for gender, scalar invariance was

not supported across military deployment history, and no form of measurement invariance was met across suicide attempt status. Overall, given the lack of strong model fit and measurement invariance in the ACSS and ACSS-FAD across several demographic groups, new or modified self-report measures for capability for suicide may be warranted. (PsycInfo Database Record (c) 2021 APA, all rights reserved).

https://doi.org/10.1016/j.cbpra.2021.05.002

Rapid Adoption and Implementation of Telehealth Group Psychotherapy During COVID 19: Practical Strategies and Recommendations.

Ajeng J. Puspitasari, Dagoberto Heredia, Melanie Gentry, Craig Sawchuk, ... Mayo Clinic

Cognitive and Behavioral Practice Available online 24 June 2021

Highlights

- Rapid adoption and implementation of group teletherapy in the context of COVID-19 is feasible.
- Behavioral health organizations should utilize available guidelines and frameworks to support successful teletherapy implementation.
- Teletherapy is a promising solution to provide access to behavioral services during COVID-19.

Abstract

Behavioral health services have been tasked with rapidly adopting and implementing teletherapy during the SARS-CoV-2/COVID-19 pandemic to assure patient and staff safety. Existing teletherapy guidelines were developed prior to the pandemic and do not capture the nuances of rapidly transitioning in-person individual and group-based treatments to a teletherapy format. In this paper, we describe our approach to quickly adapting to a teletherapy technology platform for an intensive outpatient program (IOP) guided by cognitive and behavioral modular principles for adults with serious mental illness. A review of existing guidelines was conducted and the staged approach for teletherapy implementation (Muir et al., 2020) was selected as the most appropriate model for our organizational context. We describe the most pertinent implementation strategies and report our preliminary findings detailing the feasibility of IOPs delivered via telehealth. This model of rapid teletherapy implementation offers practical clinical

guidelines for administrators and clinicians seeking to transition traditional in-person behavioral health services to a teletherapy format.

https://doi.org/10.1016/j.drugalcdep.2021.108858

The prevalence of hazardous and harmful alcohol use across trauma-exposed occupations: A meta-analysis and meta-regression.

Patricia Irizar, Jo-Anne Puddephatt, Suzanne H. Gage, Victoria Fallon, Laura Goodwin

The prevalence of hazardous and harmful alcohol use across trauma-exposed occupations: A meta-analysis and meta-regression.

Drug and Alcohol Dependence Volume 226, 1 September 2021

Highlights

- Hazardous and harmful alcohol use was highest in Armed Forces personnel.
- First responders showed higher levels of hazardous alcohol use than health care workers.
- Specifically, hazardous alcohol use was highest in military personnel and police officers.
- Studies with more males and a younger mean age had higher prevalence estimates.

Abstract

Background

Trauma exposure is associated with hazardous and/or harmful alcohol use.

Occupational groups frequently exposed to trauma may be at risk of alcohol harm. This meta-analysis determined the prevalence of hazardous and harmful alcohol use across trauma-exposed occupations and meta-regressions explored the impact of pre-defined covariates on the variance in prevalence estimates.

Method

Literature was searched from 2000 to March 2020, using Scopus, Web of Science and PsycINFO. Studies were included in the meta-analysis if they used a standardized measure of alcohol use (e.g., Alcohol Use Disorder Identification Test (AUDIT)). Studies were excluded if they measured alcohol use following an isolated sentinel event (e.g.,

9/11). The following occupations were included: first responders, health care workers, Armed Forces, war journalists and train drivers.

Results

1882 studies were identified; 55 studies were eligible. The pooled prevalence of hazardous use was 22% (95% Confidence Intervals [CI]: 17%–27%) and 11% (95% CI: 8%–14%) for harmful use. Hazardous alcohol use was significantly lower in health care workers (13%; 95% CI: 10%–16%) than first responders (26%; 95% CI: 20%–32%) and Armed Forces (34%; 95% CI: 18%–52%). There was marked heterogeneity across studies and higher prevalence rates in low-quality studies. The meta-regression identified higher proportion of males and younger mean age as predictors of variance.

Conclusions

Male-dominated occupations, such as police officers and military personnel, showed higher levels of hazardous and harmful alcohol use, indicating that interventions tailored specifically for these occupational groups may be needed.

Links of Interest

Army releases new transgender policy, but can it prevent discrimination? <u>https://www.armytimes.com/news/pentagon-congress/2021/06/25/army-releases-new-transgender-policy-but-can-it-prevent-discrimination/</u>

Goodbye, coffee? Service members might soon be fueled by a jolt to the brain <u>https://www.militarytimes.com/off-duty/military-culture/2021/06/25/goodbye-coffee-service-members-might-soon-be-fueled-by-a-jolt-to-the-brain/</u>

My experience as a "military brat" may look different than yours <u>https://militaryreach.auburn.edu/FamilyStoryDetails?resourceid=fb4f72ed-26af-4f08-b456-489234772a9e</u>

Veteran-run LGBTQIAP+ employee organization celebrates launch with DHS <u>https://www.militarytimes.com/off-duty/military-culture/2021/06/28/veteran-run-lgbtqiap-employee-organization-celebrates-launch-with-dhs/</u>

Servicemember Rights: Stakeholders Reported Servicemembers Have Limited Understanding about Waivers of Their Consumer Rights and Protections <u>https://www.gao.gov/products/gao-21-550r</u>

Resource of the Week -- Fact Sheet: Mental Health and Security Clearances

From the Defense Counterintelligence and Security Agency:

Research shows that stigmas related to mental health treatment have decreased in recent years. However, mental health stigma still remains a notable challenge, particularly among military members. A RAND study showed many service members do not regularly seek care for mental health symptoms due to reasons such as personal beliefs about self-reliance, concerns about how their supervisors and co-workers may react, and availability of mental health care. But most importantly, cleared individuals fear seeking mental health care could adversely impact their security clearance eligibility. This is not the case.



See also -- FAQs: Mental Health and Security Clearances

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