

## Research Update -- January 30, 2020

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- Mobile Health Technology Interventions for Suicide Prevention: Systematic Review.
- Courses of suicidal ideation among military veterans in residential treatment for posttraumatic stress disorder.
- Together With Veterans: VA National Strategy Alignment and Lessons Learned from Community-Based Suicide Prevention for Rural Veterans.
- Antidepressant and neurocognitive effects of serial ketamine administration versus ECT in depressed patients.
- Links of Interest
- Resource of the Week: Impact of Traumatic Brain Injuries on Participation in Daily Life and Work: Recent Research and Future Directions (ebook)

https://content.govdelivery.com/accounts/USVHA/bulletins/2778827

### PTSD Monthly Update - January 2020

National Center for PTSD (VA)

Stories include:

- All New PTSD Coach Mobile App Released
- PTSD Consultation Program
- Resources of the Month
- Research at the Center
- PTSD in the News

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https://www.ncbi.nlm.nih.gov/pubmed/31944790

Am J Orthopsychiatry. 2020 Jan 16. doi: 10.1037/ort0000438. [Epub ahead of print] Stress-buffering versus support erosion: Comparison of causal models of the relationship between social support and psychological distress in military spouses.

Ross AM, Steketee G, Emmert-Aronson BO, Brown TA, Muroff J, DeVoe ER

### Abstract

Spouses of National Guard/Reserve (NG/R) military service members cope with deployment-related stressors (DRS) that may contribute to increased psychological distress. Research indicates that higher levels of social support are associated with reduced depression and anxiety in military spouses, but longitudinal relationships have not yet been examined bidirectionally. This study examines temporal relationships between 3 dimensions of social support (social connectedness, dyadic satisfaction, and perceived support), and psychological distress in a sample of NG/R spouses during the first year after a service member returns from deployment. Data from 103 military spouses were drawn from a larger intervention development study. Autoregressive cross-lagged panel analyses examined the stress-buffering and support erosion hypotheses over a 3-month period. DRS were measured by the cumulative number of deployments and duration of most recent deployment. Distress was assessed using

latent variables of depression and anxiety. Statistically significant relationships emerged between initial levels of psychological distress and social connectedness at 3 months. Social support dimensions of dyadic satisfaction and perceived support did not predict subsequent levels of psychological distress. No significant relationships emerged between any dimension of social support at baseline and either form of psychological distress at 3 months. The support erosion hypothesis may more accurately describe the relationship between social support and psychological distress in this sample than the stress-buffering mechanism. During the first year of reintegration, social connectedness may be of particular relevance for NG/R spouses, as they may not have access to supports typically available to their active duty counterparts. (PsycINFO Database Record (c) 2020 APA, all rights reserved).

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### https://onlinelibrary.wiley.com/doi/abs/10.1002/jclp.22921

# Mending broken bonds in military couples using emotionally focused therapy for couples: Tips and discoveries.

Irina Wen, Laura E. Price, Amanda M. Spray, Charles R. Marmar

Journal of Clinical Psychology First published: 18 January 2020 https://doi.org/10.1002/jclp.22921

Military families face specific challenges related to military service, deployments, separations, and coming together. The process of reintegration back to civilian life can be challenged by posttraumatic stress and other readjustment difficulties that can affect not only the veteran but the family as a whole. Strengthening bonds and relationships is an important step in recovery. In this paper, the authors review the application of emotionally focused therapy to couples therapy with military couples and identify factors that can facilitate the therapeutic process with this unique population.

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https://www.sciencedirect.com/science/article/abs/pii/S0306460319312766

Alcohol Misuse to Down-Regulate Positive Emotions: A Cross-Sectional Multiple Mediator Analysis among US Military Veterans. Nicole H. Weiss, Shannon R. Forkus, Alexa M. Raudales, Melissa R. Schick, Ateka A. Contractor

Addictive Behaviors Available online 18 January 2020 https://doi.org/10.1016/j.addbeh.2020.106322

## Highlights

- More severe PTSD symptoms were related to greater alcohol misuse.
- PTSD was indirectly related to alcohol misuse through positive emotional avoidance.
- Positive emotional intensity did not explain the PTSD to alcohol misuse relation.
- Positive emotional intensity and positive emotional avoidance were sequential mediators.
- Targeting positive emotional avoidance may reduce the PTSD-alcohol misuse relation.

### Abstract

### Introduction

The co-occurrence of posttraumatic stress disorder (PTSD) and alcohol misuse presents a pervasive and clinically relevant concern among US military veterans.

### Objective

The current investigation sought to examine the role of positive emotion dysfunction in the relation between PTSD symptomatology and alcohol misuse. To do so, we examined the separate and sequential roles of positive emotional intensity and positive emotional avoidance in the relation between PTSD symptoms and alcohol misuse among US military veterans.

### Method

Cross-sectional data were collected from 468 US military veterans (M age= 37.74, 70.5% male, 69.0% White) who responded to an online survey.

### Results

Findings suggest that positive emotional avoidance, separately, and positive emotional intensity and positive emotional avoidance, sequentially, mediated the relation between PTSD symptoms and alcohol misuse.

### Conclusions

Findings advance theory on the role of positive emotions and related processes in the

co-occurrence of PTSD and alcohol misuse, and highlight important avenues for future research and treatment focused on the PTSD-alcohol misuse co-occurrence.

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https://journals.sagepub.com/doi/abs/10.1177/1524838019897338

## Military Sexual Trauma and Risky Behaviors: A Systematic Review.

Forkus, S. R., Weiss, N. H., Goncharenko, S., Mammay, J., Church, M., & Contractor, A. A.

