

CDP



Research Update – November 10, 2022

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<https://doi.org/10.1016/j.cpr.2022.102213>

Virtual reality in the diagnostic and therapy for mental disorders: A systematic review.

Annika Wiebe, Kyra Kannen, Benjamin Selaskowski, Aylin Mehren, ... Niclas Braun

Clinical Psychology Review

Available online 30 October 2022, 102213

Highlights

- High study variability regarding methodological rigor and application maturity
- Convincing evidence for VR exposure therapy in anxiety disorders and PTSD
- Innovative, but less robust results for VR interventions in remaining disorders
- Significant lack of research for obsessive-compulsive disorder and depression
- Markedly more studies with adults than with children or adolescents

Abstract

Background

Virtual reality (VR) technologies are playing an increasingly important role in the diagnostics and treatment of mental disorders.

Objective

To systematically review the current evidence regarding the use of VR in the diagnostics and treatment of mental disorders.

Data source

Systematic literature searches via PubMed (last literature update: 9th of May 2022) were conducted for the following areas of psychopathology: Specific phobias, panic disorder and agoraphobia, social anxiety disorder, generalized anxiety disorder, posttraumatic stress disorder (PTSD), obsessive-compulsive disorder, eating disorders, dementia disorders, attention-deficit/hyperactivity disorder, depression, autism spectrum disorder, schizophrenia spectrum disorders, and addiction disorders.

Eligibility criteria

To be eligible, studies had to be published in English, to be peer-reviewed, to report

original research data, to be VR-related, and to deal with one of the above-mentioned areas of psychopathology.

Study evaluation

For each study included, various study characteristics (including interventions and conditions, comparators, major outcomes and study designs) were retrieved and a risk of bias score was calculated based on predefined study quality criteria.

Results

Across all areas of psychopathology, $k = 9315$ studies were inspected, of which $k = 721$ studies met the eligibility criteria. From these studies, 43.97% were considered assessment-related, 55.48% therapy-related, and 0.55% were mixed. The highest research activity was found for VR exposure therapy in anxiety disorders, PTSD and addiction disorders, where the most convincing evidence was found, as well as for cognitive trainings in dementia and social skill trainings in autism spectrum disorder.

Conclusion

While VR exposure therapy will likely find its way successively into regular patient care, there are also many other promising approaches, but most are not yet mature enough for clinical application.

Review registration

PROSPERO register CRD42020188436.

Funding

The review was funded by budgets from the University of Bonn. No third party funding was involved.

<https://doi.org/10.1111/jsr.13763>

Do people use methods or tricks to fall asleep? A comparison between people with and without chronic insomnia.

Bjørn Bjorvatn, Siri Waage, Ingvild W. Saxvig

Journal of Sleep Research

First published: 31 October 2022

The present study estimated the frequency of using methods or tricks to fall asleep in the general Norwegian population. Further, people with chronic insomnia were compared with people without chronic insomnia. A representative sample of 1028 participants aged 18 years or older completed a web-based survey. The response rate was 33.5%. Insomnia symptoms were assessed with the validated Bergen Insomnia Scale, and chronic insomnia based on ICSD-3/DSM-5 criteria. Data were analysed with chi-square tests and logistic regression with adjustment for sex, age, education, and circadian preference. The results showed that 34.3% reported using a method or a trick to fall asleep, with relaxation exercises/breathing exercises being the most common. More females (39.5%) compared with males (29.1%) reported the use of a method/trick to fall asleep with an adjusted odds ratio (aOR) of 1.44. Chronic insomnia was reported by 24.9%, and clearly associated with higher use of such methods/tricks (53.7%; aOR = 3.49). Among the participants without chronic insomnia, 28.1% reported using methods/tricks to fall asleep. In conclusion, most people do not use methods or tricks to fall asleep, but chronic insomnia was associated with a higher frequency of such use. Still, since methods/tricks were also used by some participants without chronic insomnia, this may suggest that, for some people, this strategy may be effective or at least does not seem to disrupt the sleep onset process.

<https://doi.org/10.1111/jsr.13768>

A systematic review of dreams and nightmares recall in patients with rapid eye movement sleep behaviour disorder.

Elisabetta Fasiello, Serena Scarpelli, Maurizio Gorgoni, Valentina Alfonsi, Andrea Galbiati, Luigi De Gennaro

Journal of Sleep Research

First published: 31 October 2022

Rapid eye movement (REM) sleep behaviour disorder is a REM sleep parasomnia characterised by the loss of the physiological muscle atonia during REM sleep, resulting in dream enactment behaviours that may cause injuries to patients or their bed partners. The nocturnal motor episodes seem to respond to the dream contents, which are often vivid and violent. These behavioural and oneiric features make the REM sleep behaviour disorder a potential model to study dreams. This review aims to unify the literature about dream recall in REM sleep behaviour disorder as a privileged approach to study dreams, systematically reviewing studies that applied retrospective and

prospective experimental designs to provide a comprehensive overview of qualitative and quantitative aspects of dream recall in this REM sleep parasomnia. The present work highlights that the study of dreaming in REM sleep behaviour disorder is useful to understand unique aspects of this pathology and to explore neurobiological, electrophysiological, and cognitive mechanisms of REM sleep and dreaming.

<https://doi.org/10.1001/jamanetworkopen.2022.39485>

Estimated Deaths Attributable to Excessive Alcohol Use Among US Adults Aged 20 to 64 Years, 2015 to 2019.

Esser MB, Leung G, Sherk A, et al.

