

CDP



Research Update -- July 9, 2020

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<https://onlinelibrary.wiley.com/doi/abs/10.1002/jts.22558>

Incidence Rates of Posttraumatic Stress Disorder Over a 17-Year Period in Active Duty Military Service Members.

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Journal of Traumatic Stress

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Posttraumatic stress disorder (PTSD) affects approximately 8% of the general population. The prevalence of PTSD is twice as high in active duty service members and military veterans. Few studies have investigated the incidence rates of PTSD in active duty military personnel. The present study evaluated the incidence of PTSD diagnoses and the differences between demographic factors for service members between 2001 and 2017. Data on 182,400 active duty service members between 2001 and 2017 were drawn from the Defense Medical Epidemiological Database and examined by sex, age, service branch, military pay grade, marital status, and race. From 2001 to 2017, the incidence rates of PTSD in the active force (per 1,000 service members) steadily climbed, with a low of 1.24 in 2002 to a high of 12.94 in 2016. Service members most often diagnosed with PTSD were in the U.S. Army, with the enlisted pay grades of E-5–E-9, White, married, male, and between 20 and 24 years

old. Statistically significant differences, $p s < .001$, were found between observed and expected counts across all examined demographic variables. The present study is the first to our knowledge to provide a comprehensive examination of PTSD incidence rates in an active duty military population.

<https://www.cambridge.org/core/journals/psychological-medicine/article/examining-unique-and-prospective-relationships-among-selfinjurious-thoughts-and-behaviors-and-posttraumatic-stress-disorder-a-network-analysis-in-two-traumaexposed-samples/6A3722FF54631C9988A5A08FFF4D06B8>

Examining unique and prospective relationships among self-injurious thoughts and behaviors and posttraumatic stress disorder: a network analysis in two trauma-exposed samples.

Spitzer, E., Benfer, N., Zuromski, K., Marx, B., & Witte, T.

Psychological Medicine

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<https://doi.org/10.1017/S0033291720002263>

Background

As self-injurious thoughts and behaviors (SITB) remain a pressing public health concern, research continues to focus on risk factors, such as posttraumatic stress disorder (PTSD). Network analysis provides a novel approach to examining the PTSD-SITB relationship. This study utilized the network approach to elucidate how individual PTSD symptoms may drive and maintain SITB.

Methods

We estimated cross-sectional networks in two samples of trauma-exposed adults (Sample 1: $N = 349$ adults; Sample 2: $N = 1307$ Veterans) to identify PTSD symptoms that may act as bridges to SITB. Additionally, we conducted a cross-lagged panel network in Sample 2 to further clarify the temporal relationship between PTSD symptoms and SITB during a 2-year follow-up. Finally, in both samples, we conducted logistic regressions to examine the utility of PTSD symptoms in prospectively predicting SITB, over a 15-day period (Sample 1) and over a 2-year period (Sample 2), allowing us to examine both short- and long-term prediction.

Results

Two PTSD symptoms (i.e. negative beliefs and risky behaviors) emerged as highly influential on SITB in both cross-sectional networks. In the cross-lagged panel network, distorted blame emerged as highly influential on SITB over time. Finally, risky behaviors, unwanted memories, and psychological distress served as the strongest predictors of SITB across the two samples.

Conclusions

Overall, our results suggest that treatments targeting negative beliefs and risky behaviors may prevent SITB in community and Veteran populations, whereas treatments targeting distorted blame and unwanted memories may help reduce SITB for individuals with a history of combat trauma.

<https://www.tandfonline.com/doi/full/10.1080/17483107.2020.1775312>

Implementing music therapy through telehealth: considerations for military populations.

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Disability and Rehabilitation: Assistive Technology

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Purpose:

Telehealth provides psychotherapeutic interventions and psychoeducation for remote populations with limited access to in-person behavioural health and/or rehabilitation treatment. The United States Department of Défense and the Veterans Health Administration use telehealth to deliver primary care, medication management, and services including physical, occupational, and speech-language therapies for service members, veterans, and eligible dependents. While creative arts therapies are included in telehealth programming, the existing evidence base focuses on art therapy and dance/movement therapy, with a paucity of information on music therapy.

Methods:

Discussion of didactic and applied music experiences, clinical, ethical, and technological considerations, and research pertaining to music therapy telehealth addresses this gap

through presentation of three case examples. These programmes highlight music therapy telehealth with military-connected populations on a continuum of clinical and community engagement: 1) collaboration between Berklee College of Music in Boston, MA and the Acoke Rural Development Initiative in Lira, Uganda; 2) the Semper Sound Cyber Health programme in San Diego, CA; and 3) the integration of music therapy telehealth into Creative Forces®, an initiative of the National Endowment for the Arts.