Trauma, Violence, & Abuse First Published January 10, 2020 https://doi.org/10.1177/1524838019897338

### Introduction:

Military sexual trauma (MST) is a serious and pervasive problem among military men and women. Recent findings have linked MST with various negative outcomes including risky, self-destructive, and health-compromising behaviors.

### Objective:

The current review summarizes the existing literature on the association between MST and risky behaviors among military men and women who have served in the U.S. Armed Forces.

### Method:

We systematically searched five electronic databases (PubMed, EMBASE, PSYCINFO, PILOTS, and CINAHL Plus) using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines.

### Results:

Of the initial 2,021 articles, 47 met the inclusion criteria. Reviewed studies revealed three patterns of findings: (1) largely studied and consistent (i.e., suicidal behaviors, disordered eating), (2) mixed and in need of future research (i.e., alcohol and drug use, smoking), and (3) underexamined (i.e., sexual behaviors, illegal/aggressive behaviors) or completely neglected (e.g., problematic technology use, gambling).

### Discussion:

The current systematic review advances literature by providing strong support for an

association between MST and a wide range of risky behaviors. Moreover, it highlights important areas for future research.

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https://n.neurology.org/content/early/2020/01/10/WNL.000000000008935.abstract

# Posttraumatic vs nontraumatic headaches: A phenotypic analysis in a military population.

Andrea Metti, Karen Schwab, Alan Finkel, Renee Pazdan, Lisa Brenner, Wesley Cole, Heidi Terrio, Ann I. Scher

#### Neurology

First published January 10, 2020 https://doi.org/10.1212/WNL.000000000008935

### Objective

To describe and compare phenotypic features of posttraumatic headaches (PTH) and headaches unrelated to concussion.

### Methods

Participants are a random sample of recently deployed soldiers from the Warrior Strong cohort, consisting of soldiers with (n = 557) and without (n = 1,030) a history of a recent mild traumatic brain injury (mTBI; concussion). mTBI+ soldiers were subdivided as PTH+ (n = 230) and PTH– (n = 327). Headache classification was based on a detailed phenotypic questionnaire. Medical encounters for headache were documented for the year after deployment.

### Results

The findings here are limited to the soldiers with headaches, consisting of 94% of the mTBI+ soldiers and 76% of the mTBI- soldiers. Other than headache duration, all headache/migraine features were more common or more severe in the PTH+ group compared to the nonconcussed group (mTBI-) and compared to the concussed group with nontraumatic headaches (PTH-). Headaches were largely similar in the mTBI- and PTH- groups. The features most specific to PTH+ included allodynia, visual aura, sensory aura, daily headache, and continuous headache. Medical consultation for headache was most common in the PTH+ group (62%) vs the PTH- group (20%) or the mTBI- group (13%) (p < 0.008).

Conclusions

In this cohort of recently deployed soldiers, PTHs are more severe, frequent, and migraine-like and more often associated with medical consultation compared to headaches presumed unrelated to concussion. Future observational studies are needed to verify and characterize the PTH phenotype, which could be followed by treatment trials with appropriate and possibly novel outcomes for prespecified subgroups.

ClinicalTrials.gov identifier NCT01847040.

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https://link.springer.com/article/10.1007/s10942-020-00338-3

# Targeting Trauma-Related Beliefs in PTSD with Behavioral Experiments: Illustrative Case Study.

Scott H. Waltman

Journal of Rational-Emotive & Cognitive-Behavior Therapy Published: 10 January 2020 https://doi.org/10.1007/s10942-020-00338-3

Cognitive Processing Therapy (CPT) with traditional written thought records is an effective treatment for posttraumatic stress disorder (PTSD). A potential barrier to targeting trauma-related beliefs with traditional thought records is that typically the resulting behavioral avoidance from the trauma-related belief limits the experiences (i.e., evidence) which are available to draw from when evaluating a thought—there can be an absence of discrepant experiences due to avoidance. Another major approach to cognitive restructuring in the cognitive and behavioral therapies is through behavioral experiments (BE) which can be used to gather new evidence and form new experiences. Extant literature suggests there are some preliminary indications that BE may have a slight clinical advantage over traditional thought records as they are associated with a faster treatment response and better generalizing of new learning. There is also evidence that BE may have a slight advantage over traditional exposure for treating anxiety disorders. An illustrative case example of an active duty soldier with PTSD stemming from multiple combat- and non-combat-related traumas is presented. Standard CPT was modified to include BE as opposed to standard thought records to treat his PTSD. Treatment was effective as the soldier demonstrated reliable change and clinically significant change on the PTSD Checklist-5 (PCL-5). Further research is needed to better understand the role of BE in treating PTSD.

## https://www.sciencedirect.com/science/article/abs/pii/S1526590020300018

# Five-year Pain Intensity and Treatment Trajectories of Post-9/11 Veterans with Mild Traumatic Brain Injury.

Kangwon Song, Chen-Pin Wang, Donald D. McGeary, Carlos A. Jaramillo, ... Mary Jo V. Pugh

The Journal of Pain Available online 22 January 2020 https://doi.org/10.1016/j.jpain.2019.12.009

Highlights

- Traumatic brain injury is associated with higher pain intensity in Veterans
- Higher pain intensity was associated with multimodal treatment
- Despite increased use of multimodal treatments pain trajectories did not improve
- Phenotypes with high medication use may offer a specific target for interventions

#### Abstract

Pain is a pervasive problem that affects nearly half of the U.S. Veterans deployed in support of the Global War on Terror (Post-9/11 Veterans) and over half of the Post-9/11 Veterans with diagnosed traumatic brain injury (TBI). The goal of the current study was to identify pain phenotypes based on distinct longitudinal patterns of pain scores in light of pain treatment among Post-9/11 Veterans over five years of care using latent growth mixture analysis stratified by TBI status. Five pain phenotypes emerged: (1) simple low impact stable pain, (2) complex low impact stable pain, (3) complex low impact worsening pain, (4) complex moderate impact worsening pain, and (5) complex high impact stable pain. Baseline pain scores and slopes were significantly higher in Veterans with mild TBI for some phenotypes. The mild TBI cohort was younger, had more men, more whites, less blacks, less education, more unmarried, more Marines and Army, more active duty in comparison to the no TBI cohort. Distinct trajectories in pain treatment were apparent among the pain intensity subgroups.

