Research Update -- September 28, 2017

What’s Here:

- Resources for Managing Stress after Trauma (PTSD Monthly Update)
- Epidemiology of Major Depressive Disorder Disability in the US Military: FY 2007-2012.
- Role of Combat Exposure and Insomnia in Student Veterans’ Adaptation to College.
- A scoping review of human-support factors in the context of Internet-based psychological interventions (IPIs) for depression and anxiety disorders.
- A meta-analytic investigation of the impact of mindfulness-based interventions on post traumatic stress.
- Suicidality in sleep disorders: prevalence, impact, and management strategies.
- Disentangling the Link between PTSD and Violent Behavior: Findings from a Nationally Representative Sample.
- Combat exposure, emotional and physical role limitations, and substance use among male United States Army Reserve and National Guard soldiers.
- Perspectives of veterans with mild traumatic brain injury on community reintegration: Making sense of unplanned separation from service.
- Characterizing spouse/partner depression and alcohol problems over the course of military deployment.
- Mental health treatment utilization in OIF/OEF National Guard and Reserve troops with and without DSM diagnoses.
● Deployment characteristics and long-term PTSD symptoms.
● Military-related trauma is associated with eating disorder symptoms in male veterans.
● Can Anger Be Helpful?: Soldier Perceptions of the Utility of Anger.
● Cannabis use disorder and suicide attempts in Iraq/Afghanistan-era veterans.
● Does CO-MORBID obstructive sleep apnea impair the effectiveness of cognitive and behavioral therapy for insomnia?
● Sleep Disturbance After TBI.
● Differential neural activation when voluntarily regulating emotions in service members with chronic mild traumatic brain injury.
● Developing a typology of patient-generated behavioral goals for cognitive behavioral therapy for chronic pain (CBT-CP): classification and predicting outcomes.
● Documented Family Violence and Risk of Suicide Attempt Among U.S. Army Soldiers.
● A behavioral and cognitive neuroscience perspective on impulsivity, suicide, and non-suicidal self-injury: Meta-analysis and recommendations for future research.
● Factors protecting against development of suicidal ideation in military veterans.
● The Burden of Mental Illness Among Veterans: Use of VHA Health Care Services by Those With Service-connected Conditions.
● Veterans' Views on Military Tobacco Use and Tobacco Control Policy.
● Mind–Body Therapy for Military Veterans with Post-Traumatic Stress Disorder: A Systematic Review.
● Sleep Disruption, Safety Learning, and Fear Extinction in Humans: Implications for Posttraumatic Stress Disorder.
● Links of Interest
● Resource of the Week -- Suicide Prevention Resources: Read Them, Share Them
People respond to traumatic events in a number of ways. They may feel concern, anger, fear, or helplessness. These are all typical responses to a traumatic event.

Stress reactions after a disaster, like the recent hurricanes Harvey, Irma and Maria, look very much like the common reactions seen after any type of trauma. Disasters can cause a full range of mental and physical reactions. You may also react to problems that occur after the event, as well as to triggers or reminders of the trauma.

Learn what to expect following a traumatic event and how to manage stress reactions on our website...

This study assesses the incidence of major depressive disorder (MDD) disability discharge and retirement in the Army, Navy, Marine Corps and Air Force and describes MDD comorbidity. Service members with a disability discharge for either MDD (n = 2,882) or any nonpsychiatric disability (n = 56,145), between fiscal years 2007 and 2012, were included in the study population. Those with MDD disability at first evaluation but not at last evaluation were excluded. The incidence of MDD disability discharge increased significantly in the Army and Air Force between fiscal years 2007
and 2012. MDD disability retirement significantly increased in the Army, Navy, and Air Force. Females, and those who experienced at least one deployment, had higher incidence rates of MDD disability discharge. All services included spinal diseases and posttraumatic stress disorder in their top five comorbid categories. Given the association between trauma and MDD, further research into the role of both combat exposure and injury on MDD is merited.