Results:

These examples illustrate that participants were found to positively respond to music therapy and community music engagement through telehealth, and reported decrease in pain, anxiety, and depression; they endorsed that telehealth was not a deterrent to continued music engagement, requested continued music therapy telehealth sessions, and recommended it to their peers.

Conclusions:

Knowledge gaps and evolving models of creative arts therapies telehealth for military-connected populations are elucidated, with emphasis on clinical and ethical considerations.

IMPLICATIONS FOR REHABILITATION

- Music therapy intervention can be successfully adapted to accommodate remote facilitation.
- Music therapy telehealth has yielded positive participant responses including decrease in pain, anxiety, and depression.
- Telehealth facilitation is not a deterrent to continued music engagement.
- Distance delivery of music through digital platforms can support participants on a clinic to community continuum.

<https://www.sciencedirect.com/science/article/abs/pii/S000579672030142X>

A test of the interpersonal theory of suicide in a large, representative, retrospective and prospective study: Results from the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS).

Carol Chu, Kelly L. Zuromski, Samantha L. Bernecker, Peter M. Gutierrez, ... Matthew K. Nock

Highlights

- The interpersonal theory of suicide was tested among deployed Army soldiers.
- Interaction of perceived burdensomeness and hopelessness correlated with suicidal thoughts.
- Interaction of perceived burdensomeness and thwarted belongingness was not correlated with suicidal thoughts.
- Capability for suicide prospectively predicted attempts during and after deployment.
- For soldiers thinking about suicide, perceived burdensomeness prospectively predicted attempts.

Abstract

The interpersonal theory of suicide hypothesizes that perceived burdensomeness, thwarted belongingness, and hopelessness lead to active suicidal thoughts and individuals with active suicidal thoughts and elevated capability for suicide are most likely to attempt suicide. We retrospectively and prospectively tested this theory in a large sample of 7677 U.S. Army soldiers followed post-deployment for up to nine months. The interaction of perceived burdensomeness and hopelessness (OR = 2.59) was significantly associated with lifetime suicidal thoughts; however, the interactions of thwarted belongingness and perceived burdensomeness and of thwarted belongingness and hopelessness were not. Consistent with the theory, capability for suicide prospectively predicted suicide attempts during and following deployment (OR = 1.22); however, among soldiers reporting lifetime suicidal thoughts, capability did not predict attempts, only perceived burdensomeness did (OR = 1.36). Results supported some, but not all, theory hypotheses, suggesting that additional constructs may be needed to better identify the psychological factors that lead soldiers to attempt suicide.

<https://onlinelibrary.wiley.com/doi/abs/10.1002/jts.22540>

Suicidal Ideation in a Veterans Affairs Residential Posttraumatic Stress Disorder Treatment Setting: The Roles of Thwarted Belongingness and Perceived Burdensomeness.

Martin, C.E., Pukay-Martin, N.D., Blain, R.C., Dutton-Cox, C. and Chard, K.M.

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Suicide is a significant public health concern, and, specifically, the veteran population has exhibited a 22% higher risk of death by suicide than the general population (Department of Veterans Affairs, 2017). The interpersonal psychological theory of suicide (IPTTS; Joiner, 2005) appears to be the most widely researched theory to examine factors associated with suicidal ideation. The IPTTS applies to veteran suicidal ideation in that veterans may feel they are burdensome to others or that they do not belong following their transition from active duty. The current study sought to (a) identify the prevalence and correlates of the IPTTS constructs perceived burdensomeness and thwarted belongingness; (b) examine the main and interactive effects of these constructs on suicidal ideation; and (c) examine their indirect effects in the associations between posttraumatic stress disorder (PTSD) symptomatology, depressive symptomatology, and substance use with suicidal ideation in a sample of veterans in PTSD residential treatment (N = 125). Regression results demonstrated that perceived burdensomeness was significantly associated with suicidal ideation, $\beta = .50$, $p < .001$; however, thwarted belongingness and the interaction of the two were not. In the models of indirect effects, perceived burdensomeness emerged as the only significant indirect effect in the association between PTSD symptomatology and suicidal ideation, $\beta = .01$ (SE = .00), 95% CI [.0050, .0149], as well as between depressive symptomatology and suicidal ideation, $\beta = .02$ (SE = .01), 95% CI [.0109, .0311]. Study limitations and future directions are also discussed.

