

# Research Update -- April 25, 2024

#### What's Here:

- Relationship Between Alcohol Use and Firearm-Involved Suicide: Findings From the National Violent Death Reporting System, 2003–2020.
- Clinician Burnout and Effectiveness of Guideline-Recommended Psychotherapies.
- Emotional State Transitions in Trauma-Exposed Individuals With and Without Posttraumatic Stress Disorder.
- Predictors of non-fatal suicide attempts among Veterans Health Administration (VHA) patients who experienced military sexual trauma.
- Do stigma and efficacy mediate the association between training and suicide prevention behavior among Army noncommissioned officers?
- Complex PTSD symptom clusters and executive function in UK Armed Forces veterans: A cross-sectional study.
- Veterans Administration Readjustment Counseling Service Counselors' Training Needs: Results of a National Needs Assessment.
- PTSD, depression, and treatment outcomes: A latent profile analysis among active duty personnel in a residential PTSD program.
- Increase in physical activity is associated with an increase in sleep efficiency, but not with improvement in symptoms of PTSD: analysis of longitudinal data in trauma-affected refugees.

- Therapeutic Management of Nightmares: Practice Guide for Imagery Rehearsal Therapy (IRT).
- Exploring Gender Differences in Veterans in a Secondary Analysis of a Randomized Controlled Trial of Mindfulness for Chronic Pain.
- A Systematic Review of the Clinical Effects of Cannabis and Cannabinoids in Posttraumatic Stress Disorder Symptoms and Symptom Clusters.
- Partners' experiences of their loved ones' trauma and PTSD: An ongoing journey of loss and gain.
- Combat military service and male depression: The relationship between social support, PTSD, and male depression following combat military service.
- Does cognitive load influence expressive flexibility? Comparing civilian and veteran populations.
- Short-term stability and night-to-night variability of sleep parameters in nightmares comorbid with chronic insomnia Disorder across multiple nights of polysomnography.
- Traumatic Brain Injury and Subsequent Risk of Brain Cancer in US Veterans of the Iraq and Afghanistan Wars.
- (Dis)honorably discharged: identifying policy gaps in military–civilian reintegration.
- Perceived social support moderates the relations between mental health symptoms and current suicidal ideation.
- Review of the Army's Efforts to Prevent and Respond to Harassment of Soldiers (DODIG-2024-074)
- Links of Interest
- Resource of the Week Rethinking How We Solve the Military Spouse Employment Dilemma: Six Recommendations for Getting out of Our Own Way (National Military Spouse Network)

#### https://doi.org/10.1016/j.amepre.2023.11.019

# Relationship Between Alcohol Use and Firearm-Involved Suicide: Findings From the National Violent Death Reporting System, 2003–2020.

Kawon V. Kim, Jürgen Rehm, Mark S. Kaplan, Shannon Lange

American Journal of Preventive Medicine Volume 66, Issue 5, May 2024, Pages 832-839

#### Introduction

Acute alcohol intoxication is a contributing factor in firearm-involved suicides. However, knowledge of the relationship between alcohol intoxication and firearm-involved suicide by age and sex (defined herein as the biological sex of the decedent) is limited. The purpose of the current study was to evaluate the sex- and age group-specific relationship between alcohol intoxication and firearm-involved suicide.

#### Methods

Data from the National Violent Death Reporting System, 2003–2020, on suicide decedents (18+ years of age) were utilized. Age-group- and sex-specific multivariate binary logistic regression analyses were conducted. Statistical analyses were performed in 2023.

#### Results

Alcohol intoxication (i.e., having a blood alcohol concentration of 0.08 g/dL or more) was significantly associated with using a firearm as the method of suicide for young (18–34 years; relative risk (RR)=1.31, 95% CI: 1.22–1.40) and middle-aged (35–64 years; RR=1.34, 95% CI: 1.27–1.39) females but not among older females (65+ years; RR=1.01, 95% CI: 0.87–1.17). Among males, the association was significant for all age-groups (young: RR=1.28, 95% CI: 1.25–1.30; middle-aged: RR=1.17, 95% CI: 1.15–1.19; and older: RR=1.04, 95% CI: 1.01–1.07).

#### Conclusions

Among males of all ages and young and middle-aged females, alcohol intoxication was associated with increased risk of suicide by firearm—an extremely lethal method that accounts for a majority of suicides in the U.S.—compared to their non-intoxicated counterparts. Interventions targeting excessive alcohol consumption may be effective in reducing suicide mortality rates.

#### https://doi.org/10.1001/jamanetworkopen.2024.6858

# Clinician Burnout and Effectiveness of Guideline-Recommended Psychotherapies.

Sayer, N. A., Kaplan, A., Nelson, D. B., Wiltsey Stirman, S., & Rosen, C. S.

JAMA Network Open April 17, 2024

Key Points

# Question

Is therapist burnout associated with reduced effectiveness of guideline-recommended psychotherapies for posttraumatic stress disorder (PTSD)?

#### Findings

In this cohort study of 165 therapists and 1268 patients, therapist burnout was significantly associated with reduced effectiveness of guideline-recommended psychotherapies for PTSD. The proportion of patients who experienced clinically meaningful improvement in PTSD symptoms was 28.3% among therapists who reported burnout and 36.8% among therapists without burnout.

#### Meaning

These findings suggest that interventions to reduce therapist burnout might also result in more patients experiencing clinically meaningful improvement in PTSD symptoms from evidence-based psychotherapies.

#### Abstract

Importance

Clinician burnout has been associated with clinician outcomes, but the association with patient outcomes remains unclear.

