

Research Update -- September 29, 2022

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Using Client Narratives to Identify Predictors of Outcome in Written Exposure Therapy and Cognitive Processing Therapy.

Elizabeth Alpert, Adele M. Hayes, J. Ben Barnes, Denise Sloan

Behavior Therapy Available online 16 September 2022

Highlights:

- Few studies have examined the change process in written exposure therapy for PTSD.
- We examined outcome predictors in two PTSD treatments using trauma narratives.
- In written exposure therapy, healthy, balanced beliefs predicted better outcome.
- In cognitive processing therapy, avoidance and cognitive factors predicted outcome.
- Narratives can provide useful information for examining predictors of outcome.

Abstract

Written exposure therapy (WET) is a brief, 5-session treatment for posttraumatic stress disorder (PTSD) that aims to improve access to care. WET has been demonstrated to be an efficacious PTSD treatment with lower rates of dropout and noninferior PTSD symptom outcome compared to cognitive processing therapy (CPT), a 12-session, goldstandard treatment. To identify predictors of treatment outcome in both WET and CPT, the current study examined the content of participants' written narratives. Participants were 123 adults with PTSD who were randomly assigned to receive WET (n = 61) or CPT (n = 62). The CHANGE coding system was used to code all available narratives in both treatment conditions for variables hypothesized to be relevant to therapeutic change. Linear regression analyses revealed that in WET, higher average levels of accommodated (healthy, balanced) beliefs and an increase in accommodated beliefs from the first to the final impact statement predicted better PTSD symptom outcome at 12 weeks post-randomization. In CPT, higher average levels of overgeneralized and accommodated beliefs and lower levels of avoidance expressed in the narratives predicted better PTSD outcome. There were no significant predictors of outcome in analyses of change from the first to final impact statement in CPT. These findings add to research identifying predictors of change in WET and CPT by highlighting the

importance of low avoidance in CPT and of trauma-related cognitions in both CPT and WET, even though WET is a brief written intervention that does not explicitly target cognitive change.

https://doi.org/10.1002/jts.22877

Event centrality and posttraumatic stress symptoms after traumatic injury: A longitudinal investigation.

Sarah K. Stevens, Sydney C. Timmer-Murillo, Carissa W. Tomas, Adriel Boals, Christine L. Larson, Terri deRoon-Cassini, Sadie E. Larsen

Journal of Traumatic Stress First published: 14 September 2022

The development of posttraumatic stress symptoms (PTSS) can occur following a traumatic injury, which may include an increase in negative cognitions. One cognitive construct shown to be associated with the development of PTSS is event centrality, or the degree to which an individual views a traumatic experience as central to their life story. Although cross-sectional work has demonstrated a robust connection between event centrality and PTSS, the directionality of this association remains unclear. Most previous work has investigated centrality as a predictor of PTSS, although one recent study suggests that PTSS may, in fact, predict event centrality. The current longitudinal study enrolled adult civilian participants (N = 191) from a Level 1 trauma center following a traumatic injury and assessed both event centrality and PTSS at three points posttrauma (3, 12, and 18 months). A time-constrained random intercept cross-lagged panel analysis showed that PTSS predicted event centrality over the 18-month follow-up period, B = 0.16, p = .021, but event centrality did not predict PTSS, B = -0.27, p = .340. These findings suggest that the development of PTSS following trauma exposure may lead to the perception of the traumatic event as central to an individual's story over time. Further longitudinal research is necessary to determine what variables may influence the connection between PTSS and event centrality.

https://doi.org/10.1002/jts.22879

Comparing immediate- and delayed-onset posttraumatic stress disorder: Results from the National Epidemiologic Survey on Alcohol and Related Conditions–III (NESARC-III).

Zoe Bourgault, Christine Ibrahim, Bernard Le Foll, Ahmed N. Hassan

Journal of Traumatic Stress First published: 14 September 2022

Delayed-onset posttraumatic stress disorder (PTSD) is defined as a period of 6 months or more between trauma exposure and episode onset. Due to the limited research and lack of epidemiological studies on this form of the disorder, we investigated its prevalence, clinical features, and psychiatric comorbidities in a nationally representative sample of U.S. adults. Using National Epidemiologic Survey on Alcohol and Related Conditions-III (NESARC-III) data collected from individuals who met the DSM-5 criteria for PTSD (N = 1,980), we compared delayed- and immediate-onset PTSD with regard to demographic and clinical variables, including comorbidity with psychiatric and substance use disorder (SUD) diagnoses. The overall prevalence of delayed-onset PTSD was 11.0%. Respondents with delayed-onset PTSD were more likely than those with immediate-onset PTSD to report active military combat exposure, more physical and emotional difficulties, and higher levels of pain; these individuals were also more likely to be divorced and less likely to meet the diagnostic criteria for select SUDs. After adjusting for confounding variables, we found a decreased risk of delayed-onset PTSD among individuals with hallucinogen use disorder, OR = 0.30; 95% CI [0.11, 0.87], d = 0.5. We found no significant associations between PTSD onset status and any other SUD, including alcohol use disorder, after adjusting for covariates. Further longitudinal research is required to investigate the temporal associations between PTSD onset and its clinical characteristics and comorbidities, as this could have implications on disorder progression and treatment approaches.

https://doi.org/10.1007/s41105-022-00395-4

Comparison of the effects of cognitive-behavioral therapy for insomnia between patients with primary insomnia and comorbid insomnia.