JAMA Network Open
November 1, 2022

Key Points

Question

What is the estimated proportion of deaths among US adults aged 20 to 64 years attributable to excessive alcohol consumption, and are there differences by sex, age, and US state?

Findings

The estimates in this cross-sectional study of 694 660 mean deaths per year between 2015 and 2019 suggest that excessive alcohol consumption accounted for 12.9% of total deaths among adults aged 20 to 64 years and 20.3% of deaths among adults aged 20 to 49 years. Among adults aged 20 to 64 years, the proportion of alcohol-attributable deaths to total deaths varied by state.

Meaning

These findings suggest that an estimated 1 in 8 deaths among adults aged 20 to 64 years were attributable to excessive alcohol use and that greater implementation of evidence-based alcohol policies could reduce this proportion.

Abstract

Importance

Alcohol consumption is a leading preventable cause of death in the US, and death rates from fully alcohol-attributable causes (eg, alcoholic liver disease) have increased in the

past decade, including among adults aged 20 to 64 years. However, a comprehensive assessment of alcohol-attributable deaths among this population, including from partially alcohol-attributable causes, is lacking.

Objective

To estimate the mean annual number of deaths from excessive alcohol use relative to total deaths among adults aged 20 to 64 years overall; by sex, age group, and state; and as a proportion of total deaths.

Design, Setting, and Participants

This population-based cross-sectional study of mean annual alcohol-attributable deaths among US residents between January 1, 2015, and December 31, 2019, used population-attributable fractions. Data were analyzed from January 6, 2021, to May 2, 2022.

Exposures

Mean daily alcohol consumption among the 2 089 287 respondents to the 2015-2019 Behavioral Risk Factor Surveillance System was adjusted using national per capita alcohol sales to correct for underreporting. Adjusted mean daily alcohol consumption prevalence estimates were applied to relative risks to generate alcohol-attributable fractions for chronic partially alcohol-attributable conditions. Alcohol-attributable fractions based on blood alcohol concentrations were used to assess acute partially alcohol-attributable deaths.

Main Outcomes and Measures

Alcohol-attributable deaths for 58 causes of death, as defined in the Centers for Disease Control and Prevention's Alcohol-Related Disease Impact application. Mortality data were from the National Vital Statistics System.

Results

During the 2015-2019 study period, of 694 660 mean deaths per year among adults aged 20 to 64 years (men: 432 575 [66.3%]; women: 262 085 [37.7%]), an estimated 12.9% (89 697 per year) were attributable to excessive alcohol consumption. This percentage was higher among men (15.0%) than women (9.4%). By state, alcohol-attributable deaths ranged from 9.3% of total deaths in Mississippi to 21.7% in New Mexico. Among adults aged 20 to 49 years, alcohol-attributable deaths (44 981 mean annual deaths) accounted for an estimated 20.3% of total deaths.

Conclusions And Relevance

The findings of this cross-sectional study suggest that an estimated 1 in 8 total deaths

among US adults aged 20 to 64 years were attributable to excessive alcohol use, including 1 in 5 deaths among adults aged 20 to 49 years. The number of premature deaths could be reduced with increased implementation of evidenced-based, population-level alcohol policies, such as increasing alcohol taxes or regulating alcohol outlet density.

<https://doi.org/10.1080/08995605.2022.2099708>

Health disparities among millennial veterans by sexual orientation.

Laura Houghtaling & Theresa L. Osypuk

Military Psychology

Published online: 25 Jul 2022

The objective of this study was to examine sexual orientation-based disparities in six self-reported health outcomes among millennial aged military veterans. We collected data using The Millennial Veteran Health Study, a cross-sectional internet-based survey with extensive quality control measures. The survey was fielded April through December 2020 and targeted millennial aged veterans across the United States. A total of 680 eligible respondents completed the survey. We assessed six binary health outcomes: alcohol use, marijuana use, frequent chronic pain, opioid misuse, high psychological distress, and fair or poor health status. Using logistic regression adjusted for a range of demographic, socioeconomic, and military-based covariates, we find that bisexual veterans consistently report worse health than straight veterans for all six health outcomes tested. Results for gay or lesbian, compared to straight veterans, were less consistent. Sensitivity models with continuous outcomes, and stratified by gender, found similar results. These results have implications for improving the health of bisexual individuals, including addressing discrimination, belonging, and social identity, particularly in institutional settings that have traditionally heteronormative and masculine cultures such as the military.

<https://doi.org/10.1080/08897077.2022.2095075>

Use of electronic cigarettes among U.S. Military service members – prevalence and associated risk factors.

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Substance Abuse

Volume 43, 2022 - Issue 1

Background

Decreased physical fitness, loss of vision and hearing, and increased risk of chronic diseases are significant primary and secondary implications associated with the health of U.S. Military Service members who use tobacco, including electronic cigarettes. Despite the medical and non-medical costs to the U.S. Department of Defense and potential adverse health effects to Service members, electronic cigarette use is on the rise.

Methods

U.S. Military Service members who completed their Periodic Health Assessment, a standardized, electronic, logic-based tool, from July 2018 to July 2019 were eligible. This exploratory study examines the prevalence and significant risk factors associated with self-reported use of electronic cigarettes, as well as determines if tobacco use varies by sex and Service branch, through use of Chi-square analysis and logistic regression.