#### Objective

To evaluate the association between clinician burnout and the outcomes of patients receiving of guideline-recommended trauma-focused psychotherapies for posttraumatic stress disorder (PTSD).

#### Design, Setting, and Participants

This cohort study was set at the US Veterans Affairs Health Care System and included licensed therapists who provided trauma-focused psychotherapies and responded to an online survey between May 2 and October 8, 2019, and their patients who initiated a trauma-focused therapy during the following year. Patient data were collected through December 31, 2020. Data were analyzed from May to September 2023.

#### Exposures

Therapists completing the survey reported burnout with a 5-point validated measure taken from the Physician Worklife Study. Burnout was defined as scores of 3 or more.

#### Main Outcomes and Measures

The primary outcome was patients' clinically meaningful improvement in PTSD symptoms according to the PTSD Checklist for the Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition). Patient dropout, therapist adherence, and session spacing was assessed through electronic health records. Multivariable random-effects logistic regression examined the association of therapist burnout and clinically meaningful improvement, adjusted for case-mix.

#### Results

In this study, 165 of 180 (91.7%) therapists (89 [53.9%] female) completed the burnout measure and provided trauma-focused psychotherapies to 1268 patients (961 [75.8%] male) with outcome data. Fifty-eight (35.2%) therapists endorsed burnout. One third of patients (431 [34.0%]) met criterion for clinically meaningful improvement. Clinically meaningful improvement in PTSD symptoms was experienced by 120 (28.3%) of the 424 patients seen by therapists who reported burnout and 311 (36.8%) of the 844 patients seen by therapists without burnout. Burnout was associated with lower odds of clinically meaningful improvement (adjusted odds ratio [OR],0.63; 95% CI, 0.48-0.85). The odds of clinically meaningful improvement were reduced for patients who dropped out (OR, 0.15; 95% CI, 0.11-0.20) and had greater session spacing (OR, 0.80; 95% CI, 0.70-0.92). Therapist adherence was not associated with therapy effectiveness. Adjusting for dropout or session spacing did not meaningfully alter the magnitude of the association between burnout and clinically meaningful improvement.

#### Conclusions and Relevance

In this prospective cohort study, therapist burnout was associated with reduced effectiveness of trauma-focused psychotherapies. Studying when and how burnout affects patient outcomes may inform workplace interventions.

#### https://doi.org/10.1001/jamanetworkopen.2024.6813

# Emotional State Transitions in Trauma-Exposed Individuals With and Without Posttraumatic Stress Disorder.

Korem, N., Duek, O., Spiller, T., Ben-Zion, Z., Levy, I., & Harpaz-Rotem, I.

JAMA Network Open April 16, 2024

Key Points

Question

How does the transition between neutral and negative emotional states differ between trauma-exposed individuals with and without posttraumatic stress disorder (PTSD)?

#### Findings

In this cross-sectional study of 1440 trauma-exposed individuals, participants who met the criteria for PTSD exhibited a significantly faster transition rate between neutral and negative emotional states than controls. A higher transition rate was further associated with increased symptoms of emotional numbing.

#### Meaning

This study suggests that rapid shifts between neutral and negative emotional states in PTSD may bridge these seemingly contrasting symptoms, offering new insights for therapeutic strategies.

#### Abstract

#### Importance

Posttraumatic stress disorder (PTSD) is marked by the contrasting symptoms of hyperemotional reactivity and emotional numbing (ie, reduced emotional reactivity). Comprehending the mechanism that governs the transition between neutral and negative emotional states is crucial for developing targeted therapeutic strategies.

#### Objectives

To explore whether individuals with PTSD experience a more pronounced shift between neutral and negative emotional states and how the intensity of emotional numbing symptoms impacts this shift.

#### Design, Setting, and Participants

This cross-sectional study used hierarchical bayesian modeling to fit a 5-parameter logistic regression to analyze the valence ratings of images. The aim was to compare the curve's slope between groups and explore its association with the severity of emotional numbing symptoms. The study was conducted online, using 35 images with a valence range from highly negative to neutral. The rating of these images was used to assess the emotional responses of the participants. The study recruited trauma-exposed individuals (witnessed or experienced life-threatening incident, violent assault, or someone being killed) between January 17 and March 8, 2023. Participants completed the PTSD Checklist for the Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition) (DSM-5) (PCL-5).

#### Exposure

On the basis of DSM-5 criteria (endorsing at least 1 symptom from clusters B and C and 2 from D and E), participants were categorized as having probable PTSD (pPTSD) or as trauma-exposed controls (TECs).

### Main Outcomes and Measures

The main outcome was the slope parameter (b) of the logistic curve fitted to the valence rating. The slope parameter indicates the rate at which emotional response intensity changes with stimulus valence, reflecting how quickly the transition occurs between neutral and negatively valenced states. The secondary outcome was the association between emotional numbing (PCL-5 items 12-14) and the slope parameter.

# Results

A total of 1440 trauma-exposed individuals were included. The pPTSD group (n = 445) was younger (mean [SD] age, 36.1 [10.9] years) compared with the TEC group (mean [SD] age, 41.5 [13.3] years; P < .001). Sex distribution (427 women in the TEC group vs 230 in the pPTSD group) did not significantly differ between groups (P = .67). The pPTSD group exhibited a steeper slope (mean slope difference, -0.255; 89% highest posterior density [HPD], -0.340 to -0.171) compared with the controls. Across all individuals (n = 1440), a robust association was found between the slope and emotional numbing severity (mean [SD] additive value, 0.100 [0.031]; 89% HPD, 0.051-0.15). Additional analysis controlling for age confirmed the association between emotional numbing and transition sharpness (mean [SD] additive value, 0.108 [0.032]; 89% HPD, 0.056-0.159), without evidence of an age-related association (mean [SD] additive value, 0.031 [0.033]; 89% HPD, -0.022 to 0.083).