### Perspective:

The complexity of pain in patients with mTBI is categorically different than those with no TBI. Pain in patients with mTBI is heterogeneous with distinct phenotypes which may

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explain poor outcomes in this group. Identification of the individual differences may have a significant impact on the success of interventions.

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#### https://onlinelibrary.wiley.com/doi/full/10.1002/da.22943

# Effect of comorbid anxiety and depression in complicated grief on perceived cognitive failures.

Fisher, JE, Zhou, J, Liu, AG, Fullerton, CS, Ursano, RJ, Cozza, SJ

Depression & Anxiety First published: 09 January 2020 https://doi.org/10.1002/da.22943

#### Background

Bereavement is associated with cognitive difficulties, but it is unclear whether these difficulties are associated with normative and/or complicated grief (CG) and how comorbid depression and anxiety contribute to them. Self-reported "minor errors in thinking" (i.e., cognitive failures) may manifest following bereavement and be differentially affected by CG, anxiety, and depression.

#### Methods

Associations between perceived cognitive failures and CG, anxiety, and depression were investigated in 581 bereaved participants. To examine both single and comorbid conditions across the spectrum of bereaved participants, these relationships were examined using both linear regressions and group comparisons.

#### Results

Continuous measures of depression, anxiety, and grief each independently predicted perceived cognitive failures. Group comparisons indicated that the group with three comorbid conditions had the highest frequency of perceived cognitive failures and the group with no conditions had the lowest. In addition, groups with threshold depression levels (both alone and comorbid with another condition) had higher frequencies of perceived cognitive failures than other groups, suggesting that depression was more strongly associated with perceived cognitive failures than CG or anxiety.

#### Conclusions

Future research about cognition following bereavement should address how multiple

mental health symptoms or conditions combine to affect perceived and actual cognitive capacity.

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https://link.springer.com/article/10.1007/s10942-020-00338-3

# Targeting Trauma-Related Beliefs in PTSD with Behavioral Experiments: Illustrative Case Study.

Scott H. Waltman

Journal of Rational-Emotive & Cognitive-Behavior Therapy Published10 January 2020 https://doi.org/10.1007/s10942-020-00338-3

Cognitive Processing Therapy (CPT) with traditional written thought records is an effective treatment for posttraumatic stress disorder (PTSD). A potential barrier to targeting trauma-related beliefs with traditional thought records is that typically the resulting behavioral avoidance from the trauma-related belief limits the experiences (i.e., evidence) which are available to draw from when evaluating a thought-there can be an absence of discrepant experiences due to avoidance. Another major approach to cognitive restructuring in the cognitive and behavioral therapies is through behavioral experiments (BE) which can be used to gather new evidence and form new experiences. Extant literature suggests there are some preliminary indications that BE may have a slight clinical advantage over traditional thought records as they are associated with a faster treatment response and better generalizing of new learning. There is also evidence that BE may have a slight advantage over traditional exposure for treating anxiety disorders. An illustrative case example of an active duty soldier with PTSD stemming from multiple combat- and non-combat-related traumas is presented. Standard CPT was modified to include BE as opposed to standard thought records to treat his PTSD. Treatment was effective as the soldier demonstrated reliable change and clinically significant change on the PTSD Checklist-5 (PCL-5). Further research is needed to better understand the role of BE in treating PTSD.

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https://onlinelibrary.wiley.com/doi/abs/10.1111/appy.12378

Moral injury from war and other severe trauma.

Koenig, HG, Al-Zaben, FN

Asia-Pacific Psychiatry First published: 13 January 2020 https://doi.org/10.1111/appy.12378

Moral injury (MI) is a relatively new syndrome among military personnel with symptoms of post-traumatic stress disorder (PTSD). While MI has received considerable attention in the psychological sciences, the syndrome has received relatively little notice within psychiatry. MI has been defined as the negative emotions that emerge from transgressing moral boundaries by military personnel during combat such as killing enemy combatants or innocent civilians, failing to protect innocents or fellow combatants, or observing others transgress moral boundaries. MI may also be frequent among civilians and health professionals, although, as in military personnel, is often unrecognized.

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https://onlinelibrary.wiley.com/doi/abs/10.1002/jclp.22920

Integrating crisis response planning for suicide prevention into trauma-focused treatments: A military case example.

Rozek, DC, Bryan, CJ

Journal of Clinical Psychology First published: 11 January 2020 https://doi.org/10.1002/jclp.22920

#### Objective

Posttraumatic stress disorder (PTSD) and suicidal thoughts and behaviors are common in military members and veterans and produce anxiety for many clinicians. Although there are separate interventions for PTSD and elevated suicide risk, there is not much guidance on how to integrate these approaches. Crisis response planning (CRP) is an evidence-based tool used to prevent suicide attempts that can easily be integrated into trauma-focused therapies for patients with PTSD.