Masayuki Iwashita, Wataru Yamadera, Ayana Hotchi, Tomohiro Utsumi, Misato Amagai, Junpei Ishii, Takako Suzuki, Hiroshi Itoh & Masahiro Shigeta

Sleep and Biological Rhythms Volume 20, pages 489–497 (2022)

Cognitive behavioral therapy for insomnia (CBT-I) is effective for not only primary insomnia (PI) but also comorbid insomnia (CI; insomnia associated with psychiatric/physical diseases or other types of sleep disorders). This study aimed to compare the outcomes of CBT-I implemented in the same manner between patients with PI and CI. In total, 41 adult patients who had completed CBT-I were enrolled in this retrospective analysis and divided into a PI group and a CI group. The authors then examined and compared the significance of changes after therapy between the two groups. The magnitude of improvement on the Japanese version of the Insomnia Severity Index (ISI-J) was analyzed as the primary endpoint. In the PI group (n = 24), both the ISI-J score and the dose of hypnotics decreased significantly following CBT-I. On the other hand, in the CI group (n = 17), only the dose of hypnotics decreased significantly; no statistically significant improvement was seen in the ISI-J score. Sleep onset latency and sleep quality rating in recorded sleep diaries were significantly correlated with improved ISI-J scores in the CI group only. CBT-I was shown to be effective for CI, but its efficacy for CI was inferior to that for PI in terms of impact on sleep and mental condition. These results suggest that in addition to the basic components of CBT-I, treatment for CI, especially when accompanied by severe insomnia symptoms, should include approaches targeting the comorbid disease.

https://doi.org/10.1001/jama.2022.17613

Employment in Office-Based and Intensive Behavioral Health Settings in the US, 2016-2021.

Eisenberg, M. D., Eddelbuettel, J., & McGinty, E. E.

JAMA 2022 Sep 19

The COVID-19 pandemic prompted increased demand for behavioral health services.1 These conditions introduced significant stressors on the behavioral health workforce, which already experienced high rates of burnout and turnover before the COVID-19 pandemic that contributed to shortages in many areas of the country.2,3 This study examined the association between the COVID-19 pandemic and the US behavioral health workforce.

https://doi.org/10.1001/jamanetworkopen.2022.32795

Analysis of Substance Use Disorder Treatment Admissions in the US by Sex and Race and Ethnicity Before and During the COVID-19 Pandemic.

Cantor, J. H., Whaley, C. M., Stein, B. D., & Powell, D.

JAMA Network Open 2022 Sep 1

The COVID-19 pandemic has led to increases in the number of fatal drug overdoses1 and self-reported substance use disorder (SUD).2 Despite these increases, few studies have examined SUD treatment admissions during the pandemic, with studies focusing on state-specific estimates3 or inferring use through national mobility data.4 To more comprehensively examine the surge in drug overdose deaths, we quantified changes in national SUD treatment before (2017-2019) and during (2020) the COVID-19 pandemic.

https://doi.org/10.1001/jamanetworkopen.2022.32748

Emotional Exhaustion Among US Health Care Workers Before and During the COVID-19 Pandemic, 2019-2021.

Sexton, J. B., Adair, K. C., Proulx, J., Profit, J., Cui, X., Bae, J., & Frankel, A.

JAMA Network Open September 21, 2022

Key Points

- Question: Is the COVID-19 pandemic associated with an increase in health care worker emotional exhaustion?
- Findings: In this 3-year survey study with an overall sample of 107 122 responses from US health care workers before (2019) and twice during (2020 and 2021-

2022) the COVID-19 pandemic, increases were reported in assessments of emotional exhaustion in oneself and in one's colleagues overall and for every role; nurses reported increases each year, but physicians reported decreases in 2020 followed by sharp increases in 2021. Exhaustion score clustering in work settings was suggestive of a social contagion effect of exhaustion.

• Meaning : These findings indicate that emotional exhaustion among health care workers, which was problematic before the pandemic, has become worse; increases in emotional exhaustion may jeopardize care quality and necessitate additional support for the workforce.

Abstract

Importance

Extraordinary strain from COVID-19 has negatively impacted health care worker (HCW) well-being.

Objective

To determine whether HCW emotional exhaustion has increased during the pandemic, for which roles, and at what point.

Design, Setting, and Participants

This survey study was conducted in 3 waves, with an electronic survey administered in September 2019, September 2020, and September 2021 through January 2022. Participants included hospital-based HCWs in clinical and nonclinical (eg, administrative support) roles at 76 community hospitals within 2 large health care systems in the US.

Exposures

Safety, Communication, Organizational Reliability, Physician, and Employee Burnout and Engagement (SCORE) survey domains of emotional exhaustion and emotional exhaustion climate.

Main Outcomes and Measures

The percentage of respondents reporting emotional exhaustion (%EE) in themselves and a climate of emotional exhaustion (%EEclim) in their colleagues. Survey items were answered on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree); neutral or higher scores were counted as "percent concerning" for exhaustion.

Results

Electronic surveys were returned by 37 187 (of 49 936) HCWs in 2019, 38 460 (of 45 268) in 2020, and 31 475 (of 41 224) in 2021 to 2022 for overall response rates of 74.5%, 85.0%, and 76.4%, respectively. The overall sample comprised 107 122

completed surveys. Nursing was the most frequently reported role (n = 43918 [40.9%]). A total of 17 786 respondents (16.9%) reported less than 1 year at their facility, 59 226 (56.2%) reported 1 to 10 years, and 28 337 (26.9%) reported 11 years or more. From September 2019 to September 2021 through January 2022, overall %EE increased from 31.8% (95% CI, 30.0%-33.7%) to 40.4% (95% CI, 38.1%-42.8%), with a proportional increase in %EE of 26.9% (95% CI, 22.2%-31.8%). Physicians had a decrease in %EE from 31.8% (95% CI, 29.3%-34.5%) in 2019 to 28.3% (95% CI, 25.9%-31.0%) in 2020 but an increase during the second year of the pandemic to 37.8% (95% CI, 34.7%-41.3%). Nurses had an increase in %EE during the pandemic's first year, from 40.6% (95% CI, 38.4%-42.9%) in 2019 to 46.5% (95% CI, 44.0%-49.1%) in 2020 and increasing again during the second year of the pandemic to 49.2% (95%) CI, 46.5%-51.9%). All other roles showed a similar pattern to nurses but at lower levels. Intraclass correlation coefficients revealed clustering of exhaustion within work settings across the 3 years, with coefficients of 0.15 to 0.17 for emotional exhaustion and 0.22 to 0.24 for emotional exhaustion climate, higher than the .10 coefficient typical of organizational climate (a medium effect for shared variance), suggestive of a social contagion effect of HCW exhaustion.