Results

U.S. Military Service members 17–70 years old were included in this study (N = 1.12 M), with 80% of study participants being male and 20% female. Exposure to secondhand smoke (OR: 2.12, 95% CI: 2.15–2.22) and screening positive for hazardous drinking (OR: 2.70, 95% CI: 2.64–2.76) were found to show the greatest increase in odds of using electronic cigarettes, with similar findings after stratification by sex and Service branch. Stratification by Service branch revealed further differences in the association between electronic cigarette use and various demographic, military, lifestyle, and health characteristics.

Conclusion

Electronic cigarette use is increasing across the United States. U.S. Service members have unique risk factors and patterns of tobacco use. Despite tobacco use having potential adverse effects on military readiness, its use remains prevalent in this population. Our findings identify opportunities for the U.S. Department of Defense to review tobacco policy and availability and accessibility of cessation services to promote quitting tobacco, especially electronic cigarettes.

<https://doi.org/10.1891/jcp-2021-0007>

Co-Occurring Obsessive-Compulsive and Posttraumatic Stress Disorder: A Review of Conceptualization, Assessment, and Cognitive Behavioral Treatment.

Pinciotti, Caitlin M., PhD | Fontenelle, Leonardo F., MD, PhD | Van Kirk, Nathaniel, PhD | Riemann, Bradley C., PhD

Journal of Cognitive Psychotherapy
(2022) Volume 36, Issue 3

Posttraumatic stress disorder (PTSD) co-occurs with obsessive-compulsive disorder (OCD) nearly 25% of the time, and rates of co-occurring OCD within PTSD populations are even higher. Several studies examining the impact of co-occurring OCD and PTSD with suggest attenuated treatment response, yet findings regarding symptom presentation in this population are mixed. Given phenotypic, functional, and sometimes etiological overlap in OCD and PTSD, differential diagnosis and specialized treatment can be a complex yet important undertaking. This paper reviews the current literature on co-occurring OCD and PTSD; describes the theoretical conceptualization for the intersection of OCD and PTSD; offers recommendations for differential assessment and cognitive behavioral treatment; and provides directions for future research on co-occurring OCD and PTSD.

<https://doi.org/10.1038/s41398-022-02066-x>

Enhancing exposure therapy for posttraumatic stress disorder (PTSD): a randomized clinical trial of virtual reality and imaginal exposure with a cognitive enhancer.

JoAnn Difede, Barbara O. Rothbaum, Albert A. Rizzo, Katarzyna Wyka, Lisa Spielman, Christopher Reist, Michael J. Roy, Tanja Jovanovic, Seth D. Norrholm, Judith Cukor, Megan Olden, Charles E. Glatt & Francis S. Lee

Translational Psychiatry
Volume 12, Article number: 299 (2022)

Posttraumatic stress disorder (PTSD) is a significant public health issue. Yet, there are limited treatment options and no data to suggest which treatment will work for whom. We tested the efficacy of virtual reality exposure (VRE) or prolonged imaginal exposure (PE), augmented with D-cycloserine (DCS) for combat-related PTSD. As an exploratory aim, we examined whether brain-derived neurotrophic factor (BDNF) and fatty acid amide hydrolase (FAAH) moderated treatment response. Military personnel with PTSD ($n = 192$) were recruited into a multisite double-blind randomized controlled trial to receive nine weeks of VRE or PE, with DCS or placebo. Primary outcome was the improvement in symptom severity. Randomization was stratified by comorbid depression (MDD) and site. Participants in both VRE and PE showed similar meaningful clinical improvement with no difference between the treatment groups. A significant interaction ($p = 0.45$) suggested VRE was more effective for depressed participants (CAPS difference $M = 3.51$ [95% CI 1.17–5.86], $p = 0.004$, $ES = 0.14$) while PE was more effective for nondepressed participants ($M = -8.87$ [95% CI -11.33 to -6.40], $p < 0.001$, $ES = -0.44$). The main effect of DCS vs. placebo was not significant. Augmentation by MDD interaction ($p = 0.073$) suggested that depressed participants improved more on placebo ($M = -8.43$ [95% CI -10.98 to -5.88], $p < 0.001$, $ES = -0.42$); DCS and placebo were equally effective for nondepressed participants. There was an apparent moderating effect of BDNF Val66Met polymorphism on DCS augmentation ($ES = 0.67$). Met66 allele carriers improved more on DCS ($ES = -0.25$). FAAH 385 A carriers improved more than non-carriers ($ES = 0.33$), particularly those with MDD ($ES = 0.62$). This study provides a step toward precision therapeutics for PTSD by demonstrating that comorbid MDD and genetic markers may help guide treatment selection.

<https://doi.org/10.1037/tep0000419>

Integrating public health core values into psychology training competencies.

Patel, Z. S., Brodar, K. E., Hylton, E., Glynn, T. R., & Dale, S. K.

Training and Education in Professional Psychology
Advance online publication

Psychological science is committed to the research and use of evidence-based practice. To address the burden of mental illness, there is also a need to use psychological science for mental health advocacy and promotion. However, psychology training programs often focus on individual-level intervention instead of public health prevention

in teaching, care delivery, and scholarship. Preparing psychologists to address population mental health and adequately serve all communities, especially those on the margins which our current system fails, will require moving beyond individual treatment and integrating public health values in training programs. We reflect on ways the Public Health Code of Ethics can be used to revise the current American Psychological Association psychology training competencies and discuss strategies psychology training programs can implement to train public-health oriented psychologists to move toward more ethical and effective practice. (PsycInfo Database Record (c) 2022 APA, all rights reserved)

<https://doi.org/10.1037/amp0001019>

Building a more equitable society: Psychology's role in achieving health equity.