# Conclusions and Relevance

These findings support that individuals with PTSD undergo rapid transitions between

neutral and negative emotional states, a phenomenon intensified by the severity of emotional numbing symptoms. Therapeutic interventions aimed at moderating these swift emotional transitions could potentially alleviate PTSD symptoms.

\_\_\_\_

### https://doi.org/10.1111/sltb.13038

# Predictors of non-fatal suicide attempts among Veterans Health Administration (VHA) patients who experienced military sexual trauma.

Hein, T. C., Austin, K., Grau, P. P., Keith, J. A., Claes, N. J., & Bowersox, N. W.

Suicide & Life-Threatening Behavior 2024; 54(2), 263–274

### Objective

Military sexual trauma (MST) has been identified as a risk factor for suicidal behavior. To inform suicide prevention efforts within the Veterans Health Administration (VHA), this study evaluates predictors of non-fatal suicide attempts (NFSAs) among VHA patients who experienced MST.

#### Methods

For VHA patients in fiscal year (FY) 2019 who previously screened positive for a history of MST, documented NFSAs were assessed. Using multivariable logistic regression, demographic, clinical, and VHA care utilization predictors of NFSAs were assessed.

# Results

Of the 212,215 VHA patients who screened positive for MST prior to FY 2019 and for whom complete race, service connection, and rurality information was available, 1742 (0.8%) had a documented NFSA in FY 2019. In multivariable logistic regression analyses, total physical and mental health morbidities were not associated with NFSA risk. Predictors of a documented NFSA included specific mental health diagnoses [adjusted odds ratio (aOR) range: 1.28–1.94], receipt of psychotropic medication prescriptions (aOR range: 1.23–2.69) and having a prior year emergency department visit (aOR = 1.32) or inpatient psychiatric admission (aOR = 2.15).

#### Conclusions

Among VHA patients who experienced MST, specific mental health conditions may increase risk of NFSAs, even after adjustment for overall mental health morbidity.

Additionally, indicators of severity of mental health difficulties such as receipt of psychotropic medication prescriptions and inpatient psychiatric admissions are also associated with increased risk above and beyond risk associated with diagnoses. Findings highlight targets for suicide prevention initiatives among this vulnerable group within VHA and may help identify patients who would benefit from additional support.

\_\_\_\_

### https://doi.org/10.1111/sltb.13033

# Do stigma and efficacy mediate the association between training and suicide prevention behavior among Army noncommissioned officers?

Brooks Holliday, S., Ayer, L., Beckman, R., Jaycox, L. H., Agniel, D., Elinoff, D., Ramchand, R., Hoch, E., & Wagner, L.

Suicide & Life-Threatening Behavior 2024; 54(2), 195–206

#### Introduction:

Rates of suicide in the Active Component of the military have significantly increased since 2010, with particularly high rates among Army service members. One element of the Army's approach to suicide prevention relies on noncommissioned officers (NCOs) as gatekeepers who have regular contact with soldiers. NCOs receive suicide prevention training, but there is limited evidence that such training leads to behavior change.

# Methods:

We surveyed 2468 Army NCOs participating in leadership development courses to determine (a) if training on suicide prevention and soft skills (e.g., active listening) was associated with gatekeeper behavior and use of soft skills; and (b) whether that association was explained by two potential barriers, stigma and perceptions of efficacy.

#### Results:

Both the number of suicide prevention training topics and soft skills trained were associated with increased gatekeeper behavior; these relationships were explained in part by lower stigma and higher efficacy for use of soft skills. The use of interactive training methods and receiving coaching after training were not associated with stigma or efficacy, though both methods were associated with more frequent use of soft skills. Conclusion:

Results suggest that the content and format of training is important to preparing NCOs to fulfill a gatekeeper role.

\_\_\_\_

### https://doi.org/10.1186/s40359-024-01713-w

# Complex PTSD symptom clusters and executive function in UK Armed Forces veterans: A cross-sectional study.

Biscoe, N., New, E., & Murphy, D.

BMC Psychology 2024; 12(1), 209

Background:

Less is known about complex posttraumatic stress disorder (CPTSD) than postrraumatic stress disorder (PTSD) in military veterans, yet this population may be at greater risk of the former diagnosis. Executive function impairment has been linked to PTSD treatment outcomes. The current study therefore aimed to explore possible associations between each CPTSD symptom cluster and executive function to understand if similar treatment trajectories might be observed with the disorder.

# Methods:

A total of 428 veterans from a national charity responded to a self-report questionnaire which measured CPTSD symptom clusters using the International Trauma Questionnaire, and executive function using the Adult Executive Function Inventory. Single and multiple linear regression models were used to analyse the relationship between CPTSD symptom clusters and executive function, including working memory and inhibition.

# Results:

Each CPTSD symptom cluster was significantly associated with higher executive function impairment, even after controlling for possible mental health confounding variables. Emotion dysregulation was the CPTSD symptom cluster most strongly associated with executive function impairment.

# Conclusions:

This is the first study to explore the relationship between executive function and CPTSD

symptom clusters. The study builds on previous findings and suggests that executive function could be relevant to CPTSD treatment trajectories, as is the case with PTSD alone. Future research should further explore such clinical implications.

\_\_\_\_

### https://doi.org/10.1891/JCP-2023-0007

# Veterans Administration Readjustment Counseling Service Counselors' Training Needs: Results of a National Needs Assessment.