Conclusions and Relevance

This large-scale survey study of HCWs spanning 3 years offers substantial evidence that emotional exhaustion trajectories varied by role but have increased overall and among most HCW roles since the onset of the pandemic. These results suggest that current HCW well-being resources and programs may be inadequate and even more difficult to use owing to lower workforce capacity and motivation to initiate and complete well-being interventions.

https://doi.org/10.4088/JCP.21br14341

Factors Associated With Remission of Suicidal Ideation During the COVID-19 Pandemic: A Population-Based, Longitudinal Study in US Military Veterans.

Herzog, S., Nichter, B., Hill, M. L., Na, P. J., Norman, S. B., & Pietrzak, R. H.

The Journal of Clinical Psychiatry 2022 Jun 27; 83(4)

The COVID-19 pandemic, first declared a global public health emergency by the World Health Organization (WHO) on January 30, 2020,1 has resulted in profound social and

economic hardship and over 5 million deaths worldwide as of October 2021.2 Scholars have forecast a secondary crisis of mental illness and suicidality extending far beyond those sickened by the virus3–6 as individuals struggle to cope with financial losses, fear of infection, uncertainty about the future, and unprecedented disruptions to their daily lives. However, it is difficult to accurately anticipate the mental health repercussions of COVID-19 without accounting for protective or mitigating factors that may confer resilience to adversity or promote remission of suicidal ideation (SI). Indeed, nearly 2 years since the WHO's declaration, early data suggest that the COVID-19 pandemic has wrought heterogeneous mental health impacts7,8 and that the projected increase in suicidality has borne out in some populations more than in others.9–11

https://doi.org/10.1016/j.jad.2022.06.070

Scores on the suicide cognitions scale-revised (SCS-R) predict future suicide attempts among primary care patients denying suicide ideation and prior attempts.

Bryan, C. J., Thomsen, C. J., Bryan, A. O., Baker, J. C., May, A. M., & Allen, M. H.

Journal of Affective Disorders Volume 313, 15 September 2022, Pages 21-26

Background:

Approximately half of patients who attempt or die by suicide screened negative for suicidal ideation during their most recent medical visit. Maladaptive beliefs and schemas can increase cognitive vulnerability to suicidal behavior, even among patients without recent or past suicidal thoughts and behaviors. Assessing these beliefs could improve the detection of patients who will engage in suicidal behavior after screening negative for elevated suicide risk.

Methods:

Primary care patients who completed the Patient Health Questionnaire-9 and the Suicide Cognitions Scale-Revised (SCS-R) during routine clinic visits and denied suicidal ideation at baseline (N = 2417) were included in the study sample. Suicidal behaviors during the 12 months after baseline were assessed. Logistic regression analyses examined the association of baseline SCS-R scores with later suicidal behavior.

Results:

In both univariate and multivariate analyses, SCS-R total scores were associated with significantly increased risk of suicidal behavior within 90, 180, and 365 days post-baseline. Results were unchanged when patients who reported prior suicidal behavior were excluded (N = 2178). In item-level analyses, all 16 SCS-R items significantly differentiated patients with and without follow-up suicidal behavior.

Limitations:

Study limitations included missing follow-up data, restriction of sample to U.S. military medical beneficiaries, and inability to assess representativeness of the sample relative to the full primary care population.

Conclusions:

SCS-R scores are elevated among patients who attempt suicide after denying both suicidal ideation and prior suicide attempts, suggesting the scale may reflect enduring suicide risk. The SCS-R could enhance suicide risk screening and assessment.

https://doi.org/10.1016/j.jad.2022.06.066

The prospective relation between borderline personality disorder symptoms and suicide risk: The mediating roles of emotion regulation difficulties and perceived burdensomeness.

Gratz, K. L., Kiel, E. J., Mann, A., & Tull, M. T.

Journal of Affective Disorders Volume 313, 15 September 2022, Pages 186-195

Highlights

- The pathways through which BPD symptoms increase suicide risk are unknown.
- We examined emotion regulation (ER) and perceived burdensomeness (PB) as mediators.
- BPD symptoms related to greater suicide risk indirectly via ER difficulties and PB
- Results indicate transactional relations among BPD, ER, and suicide risk over time.

Abstract

Background

Despite the strong link between borderline personality disorder (BPD) symptoms and suicide risk, little is known about the mechanisms underlying this association. Theorydriven research clarifying the pathways through which BPD symptoms increase suicide risk over time is needed and may highlight relevant treatment targets for decreasing suicide risk among individuals with heightened BPD symptoms. This study examined the prospective relations among BPD symptoms, emotion regulation (ER) difficulties, perceived burdensomeness, thwarted belongingness, and suicide risk across five assessments over a 7-month period. Consistent with the interpersonal theory of suicide, we hypothesized that greater BPD symptoms would predict greater suicide risk over time via greater ER difficulties and, subsequently, greater perceived burdensomeness.

Methods

A U.S. nationwide sample of 500 adults (47 % women; mean age = 40.0 ± 11.64) completed a prospective online study, including an initial assessment and four follow-up assessments over the next seven months.

Results

Results revealed a significant indirect relation between BPD symptoms and greater suicide risk over time through greater ER difficulties and later perceived burdensomeness. Results also provided evidence for transactional relations between BPD symptoms and ER difficulties and suicide risk over time.