Kelly, J. F.

American Psychologist
(2022) 77(5), 633–645

The U.S. Centers for Disease Control and Prevention defines health disparities as “preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations.” Health disparities are often the result of persistent unjust policies and discriminatory practices that increase the risk of vulnerable populations for poor health. Environmental, social, and behavioral factors—all areas of psychology's expertise—contribute to health disparities in interacting ways. This article describes health disparities, including the evidence for them, the role that psychology and the American Psychological Association (APA) can play in addressing the health disparities, and the work of the APA Presidential Task Force on Psychology and Health Equity, including the APA Resolution on Psychology and Health Equity. (PsycInfo Database Record (c) 2022 APA, all rights reserved)

<https://doi.org/10.1093/milmed/usac153>

Physical Injuries, Treatment-Seeking, and Perceived Barriers to Treatment in U.S. Army Drill Sergeants.

Elliman, T. D., Cohen, B. S., Heaton, K. J., & Proctor, S. P.

Military Medicine

2022 Oct 29; 187(11-12): 1403-1411

Introduction:

Drill sergeants work under mentally and physically challenging conditions. The current study examined self-reported rates of physical injuries in drill sergeants; rates of treatment-seeking for injuries; perceived barriers toward treatment-seeking; and associated demographic and environmental factors.

Materials and methods:

Drill sergeants from across all Army basic training locations completed self-report surveys from September to November of 2018. In total, 726 drill sergeants were included in analyses. Drill sergeants indicated whether they had acquired an injury during their time in the drill sergeant role and whether they had sought treatment for all such injuries. Furthermore, drill sergeants rated their agreement with a number of possible perceived barriers to treatment-seeking for physical injuries. Regression models examining each phenomenon included hours of sleep obtained per day; general- and health-specific leadership behaviors of the company command teams; unit cohesion; time as a drill sergeant; duty location; gender; military operational specialty; years in the military; previous combat deployments; and route of assignment. The study was approved by the Walter Reed Army Institute of Research Institutional Review Board.

Results:

In total, 38% of respondents reported acquiring an injury during their time as drill sergeants. Of those who had acquired an injury, 61% reported seeking medical help for all injuries acquired. Injuries were more likely in females (49%) than in males (34%) and less likely in drill sergeants reporting at least 6 hours of sleep (27%) versus those reporting 5 hours (40%) and 4 hours or less (43%). Reported comparisons were significant after controlling for demographic and environmental variables in regression models. The most strongly endorsed perceived barriers to treatment-seeking were "Seeking help would place too much burden on the other drill sergeants" (69%) and "Seeking help would interfere with my ability to train the recruits" (60%). Both of these perceived barriers were significantly associated with reduced treatment-seeking in injured drill sergeants, after controlling for demographic and environmental variables.

Conclusions:

This study is the first to examine injury occurrence, treatment-seeking, and perceived barriers to treatment-seeking in U.S. Army drill sergeants. Building on previous studies that showed the negative effects of sleep deprivation on the safety and behavioral health of drill sergeants, the current study gives further evidence of the negative effects of such sleep deprivation, this time in the domain of physical injuries. The results suggest that pursuing strategies that allow for healthier sleep duration may contribute to injury reduction.

<https://doi.org/10.1176/appi.ajp.21111113>

Leveraging Large-Scale Genetics of PTSD and Cardiovascular Disease to Demonstrate Robust Shared Risk and Improve Risk Prediction Accuracy.

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The American Journal of Psychiatry

Published Online: 7 Sep 2022

Objective:

Individuals with posttraumatic stress disorder (PTSD) are significantly more likely to be diagnosed with cardiovascular disease (CVD) (e.g., myocardial infarction, stroke). The evidence for this link is so compelling that the National Institutes of Health convened a working group to determine gaps in the literature, including the need for large-scale genomic studies to identify shared genetic risk. The aim of the present study was to address some of these gaps by utilizing PTSD and CVD genome-wide association study (GWAS) summary statistics in a large biobank sample to determine the shared genetic risk of PTSD and CVD.

Methods:

A large health care biobank data set was used (N=36,412), combined with GWAS summary statistics from publicly available large-scale PTSD and CVD studies. Disease phenotypes (e.g., PTSD) were collected from electronic health records. De-identified genetic data from the biobank were genotyped using Illumina SNP array. Summary statistics data sets were processed with the following quality-control criteria: 1) SNP heritability $h^2 > 0.05$, 2) compute z-statistics ($z = \beta/SE$ or $z = \log(OR)/SE$), 3) filter nonvariable SNPs ($0 < \text{freq} < 1$), and 4) filter SNPs with low number of samples. The

multitrait analysis of GWAS (MTAG) approach was used to combine GWAS summary statistics.

Results:

Significant genetic correlations were found between PTSD and CVD ($r_G=0.24$, $SE=0.06$), and Mendelian randomization analyses indicated a potential causal link from PTSD to hypertension ($\beta=0.20$, $SE=0.04$), but not the reverse. PTSD summary statistics significantly predicted PTSD diagnostic status ($R^2=0.27$), and this was significantly improved by incorporating summary statistics from CVD and major depressive disorder ($R^2=1.30$). Further, pathway enrichment analyses indicated that genetic variants involved in shared PTSD-CVD risk included those involved in postsynaptic structure, synapse organization, and interleukin-7-mediated signaling pathways.