<https://onlinelibrary.wiley.com/doi/abs/10.1002/jts.22519>

The Sequential Relation Between Changes in Catastrophizing and Changes in Posttraumatic Stress Disorder Symptom Severity.

Pimentel, S.D., Adams, H., Ellis, T., Clark, R., Sully, C., Paré, C. and Sullivan, M.J.

Journal of Traumatic Stress

First published: 01 June 2020

<https://doi.org/10.1002/jts.22519>

Catastrophizing has been discussed as a cognitive precursor to the emergence of posttraumatic stress disorder (PTSD) symptoms following the experience of stressful events. Implicit in cognitive models of PTSD is that treatment-related reductions in catastrophizing should yield reductions in PTSD symptoms. The tenability of this prediction has yet to be tested. The present study investigated the sequential relation between changes in a specific form of catastrophizing—symptom catastrophizing—and changes in PTSD symptom severity in a sample of 73 work-disabled individuals enrolled in a 10-week behavioral activation intervention. Measures of symptom catastrophizing and PTSD symptom severity were completed at pre-, mid-, and posttreatment assessment points. Cross-sectional analyses of pretreatment data revealed that symptom catastrophizing accounted for significant variance in PTSD symptom severity, $\beta = .40$, $p < .001$, $sr = .28$ (medium effect size), even when controlling for known correlates of symptom catastrophizing, such as pain and depression. Significant reductions in symptom catastrophizing and PTSD symptoms were observed during treatment, with large effect sizes, $ds = 1.42$ and 0.94 , respectively, $p s < .001$. Cross-lagged analyses revealed that early change in symptom catastrophizing predicted later change in PTSD symptoms; early changes in PTSD symptom severity did not predict later change in symptom catastrophizing. These findings are consistent with the conceptual models that posit a causal relation between catastrophizing and PTSD symptom severity. The clinical implications of the findings are discussed.

<https://journals.sagepub.com/doi/abs/10.1177/0886260520936364>

“Brothers in Arms”: Secondary Traumatization and Sibling Relationship Quality Among Siblings of Combat Veterans.

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Journal of Interpersonal Violence

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<https://doi.org/10.1177/0886260520936364>

The aversive impact of exposure to combat and posttraumatic stress disorder (PTSD) on family members has been examined mainly among veterans’ partners and offspring. No study has examined secondary traumatization in veterans’ siblings and the role of relationship quality in these links. The present study aimed to assess secondary PTSD symptoms (PTSS) and general distress among siblings of combat veterans, and the role of sibling relationship quality in the association between veterans’ exposure to combat

and PTSS and sibling secondary PTSS. A sample of 106 adult dyads of Israeli combat veterans and their closest in age siblings responded to self-report questionnaires in a cross-sectional study design. The rates of sibling secondary PTSS and general distress were relatively low. However, veterans' exposure to combat and PTSS were positively related to siblings' secondary PTSS. Importantly, veterans' PTSS mediated the association between veterans' exposure to combat and siblings' secondary PTSS, only among sibling dyads with high levels of warmth and low levels of conflict in their relationship. Furthermore, the inclusion of siblings general distress contributed to heightened sibling secondary PTSS, but only the warmth dimension moderated the link between veterans' PTSS and siblings' secondary PTSS. Findings suggest that veterans' PTSS is implicated in their siblings' secondary PTSS. Veterans' PTSS might also serve as a possible mechanism for the links between exposure to combat and siblings' secondary PTSS. Moreover, relationship quality with a sibling veteran might take a toll in the form of siblings' secondary PTSS following veteran military service.

<https://www.sciencedirect.com/science/article/pii/S0301051120300880>

Resting high frequency heart rate variability and PTSD symptomatology in Veterans: Effects of respiration, role in elevated heart rate, and extension to spouses.

Timothy W. Smith, Carlene Deits-Lebehn, Catherine M. Caska-Wallace, Keith D. Renshaw, Bert N. Uchino

Biological Psychology
Volume 154, July 2020
<https://doi.org/10.1016/j.biopsycho.2020.107928>

Highlights

- Posttraumatic stress disorder (PTSD) is associated with low resting heart rate variability (HRV).
- However, the role of respiration in this association has not been determined in prior research.
- In 65 U.S. Veterans, clinically diagnosed PTSD was associated with lower highThis association held while controlling respiration, but was not seen in Veterans' spouses.
- In mediational analyses, low HRV accounted for elevated resting heart rate in PTSD.