Limitations

All constructs were assessed via self-report questionnaire data. Our measure of suicide risk focuses on only suicidal ideation, plans, and impulses, and not suicide attempts or preparatory behaviors.

Conclusions

Results highlight both ER- and interpersonal-related factors as key mechanisms underlying suicide risk among community adults with BPD symptoms.

https://doi.org/10.1016/j.drugalcdep.2022.109546

Predictors of alcohol use disorder treatment outcomes over 12 months: Role of concerned others' functioning and Al-Anon participation.

Michael A. Cucciare, Xiaotong Han, Christine Timko

Highlights

- Patient AA use and abstinence decreased over 12-months following treatment.
- CO Al-Anon involvement was associated with more patient (AA) attendance.
- More CO stigma was associated with lower patient AA participation.
- More CO approach coping was associated with less patient risk for substance use.

Abstract

Background

This study included dyads comprised of adults entering treatment for alcohol use disorder and their Concerned Others (COs) to examine indicators of COs functioning (Al-Anon attendance and involvement, relationship stressors, use of approach coping and stigma) as predictors of patient outcomes (Alcoholics Anonymous (AA) attendance and involvement, abstinence and risk of substance use) over 12 months following adults' entry into AUD treatment.

Methods

Dyads (n = 279) were assessed when patients entered treatment and at 3-, 6- and 12month follow-ups. Data were collected through participants' self-report. Lagged generalized linear mixed models were used to examine associations between indicators of COs' functioning at baseline, 3- and 6-month follow-ups and patients' outcomes at 3-, 6- and 12-month follow-ups.

Results

Patients reported less AA attendance and involvement and likelihood of maintaining abstinence from alcohol use over time. Findings from our multivariate analysis showed that any CO involvement in Al-Anon, relative to none, was associated with more patient AA attendance. In contrast, more stigma (e.g., need to hide patient's drinking) reported by COs was associated with lower patient AA participation and involvement, while more CO use of approach coping was associated with less patient risk for alcohol and drug use.

Conclusions

Findings suggest that COs' functioning can affect longer-term outcomes of adults entering AUD treatment. Treatment programs should increase the availability of help to COs to improve their functioning and patient outcomes.

https://doi.org/10.1001/jamaneurol.2022.1567

Cognitive Behavioral Therapy for Veterans With Comorbid Posttraumatic Headache and Posttraumatic Stress Disorder Symptoms: A Randomized Clinical Trial.

McGeary, D. D., Resick, P. A., Penzien, D. B., McGeary, C. A., Houle, T. T., Eapen, B. C., Jaramillo, C. A., Nabity, P. S., Reed, D. E., 2nd, Moring, J. C., Bira, L. M., Hansen, H. R., Young-McCaughan, S., Cobos, B. A., Mintz, J., Keane, T. M., & Peterson, A. L.

JAMA Neurology 2022 Aug 1; 79(8): 746-757

Key Points

Question

Do cognitive behavioral therapies for posttraumatic headache and posttraumatic stress disorder (PTSD) symptoms improve headache-related disability in veterans compared with treatment per usual?

Findings

A randomized clinical trial of 193 post-9/11 combat veterans with posttraumatic headache and PTSD symptoms found headache disability was significantly improved with cognitive behavioral therapy for headaches compared with treatment per usual. Though participants randomly assigned to cognitive processing therapy reported significantly greater improvement in PTSD symptom severity compared with treatment per usual, there was no significant effect of cognitive processing therapy on headache disability.

Meaning

Cognitive behavioral therapies are efficacious treatments for veterans with comorbid posttraumatic headache and PTSD symptoms.

Abstract

Importance

Posttraumatic headache is the most disabling complication of mild traumatic brain injury. Posttraumatic stress disorder (PTSD) symptoms are often comorbid with posttraumatic headache, and there are no established treatments for this comorbidity.

Objective

To compare cognitive behavioral therapies (CBTs) for headache and PTSD with

treatment per usual (TPU) for posttraumatic headache attributable to mild traumatic brain injury.

Design, Setting, and Participants

This was a single-site, 3–parallel group, randomized clinical trial with outcomes at posttreatment, 3-month follow-up, and 6-month follow-up. Participants were enrolled from May 1, 2015, through May 30, 2019; data collection ended on October 10, 2019. Post-9/11 US combat veterans from multiple trauma centers were included in the study. Veterans had comorbid posttraumatic headache and PTSD symptoms. Data were analyzed from January 20, 2020, to February 2, 2022.

Interventions

Patients were randomly assigned to 8 sessions of CBT for headache, 12 sessions of cognitive processing therapy for PTSD, or treatment per usual for headache.

Main Outcomes and Measures

Co–primary outcomes were headache-related disability on the 6-Item Headache Impact Test (HIT-6) and PTSD symptom severity on the PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition) (PCL-5) assessed from treatment completion to 6 months posttreatment.

Results

A total of 193 post-9/11 combat veterans (mean [SD] age, 39.7 [8.4] years; 167 male veterans [87%]) were included in the study and reported severe baseline headacherelated disability (mean [SD] HIT-6 score, 65.8 [5.6] points) and severe PTSD symptoms (mean [SD] PCL-5 score, 48.4 [14.2] points). For the HIT-6, compared with usual care, patients receiving CBT for headache reported -3.4 (95% CI, -5.4 to -1.4; P < .01) points lower, and patients receiving cognitive processing therapy reported -1.4(95% CI, -3.7 to 0.8; P = .21) points lower across aggregated posttreatment measurements. For the PCL-5, compared with usual care, patients receiving CBT for headache reported -6.5 (95% CI, -12.7 to -0.3; P = .04) points lower, and patients receiving cognitive processing therapy reported -8.9 (95% CI, -15.9 to -1.9; P = .01) points lower across aggregated posttreatment measurements. Adverse events were minimal and similar across treatment groups. Conclusions and Relevance This randomized clinical trial demonstrated that CBT for headache was efficacious for disability associated with posttraumatic headache in veterans and provided clinically significant improvement in PTSD symptom severity. Cognitive processing therapy was efficacious for PTSD symptoms but not for headache disability.