#### Method

Given the high frequency of suicidal thoughts among patients with PTSD, the current

paper discusses how CRP can be integrated into trauma-focused therapy. A clinical case example is provided to demonstrate how the CRP can be integrated into cognitive processing therapy for a suicidal veteran diagnosed with PTSD.

#### Results

Using CRP within a cognitive processing therapy treatment program reduced both PTSD and suicidal ideation.

#### Conclusions

Suicide specific treatments can be integrated effectively into trauma-focused treatments.

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### https://www.sciencedirect.com/science/article/abs/pii/S0165032719326722

# Prospective association between suicide cognitions and emotional responses to a laboratory stressor: The mediating role of nightly subjective sleep quality.

Jeremy L. Grove, Timothy W. Smith, Steven E. Carlson, Craig J. Bryan, ... Kimberly Parkhurst

Journal of Affective Disorders Volume 265, 15 March 2020, Pages 77-84 https://doi.org/10.1016/j.jad.2020.01.060

Highlights

- Suicide cognitions predict negative affective responses to environmental stressors.
- The above association is partially explained by nightly subjective sleep quality.
- Shame is key negative affective state driving the above direct and indirect associations.

### Abstract

### Background

Sleep is a reliable correlate of suicidal thoughts and behaviors (STBs), yet few studies have directly examined negative affect in the context of this association. The present study combined daily experience methods with a laboratory paradigm to investigate suicide cognitions as a predictor of emotional responses to environmental stressors, and tested the role of nightly sleep parameters.

### Method

72 participants (Mage = 24.25; 41 with a recent history of suicide ideation and 31 without a history of STBs) completed a four-day study. Suicide cognitions were measured on the first day, and actigraphy-based sleep duration and fragmentation, and morning ratings of prior night subjective sleep quality (SSQ) were subsequently measured over three consecutive nights. Participants returned on the fourth day to complete the Trier Social Stress Task, where self-report changes in negative affect immediately post-task (i.e., reactivity) and five minutes post-task (i.e., recovery) were observed.

## Results

Regression analyses indicated that suicide cognitions predicted negative affect reactivity and recovery. Simple mediation analyses revealed that SSQ partially mediated the relation between suicide cognitions and negative affect recovery (especially shame), but not reactivity. No significant associations were observed for the actigraphy-based sleep parameters.

### Limitations

Just three nights of actigraphy-based data collection. A single item was used to measure SSQ.

## Conclusions

Suicide cognitions predict negative affective responses to situational stressors and SSQ may have a key role in this effect, especially the duration of negative emotional reactions. Hence, sleep and emotional reactivity may be potential targets for suicide prevention efforts.

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https://journals.sagepub.com/doi/abs/10.1177/0967010619889469

## Churn: Mobilization-demobilization and the fungibility of American military life.

Ken MacLeish

Security Dialogue First Published January 14, 2020 https://doi.org/10.1177/0967010619889469 This article posits an analytic of mobilization–demobilization that attends to the instrumentalization and fungibility of military lives as both a primary source of embodied war-related harm and an undertheorized logic of the US war-making apparatus. Based on ethnographic fieldwork among post-9/11 military veterans in a US military community, the article explores mobilization–demobilization across three registers. First, I contrast it with dominant scholarly framings of 'transition', 'reintegration', and 'militarization', terms that analytically compartmentalize war in space and time. Second, I show how mobilization–demobilization drives the uptake and release of military labor and accounts for continuities between war violence and 'war-like' domestic political relations in 20th- and 21st-century US military recruiting, welfare, and personnel practices. Finally, I describe the trajectory of one veteran caught up in some elements of mobilization–demobilization, including injury, post-traumatic stress, substance use, and law-breaking, which are structured by the military's management of his labor. These dynamics demonstrate crucial empirical links between the domestic and global faces of US war-making, and between war and nominally non-war domains.

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### https://www.liebertpub.com/doi/abs/10.1089/jwh.2019.8082

## Sex Differences in Associations Between Depression and Posttraumatic Stress Disorder Symptoms and Tobacco Use Among Veterans of Recent Conflicts.

Georgina M. Gross, Lori A. Bastian, Noelle B. Smith, Ilan Harpaz-Rotem, and Rani Hoff

Journal of Women's Health Published Online:14 Jan 2020 https://doi.org/10.1089/jwh.2019.8082

### Background:

Rates of tobacco use, posttraumatic stress disorder (PTSD), and depression are higher for veterans compared to their civilian counterparts. Female veterans have high rates of tobacco use and mental health (MH) conditions; however, little is known about sex differences in the association of depression and PTSD symptoms with postdeployment tobacco use.

### Methods:

Cross-sectional associations and binary logistic regression models were conducted using baseline interview data from the Survey of Experiences of Returning Veterans sample (850 recently returned veterans; 352 women; age mean [standard deviation, SD] = 35.63 [8.94]; 71.2% white).

#### Results:

Men were more likely to be tobacco users (39.8% vs. 23.6%; chi square = 24.40; p < 0.001) and had higher postdeployment PTSD symptoms (men mean [SD] = 48.62 [17.93], women mean [SD] = 45.95 [18.22], t = -2.12, p < 0.05), but had similar rates of depression compared to women. In binary logistic models, sex, depression, and PTSD symptoms showed significant main effects in the prediction of postdeployment tobacco use, over and above the effects of demographics, military variables, and alcohol use. Sex moderated the association between PTSD symptoms and tobacco use, such that PTSD symptoms predicted tobacco use for women, but not for men. Sex did not moderate the association between depression and tobacco use.