Bryan, J. L., Wittkower, D., Walker, L., Ozanian, A., Fisher, M., & Asghar-Ali, A. A.

Journal of Cognitive Psychotherapy 2024; 38(2), 157–168

The Department of Veteran Affairs established Readjustment Counseling Service (RCS) to meet the mental health needs of active-duty service members, veterans, and their families. A diverse therapeutic skill set is needed to serve this complex population. To assess training needs, a national mixed-methods needs assessment consisting of a survey for RCS counselors and focus groups among counselors, RCS educational trainers, and national leadership was conducted. Survey results (n = 681) showed that RCS counselors were most interested in trainings on moral injury, acceptance and commitment therapy, and military sexual trauma (MST). Desired trainings aligned with populations served. Themes from focus groups revealed the need for foundational trainings so that all RCS counselors are adept in treating MST, moral injury, and posttraumatic disorder and proficient in caring for couples. Additionally, counselors desired advanced trainings to help them treat those they serve.

https://doi.org/10.1016/j.jpsychires.2024.03.010

# PTSD, depression, and treatment outcomes: A latent profile analysis among active duty personnel in a residential PTSD program.

Kline, A. C., Otis, N., Panza, K. E., McCabe, C. T., Glassman, L., Campbell, J. S., & Walter, K. H.

Journal of Psychiatric Research 2024; 173, 71–79

Depression frequently co-occurs with posttraumatic stress disorder (PTSD), including among active duty service members. However, symptom heterogeneity of this comorbidity is complex and its association with treatment outcomes is poorly understood, particularly among active duty service members in residential treatment. This study used latent profile analysis (LPA) to identify symptom-based subgroups of PTSD and depression among 282 male service members in a 10-week, residential PTSD treatment program with evidence-based PTSD psychotherapies and adjunctive interventions. The PTSD Checklist-Military Version and Patient Health Questionnaire-8 were completed by service members at pre- and posttreatment and weekly during treatment. Multilevel models compared subgroups on PTSD and depression symptom change across treatment. LPA indicated four subgroups provided optimal fit: Depressive (high depression severity, low PTSD avoidance; n = 33, 11.7%), Avoidant (high PTSD avoidance, moderate depression severity; n = 89, 31.6%), Moderate (moderate PTSD and depression severity; n = 27, 9.6%), and Distressed (high PTSD and depression severity; n = 133, 47.2%). Treatment response differed across classes for both PTSD and depression outcomes (time × LPA class interaction ps < 0.001). In PTSD models, post-hoc comparisons indicated the Moderate class was associated with less PTSD symptom improvement relative to the other classes (ps < 0.006). In depression models, symptom reduction was greatest for the Distressed and Depressive subgroups relative to the other two classes (ps < 0.009). Study results provide an initial model for two prevalent, impairing disorders among service members and show how these symptombased subgroups may differentially respond to residential PTSD treatment.

https://doi.org/10.1186/s44167-024-00046-8

Increase in physical activity is associated with an increase in sleep efficiency, but not with improvement in symptoms of PTSD: analysis of longitudinal data in trauma-affected refugees.

Hinuga Sandahl, Mette Korshøj, Ole Steen Mortensen & Jessica Carlsson

Journal of Activity, Sedentary and Sleep Behaviors Published: 15 February 2024

#### Background

In trauma-affected refugees with posttraumatic stress disorder (PTSD), research on physical activity is scarce. Knowing more about the relation between physical activity and PTSD symptoms may provide insight into physical activity as a possible target in the treatment of PTSD. The aim of the present study was to examine whether baseline and change in level of physical activity from baseline to end of treatment were related to, respectively, baseline and change in PTSD symptoms, quality of life, sleep quality, and sleep efficiency in trauma-affected refugees.

#### Methods

Longitudinal data from a randomized controlled trial were analysed with multiple linear regression. Level of physical activity and sleep efficiency were measured with actigraphy and symptoms of PTSD, sleep quality, and quality of life were measured with self-report questionnaires.

#### Results

A higher level of physical activity was significantly associated with better baseline sleep quality, borderline associated with quality of life, but not with symptoms of PTSD, or sleep efficiency. Furthermore, an increase in level of physical activity was significantly associated with improvement in sleep efficiency. Change in level of physical activity was not significantly associated with improvement in PTSD symptoms, quality of life, or sleep quality.

#### Conclusion

The novelty of the current study lies in the finding of no relation between a change in level of physical activity and a change in symptoms of PTSD. The results point to a complex relation between sleep, physical activity and PTSD and point towards a need for studies on these relations to provide effective interventions in trauma-affected refugees.

Trial registration ClinicalTrials.gov ID (<u>NCT02761161</u>), April 27, 2016.

\_\_\_\_

https://doi.org/10.1007/s40675-024-00287-8

Therapeutic Management of Nightmares: Practice Guide for Imagery Rehearsal Therapy (IRT).

Alix Romier, Emmanuelle Clerici, Emilie Stern, Julia Maruani & Pierre A. Geoffroy

Current Sleep Medicine Reports Published: 15 February 2024

#### Purpose of Review

Nightmares, vivid and distressing dreams leading to arousal, can significantly impact sleep and daytime functioning. Nightmare disorder can occur with or without psychiatric disorders and with or without a traumatic event. Effective management of nightmares is crucial not only for nightmare disorder but also to prevent the worsening of psychiatric disorders or complications, such as suicide. This review explores the range of available treatments, encompassing both pharmacological and non-pharmacological, for nightmare disorders and trauma-associated nightmares.