Trial Registration ClinicalTrials.gov Identifier: <u>NCT02419131</u>

https://doi.org/10.1080/08995605.2022.2094175

Reculturation: A new perspective on military-civilian transition stress.

Jeremy S. Joseph, Lorraine Smith-MacDonald, Meg C. Filice & Matthew S. Smith

Military Psychology Published online: 30 Jun 2022

Various forms of assistance are offered to help US Veterans achieve success in their post-military lives in recognition of their service. Despite the many successes, a significant number of Veterans continue to remain at risk for negative mental health outcomes, including suicidality and low levels of life satisfaction. These findings may be due to challenges arising from cultural identity dissonance. Problematic strategies used by Veterans to reduce this dissonance can result in a lack of belongingness, a key component in Joiner's Interpersonal Theory of Suicide. The authors suggest that research on the immigrant experience of acculturation may provide a new perspective to better understand issues of identity and sense of belonging in Veterans. Given that most Veterans return to the culture in which they grew up, the authors offer the term "reculturation." The authors propose clinical psychology focus on exploring the reculturation process of Veterans to support program engagement and suicide prevention.

https://doi.org/10.1016/j.sleh.2022.07.005

The bi-directional relationship between post-traumatic stress disorder and obstructive sleep apnea and/or insomnia in a large U.S. military cohort.

Chinoy, E. D., Carey, F. R., Kolaja, C. A., Jacobson, I. G., Cooper, A. D., & Markwald, R. R.

Sleep Health 2022 Sep 23

Objectives:

Determine if a bi-directional relationship exists between the development of sleep disorders (obstructive sleep apnea [OSA] and/or insomnia) and existing post-traumatic stress disorder (PTSD), and vice versa; and examine military-related factors associated with these potential relationships.

Design:

Longitudinal analyses of a prospective representative U.S. military cohort.

Participants:

Millennium Cohort Study responders in 2011-2013 (Time 1 [T1]) and 2014-2016 (Time 2 [T2]) without insomnia or OSA at T1 (N = 65,915) or without PTSD at T1 (N = 71,256).

Measurements:

Provider-diagnosed OSA, self-reported items for insomnia, provider-diagnosed PTSD, and current PTSD symptoms were assessed at T1 and T2. Adjusted multivariable models identified military-related factors associated with new-onset PTSD in those with OSA and/or insomnia, and vice versa.

Results:

Self-reported history of provider-diagnosed PTSD without current symptoms at T1 was associated with new-onset OSA only and comorbid OSA/insomnia at T2, while current PTSD symptoms and/or diagnosis was associated with new-onset insomnia only. OSA/insomnia at T1 was consistently associated with newly reported PTSD symptoms or diagnosis except that insomnia only was not associated with newly reported provider-diagnosed PTSD. Military-related risk factors significantly associated with the bi-directional relationship for new-onset PTSD or OSA/insomnia included prior deployment with higher combat exposure and recent separation from the military; being an officer was protective for both outcomes.

Conclusions:

In this large military cohort, findings suggest that PTSD and OSA and/or insomnia are bi-directionally predictive for their development, which was sometimes revealed by health care utilization. Relevant military-related risk factors should be considered in efforts to prevent or treat PTSD and/or sleep disorders.

https://doi.org/10.1007/s40501-022-00280-4

Moral Injury in the Context of Substance Use Disorders: a Narrative Review.

Van Denend, J., Harris, J. I., Fuehrlein, B., & Edens, E. L.

Current Treatment Options in Psychiatry 2022 Sep 16

The rate of annual drug overdose deaths in the USA recently topped 100,000 (CDC/National Center for Health Statistics 2021), an illustration of the critical need to prevent and treat substance use disorders (SUDs). As a complex, chronic medical condition, substance use treatment requires psychological, emotional, and spiritual interventions along with medical care. The recently developed concept of moral injury has been increasingly studied and applied to military service members who experience conflict between the expectations or survival needs of combat and their moral values. This review explores whether moral injury, along with the related emotional, psychological, and spiritual symptoms, can also develop in the context of SUDs. This review identified 5 manuscripts related to moral injury arising in a substance use context. These studies were small in sample size and gualitative in nature but did indicate the presence of moral injury within the context of substance use. Further studies are needed to better understand and treat moral injury related to SUDs. A conceptualization of how moral injury may arise in the context of substance use is presented here. It is suggested that the activation of the primitive dopaminergic reward system causes a potential conflict between the experienced need for the addictive substance and a person's moral code or values. The moral injury resulting from this collision may impact treatment and recovery.

https://doi.org/10.1037/tra0001352

Psychological and spiritual factors affecting well-being among military personnel engaged in remote combat.

Bufford, R. K., Frise, A., Paloutzian, R. F., Mulhearn, T. J., Scheuneman, N., Chappelle, W., Galloway, K., & Prince, L.

Psychological Trauma : Theory, Research, Practice and Policy 2022 Sep 22

Introduction:

Remotely piloted aircraft (RPA) require multiple crewmembers to successfully operate the aircraft. RPAs shape modern warfare and pose challenges for the spiritualemotional health of RPA personnel. This study explored whether (a) RPA crewmembers could be separated into groups based on their experiences, (b) the groups differed in psychological health outcomes, and (c) they differed in aspects of spiritual well-being.