Role of Combat Exposure and Insomnia in Student Veterans’ Adaptation to College.

James J. McGuffin, Shelley A. Riggs & Daniel J. Taylor

Behavioral Sleep Medicine
Published online: 04 Aug 2017
http://dx.doi.org/10.1080/15402002.2017.1363041

Objective/Background:
Since 2002, the number of college student veterans has nearly doubled, although 30–40% of veterans fail to complete their degree. Few research efforts to understand the challenges veterans face transitioning to college in recent years have looked beyond the effects of posttraumatic stress disorder. Insomnia is the most frequently reported symptom of combat veterans and can have serious implications for college students. The purpose of this study was to examine the role of insomnia in student veteran adaptation to college relative to civilian students.

Participants:
College students (N = 588), including 154 veterans, participated in a large online study examining the psychological, relational, and academic functioning of college students. Approximately 61% of the veteran subsample reported combat exposure.

Methods:
Students were administered a Background Information Questionnaire, the Insomnia Severity Index, the Deployment Risk and Resilience Inventory, and the Student Adaptation to College Questionnaire. Data was analyzed using multivariate analysis of covariance and regression to test for direct and indirect effects.
Results and Conclusions:
Student veterans reported better academic and personal-emotional adaptation than civilian students, while civilians reported better social adjustment than veterans. However, follow-up analyses revealed that these effects might be explained by group differences in gender, income, and marital status. Although combat veterans without insomnia had better academic adjustment than noncombat veterans and civilian students, insomnia seemed to have a greater negative effect on combat veterans’ academic adjustment relative to civilian students. Furthermore, insomnia mediated the relationship between combat exposure and veterans’ personal-emotional adjustment to college.


A scoping review of human-support factors in the context of Internet-based psychological interventions (IPIs) for depression and anxiety disorders.

Minjung Shim, Brittain Mahaffey, Michael Bleidistel, Adam Gonzalez

Clinical Psychology Review
Volume 57, November 2017, Pages 129-140
https://doi.org/10.1016/j.cpr.2017.09.003

Internet-based psychological interventions (IPIs) may provide a highly accessible alternative to in-person psychotherapy. However, little is known about the role of human-support in IPIs for depression and anxiety disorders.

The purpose of this study was to evaluate the evidence in the literature regarding the role of human-support in IPIs for depression and anxiety disorders; identify research gaps; and provide recommendations.

A scoping review of randomized controlled trials was conducted using seven databases. Two reviewers screened citations, selected studies, and extracted data. Data was analyzed and summarized by common human-support factors.

Seven categories for support factors were identified from 19 studies: guided versus unguided IPIs, level of therapist expertise, human versus automated support, scheduled versus unscheduled contact, mode of communication, synchronicity of communication, and intensity of support. Only one feature had a significant effect on treatment
outcomes, with scheduled support resulting in better outcomes than unscheduled support. There were mixed findings regarding guided versus unguided interventions and human versus automated support.

Providing structured support in a fixed-interval schedule is recommended to enhance the utilization of IPIs for depression and anxiety disorders. Findings should be interpreted with caution due to the limited available research. Further research is needed to draw robust conclusions.

-----


A meta-analytic investigation of the impact of mindfulness-based interventions on post traumatic stress.

Tanya L. Hopwood, Nicola S. Schutte

Clinical Psychology Review
Volume 57, November 2017, Pages 12-20
https://doi.org/10.1016/j.cpr.2017.08.002

A number of studies have investigated the impact of mindfulness-based interventions on symptoms of post-traumatic stress (PTSD) compared to control conditions. The current meta-analysis consolidated findings from 18 studies reporting results for 21 samples of participants. Across studies, mindfulness-based treatments compared to control conditions were effective in ameliorating symptoms of PTSD, with Hedges' g = -0.44. Hedges' g was -0.59 for comparison of mindfulness-based interventions to waitlist control conditions. Changes in mindfulness may underpin the effect of mindfulness-based interventions on PTSD symptoms and thus the meta-analysis examined findings regarding increases in mindfulness. The 12 studies that assessed mindfulness found that the interventions significantly increased mindfulness, Hedges' g = 0.52. Moderator analyses indicated that interventions with longer mindfulness training were more efficacious in reducing symptoms of PTSD. Across studies, gender, age, veteran status, or length of time between the intervention and assessment of PTSD symptoms did not moderate the impact of mindfulness-based interventions. The results provide a foundation for future research directions and have implications for work with those impacted by trauma.