#### **Recent Findings**

Different interventions have shown their safety and effectiveness in the therapeutic management of nightmares, such as imagery rehearsal therapy; exposure, relaxation, and rescripting therapy; lucid dreaming therapy; desensitization and exposure therapy; self-exposure therapy; and Prazosin.

#### Summary

Imagery rehearsal therapy (IRT) stands out with robust evidence supporting its effectiveness in nightmare disorder as well as in trauma-associated nightmares and should be considered as a first-line choice for therapeutic management of nightmares. This psychotherapeutic intervention employs cognitive and behavioral techniques and involves practicing mental imagery during daytime to modify the content of nightmares. This review summarizes the core principles of IRT and presents comprehensive guidelines for clinical practice.

\_\_\_\_

# https://doi.org/10.1089/whr.2023.0086

# Exploring Gender Differences in Veterans in a Secondary Analysis of a Randomized Controlled Trial of Mindfulness for Chronic Pain.

Burgess, D. J., Hagel Campbell, E. M., Branson, M., Calvert, C., Evans, R., Allen, K. D., Bangerter, A., Cross, L. J. S., Driscoll, M. A., Hennessy, S., Ferguson, J. E., Friedman, J. K., Matthias, M. S., Meis, L. A., Polusny, M. A., Taylor, S. L., & Taylor, B. C. Women's Health Reports Published Online: 12 February 2024

#### Background:

Although studies have documented higher rates of chronic pain among women Veterans compared to men Veterans, there remains a lack of comprehensive information about potential contributors to these disparities.

#### Materials and Methods:

This study examined gender differences in chronic pain and its contributors among 419 men and 392 women Veterans, enrolled in a mindfulness trial for chronic pain. We conducted descriptive analyses summarizing distributions of baseline measures, obtained by survey and through the electronic health record. Comparisons between genders were conducted using chi-square tests for categorical variables and t-tests for continuous measures.

#### Results:

Compared to men, women Veterans were more likely to have chronic overlapping pain conditions and had higher levels of pain interference and intensity. Women had higher prevalence of psychiatric and sleep disorder diagnoses, greater levels of depression, anxiety, post-traumatic stress disorder, fatigue, sleep disturbance, stress and pain catastrophizing, and lower levels of pain self-efficacy and participation in social roles and activities. However, women were less likely to smoke or have a substance abuse disorder and used more nonpharmacological pain treatment modalities.

#### Conclusion:

Among Veterans seeking treatment for chronic pain, women differed from men in their type of pain, had greater pain intensity and interference, and had greater prevalence and higher levels of many known biopsychosocial contributors to pain. Results point to the need for pain treatment that addresses the comprehensive needs of women Veterans.

Clinical Trial Registration Number: <u>NCT04526158</u>. Patient enrollment began on December 4, 2020.

\_\_\_\_

https://doi.org/10.4088/JCP.23r14862

# A Systematic Review of the Clinical Effects of Cannabis and Cannabinoids in Posttraumatic Stress Disorder Symptoms and Symptom Clusters.

Rodas, J. D., George, T. P., & Hassan, A. N.

The Journal of Clinical Psychiatry 2024; 85(1), 23r14862.

### Objective:

Given the high rate of comorbid posttraumatic stress disorder (PTSD) and cannabis use, it is critical that further research be conducted to address the associated benefits and risks of cannabis use in this population. This systematic review evaluated evidence on the effects of cannabis and cannabinoids on PTSD symptoms and PTSD clusters.

#### Data Sources:

A systematic search of PubMed, PsycINFO, and EMBASE databases was performed using terms related to cannabis, cannabinoids, and PTSD. Peer-reviewed studies available online in English and published from January 1990 through February 2023 were considered.

#### Study Selection:

Included studies were experimental or observational in design, were conducted in cannabis-using patients with PTSD, used validated measures of PTSD, and were published in English.

# Data Extraction:

Extracted information included study aims, study design, sample size and sex, comparator group, cannabis-related characteristics, psychometric instruments, and relevant clinical findings regarding overall PTSD symptoms and cluster symptoms.

#### Results:

Fourteen studies were included, 3 in a comorbid PTSD and cannabis use disorder (CUD) sample and 11 in a non-CUD sample. Of the 10 studies examining overall PTSD symptoms in a non-CUD sample, 5 suggested benefits associated with cannabis use and 5 suggested no effect or worsening of symptoms. Four studies reported benefits of cannabis for cluster B- and E-related symptoms in a non-CUD sample. All 3 studies in cannabis-using patients with a comorbid PTSD and CUD diagnosis reported risks for worsening of overall symptoms.

Conclusions:

This review did not find major benefits of cannabinoids in improving overall PTSD symptoms. Some benefits with regard to cluster B and E symptoms were observed. Some risks with regard to worsening suicidal ideation and violent behavior were also reported. Individuals with a comorbid CUD diagnosis may be at greater risk for negative cannabis-related PTSD outcomes. More experimental studies are needed to determine the causal effects of cannabis and cannabinoids in PTSD.

\_\_\_\_

#### https://doi.org/10.1371/journal.pone.0292315

Partners' experiences of their loved ones' trauma and PTSD: An ongoing journey of loss and gain.

Rosie Powling, Dora Brown, Sahra Tekin, Jo Billings

PLoS ONE 2024; 19(2): e0292315

#### Background

Traumatic life events can have a profound impact on the physical and psychological wellbeing of not only those who directly experience them, but others who are indirectly affected, such as victims' partners.

#### Aims

This study aimed to explore the experiences and views of partners of individuals who have a history of trauma and diagnosis of posttraumatic stress disorder (PTSD).