Method:

Participants included 354 United States Air Force personnel involved in RPA duty. Participants provided demographic information and completed the Work Role Strain Scale as a predictor. Outcome measures included job satisfaction, the Maslach Burnout Inventory, Outcome Questionnaire-45.2, Posttraumatic Stress Disorder Checklist for Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5), and medical complaints and psychosocial services indices. The Spiritual Well-Being Scale and Unit Cohesion Scale were assessed as moderating factors.

Results:

Cluster analysis identified two groups of crewmembers. Psychologically healthy participants included 73.4% of crewmembers (n = 260); the remaining 26.6% (n = 94) were distressed. The distressed group included more imagery analysts, weapon-strike pilots, and females, and fewer sensor operators and males compared with the healthy group. Symptoms among the distressed group included more psychological difficulties and PTSD symptoms, more medical complaints, and greater use of psychosocial services. The distressed group reported greater work-role conflict, role ambiguity, work overload, relationship stress, emotional exhaustion, and cynicism as well as lower job satisfaction, unit cohesion, professional efficacy, and existential well-being.

Discussion:

The strongest predictors of distress were lack of meaning and feeling overextended at work. Emotional exhaustion and low existential well-being identified distressed crewmembers. (PsycInfo Database Record (c) 2022 APA, all rights reserved).

https://doi.org/10.55460/I6M8-EZPL

Active Warfighter Mental Health Lower in Mid-Career.

DeFreese, J. D., Fredrickson, B. L., Kiefer, A. W., Bailar-Heath, M., Burke, R. J., DeLellis, S. M., Kane, S. F., Lynch, J. H., Means, G. E., Depenbrock, P. J., & Mihalik, J. P.

Journal of Special Operations Medicine 2022 Sep 19; 22(3): 129-135

Purpose:

The present study investigated Special Operations Forces (SOF) combat Servicemember mental health at different SOF career stages in association with resilience.

Methods:

Fifty-eight SOF combat Service Members either entering SOF (career start; n=38) or multiple years with their SOF organization (mid-career; n=20) self-reported mild traumatic brain injury (TBI) history, resilience, subjective well-being, depression, anxiety, and posttraumatic stress. Poisson regression analyses were employed to test SOF career stage differences in each mental health symptom using resilience, while accounting for other pertinent military factors.

Results:

There were significant interaction effects of SOF career stage and resilience on mental health symptoms. SOF career start combat Servicemembers endorsed lower depression and posttraumatic stress and higher subjective well-being with higher resilience, but these associations between resilience and mental health symptoms were not seen in SOF mid-career Servicemembers.

Conclusions:

Although preliminary, the adaptive association between resilience and mental health seemed to be blunted in combat Servicemembers having served multiple years in SOF. This information informs research to provide evaluation tools to support prophylactic performance and long-term health preservation in military populations.

https://doi.org/10.1080/17512433.2022.2114898

Opioid epidemic: lessons learned and updated recommendations for misuse involving prescription versus non-prescription opioids.

Bedene, A., Dahan, A., Rosendaal, F. R., & van Dorp, E.

Expert Review of Clinical Pharmacology 2022 Sep; 15(9): 1081-1094

Introduction:

In the past decades, the opioid crisis has heavily impacted parts of the US society and has been followed by an increase in the use of opioids worldwide. It is of paramount importance that we explore the origins of the US opioid epidemic to develop best practices to tackle the rising tide of opioid overdoses.

Areas covered:

In this expert review, we discuss opioid (over)prescription, change in perception of pain, and false advertisement of opioid safety as the leading causes of the US opioid epidemic. Then, we review the evidence about opioid dependence and addiction potential and provide current knowledge about predictors of aberrant opioid-related behavior. Lastly, we discuss different approaches that were considered or undertaken to combat the rising tide of opioid-related deaths by regulatory bodies, pharmaceutical companies, and health-care professionals. For this expert review, we considered published articles relevant to the topic under investigation that we retrieved from Medline or Google scholar electronic database.

Expert opinion:

The opioid epidemic is a dynamic process with many underlying mechanisms. Therefore, no single approach may be best suited to combat it. In our opinion, the best way forward is to employ multiple strategies to tackle different underlying mechanisms.

https://doi.org/10.1038/s41386-022-01405-2

Emotional numbing in PTSD is associated with lower amygdala reactivity to pain.

Korem, N., Duek, O., Ben-Zion, Z., Kaczkurkin, A. N., Lissek, S., Orederu, T., Schiller, D., Harpaz-Rotem, I., & Levy, I.

Neuropsychopharmacology 2022 Oct; 47(11): 1913-1921

Posttraumatic stress disorder (PTSD) is associated with altered pain perception, namely increased pain threshold and higher pain response. While pain consists of physiological and affective components, affective components are often overlooked. Similar patterns of increased threshold-high response in PTSD were shown in response to emotional stimuli, i.e., emotional numbing. As both emotional numbing and pain processing are modulated by the amygdala, we aimed to examine whether individuals diagnosed with PTSD show lower amygdala activation to pain compared with combat controls, and whether the amygdala responses to pain correlates with emotional numbing. To do so, two independent samples of veterans (original study: 44 total (20 PTSD); conceptual replication study: 40 total (20 PTSD)) underwent threat conditioning, where a conditioned stimulus (CS+; visual stimulus) was paired with an unconditioned stimulus (US; electric-shock). We contrasted the amygdala activity to the CS + US pairing with the CS+ presented alone and correlated it with emotional numbing severity. In both samples, the PTSD group showed a robust reduction in amygdala reactivity to shock compared to the Combat Controls group. Furthermore, amygdala activation was negatively correlated with emotional numbing severity. These patterns were unique to the amygdala, and did not appear in comparison to a control region, the insula, a pivotal region for the processing of pain. To conclude, amygdala response to pain is lower in individuals with PTSD, and is associated with emotional numbing symptoms. Lower amygdala reactivity to mild pain may contribute to the "all-or-none" reaction to stressful situations often observed in PTSD.

https://doi.org/10.1016/j.jss.2022.04.056

Association of Race/Ethnicity With Substance Use Testing After Trauma: A Cross-Sectional Study.