#### Conclusions:

Given the divergent predictors of postdeployment tobacco use for male and female veterans, there may be sex-specific barriers to tobacco-use cessation, including factors related to MH conditions such as PTSD. Further examination of sex differences can help to identify tailored intervention strategies.

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https://www.ncbi.nlm.nih.gov/pubmed/31941473

BMC Psychiatry. 2020 Jan 15;20(1):23. doi: 10.1186/s12888-020-2432-9

# Posttraumatic stress disorder and risk of selected autoimmune diseases among US military personnel.

Bookwalter DB, Roenfeldt KA, LeardMann CA, Kong SY, Riddle MS, Rull RP

#### BACKGROUND:

Increasing evidence suggests a link between posttraumatic stress disorder (PTSD) and physical health. Stress disorders may lead to impairment of the immune system and subsequent autoimmune disease. This study investigated the association between PTSD and risk of selected autoimmune diseases (i.e. rheumatoid arthritis, systemic lupus erythematosus, inflammatory bowel diseases, and multiple sclerosis) among US active duty service members.

#### METHODS:

Using data from the Millennium Cohort Study, incident autoimmune cases between

study initiation and September 2015 were identified from medical encounter records in the Military Health System Data Repository (MDR). Participants were classified as having a history of PTSD if they self-reported receiving a health care provider's diagnosis of PTSD or if they screened positive using the PTSD Checklist-Civilian Version. Hazard ratios (HRs) and 95% confidence intervals (CIs) were estimated using multivariable Cox regression models adjusted for demographics and history of another mental health condition.

## **RESULTS**:

Among 120,572 participants followed for a mean of 5.2 years, risk of any of the selected autoimmune diseases was 58% higher for those with a history of PTSD (HR = 1.58, 95% CI: 1.25, 2.01) compared with no history of PTSD. Further adjustment for BMI, smoking status, and alcohol use had little impact on the effect estimates, and results were not appreciably different according to combat experience and history of physical or sexual trauma.

## CONCLUSIONS:

Active duty military personnel with PTSD may have an elevated risk of a range of autoimmune diseases, regardless of combat experience or prior trauma. Future research is needed to understand potential mechanisms which may inform future mitigative strategies in reducing extra-neuropsychiatric health problems among those with PTSD.

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https://www.ncbi.nlm.nih.gov/pubmed/31283558

Spine (Phila Pa 1976). 2019 Nov 1;44(21):1481-1491. doi: 10.1097/BRS.000000000003114

Does Disordered Sleep Moderate the Relationship Between Pain, Disability and Downstream Health Care Utilization in Patients With Low Back Pain?: A Longitudinal Cohort From the US Military Health System.

Rhon D, O'Hagan E, Mysliwiec V, Lentz TA

STUDY DESIGN: Prospective cohort.

### **OBJECTIVE:**

The purpose of this study was to evaluate the influence of disordered sleep on the relationship between pain and health care utilization (HCU) and pain-related disability and HCU in individuals with low back pain (LBP).

### SUMMARY OF BACKGROUND DATA:

Disordered sleep and pain influence LBP outcomes, but their relationship with health care seeking after an episode of LBP has not been investigated and could help identify who is at risk for long-term medical care.

### METHODS:

This study included patients with LBP participating in a self-management class at a large US military hospital between March 1, 2010 and December 4, 2012. Pain intensity, disability (Oswestry Disability Index), and sleepiness (Epworth Sleepiness Scale) were captured at baseline. Medical visits for a sleep disorder in the 12 months before the class and LBP-related healthcare utilization for the 12 months following the class were abstracted from the Military Health System Data Repository. Separate multivariate analyses evaluating pain intensity and disability as predictors of HCU were developed, with sleepiness and the presence of a sleep disorder as potential moderators. Analyses were adjusted for age, sex, history of back pain, and mental health comorbidities.

### **RESULTS**:

A total of 757 consecutive participants were included, with 195 (26.8%) diagnosed with a subsequent sleep disorder. Sleepiness was not a significant predictor of HCU. The main effects of disability, pain intensity, and presence of a sleep disorder were significant across all analyses, with higher disability, pain intensity, and presence of a sleep disorder associated with higher predicted visits and costs for LBP. The presence of a sleep disorder was not a significant moderator in any model.

### CONCLUSION:

Higher pain intensity and disability predicted higher pain-related HCU in the year following a LBP self-management class. The presence of a sleep disorder diagnosis, as recorded in medical records, had a significant independent effect on LBP-related health care visits and costs beyond the influences of pain intensity, disability, and other key demographic and health-related characteristics, but did not moderate these relationships.

LEVEL OF EVIDENCE: 3.

## https://journals.sagepub.com/doi/abs/10.1177/1077801219893475

#### Military Cohorts, Substance Use, and Male-Perpetrated Intimate Partner Violence.

Roberto Cancio

Violence Against Women First Published January 13, 2020 https://doi.org/10.1177/1077801219893475

This study considers variations of intimate partner violence (IPV) from the point of the perpetrator to test the impact of demographic factors on the type of IPV most prevalent among pre-9/11 and post-9/11 military families from the National Longitudinal Study of Adolescent to Adult Health (1994–2008): Waves I and IV in-home interviews (N = 499). Study findings indicate that the perpetration of physical and sexual IPV depends on the context of veteran cohort and race/ethnicity. Models for substance use and IPV patterns were not similar across military cohorts and/or racial/ethnic groups.

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https://onlinelibrary.wiley.com/doi/abs/10.1002/jclp.22920

Integrating crisis response planning for suicide prevention into trauma-focused treatments: A military case example.