Methods

In-depth semi-structured interviews were conducted with six partners of people who had experienced trauma and were diagnosed with PTSD and awaiting or receiving treatment at a specialist Trauma Service. The data was analysed using Interpretative Phenomenological Analysis.

#### Results

One overarching theme resulted from the data: partners experienced trauma and PTSD as an ongoing journey of loss and gain. This was supported by three superordinate themes: making sense of the trauma and ensuing consequences, shifting identities, and

accessing and experiencing outside resources. Partners' journeys were characterised by striving and struggling to make sense of the trauma and its ensuing consequences, whilst grappling with the identities of themselves, their partners and relationships shifting over time. Participants navigated their journeys in the context of external resources and support from friends, family, colleagues and professionals.

#### Conclusions

The results of this study highlight the need for greater information and support for partners of people with PTSD.

\_\_\_\_\_

#### https://doi.org/10.1177/00207640241231216

# Combat military service and male depression: The relationship between social support, PTSD, and male depression following combat military service.

Weinberg, M., Shorer, S., Marom, D., Cohen, L., & Cohen, M.

International Journal of Social Psychiatry First published online February 13, 2024

#### Background:

Soldiers in military service are at risk of exposure to traumatic and stressful experiences, which can lead to symptoms of posttraumatic stress disorder (PTSD) and symptoms of depression. In the context of veterans' PTSD and depression, social support has been shown to be a very significant resource. However, while general depression has been examined among veterans and although combat soldiers are often men, male depression has been rarely examined. Therefore, the present study aimed to examine the relationships between social support, PTSD symptoms, and male depression among veterans.

#### Methods:

Five hundred and ninety-five male combat veterans completed a demographic questionnaire and measures of social support, PTSD, and male depression, including the specific symptoms of anger, substance use, social withdrawal, and restricted emotions.

#### Results:

Structural-equation-model analyses showed that social support was negatively

associated with both PTSD symptoms and depression symptoms. Specifically, social support showed lower trends of associations with substance use and anger; whereas there were higher associations with social withdrawal and restricted emotions. PTSD showed the strongest association with anger. Thus, we can see that social support is a key resource for coping with PTSD and different symptoms of male depression.

Conclusion:

Greater attention to social support, PTSD, and aspects of male depression could assist the development of intervention and therapeutic programs and also help to prevent the misdiagnosis of depression among military veterans.

\_\_\_\_

### https://doi.org/10.1080/02699931.2024.2316194

# Does cognitive load influence expressive flexibility? Comparing civilian and veteran populations.

Roland P. Hart, John A. Benzshawel & George A. Bonanno

Cognition and Emotion Published online: 13 Feb 2024

Expressive flexibility (EF) is a component of emotion regulation flexibility repertoire that constitutes the ability to enhance or suppress the expression of emotion in accordance with a given situational context. Previous research has associated EF with healthy adjustment to adversity. This association has also been observed in combat veterans with elevated post-traumatic stress. EF and other elements of regulatory flexibility are believed to rely on functions of cognitive control, such as working memory. However, previous research has yet to investigate this link. Accordingly, we examined performance in veterans (N = 42) and non-veterans (N = 75) on an EF Task with and without the inclusion of a numerical cognitive load task. Results indicate an interaction between cognitive load and expressive condition. Specifically, suppression abilities were weaker in cognitive load conditions. These findings did not vary in veteran and non-veteran samples. These results add to a growing body of work indicating a relationship between cognitive control and regulatory flexibility, and suggest similar mechanisms between veteran and non-veteran populations.

#### https://doi.org/10.1093/sleep/zsae032

# Short-term stability and night-to-night variability of sleep parameters in nightmares comorbid with chronic insomnia Disorder across multiple nights of polysomnography.

Caitlin Paquet, Kristina P Lenker, Susan L Calhoun, Edward O Bixler, Alexandros N Vgontzas, Julio Fernandez-Mendoza

#### Sleep

Volume 47, Issue 4, April 2024, zsae032

#### **Study Objectives**

The purpose of this study was to examine the degree of short-term stability of polysomnographic (PSG) measured sleep parameters and the overall differences between individuals with comorbid nightmares and insomnia compared to those with chronic insomnia disorder alone or good sleeping controls across four nights in the sleep lab.

#### Methods

A total of 142 good sleeping controls, 126 chronic insomnia alone, and 24 comorbid insomnia/nightmare participants underwent four consecutive nights of 8-hour PSG recordings. Outcomes included sleep continuity, architecture, and REM-related parameters across nights one through four. Intraclass correlation coefficients with mixed-effect variances and repeated-measure analysis of covariance were used, respectively, to determine short-term stability as well as between-participants and time-by-group interaction effects.

# Results

Wake after sleep onset and stage 1 showed "poor stability" in the comorbid insomnia/nightmare group compared to "moderate stability" in the good sleeping controls and chronic insomnia alone group. Significant between-group effects (all ps < .05) showed that the comorbid insomnia/nightmare group took longer to fall asleep and had a greater first-night-effect in stage 1 compared to good sleeping controls and chronic insomnia alone group; in addition, the comorbid insomnia/nightmare and insomnia alone groups slept shorter, with fewer awakenings and REM periods, compared to the good sleeping controls.

#### Conclusions

Nightmares are associated with abnormal sleep above and beyond REM disruption, as

sleep continuity was the primary aspect in which poor stability and group differences emerged. The greater inability to fall asleep and instability of sleep fragmentation in those with comorbid insomnia/nightmares compared to chronic insomnia alone may be attributed to the impact of presleep anticipatory anxiety and nightmare-related distress itself.