Conclusions:

The results from this study suggest that PTSD and CVD may share genetic risk. Further, these results implicate PTSD as a risk factor leading to the development of hypertension and coronary artery disease. Additional research is needed to determine the clinical utility of these findings.

See also: [From Soldier's Heart to Shared Genetic Risk: PTSD and Cardiovascular Disease](#) (editorial)

<https://doi.org/10.1093/milmed/usab364>

Resilience and Depression in Military Service: Evidence From the National Longitudinal Study of Adolescent to Adult Health (Add Health)

Orak, U., Kayaalp, A., Walker, M. H., & Breault, K.

Military Medicine

2022 Oct 29; 187(11-12): 1441-1448

Introduction:

Research indicates that military service involves stressors that may be related to depression. However, the military provides financial, educational, psychological, and social advantages that may help to mitigate the effects of service-related stressors. Because most prior research was based on cross-sectional data or small clinical samples, we explored individual-level trajectories of depression over time.

Methods:

Data came from the restricted-use version of the National Longitudinal Study of Adolescent to Adult Health (Add Health) in four survey waves from 1994 to 2008, with a total of 1,112 service members, of whom 231 were female, and a total sample size of 13,544. Statistical estimation employed the multilevel growth curve modeling approach.

Results:

Individuals who later served in the military had lower rates of depression than their civilian counterparts at year 1 of the study, and rates of depression decreased consistently for both groups throughout the study. Service members ended up with the same level of depression compared to civilians (year 14). Sex, race and parental education were unrelated to depression, and no evidence was found for the hypothesis that the military functions as a "bridging environment" to reduce depression by providing a more attractive alternative compared to civilian life.

Conclusions:

Individuals who were less depressed at year 1 of the study were more likely to enlist into the military. While both civilians and service members displayed decreasing depression over the years of the study, military members had less decrease in depression over time beginning at a lower level of depression than civilian. Taken together, the minor differences in depression between the civilian and military samples and the lower level of depression among military members at the beginning of the study suggest that military service selects against higher levels of depression at the start of service and, given the known stressors related to the military, membership in the service may be associated with resilience to depression.

<https://health.mil/News/Articles/2022/08/01/Pain-and-PTSD-MSMR>

Brief Report: Pain and Post-Traumatic Stress Disorder Screening Outcomes Among Military Personnel Injured During Combat Deployment.

MacGregor, A., Jurick, S., McCabe, C., Harbertson, J., Dougherty, A., & Galarneau, M.

MSMR

2022 Aug 1; 29(8): 13-15

The post-9/11 U.S. military conflicts in Iraq and Afghanistan lasted over a decade and yielded the most combat casualties since the Vietnam War. While patient survivability increased to the highest level in history, a changing epidemiology of combat injuries emerged whereby focus shifted to addressing an array of long-term sequelae, including physical, psychological, and neurological issues. The long-term effects of combat injury can adversely impact well-being and exact a significant burden on the health care system.

Physical pain is common among military personnel returning from deployment, particularly those injured in combat, and is associated with detrimental effects such as medical discharge and substance use disorders. Pain has also been linked to post-traumatic stress disorder (PTSD), which is common in veterans of the Iraq and Afghanistan conflicts. The mutual maintenance model posits that PTSD symptoms may exacerbate chronic pain and, in turn, pain may contribute to or enhance existing PTSD symptoms. PTSD is associated with negative outcomes among veterans with chronic pain, including disability, decreased functioning, and sleep disturbances, making the study of pain and PTSD essential for improved patient care and rehabilitation.

Previous research on the co-occurrence of pain and PTSD in wounded service members has been limited by small sample sizes, specific injuries, or short follow-up periods. The present study adds to the existing literature by examining the association between pain and PTSD screening outcomes nearly a decade after combat injury among a large, national sample of service members and veterans who were injured during deployment and experienced a wide range of injuries.

<https://doi.org/10.1111/sltb.12903>

Brief contact interventions to reduce suicide among discharged patients with mental health disorders—A meta-analysis of RCTs.

Jing Ling Tay MN, RN, Ziqiang Li PhD, RMN, RN

Suicide & Life-Threatening Behavior

First published: 28 July 2022

Background

Worldwide, about 1 million died from suicide in 2000. People with mental health

disorders are at greater risk of suicide, and they are especially susceptible during 1-week period after discharge from the hospital.

Objective

This meta-analysis paper aims to evaluate the effectiveness of brief contact interventions in preventing (1) suicidal deaths, (2) suicidal attempts, and (3) suicidal ideations among mental health patients discharged from the hospital.

Methods

Search for published and unpublished articles were conducted using 10 databases: CINAHL, Cochrane Central Register of Controlled Trials, Embase, Scopus, Pubmed, PsycINFO, Web of Science, Randomised Control Trial Registry Website, ClinicalTrials.gov, and Proquest Dissertation and Theses Global, using the keywords “suicide” AND “discharged,” AND “patients.” All articles printed in English and published from the year 1995 to August 2019 were included.

Results

A total of 23 articles were included in the meta-analysis. Contact interventions significantly reduced suicidal attempts within (1) 12–14 months and (2) suicide ideations within 12 months. There were no significant findings on suicidal deaths.

Discussion

A new finding of this meta-analysis is that combining several brief contact interventions could potentially reduce suicidal attempts and ideations. This is important in preserving the lives of discharged patients.

<https://doi.org/10.1080/00377317.2022.2104778>

Trauma-Informed Clinical Practice with Clients with Suicidal Thoughts and Behaviors.