Abstract

Heart rate variability (HRV) associated with parasympathetic activity (i.e., cardiac vagal tone) is reduced in posttraumatic stress disorder (PTSD), but possible confounding effects of respiration have not been studied sufficiently. Further, reduced parasympathetic inhibition might contribute to elevated heart rate (HR) in PTSD. Finally, reduced HRV in PTSD might extend to intimate partners, given their chronic stress exposure. In 65 couples (male Veterans, female partners), elevated PTSD symptomatology (n = 32; 28 met full DSM IV criteria, 4 fell slightly short) was documented by structured interview and self-reports. Baseline HR, high-frequency HRV (HF-HRV), cardiac pre-ejection period (PEP), and respiration rate and depth were measured via impedance cardiography. Veterans with PTSD symptoms displayed reduced lnHF-HRV, even when adjusting for respiration, but their partners did not. In mediational analyses, elevated resting HR in PTSD was accounted for by lnHF-HRV but not PEP. Results strengthen evidence regarding HF-HRV and elevated HR in PTSD.

<https://www.sciencedirect.com/science/article/abs/pii/S0165178120316462>

Suicide risk and firearm ownership and storage behavior in a large military sample.

Michael D Anestis, Shelby L Bandel, Sarah E Butterworth, Allison E Bond, ... Craig J Bryan

Psychiatry Research

Available online 2 July 2020

<https://doi.org/10.1016/j.psychres.2020.113277>

Highlights

- Service members largely store firearms unsafely
- Suicide risk factors (e.g. lifetime ideation) associated with unsafe storage
- Lifetime and current suicidal ideation not associated with firearm ownership

Abstract

Firearms account for the majority of suicide deaths in the United States military and access to firearms is a risk factor for suicide. Prior research has shown service members tend to store firearms unsafely, with some research indicating this is particularly true among those with elevated suicide risk. Existing research has focused

on individuals at known risk for suicide; however, those who die by suicide using a firearm are prone to avoiding mental healthcare and underreporting suicidal ideation, thereby necessitating an understanding of this phenomenon among firearm owners outside of the mental healthcare system. The present study examined firearm storage and suicide risk in a large nonclinical sample of service members (total sample n = 953; firearm owning sample = 473). Lifetime suicidal ideation, current depressive symptoms, and perceived likelihood of making a future suicide attempt were associated with unsafe firearm storage. In contrast, lifetime suicidal ideation was not associated with a greater likelihood to own firearms. These findings suggest those at risk of suicide are more likely to store firearms unsafely, which increases ease of access to firearms. These findings reiterate the importance of means safety as a suicide prevention strategy.

<https://academic.oup.com/milmed/article/doi/10.1093/milmed/usaa148/5866634>

Impacts of rTMS on Refractory Depression and Comorbid PTSD Symptoms at a Military Treatment Facility.

Sean Wilkes, MD, MSc, MAJ, USA, Celia Ona, MD, Michael Yang, DO, CPT, USA, Pingyang Liu, PhD, Amber Benton, MD, CPT, USA, Michael Lustik, MS, John Coleman, MD, MAJ, USA

Military Medicine

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<https://doi.org/10.1093/milmed/usaa148>

Introduction

Repetitive transcranial magnetic stimulation (rTMS) as a treatment for depression has been studied for over two decades. Repetitive TMS was approved by the Food and Drug Administration in 2008 for the treatment of depression after at least one failed trial of an antidepressant medication of adequate dose and duration. This study evaluated whether rTMS treatments may be associated with measurable improvements in depression and post-traumatic stress disorder (PTSD) symptoms for treated military beneficiaries in Hawaii suffering from depression. It also examined the number of failed medication trials that patients underwent before rTMS treatment.

Materials and Methods

A retrospective chart review of 77 rTMS patients who received and completed treatment between January 1, 2010 and October 31, 2016 was performed. Under a typical

treatment regimen, patients receive rTMS for 6 weeks as well as weekly psychiatric assessments, which included completion of Beck's Depression Inventory (BDI) and PTSD Checklist (PCL). A mixed model repeated measures analysis was done assuming an autoregressive order one covariance structure to evaluate changes over time. Adjusted analyses were done to assess whether changes over time differed by age, prior diagnosis of PTSD, active duty status, and gender.