Hernandez, S., Menza, R., Schwartz, H., Ledesma, Y., Stein, D. M., Mackersie, R., & Bongiovanni, T.

The Journal of Surgical Research 2022 Nov; 279: 265-274

Introduction:

Race/ethnicity has been strongly associated with substance use testing but little is known about this association in injured patients. We sought to identify trends and associations between race/ethnicity and urine toxicology (UTox) or Blood Alcohol Concentration (BAC) testing in a diverse population after trauma.

Materials and methods:

We conducted a retrospective cross-sectional study of adult trauma patients admitted to a single Level-1 trauma center from 2012 to 2019. The prevalence of substance use testing was evaluated over time and analyzed using a multivariable logistic regression, with a subgroup analysis to evaluate the interaction of English language proficiency with race/ethnicity in the association of substance use testing.

Results: A total of 15,556 patients (40% White, 13% Black, 24% Latinx, 20% Asian, and 3% Native or Unknown) were included. BAC testing was done in 63.2% of all patients and UTox testing was done in 39.2%. The prevalence of substance use testing increased over time across all racial/ethnic groups. After adjustment, Latinx patients had higher odds of receiving a BAC test and Black patients had higher odds of receiving a UTox test (P < 0.001 and P < 0.001, respectively) compared to White patients. Asian patients had decreased odds of undergoing a UTox or BAC test compared to White patients (P < 0.001 and P < 0.001, respectively). Patients with English proficiency had higher odds of undergoing substance use testing compared to those with limited English proficiency (P < 0.001).

Conclusions:

Despite an increase in substance use testing over time, inequitable testing remained among racial/ethnic minorities. More work is needed to combat racial/ethnic disparities in substance use testing.

https://doi.org/10.1007/s11606-022-07580-8

State of the Knowledge of VA Military Sexual Trauma Research.

Galovski, T. E., Street, A. E., Creech, S., Lehavot, K., Kelly, U. A., & Yano, E. M.

Journal of General Internal Medicine 2022 Sep; 37(Suppl 3): 825-832

Despite substantial efforts to counter sexual assault and harassment in the military, both remain persistent in the Armed Services. In February 2021, President Biden directed the U.S. Department of Defense to establish a 90-day Independent Review Commission on Sexual Assault in the Military (IRC) to assess the department's efforts and make actionable recommendations. As servicemembers discharge from the military, effects of

military sexual trauma (MST) are often seen in the Veterans Health Administration (VA). In response to an IRC inquiry about VA MST research, we organized an overview on prevalence, adverse consequences, and evidence-based treatments targeting the sequelae of MST. Women are significantly more likely to experience MST than their male counterparts. Other groups with low societal and institutional power (e.g., lower rank) are also at increased risk. Although not all MST survivors experience long-term adverse consequences, for many, they can be significant, chronic, and enduring and span mental and physical health outcomes, as well as cumulative impairments in functioning. Adverse consequences of MST come with commonalities shared with sexual trauma in other settings (e.g., interpersonal betrayal, victim-blaming) as well as unique aspects of the military context, where experiences of interpersonal betrayal may be compounded by perceptions of institutional betrayal (e.g., fear of reprisal or ostracism, having to work/live alongside a perpetrator). MST's most common mental health impact is posttraumatic stress disorder, which rarely occurs in isolation, and may coincide with major depression, anxiety, eating disorders, substance use disorders, and increased suicidality. Physical health impacts include greater chronic disease burden (e.g., hypertension), and impaired reproductive health and sexual functioning. Advances in treatment include evidence-based psychotherapies and novel approaches relying on mind-body interventions and peer support. Nonetheless, much work is needed to enhance detection, access, care, and support or even the best interventions will not be effective.

https://doi.org/10.1038/s41598-022-14496-0

Stressful life events and trajectories of depression symptoms in a U.S. military cohort.

Laura Sampson, Howard J. Cabral, Anthony J. Rosellini, Jaimie L. Gradus, Gregory H. Cohen, David S. Fink, Anthony P. King, Israel Liberzon & Sandro Galea

Scientific Reports Published: 30 June 2022

Depression is a common mental disorder that may comprise distinct, underlying symptom patterns over time. Associations between stressful life events throughout the civilian lifecourse—including during childhood—and adult depression have been documented in many populations, but are less commonly assessed in military samples. We identified different trajectories of depression symptoms across four years in a military cohort using latent class growth analysis, and investigated the relationship between these trajectories and two domains of civilian life experiences: childhood adversity (e.g., being mistreated during childhood) and more proximal stressful experiences (e.g., divorce). A four-group depression model was identified, including a symptom-free group (62%), an increasing symptom group (13%), a decreasing symptom group (16%), and a "chronic" symptom group (9%). Compared to the symptom-free group, soldiers with childhood adversity were more likely to be in the chronic depression, decreasing, and increasing symptom groups. Time-varying adult stressors had the largest effect on depression symptoms for the increasing symptom group compared to other groups, particularly in the last two years of follow-up. This study indicates the importance of considering events from throughout the lifecourse not only those from deployment—when studying the mental health of servicemembers.

https://doi.org/10.1038/s44184-022-00004-9

Provision of social support and mental health in U.S. military veterans.