Rebecca G. Mirick, Joanna Bridger & James McCauley

Smith College Studies in Social Work
Volume 92, 2022 - Issue 3

In 2020, almost 46,000 individuals in the United States died from suicide, 1.2 million adults made a suicide attempt, and 12.2 million had serious suicidal thoughts. Clinicians

in diverse practice settings will work with clients experiencing suicidal thoughts and behaviors. Due to a strong association between trauma and suicidality, suicidology experts have recommended the use of trauma-informed practice when working with clients with suicidal thoughts and behaviors. However, although there are guidelines for trauma-informed care and for working with clients with suicidality, there are no models, explanations, or discussions about how clinicians can provide trauma-informed care in their work with individuals with suicidal thoughts and behaviors. This conceptual paper describes examples of the application of the Substance Abuse and Mental Health Services Administration (SAMHSA)'s trauma-informed care principles to clinical work with individuals with suicidal thoughts and behaviors. Strategies are provided for each of the guiding principles, and case examples used to illustrate strategies, barriers, and potential pitfalls.

<https://doi.org/10.1089/neu.2022.0176>

Comparing Outcomes of the Veterans Health Administration's Traumatic Brain Injury and Mental Health Screening Programs: Types and Frequency of Specialty Services Used.

Shannon R. Miles, Nina A. Sayer, Heather G. Belanger, Hari H. Venkatachalam, Frank Andrew Kozel, Peter A. Toyinbo, James A. McCart, and Stephen L. Luther.

Journal of Neurotrauma
Published Online:26 Aug 2022

The Veterans Health Administration (VHA) screens veterans who deployed in support of the wars in Afghanistan and Iraq for traumatic brain injury (TBI) and mental health (MH) disorders. Chronic symptoms after mild TBI overlap with MH symptoms, for which there are already established screens within the VHA. It is unclear whether the TBI screen facilitates treatment for appropriate specialty care over and beyond the MH screens. Our primary objective was to determine whether TBI screening is associated with different types (MH, Physical Medicine & Rehabilitation [PM&R], and Neurology) and frequency of specialty services compared with the MH screens. A retrospective cohort design examined veterans receiving VHA care who were screened for both TBI and MH disorders between Fiscal Year (FY) 2007 and FY 2018 (N = 241,136). We calculated service utilization counts in MH, PM&R, and Neurology in the six months after the screens. Zero-inflated negative binomial regression models of encounters (counts) were fit separately by specialty care type and for a total count of specialty services. We found

that screening positive for TBI resulted in 2.38 times more specialty service encounters than screening negative for TBI. Compared with screening positive for MH only, screening positive for both MH and TBI resulted in 1.78 times more specialty service encounters and 1.33 times more MH encounters. The TBI screen appears to increase use of MH, PM&R, and Neurology services for veterans with post-deployment health concerns, even in those also identified as having a possible MH disorder.

<https://doi.org/10.1037/tra0001292>

Hyperarousal symptoms linger after successful PTSD treatment in active duty military.

Miles, S. R., Hale, W. J., Mintz, J., Wachen, J. S., Litz, B. T., Dondanville, K. A., Yarvis, J. S., Hembree, E. A., Young-McCaughan, S., Peterson, A. L., & Resick, P. A.

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

Objective:

Evidence-based psychotherapies are efficacious at reducing posttraumatic stress disorder (PTSD) symptoms, but military and veteran samples improve less than civilians. The objective of this secondary analysis of two clinical trials of cognitive processing therapy (CPT) was to determine if hyperarousal symptoms were more resistant to change compared with other PTSD symptom clusters in active duty service members.

Method:

Service members completed the PTSD Checklist for the DSM–5 (PCL-5) pre- and post-CPT. Symptoms were coded present if rated 2 (moderate) or higher on a 0–4 scale. Cutoffs for reliable and clinically significant change classified 21%, 18%, and 61% of participants as recovered, improved, and suboptimal responders, respectively. Data analyses focused on the posttreatment status of symptoms that were present at baseline to determine their persistence as a function of treatment outcome. Generalized linear mixed effects models with items treated as a repeated measure estimated the proportions who continued to endorse each symptom and compared hyperarousal symptoms with symptoms in other clusters.

Results:

Among improved participants, the average hyperarousal symptom was present in 69% compared with 49% for symptoms in other clusters ($p < .0001$). Among recovered patients, hyperarousal symptoms were present for 26%, while symptoms in the reexperiencing (2%), avoidance (3%), and negative alterations (4%) clusters were almost nonexistent ($p < .0001$).

Conclusions:

Even among service members who recovered from PTSD after CPT, a significant minority continue to report hyperarousal symptoms while other symptoms remit. Hyperarousal symptoms may require additional treatment. (PsyInfo Database Record (c) 2022 APA, all rights reserved)

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Characterizing veteran and PTSD service dog teams: Exploring potential mechanisms of symptom change and canine predictors of efficacy.