Results

The majority of patients were from the army (74%) and 56% were on active duty. Just over half (53%) were male. Most patients (52%) had completed trials of three or more different antidepressant medications before initiation of treatment with rTMS. The mean number of antidepressant trials was 2.7. BDI and PCL scores were significantly lower at end of treatment on average compared to the pretreatment baseline scores. Mean differences for BDI and PCL were significant with $P < 0.001$ 15, 30, and 45 days after TMS treatment was initiated. Overall, 44% of patients experienced a reduction ≥ 10 points on BDI, and 38% experienced a reduction ≥ 10 points on PCL. Additionally, scores fell similarly regardless of whether or not patients had a comorbid diagnosis of PTSD.

Conclusions

Our research suggests that rTMS treatments may produce a reduction in symptoms of both depression and PTSD in patients with refractory depression and comorbid PTSD. It may be a useful alternative to antidepressants in the treatment of depression in the military population, including those with comorbid PTSD. Broader implementation of this treatment modality may prove beneficial for the purposes of military readiness, given current policies and restrictions on service members who are initiated on antidepressant medications.

<https://link.springer.com/article/10.1007/s00737-020-01047-7>

Managing post-sexual assault suicide risk.

Amanda K. Gilmore, Erin F. Ward-Ciesielski, Anna Smalling, Anne R. Limowski, Christine K. Hahn & Anna E. Jaffe

Archives of Women's Mental Health

Published 05 July 2020

<https://doi.org/10.1007/s00737-020-01047-7>

Suicidal ideation and suicidal behavior are common after experiencing a sexual assault. Therefore, it is imperative to assess for and manage suicidal ideation using evidence-based techniques after a sexual assault medical forensic examination (SAMFE). We assessed factors associated with higher suicidal ideation identified in a post-SAMFE mental health screening conducted over the phone and strategies to manage suicide risk. We also discuss three case examples and unique considerations when assessing post-SAMFE suicide risk. It was found that among individuals who completed a post-SAMFE screen, individuals who have been previously hospitalized for a mental health problem, who had higher acute stress symptoms, and who were homeless reported more suicidal ideation than those without those histories or symptom presentations. No matter the risk factors for suicidal ideation post-SAMFE, it is essential to screen all individuals post-SAMFE due to their high risk for suicidal ideation and death by suicide.

Links of Interest

Second Chances for Veterans from Veterans Treatment Court

<https://www.blogs.va.gov/VAntage/76378/second-chances-veterans-veterans-treatment-court/>

Staff Perspective: Understanding the Relationship Between PTSD, Sleep Disturbances, and Suicidality

<https://deploymentpsych.org/blog/staff-perspective-understanding-relationship-between-ptsd-sleep-disturbances-and-suicidality>

Former DoD official who claimed fraud in suicide prevention office wins whistleblower retaliation case

<https://www.militarytimes.com/news/your-army/2020/07/06/former-dod-official-who-claimed-fraud-in-suicide-prevention-office-wins-whistleblower-retaliation-case/>

Combat stress techniques help military providers during COVID pandemic

<https://health.mil/News/Articles/2020/07/06/Combat-stress-techniques-help-military-providers-during-COVID-pandemic>

New facility to treat TBI, PTSD opens at Eglin Air Force Base

<https://www.airforcetimes.com/news/your-air-force/2020/07/07/new-facility-to-treat-tbi-ptsd-opens-at-eglin-air-force-base/>

Tulane University receives \$12.5 million grant to treat brain injuries and PTSD in veterans

<https://www.militarytimes.com/education-transition/2020/07/07/tulane-university-receives-125-million-grant-to-treat-brain-injuries-and-ptsd-in-veterans/>

Military Adaptive Sports Program aids with healing our Wounded Warriors

<https://health.mil/News/Articles/2020/07/07/Military-Adaptive-Sports-Program-aids-with-healing-our-Wounded-Warriors>

Pain Consortium Symposium Features Digital Technologies for Pain Management and Research

<https://www.nccih.nih.gov/research/blog/pain-consortium-symposium-features-digital-technologies-for-pain-management-and-research>

SecVA: REACH campaign strives to reduce Veteran suicide

<https://www.blogs.va.gov/VAntage/76727/secva-reach-campaign-strives-reduce-veteran-suicide/>

Operation Tohidu at Melwood offers free retreat for Veterans

<https://www.blogs.va.gov/VAntage/76487/operation-tohidu-melwood-offers-free-retreat-veterans/>

Military families with disabled members need more accessible homes, survey finds

<https://www.militarytimes.com/pay-benefits/2020/07/08/military-families-with-disabled-members-need-more-accessible-homes-survey-finds/>

Resource of the Week: [DHA Guide to Digital Health Technology](#)

New, from the Defense Health Agency:

All-in-one reference guide for available health technology resources i.e., Apps, Podcast, Websites...



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