Peter J. Na, Jack Tsai, Steven M. Southwick & Robert H. Pietrzak

npj Mental Health Research Published: 29 June 2022

While social support has been linked to better health, most research has focused on the receipt of social support. In this study, we evaluated associations between provided support and mental health in a nationally representative cohort of 4069 US veterans. The majority (60–72%) of veterans reported providing support on a consistent basis. Veterans who scored higher on certain aspects of personality (i.e., agreeableness, conscientiousness, and extraversion) and received greater support were more likely to provide support. Further, each standard deviation increase in provided support was independently associated with 22–32% reduced odds of internalizing psychiatric disorders and suicidal ideation, and veterans who scored higher on both provided and received support had 3.5- to 14-fold lower odds of these outcomes relative to those with high received support but low provided support. Results suggest that interventions to promote the provision of support may help mitigate risk for adverse mental health outcomes in veterans.

https://doi.org/10.1007/s11126-022-09995-2

An Assessment of the 10-Item Mental Health Recovery Measure in a Predominantly African American Sample of Adults with Serious Mental Illness.

Weber, R.L., Abraham, K.M.

Psychiatric Quarterly Published: 30 June 2022

Study objectives were to 1) assess the reliability and validity of the 10-item Mental Health Recovery Measure (MHRM-10) in sample of predominately African American participants with serious mental illness, and 2) evaluate differences in MHRM-10 scores between the present sample and two other samples of persons with serious mental illness with different racial compositions. Participants included 230 adults (85.7% African American) with chart diagnoses of schizophrenia-spectrum, bipolar-spectrum, and major depressive disorders receiving services from community mental health centers in Detroit, Michigan. In addition to the MHRM-10, participants completed measures of psychological symptoms (Brief Symptom Inventory (BSI)- General Severity Index (GSI) and depression subscale), well-being (12-Item World Health Organization Disability Assessment Schedule 2.0; WHODAS 2.0), and stress-related growth (Stress-Related Growth Scale – Short Form; SRGS-SF). Internal consistency and convergent validity of the MHRM-10 were examined. Differences in MHRM-10 scores between the present sample and other samples were characterized by effect sizes. The MHRM-10 demonstrated excellent internal consistency. Evidence for convergent validity of the MHRM-10 included moderate correlations with the BSI-GSI, BSI-depression subscale, SRGS-SF, and WHODAS 2.0. The present sample of predominately African American participants showed higher MHRM-10 scores than two other samples with smaller proportions of African American participants. The MHRM-10 demonstrates excellent internal consistency and good convergent validity among African Americans with serious mental illness. Although findings are promising, studies should further assess the psychometric properties of the MHRM-10 in African American samples. Additional research that examines racial differences in mental health recovery is needed.

https://doi.org/10.1177/02654075221105025

Relationship maintenance among military couples.

Knobloch, L. K., Monk, J. K., & MacDermid Wadsworth, S. M.

Journal of Social and Personal Relationships First published online June 30, 2022

A burgeoning body of research on the relationship maintenance of military couples over the past two decades suggests the time is right to organize, assimilate, and critique the literature. We conducted a systematic review informed by the integrative model of relationship maintenance that considered issues of intersectionality. Our literature search identified 81 relevant journal articles representing 62 unique samples. With respect to theory, 59.3% of the journal articles employed one or more formal theoretical frameworks. In terms of research design, 88.7% of the studies focused on the U.S. military, 83.9% of the studies recruited convenience samples, 54.8% of the studies utilized quantitative methods, and 30.6% of the studies collected longitudinal data. Among the studies reporting sample demographics, 96.8% of participants were married, 77.2% of participants identified as non-Hispanic White, and only one same-sex relationship was represented. Our narrative synthesis integrated findings about relationship maintenance from studies examining (a) relationship maintenance overtly, (b) communicating to stay connected across the deployment cycle, (c) disclosure and protective buffering, (d) support from a partner, (e) dyadic coping, and (f) caregiving and accommodating a partner's symptoms. We interpret our results with an eye toward advancing theory, research, and practice.

Links of Interest

Military sexual assault reform is slow going, but that's the plan <u>https://www.militarytimes.com/news/your-military/2022/09/21/military-sexual-assault-reform-is-slow-going-but-thats-the-plan/</u>

Secretary of Defense Announces a New Action Plan: Taking Care of Our Service Members and Families

https://www.militaryonesource.mil/financial-legal/personal-finance/taking-care-of-people/

The Pros and Cons of Using AI-Based Mental Health Tools <u>http://newsbreaks.infotoday.com/NewsBreaks/The-Pros-and-Cons-of-Using-AIBased-Mental-Health-Tools-155090.asp</u>

Resource of the Week – Improving Support for Veteran Women: Veterans' Issues in Focus

New, from the RAND Corporation:

The VA mission statement is a symptom of a broader tendency to associate veteran status with men. Public debates about women's service in combat units and their historic "firsts," like completing Ranger School, have brought attention to women service members and made them very visible to the public. Women have also historically been the most visible within the military; because of their limited numbers and differential dress and grooming standards, they do not "blend in" with their peers. Women service members often face scrutiny from commanders and peers who are men and find it difficult to fully assimilate with their units. Yet, when they transition to civilian life, they become "invisible," not recognized as veterans in the same way as their male peers (Goldstein, 2018; Thomas and Hunter, 2019). As a result, their presence has historically been overlooked, their contributions underappreciated, and their needs underexamined and underresourced (VA Center for Women Veterans, 2022). Women are the fastest-growing population of service members and veterans and, according to the Veterans Health Administration, they account for 30 percent of new patients (VA, 2022b). As Figure 1 indicates, even as the overall number of veterans declines, the population of veteran women is projected to increase over the coming decade. By 2032, at least 14 percent of veterans will be women, compared with approximately 10 percent today (VA National Center for Veterans Analysis and Statistics, 2021).



Shirl Kennedy, BS, MA Research Editor Henry M. Jackson Foundation employee collaborating with Center for Deployment Psychology Office: (727) 537-6160 Email: shirley.kennedy.ctr@usuhs.edu