-----
Suicidality in sleep disorders: prevalence, impact, and management strategies.

Christopher W Drapeau, Michael R Nadorff

Nature and Science of Sleep
2017:9 213–226

Sleep disturbances are associated with suicide-related thoughts and behaviors, and the incidence of sleep concerns and suicide has increased recently in the US. Most published research exploring the sleep–suicidality relation is focused on select sleep disorders, with few reviews offering a comprehensive overview of the sleep–suicidality literature. This narrative review broadly investigates the growing research literature on sleep disorders and suicidality, noting the prevalence of suicide ideation and nonfatal and fatal suicide attempts, the impact of several sleep disorders on suicide risk, and potential sleep-disorder management strategies for mitigating suicide risk. Aside from insomnia symptoms and nightmares, there exist opportunities to learn more about suicide risk across many sleep conditions, including whether sleep disorders are associated with suicide risk independently of other psychiatric conditions or symptoms. Generally, there is a lack of randomized controlled trials examining the modification of suicide risk via evidence-based sleep interventions for individuals with sleep disorders.

Disentangling the Link between PTSD and Violent Behavior: Findings from a Nationally Representative Sample.

Shannon M. Blakey, Holly Love, Lisa Lindquist, Jean C. Beckham, Eric B. Elbogen
Objective:
Although research using combat veteran samples has demonstrated an association between posttraumatic stress disorder (PTSD) and violence toward others, there has been relatively little research examining this relationship among individuals with no combat history.

Method:
Data representative of the United States population collected from the two wave National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) were analyzed to determine the risk factors for violent behavior of individuals reporting no history of active military combat (N = 33,215).

Results:
In chi-square analyses, participants meeting criteria for lifetime PTSD at Wave 1 reported higher rates of violence between Waves 1 and 2 compared to participants without a history of PTSD (7% vs 3%). An increase in anger following trauma and use of alcohol to cope with PTSD symptoms were stronger predictors of physically aggressive or violent acts than a lifetime diagnosis of PTSD without anger. When controlling for these and other covariates, PTSD alone no longer significantly predicted any subtype of physical aggression or violence toward others.

Conclusions:
Results suggest that although PTSD is related to violent behavior, specific sequelae of trauma (specifically, increased anger and selfmedicating with alcohol) are more critical than diagnosis alone in predicting violent behavior in the general population. Clinical implications and future research directions are discussed.


Combat exposure, emotional and physical role limitations, and substance use among male United States Army Reserve and National Guard soldiers.

R. A. Hoopsick, B. M. Vest, D. L. Homish, G. G. Homish

Quality of Life Research
First Online: 18 September 2017
Purpose

Combat-exposed soldiers are at an increased risk for health problems that diminish quality of life (QOL) and substance use. We explored the cross-sectional associations between combat exposure and two measures of QOL, and the effect of substance use on those associations.

Methods

Data are from the baseline wave of Operation: SAFETY, an ongoing survey-based study of United States Army Reserve/National Guard (USAR/NG) soldiers and their partners. Our sample consisted of male USAR/NG soldiers with a history of deployment (N = 248). Limitations in usual activity due to physical and emotional problems were assessed using the 36-Item Short-Form Health Survey (SF-36).