Clare L. Jensen, Kerri E. Rodriguez, Evan L. MacLean, Ahmad Hakeem Abdul Wahab, Arman Sabbaghi, Marguerite E. O'Haire

Jensen CL, Rodriguez KE, MacLean EL, Abdul Wahab AH, Sabbaghi A, O'Haire ME

PLoS ONE

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Psychiatric service dogs are an emerging complementary intervention for posttraumatic stress disorder (PTSD). Initial evidence suggests that partnership with a service dog may be related to less PTSD symptom severity. However, it remains unclear how or why this might occur. To address this gap, we conducted a longitudinal investigation of 82 post-9/11 military members or veterans and their PTSD service dogs to (1) evaluate service dog characteristics as potential predictors of efficacy, (2) assess dog and human characteristics as potential predictors of veteran-dog bond, and (3) explore potential mechanisms for mental health outcomes. Aim 1 results demonstrated that most service dog characteristics did not predict veterans' mental health outcomes, but lower service dog excitability was associated with less PTSD symptom severity at follow-up. Aim 2 results showed that closer dog-veteran relationships were associated with less excitable dog temperament. Aim 3 results indicated that worse mental health

at follow-up was associated with greater use of the specifically trained PTSD service dog task to initiate a social greeting (“make a friend”), whereas better mental health was related to less use of dominance-based training methods, lower perceived emotional/logistical costs of service dog partnership, and closer veteran-dog relationships. More frequent use of the trained service dog task to signal when someone approaches from behind (cover/watch back) was associated with greater anxiety, but less PTSD symptom severity. Overall, veterans spent an average of 82% of their time with service dogs (assessed via Bluetooth proximity between dog collar and veteran smartphone), and most frequently asked their service dogs to perform the trained task for calming their anxiety (calm/comfort anxiety). The present study provides subjective and objective metrics of the heterogeneity among veteran-service dog dyads while also suggesting which of the assessed metrics might be potential mechanisms involved in the intervention.

<https://doi.org/10.1016/j.janxdis.2022.102607>

Exposure therapy for PTSD in military populations: A systematic review and meta-analysis of randomized clinical trials.

Carmen P. McLean, Hannah C. Levy, Madeleine L. Miller, David F. Tolin

Journal of Anxiety Disorders
Volume 90, August 2022, 102607

Military populations are disproportionately affected by posttraumatic stress disorder (PTSD) and may experience less benefit from first line psychotherapies for PTSD relative to civilians. We examined the efficacy of exposure therapy among Veterans and active duty military personnel across various control conditions and tested potential treatment-related, demographic, and clinical moderators. Randomized controlled trials of exposure-based therapies for PTSD in military populations were identified from a recent meta-analysis and through PsycINFO and Medline. Nineteen studies met inclusion criteria and were included in the meta-analysis (total N = 2905). Exposure therapy had medium to large effects compared to waitlist and treatment as usual, a small effect compared to non-trauma-focused therapy, and no effect relative to other trauma-focused therapy. The overall effect was similar at post-treatment and follow up. The effect size for exposure was larger in studies with younger participants, more women, fewer participants with comorbid major depression, and fewer participants taking psychiatric medication. Effect sizes were not impacted by treatment length or

type, participant race or ethnicity, comorbid substance use, Veteran versus active duty status, or study risk of bias. Findings document the variable efficacy of exposure therapy in military populations across comparator types and point to several potentially important moderators of outcome that should be examined in future research.

<https://doi.org/10.1002/jts.22867>

Lifetime trauma exposure profiles and alcohol use over time among U.S. Reserve and National Guard soldiers.

Bonnie M. Vest, Nomi S. Weiss-Laxer, D. Lynn Homish, Gregory G. Homish

Journal of Traumatic Stress
First published: 28 July 2022

Although trauma exposure is a recognized risk factor for alcohol use, research on military populations has emphasized combat exposure, with minimal consideration of exposure to other potentially traumatic events (PTEs). We aimed to (a) identify, characterize, and quantify subgroups of service members based on PTE patterns; (b) examine associations between trauma exposure subgroups and alcohol use; and (c) examine these associations longitudinally. Data were drawn from Operation: SAFETY, a longitudinal study of health and well-being among U.S. Army Reserve/National Guard soldiers (N = 478). Exposure to 15 PTEs, including childhood maltreatment, noninterpersonal events (e.g., natural disasters, accidents), interpersonal trauma, and military-related exposures, was assessed at baseline. Latent profile analysis was conducted to characterize mutually exclusive trauma profiles; profile membership was used to longitudinally predict alcohol use in generalized estimating equation models. Four exposure profiles were identified: intimate partner violence (IPV)/combat trauma (8.4%, n = 40), combat trauma (24.7%, n = 118), childhood trauma (8.4%, n = 40), and low trauma (58.6%, n = 280). In adjusted models, compared to the low trauma profile, IPV/combat profile membership was longitudinally associated with alcohol problems, OR = 2.44, p = .005. Membership in other trauma profiles was not associated with alcohol use. Within the IPV/combat profile, men had a higher risk of frequent heavy drinking than women. Results suggest a need to comprehensively screen for lifetime PTE exposure, particularly IPV, in military populations. Given the high prevalence of nonmilitary PTEs, an inclusive, trauma-informed approach to health care and service provision is warranted.

<https://doi.org/10.1016/j.cbpra.2022.05.005>

Clinical Effectiveness of an Intensive Outpatient Program for Integrated Treatment of Comorbid Substance Abuse and Mental Health Disorders.

Laura E. Watkins, Samantha C. Patton, Barbara O. Rothbaum

Cognitive and Behavioral Practice
Available online 27 July 2022

Highlights

- Integrating CBT for SUD and comorbid disorders in a 2-week intensive outpatient program, was feasible.
- Results indicated significant reductions in substance use and binge drinking and PTSD and depression symptoms.
- Findings suggest these effects may be consistent across in-person, hybrid, and telehealth treatment modalities.