David C. Rozek, Craig J. Bryan

Journal of Clinical Psychology First published: 11 January 2020 https://doi.org/10.1002/jclp.22920

Objective

Posttraumatic stress disorder (PTSD) and suicidal thoughts and behaviors are common in military members and veterans and produce anxiety for many clinicians. Although there are separate interventions for PTSD and elevated suicide risk, there is not much guidance on how to integrate these approaches. Crisis response planning (CRP) is an

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evidence-based tool used to prevent suicide attempts that can easily be integrated into trauma-focused therapies for patients with PTSD.

#### Method

Given the high frequency of suicidal thoughts among patients with PTSD, the current paper discusses how CRP can be integrated into trauma-focused therapy. A clinical case example is provided to demonstrate how the CRP can be integrated into cognitive processing therapy for a suicidal veteran diagnosed with PTSD.

#### Results

Using CRP within a cognitive processing therapy treatment program reduced both PTSD and suicidal ideation.

#### Conclusions

Suicide specific treatments can be integrated effectively into trauma-focused treatments.

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https://www.sciencedirect.com/science/article/abs/pii/S0005789420300113

# A Nonrandomized Trial of Prolonged Exposure and Cognitive Processing Therapy for Combat-Related Posttraumatic Stress Disorder in a Deployed Setting.

Alan L. Peterson, Edna B. Foa, Patricia A. Resick, Timothy V. Hoyt, ... Jim Mintz

Behavior Therapy Available online 13 January 2020 https://doi.org/10.1016/j.beth.2020.01.003

Highlights

- Few studies have evaluated trauma-focused treatments for PTSD during deployments
- This study evaluated the use of PE and CPT for PTSD during a military deployment
- Twelve deployed U.S. military service members were treated with PE or CPT
- Both Treatments demonstrated clinically significant reductions in PTSD symptoms
- Modified forms of PE and CPT can be effectively used in deployed settings

### Abstract

For many decades, the U.S. military's general operational guideline has been to limit the use of trauma-focused treatments for combat and operational stress reactions in military service members until they have returned from deployment. Recently, published clinical trials have documented that active duty military personnel with combat-related posttraumatic stress disorder (PTSD) can be treated effectively in garrison. However, there are limited data on the treatment of combat and operational stress reactions or combat-related PTSD during military deployments. This prospective, nonrandomized trial evaluated the treatment of active duty service members (N = 12) with combat and operational stress reactions or combat-related PTSD while deployed to Afghanistan or Iraq. Service members were treated by deployed military behavioral health providers using modified Prolonged Exposure (PE; n = 6) or modified Cognitive Processing Therapy (CPT; n = 6), with protocol modifications tailored to individual mission requirements. The PTSD Checklist – Military Version (PCL-M) total score was the primary outcome measure. Results indicated that both groups demonstrated clinically significant change in PTSD symptoms as indicated by a reduction of 10 points or greater on the PCL-M. Participants treated with modified PE had significant reductions in PTSD symptoms (t(1) = -3.83, p = .01; g = -1.32), with a mean reduction of 18.17 points on the PCL-M. Participants treated with modified CPT had a mean PCL-M reduction of 10.00 points, but these reductions were not statistically significant (t(1) = -1.49, p = .12; q = -0.51). These findings provide preliminary evidence that modified forms of PE and CPT can be implemented in deployed settings for the treatment of combat and operational stress reactions and combat-related PTSD.

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https://mhealth.jmir.org/2020/1/e12516/

# Mobile Health Technology Interventions for Suicide Prevention: Systematic Review.

Melia R, Francis K, Hickey E, Bogue J, Duggan J, O'Sullivan M, Young K

JMIR Mhealth Uhealth 2020;8(1):e12516 DOI: 10.2196/12516

Background:

Digital interventions are proposed as one way by which effective treatments for selfharm and suicidal ideation may be improved and their scalability enhanced. Mobile devices offer a potentially powerful medium to deliver evidence-based interventions with greater specificity to the individual when the intervention is needed. The recent proliferation of publicly available mobile apps designed for suicide prevention underlines the need for robust evidence to promote safe practice.

#### Objective:

This review aimed to examine the effectiveness of currently available mobile health (mHealth) technology tools in reducing suicide-specific outcomes.

#### Methods:

The following databases were searched: Cochrane Central Register of Controlled Trials (The Cochrane Library), MEDLINE, EMBASE, PsycINFO, and relevant sources of gray literature. All published and unpublished randomized controlled trials (RCTs), pseudo-RCTs, and pre-post observational studies that evaluated the effectiveness of mHealth technology in suicide prevention delivered via mobile computing and communication technology were included. Studies were included if they measured at least one suicide outcome variable (ie, suicidal ideation, suicidal intent, nonsuicidal self-injurious behavior, and suicidal behavior). A total of 2 review authors independently extracted data and assessed study suitability, in accordance with the Cochrane Collaboration Risk of Bias Tool, on July 31, 2018. Owing to the heterogeneity of outcomes found across studies, results were not amenable for pooled synthesis, and a meta-analysis was not performed. A narrative synthesis of the available research is presented here.

### Results:

A total of 7 studies met criteria for inclusion. Four published articles that reported on the effectiveness of the following mobile phone apps were included: iBobbly, Virtual Hope Box, Bluelce, and Therapeutic Evaluative Conditioning. Results demonstrated some positive impacts for individuals at elevated risk of suicide or self-harm, including reductions in depression, psychological distress, and self-harm and increases in coping self-efficacy. None of the apps evaluated demonstrated the ability to significantly decrease suicidal ideation compared with a control condition. In addition, 3 unpublished and recently completed trials also met criteria for inclusion in the review. Conclusions: Further research is needed to evaluate the efficacy of stand-alone mHealth technology-based interventions in suicide prevention. The small number of studies reported in this review tentatively indicate that such tools may have a positive impact on suicide-specific outcomes. Future mHealth intervention evaluations would benefit from addressing the following 3 main methodological limitations : (1) heterogeneity of outcomes: a lack of standardized measurement of suicide outcomes across studies; (2) ecological validity: the tendency to exclude potential participants because of the elevated suicide risk may reduce generalizability within clinical settings;

and (3) app regulation and definition: the lack of a standardized classification system for mHealth intervention type points to the need for better definition of the scope of such technologies to promote safe practice.