Results

Greater combat exposure was independently associated with limitations in usual activity due to physical (regression coefficient = −0.35, 95% CI −0.55 to −0.16, R2 = 0.09; p < 0.01) and emotional (regression coefficient = −0.32, 95% CI −0.56 to −0.09, R2 = 0.09; p < 0.01) problems. Combat exposure had a significant interaction with frequent heavy drinking on physical role limitations (regression coefficient = −0.65, 95% CI −1.18 to −0.12, R2 = 0.12; p < 0.05) and emotional role limitations (regression coefficient = −0.83, 95% CI −1.46 to −0.19, R2 = 0.12; p < 0.05). Combat exposure also had a significant interaction with lifetime non-medical use of prescription drugs on physical role limitations (regression coefficient = 0.81, 95% CI 0.18–1.45, R2 = 0.11; p < 0.05).

Conclusion

Combat is an unmodifiable risk factor for poor QOL among soldiers; however, frequent heavy drinking and non-medical use of prescription drugs modifies the relationship between combat exposure and QOL. Therefore, substance use is a potential point of intervention to improve QOL among soldiers.

Matthew C. Mishkind, Aaron M. Norr, Andrea C. Katz, Greg M. Reger

Current Psychiatry Reports
First Online: 18 September 2017
https://doi.org/10.1007/s11920-017-0836-0

Purpose of Review
This review provides an overview of the current evidence base for and clinical applications of the use of virtual reality (VR) in psychiatric practice, in context of recent technological developments.

Recent Findings
The use of VR in psychiatric practice shows promise with much of the research demonstrating clinical effectiveness for conditions including post-traumatic stress disorder, anxiety and phobias, chronic pain, rehabilitation, and addictions. However, more research is needed before the use of VR is considered a clinical standard of practice in some areas.

Summary
The recent release of first generation consumer VR products signals a change in the viability of further developing VR systems and applications. As applications increase so will the need for good quality research to best understand what makes VR effective, and when VR is not appropriate for clinical services. As the field progresses, it is hopeful that the flexibility afforded by this technology will yield superior outcomes and a better understanding of the underlying mechanisms impacting those outcomes.

-----

http://psycnet.apa.org/record/2017-06703-003

Perspectives of veterans with mild traumatic brain injury on community reintegration: Making sense of unplanned separation from service.
For veterans separated from the military as a result of acquired mild traumatic brain injury (mTBI), the transition from a military identity to a civilian one is complicated by health, cognitive, and psychosocial factors. We conducted in-depth interviews with 8 veterans with mTBI to understand how they perceived the experience of departure from the military, rehabilitation services provided at a Department of Veterans Affairs (VA) Polytrauma Network Site, and reentry into civilian life. Two distinct patterns of thinking about community reintegration emerged. The first pattern was characterized by the perception of a need to fade one’s military identity. The second pattern, conversely, advanced the perception of a need to maintain the integrity of one’s military identity though living in a civilian world. These perceptions may be linked to individuals’ roles while in the military and whether violent acts were committed in carrying out the mission of service, acts not consonant with positive self-appraisal in the civilian world. The crisis of unplanned, involuntary separation from the military was universally perceived as a crisis equal to that of the precipitating injury itself. The perception that civilians lacked understanding of veterans’ military past and their current transition set up expectations for interactions with health care providers, as well as greatly impacting relationships with friend and family. Our veterans’ shared perceptions support existing mandates for greater dissemination of military culture training to health care providers serving veterans both at VA and military facilities as well as in the civilian community at large.

(PsycINFO Database Record (c) 2017 APA, all rights reserved)


Characterizing spouse/partner depression and alcohol problems over the course of military deployment.

Erbes CR, Kramer M, Arbisi PA, DeGarmo D, Polusny MA
OBJECTIVE:
Spouse/partners of military personnel demonstrate elevated levels of distress during military deployments, yet there is insufficient information about courses of adjustment over time. The current study identified trajectories of depression and alcohol use problems and predictors of those trajectories across the deployment cycle.