Abstract

Comorbid substance use disorders (SUDs) and mental health disorders are a pervasive problem among post-9/11 veterans and service members. Treatment of SUD and comorbid disorders has historically occurred separately and sequentially, and when treated concurrently has been primarily done in a weekly outpatient setting, which has high rates of dropout. The current study describes an integrated 2-week intensive outpatient treatment (IOP) using cognitive-behavioral therapy, including prolonged exposure for posttraumatic stress disorder (PTSD), unified protocol for anxiety and mood disorders, and relapse prevention for SUD. Forty-two patients completed the comorbid treatment program. Results indicated that self-reported substance use, PTSD, and depression symptoms significantly decreased following treatment, while satisfaction with participation in social roles increased. These preliminary effectiveness data indicate that comorbid SUD and mental health disorders can be effectively treated in a 2-week intensive outpatient program.

<https://doi.org/10.1037/tra0001303>

Concurrent and proximal associations among PTSD symptoms, prescription opioid use, and co-use of other substances: Results from a daily monitoring study.

Badour, C. L., Flores, J., Hood, C. O., Jones, A. C., Brake, C. A., Tipsword, J. M., Penn, C. J., & McCann, J. P.

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

Objective:

Posttraumatic stress disorder (PTSD) and nonmedical prescription opioid use (NMPOU) are linked. Much of the research documenting this association uses cross-sectional or longitudinal designs that describe patterns of use over extended intervals. The present study used a daily monitoring design to examine how daily fluctuations in PTSD symptoms predicted patterns of prescription opioid use (both medical and nonmedical) and co-use of other substances. This approach has distinct advantages for understanding proximal temporal relations between PTSD symptom variation and substance use patterns.

Method:

Forty adults with clinical or subclinical PTSD and past-month NMPOU completed daily measures of PTSD symptoms, physical pain, prescription opioid use, and other substance use for 28 days using a smartphone application.

Results:

Same day co-use of prescription opioids and at least one other substance was common. Higher-than-typical PTSD symptoms on a given day (within-person) was associated with an increased likelihood of reporting NMPOU (overall and with co-use of one or more additional substances) on the same day. This association was specific to PTSD alterations in arousal and reactivity symptoms (Criteria E). Neither total PTSD symptoms nor individual PTSD symptom clusters prospectively predicted next-day prescription opioid use (overall or with co-use). Use of prescription opioids also did not predict next-day PTSD symptom severity.

Conclusion:

This is the first study to demonstrate positive associations between day-to-day fluctuations in PTSD symptoms and NMPOU. Results from the current study also

highlight the importance of examining polysubstance use patterns among individuals with PTSD who use prescription opioids. (PsycInfo Database Record (c) 2022 APA, all rights reserved)

<https://doi.org/10.1177/0095327X221108526>

“She Clearly Thought That Something Bad Had Happened to Her”: How Military Lawyers Construct Narratives of Victim Legitimacy and Perceived Harm in Sexual Assault Cases.

Tosto, S. A., & Bonnes, S.

Armed Forces & Society

First published online July 29, 2022

It has been well established that survivors of sexual assault are revictimized as they navigate the civilian criminal justice system. Significantly less is known, however, about how sexual violence is navigated within the military justice system. In this study, we use qualitative interviews with military lawyers about sexual assault cases to explore their constructions of victim legitimacy. Lawyers create a distinction between perceived and actual harm done to a victim and perpetuate the notion that victims falsely accuse men of sexual violence. Through these discursive strategies, lawyers suggest that the issue of military sexual violence is inflated. Finally, lawyers blame the institutional structure of the military for teaching victimization to young women. This helps them explain why victims who they do not perceive as legitimate report sexual violence. These findings emphasize the need for further inquiry into how those working in the military justice system perceive and interact with victims.

Links of Interest

The number of homeless vets dropped sharply over the last two years

<https://www.militarytimes.com/veterans/2022/11/03/the-number-of-homeless-vets-dropped-sharply-over-the-last-two-years/>

Finding Her Direction

<https://www.maketheconnection.net/read-stories/finding-her-direction/>

New Questions About Military Service and Chronic Traumatic Encephalopathy
[https://journals.lww.com/neurotodayonline/Fulltext/2022/07210/New Questions About Military Service and Chronic.1.aspx](https://journals.lww.com/neurotodayonline/Fulltext/2022/07210/New_Questions_About_Military_Service_and_Chronic.1.aspx)

Resource of the Week: [Veterans Day 2022: November 11](#)

A “Facts for Features” publication from the U.S. Census Bureau.

Veterans Day originated as “Armistice Day” on Nov. 11, 1919, the first anniversary of the end of World War I. Congress passed a resolution in 1926 making it an annual observance, and it became a national holiday in 1938. Sixteen years later, then-President Dwight D. Eisenhower signed legislation changing the name to Veterans Day to honor all those who served their country during war or peacetime. On this day, the nation honors military veterans -- living and dead -- with parades and other observances across the country and a ceremony at the Tomb of the Unknown Soldier at Arlington National Cemetery in Virginia.

The following facts are possible thanks to the invaluable responses to U.S. Census Bureau surveys. We appreciate the public’s cooperation in helping us measure America’s people, places and economy.

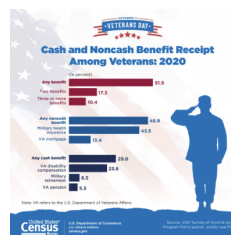
Did You Know?

16.5 million

The number of military veterans in the United States in 2021.

Source:

 [2021 American Community Survey 1-year estimates](#)



1.7 million

The number of female veterans in the United States in 2021.

Source:

 [2021 American Community Survey 1-year estimates](#)

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