Trial Registration: PROSPERO CRD42017072899; https://www.crd.york.ac.uk/prospero/display\_record.php?RecordID=72899 International Registered Report Identifier (IRRID): RR2-10.2196/resprot.8635

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#### https://onlinelibrary.wiley.com/doi/abs/10.1002/da.22993

# Courses of suicidal ideation among military veterans in residential treatment for posttraumatic stress disorder.

Noelle B. Smith, Lauren M. Sippel, David C. Rozek, Patricia T. Spangler, Delphine Traber, Casey L. Straud, Rani Hoff, Ilan Harpaz-Rotem

Depression & Anxiety First published: 17 January 2020 https://doi.org/10.1002/da.22993

### Background

Suicidal thoughts are common among veterans with posttraumatic stress disorder (PTSD). The aim of this study was to examine the prevalence and correlates of four courses of suicidal (SI) among veterans receiving residential PTSD treatment.

### Methods

A total of 1,807 veterans receiving residential PTSD treatment at Department of Veterans Affairs medical facilities who completed self-report measures at admission and discharge were included.

### Results

The prevalence of SI courses were No SI (33.6%), Remitted SI (23.0%), SI onset (6.0%), and Chronic SI (37.4%). There were group differences between the four SI courses in PTSD symptoms at baseline, magnitude of PTSD symptom change during treatment, race/ethnicity and baseline depression, substance use, physical functioning, and pain. Chronic SI was associated with highest baseline PTSD, depression, substance use, pain and worse physical functioning. Remitted SI course was associated

with greatest pre-posttreatment PTSD improvement, followed by No SI, Chronic SI, and SI Onset. Multinomial logistic regressions revealed that PTSD symptom improvement and baseline PTSD symptoms most consistently related to symptomatic SI courses compared to less symptomatic or No SI courses. Receipt of trauma-focused psychotherapy (none, some, or adequate) and length of stay were not related to SI courses and did not differ between groups.

#### Conclusions

Findings indicate that treating PTSD symptoms could be impactful for reducing suicidal thoughts. Although many veterans had remitted or reduced severity of SI at discharge, a significant proportion of veterans reported SI at discharge (43.4%), potentially highlighting the need for suicide specific treatment interventions within the context of PTSD treatment.

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https://onlinelibrary.wiley.com/doi/abs/10.1111/sltb.12613

# Together With Veterans: VA National Strategy Alignment and Lessons Learned from Community-Based Suicide Prevention for Rural Veterans.

Monteith, L.L., Wendleton, L., Bahraini, N.H., Matarazzo, B.B., Brimner, G. and Mohatt, N.V.

Suicide and Life-Threatening Behavior First published: 16 January 2020 https://doi.org/10.1111/sltb.12613

### Background

Rural veterans are at increased risk for dying by suicide compared with urban veterans, yet interventions for preventing suicide among rural veterans have been limited.

### Objectives

(1) Describe how Together With Veterans (TWV), a community-based intervention to prevent suicide among veterans in rural communities, aligns with the VA National Strategy for Preventing Veteran Suicide; (2) share lessons learned while beginning to implement TWV in rural communities.

#### Methods

Together With Veterans is being implemented in four rural communities and comprises

six suicide prevention best practices: (1) reducing stigma and promoting help-seeking; (2) lethal means safety, with an emphasis on firearms; (3) gatekeeper training; (4) training primary care providers; (5) improving access to crisis services; and (6) enhancing support for high-risk veterans.

### Results

Together With Veterans best practices align with most, but not all, of the strategies in the VA National Strategy for Preventing Veteran Suicide. Community veteran partners have shown a willingness to collaborate and provide local leadership, enthusiasm, and a sense of duty.

## Conclusions

By supporting and facilitating local veteran leaders and their community partners in increasing suicide prevention knowledge, public awareness, and resources, we propose that TWV offers an acceptable and feasible approach that builds on the strengths of rural communities. Systematic evaluation is warranted.

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https://www.sciencedirect.com/science/article/abs/pii/S0022395619310660

# Antidepressant and neurocognitive effects of serial ketamine administration versus ECT in depressed patients.

Laura Basso, Luisa Bönke, Sabine Aust, Matti Gärtner, ... Simone Grimm

Journal of Psychiatric Research Volume 123, April 2020, Pages 1-8 https://doi.org/10.1016/j.jpsychires.2020.01.002

## Background

While electroconvulsive therapy (ECT) is considered the gold standard for acute treatment of patients with otherwise treatment-resistant depression, ketamine has recently emerged as a fast-acting treatment alternative for these patients. Efficacy and onset of action are currently among the main factors that influence clinical decision making, however, the effect of these treatments on cognitive functions should also be a crucial point, given that cognitive impairment in depression is strongly related to disease burden and functional recovery. ECT is known to induce transient cognitive impairment, while little is known about ketamine's impact on cognition. This study therefore aims to

compare ECT and serial ketamine administration not only with regard to their antidepressant efficacy but also to acute neurocognitive effects.