See also: <u>Objective sleep disturbance in nightmares: is prolonged sleep onset latency a</u> <u>proxy for fear-of-sleep-related arousal?</u>

\_\_\_\_

#### https://doi.org/10.1001/jamanetworkopen.2023.54588

# Traumatic Brain Injury and Subsequent Risk of Brain Cancer in US Veterans of the Iraq and Afghanistan Wars.

Stewart, I. J., Howard, J. T., Poltavskiy, E., Dore, M., Amuan, M. E., Ocier, K., Walker, L. E., Alcover, K. C., & Pugh, M. J.

JAMA Network Open February 15, 2024

#### Importance:

While brain cancer is rare, it has a very poor prognosis and few established risk factors. To date, epidemiologic work examining the potential association of traumatic brain injury (TBI) with the subsequent risk of brain cancer is conflicting. Further data may be useful.

# Objective:

To examine whether a history of TBI exposure is associated with the subsequent development of brain cancer.

Design, setting, and participants:

A retrospective cohort study was conducted from October 1, 2004, to September 20, 2019, and data analysis was performed between January 1 and June 26, 2023. The median follow-up for the cohort was 7.2 (IQR, 4.1-10.1) years. Veterans Affairs (VA) and Department of Defense (DoD) administrative data on 1 919 740 veterans from the Long-Term Impact of Military-Relevant Brain Injury Consortium-Chronic Effects of Neurotrauma Consortium were included.

#### Exposure:

The main exposure of interest was TBI severity (categorized as mild, moderate or severe [moderate/severe], and penetrating).

#### Main outcomes and measures:

The outcome of interest was the development of brain cancer based on International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) or International Statistical Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnostic codes in either the DoD/VA medical records or from the National Death Index.

### Results:

After 611 107 exclusions (predominately for no encounter during the study period), a cohort including 1 919 740 veterans was included, most of whom were male (80.25%) and non-Hispanic White (63.11%). Median age at index date was 31 (IQR, 25-42) years. The cohort included 449 880 individuals with TBI (mild, 385 848; moderate/severe, 46 859; and penetrating, 17 173). Brain cancer occurred in 318 individuals without TBI (0.02%), 80 with mild TBI (0.02%), 17 with moderate/severe TBI (0.04%), and 10 or fewer with penetrating TBI ( $\leq 0.06\%$ ). After adjustment, moderate/severe TBI (adjusted hazard ratio [AHR], 1.90; 95% CI, 1.16-3.12) and penetrating TBI (AHR, 3.33; 95% CI, 1.71-6.49), but not mild TBI (AHR, 1.14; 95% CI, 0.88-1.47), were associated with the subsequent development of brain cancer.

# Conclusions and relevance:

In this cohort study of veterans of the Iraq and Afghanistan wars, moderate/severe TBI and penetrating TBI, but not mild TBI, were associated with the subsequent development of brain cancer.

\_\_\_\_

https://doi.org/10.1093/haschl/qxae021

# (Dis)honorably discharged: identifying policy gaps in military–civilian reintegration.

Tavis Reid, Kaitlyn M Sims

Health Affairs Scholar Volume 2, Issue 2, February 2024, qxae021 Despite the substantial transition assistance available for honorably separating servicemembers, 75% of US veterans report difficulties with the transition to civilian life. For the 16% of veterans who separate with less-than-honorable discharges, these difficulties are compounded by the lack of structural support from the US military. Social stigma, limited transition programming, and loss of benefits create a perfect storm of barriers for these discharged servicemembers. These barriers compound with postservice mental and physical health challenges to contribute to cycles of misconduct that can result in criminal incarceration. Further, because most of these veterans lack health benefits from the Department of Veterans Affairs due to their discharge status, this population is substantially understudied from a public health perspective. However, actionable policy paths forward and federal policy change offer opportunity to soften the landing for these veterans and meet their legitimate needs for care.

\_\_\_\_

#### https://doi.org/10.1037/ser0000849

# Perceived social support moderates the relations between mental health symptoms and current suicidal ideation.

Hoffmire, C. A., Donovan, M. L., Ryan, A. T., Brenner, L. A., Vogt, D., Maguen, S., Schneiderman, A., Miller, C. N., & Forster, J. E.

Psychological Services Advance online publication

Despite efforts to identify risk factors associated with suicidal ideation (SI), less work has been conducted to highlight protective factors to promote prevention. Perceived social support has been shown to positively impact a wide range of psychological outcomes; however, prior efforts exploring whether perceived social support moderates the relationship between mental health (MH) symptoms and current SI among men and women have been hampered by limitations. To address knowledge gaps, data from the Comparative Health Assessment Interview Research Study was used to evaluate whether (a) perceived social support moderates the relationship between mental health symptoms (posttraumatic stress, anxiety, alcohol use, depressive) and current SI among veterans and nonveterans; (b) the strength of this moderating effect varies by gender and veteran status; and (c) the strength of this moderating effect varies by social support source (significant other, friend, family). Results suggest that perceived social support is more protective against SI for those with lower levels of mental health symptoms (≥ 25th percentile) than for those with higher symptom levels (≥ 75th

percentile). Findings were largely consistent across study groups, support sources, and mental health symptoms examined; however, a significant moderating effect on the alcohol use–SI relationship was only observed for veteran men. Those with a lower mental health symptom severity may receive more benefit from strategies aimed at increasing perceived social support compared to those with higher symptom severity. Research is needed to match protective factors to individual phenotypes, with the goal of engaging those living with SI in more effective interventions. (PsycInfo Database Record (c) 2024 APA, all rights reserved)

### Impact Statement

We found perceived social support to be more protective against suicidal ideation when mental health symptoms were low than when they were high. This suggests that those with lower mental health symptom severity may receive more benefit from strategies aimed at increasing perceived social support. For those with high levels of mental health symptoms, such strategies may still be important, though these individuals may experience challenges in accurately assessing and using social supports. (PsycInfo Database Record (c) 2024 APA, all rights reserved)

\_\_\_\_

https://www.dodig.mil/reports.html/Article/3750123/review-of-the-armys-efforts-toprevent-and-respond-to-harassment-of-soldiers-do/

# Review of the Army's Efforts to Prevent and Respond to Harassment of Soldiers (DODIG-2024-074)

Department of Defense Office of Inspector General April 17, 2024

From press release:

The objective of this review was to determine the effectiveness of the Army's actions to prevent and respond to harassment of Soldiers, including sexual harassment, bullying, and hazing. This review focused on how Army brigade commanders used the Defense Organizational Climate Survey (DEOCS) and Command Climate Assessments

•••

The DoD OIG found that while Army brigade commanders generally used DEOCS and CCAs to identify and mitigate harassment issues within their units, they did not:

- Perform historical comparisons in any of the DEOCS and CCA action plans reviewed to identify year-to-year trends with harassment risk factors;
- Develop actionable initiatives that address issues identified within the DEOCS results with specific periods for follow-up; or
- Include questions to assess bullying and hazing within any of the DEOCS we reviewed.

The DoD OIG also found inconsistencies between the DEOCS responses and the number of sexual harassment complaints. For example, between January 2021 and 2023, there were 4,674 responses to climate survey questions that showed a risk of sexually harassing behavior, compared to only 73 sexual harassment complaints reported during that same time period.

The DoD OIG made seven recommendations in this report, including that the Assistant Secretary of the Army (Manpower and Reserve Affairs), in coordination with the Office of the Deputy Chief of Staff, G9 develop and implement plans to:

- Ensure that brigade commanders perform historical comparisons of DEOCS results and CCA action plans to identify year-to-year trends with harassment risk factors;
- Ensure that CCA action plans include initiatives tied to specific objectives, goals, and milestones for completion and list the individuals responsible for implementing those initiatives; and
- Identify and address any barriers that might arise amongst soldiers who report harassment complaints.

\_\_\_\_\_

# Links of Interest

After-school program helps Hampton Roads military children cope with deployment <u>https://www.pilotonline.com/2024/04/17/after-school-program-helps-hampton-roads-military-children-cope-with-deployment/</u>

New Defense, State Department Agreement Improves Military Spouses' Ability to Telework Overseas

https://www.defense.gov/News/Releases/Release/Article/3744671/new-defense-statedepartment-agreement-improves-military-spouses-ability-to-tel/ Department of Defense Recognizes April 2024 as Annual Sexual Assault Awareness and Prevention Month

https://www.defense.gov/News/Releases/Release/Article/3749467/department-ofdefense-recognizes-april-2024-as-annual-sexual-assault-awareness/

'Consequences of War'–Veterans Incarcerated at Higher Rates and Face Longer Sentences

https://thewarhorse.org/military-veterans-incarcerated-at-higher-rates-lack-support/

\_\_\_\_\_

Resource of the Week – <u>Rethinking How We Solve the Military Spouse</u> Employment Dilemma: Six Recommendations for Getting out of Our Own Way

New White Paper from the National Military Spouse Network

From Sue Hoppin, Founder & President, National Military Spouse Network:

Fourteen years ago, the military spouse unemployment rate was 26%. Comparatively, the national unemployment rate was 9.6% and 11.5% for veterans.

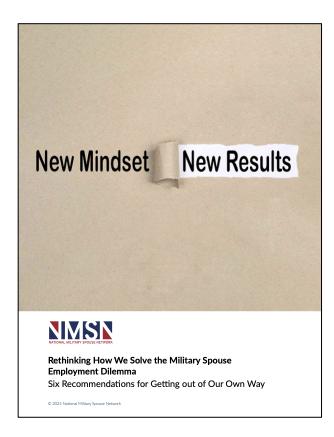
Today, the national and veteran unemployment rates have fallen significantly to 3.7% and 3% respectively while the military spouse unemployment rate remains ridiculously high at 21% (statistically unchanged for nearly a decade).

Following the concept of 'if you do what you've always done, you'll always get what you've always gotten,' we can infuse new thinking into problem-solving by revisiting such basic questions as:

- What problem are we really trying to solve?
- How do we actually measure military spouse unemployment?
- How do we define underemployment?
- Do we understand why some military spouses choose to stay out of the workforce?
- Do we understand why some spouses may be satisfied being underemployed?
- What type of solutions haven't we attempted yet?

We must call out and reframe the cultural assumptions and false narratives that hold back real progress. These outdated notions say:

- We must choose between helping service members/veterans or military spouses.
- The same solutions that solved veteran unemployment will also work for military spouses.
- Existing solutions work fine despite not knowing the actual returns on investments.
- We can effectively work in stovepipes, without interagency communication and collaboration.
- Policies and procedures that support outdated demographics and practices are acceptable.
- We only need to focus on the military spouses of currently serving members who are seeking employment, versus paying attention to the entire life cycle, from new military spouses to veteran spouses.



Shirl Kennedy Research Editor, HJF In Support of the Center for Deployment Psychology Email: shirley.kennedy.ctr@usuhs.edu



Henry M. Jackson Foundation for the Advancement of Military Medicine