#### Methods

Fifty patients suffering from depression were treated with either serial ketamine infusions or ECT. Depression severity and cognitive functions were assessed before, during, and after treatment.

### Results

ECT and ketamine administration were equally effective, however, the antidepressant effects of ketamine occurred faster. Ketamine improved neurocognitive functioning, especially attention and executive functions, whereas ECT was related to a small overall decrease in cognitive performance.

#### Conclusions

Due to its pro-cognitive effects and faster antidepressant effect, serial ketamine administration might be a more favorable short-term treatment option than ECT.

#### Limitations

As this research employed a naturalistic study design, patients were not systematically randomized, there was no control group and patients received concurrent and partially changing medications during treatment.

#### Clinical trials registration

Functional and Metabolic Changes in the Course of Antidepressive Treatment, https://clinicaltrials.gov/ct2/show/NCT02099630, NCT02099630.

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### Links of Interest

FDA Expands Access to Ecstasy Drug for PTSD Therapy https://www.military.com/daily-news/2020/01/22/fda-expands-access-ecstasy-drug-ptsdtherapy.html

Study finds health as top concern for veterans after separating from military service <u>https://www.news-medical.net/news/20200102/Study-finds-health-as-top-concern-for-veterans-after-separating-from-military-service.aspx</u>

After years of vigilant service, Veterans must remain vigilant online Veterans are twice as likely as non-Veterans to be targets of online scams <u>https://www.blogs.va.gov/VAntage/70471/years-vigilant-service-veterans-must-remain-vigilant-online/</u>

Study backs long-term benefits of non-drug pain therapy Research team reviewed records of more than 140,000 Veterans <u>https://www.blogs.va.gov/VAntage/70501/study-backs-long-term-benefits-of-non-drug-pain-therapy/</u>

Pentagon agrees to republish discharge and records corrections decisions <u>https://www.militarytimes.com/news/your-military/2020/01/22/pentagon-agrees-to-republish-discharge-and-records-corrections-decisions/</u>

Prepare for the Coming Mental Health Challenge https://blog.usni.org/posts/2020/01/23/prepare-for-the-coming-mental-health-challenge

Can Mindfulness Evolve From Wellness Pursuit to Medical Treatment? <u>https://www.nytimes.com/2020/01/22/magazine/can-mindfulness-evolve-from-wellness-pursuit-to-medical-treatment.html?smid=nytcore-ios-share</u>

Top VA hospital lacked full-time gynecologist, facilities serving women veterans for years, report says

https://www.militarytimes.com/news/pentagon-congress/2020/01/24/top-va-hospitallacked-full-time-gynecologist-facilities-serving-women-veterans-for-years-report-says/

"Walkabout" to Build Trust, Reduce Stigma https://www.pdhealth.mil/news/blog/walkabout-build-trust-reduce-stigma

Spouses of deployed Fort Bragg soldiers can seek financial help https://www.fayobserver.com/news/20200127/spouses-of-deployed-fort-bragg-soldierscan-seek-financial-help

Plenty of plans on preventing veterans suicide, but no agreement on what comes first <u>https://www.militarytimes.com/news/pentagon-congress/2020/01/28/plenty-of-plans-on-preventing-veterans-suicide-but-no-agreement-on-what-comes-first/</u>

How veterans may be overwhelmed by too many programs to help them find jobs <u>https://www.militarytimes.com/education-transition/2020/01/29/how-veterans-may-be-overwhelmed-by-too-many-programs-to-help-them-find-jobs/</u>

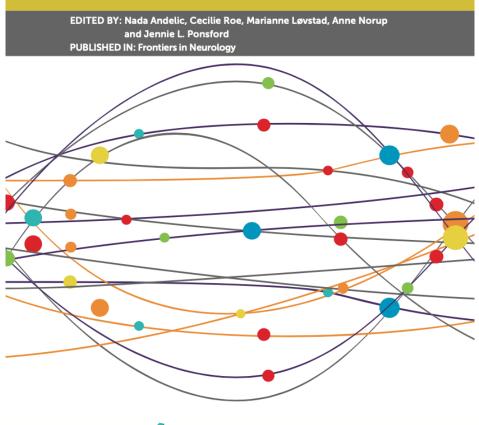
## Resource of the Week: Impact of Traumatic Brain Injuries on Participation in Daily Life and Work: Recent Research and Future Directions

New ebook from Frontiers, an open access publisher/open science platform. Download as PDF or ePub.

A large proportion of patients with traumatic brain injuries (TBI) sustain long-term physical, cognitive and emotional impairments that have a profound impact on their everyday level of functioning and community participation and reintegration. Participation in daily life activities and work is identified as one of the most important outcomes of rehabilitation following TBI both by patients/ their families and health care professionals. The medical complexity of TBI and the strong role of psychological and environmental factors in affecting prognosis and outcome require individualized and often long-term rehabilitative care. It is a clinical challenge to provide and evaluate the long-term services needed to target aspects of participation that patients with TBI experience as particularly challenging. It is not easy to identify single predictors for long-term participation, as there seems to be a close interaction between several factors. For example, motor and cognitive deficits appear to have significant impact on participation in the early stages, whereas personal, emotional and social factors may play a major role in later stages of TBI. There is thus reason to believe that injuryspecific factors play the greatest prognostic role early on in recovery, while general factors such as resilience, access to social support, degree of pre- and comorbid psychological problems, and substance dependency play a greater role in long-term adjustment.

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## IMPACT OF TRAUMATIC BRAIN INJURIES ON PARTICIPATION IN DAILY LIFE AND WORK: RECENT RESEARCH AND FUTURE DIRECTIONS





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