METHOD:
National Guard soldiers (N = 1973) and spouses/intimate partners (N = 1020) completed assessments of risk/protective factors and baseline measures of mental health functioning 2 to 5 months prior to soldiers’ 1-year deployments (Time 1) to Kuwait/Iraq in support of Operation New Dawn or Afghanistan in support of Operation Enduring Freedom. Partners’ mental health was reassessed at 4 months (Time 2) and 8 months (Time 3) after soldiers deployed, and both spouses/partners and soldiers were reassessed 2-3 months postdeployment (Time 4).

RESULTS:
Latent class growth modeling of partner depression symptoms over time revealed 4 groups: Resilience (79.9%), Deployment Distress (8.9%), Anticipatory Distress (8.4%), and Post-Deployment Distress (2.7%). Three alcohol misuse trajectories were identified: Resilience (91.3%), Deployment Onset (5.4%), and Deployment Desistance (3.3%). Predeployment predictors of partners’ depression symptom trajectories varied by group and included soldier reports of stressors and social support and partner levels of neuroticism, introversion, disconstraint, and reported stressors. Predeployment predictors of alcohol misuse trajectories varied by group, and included soldier levels of alcohol misuse as well as partner neuroticism, disconstraint, and family readiness.

CONCLUSIONS:
Delineating and predicting trajectories of partner adjustment can allow for better targeted interventions toward those most at risk for heightened distress or alcohol problems over the deployment cycle. (PsycINFO Database Record (c) 2017 APA, all rights reserved).


Mental health treatment utilization in OIF/OEF National Guard and Reserve troops with and without DSM diagnoses.
Military service members have an increased risk of developing mental health (MH) problems following deployment to Iraq or Afghanistan, yet only a small percentage seek mental health treatment. The aim of the present study was to explore patterns of MH service utilization within the first 12 months following return from combat deployment. Participants were 169 service members who had returned from war-zone deployment in either Iraq or Afghanistan and had assessments covering a 12-month period following their homecoming. The authors first examined the prevalence of mental health diagnoses and engagement with mental health treatment (e.g., visits to the emergency room, inpatient hospitalization, individual therapy, group therapy, family or couple therapy, medication appointments, and self-help). Regression analyses explored whether distress, functioning, diagnoses, or social support predicted treatment use. Findings indicated that 28 of 50 military service members (56%) who met diagnostic criteria for a mental health disorder accessed services in the year following their return from deployment. Individual treatment was the most common modality, and those with major depressive disorder (MDD) reported the most treatment contacts. Social support was not associated with use of mental health services. Baseline functioning and psychiatric distress predicted entry into treatment whereas only psychiatric distress predicted amount of mental health service use in the 12-month postdeployment period. Findings highlight the need for enhanced strategies to link those reporting psychiatric distress with MH treatment services and increase community connectedness regardless of whether they meet full criteria for a mental health diagnosis. (PsycINFO Database Record (c) 2017 APA, all rights reserved).


Deployment characteristics and long-term PTSD symptoms.

Morissette SB, DeBeer BB, Kimbrel NA, Meyer EC, Gulliver SB

OBJECTIVE:
The impact of number, length, and time between (i.e., "dwell time") deployments on long-term Diagnostic and Statistical Manual of Mental Disorders Fourth Edition
posttraumatic stress disorder (PTSD) symptoms was examined in post-9/11 U.S. veterans.

METHOD:
This cross-sectional design includes data from 278 veterans participating in a larger longitudinal research program of postdeployment recovery. Measures included self-report questionnaires and the Clinician Administered PTSD Scale.

RESULTS:
Hierarchical regression was used to evaluate the independent contributions of deployment characteristics on long-term PTSD symptoms after controlling for demographics and combat exposure. As expected, dwell time was a significant predictor of long-term PTSD symptoms ($\beta = -0.17$, $p = .042$; $F_{5,108} = 8.21$, $\Delta R^2 = 0.03$, $p < .001$). Follow-up analyses indicated that dwell time of less than 12 months was associated with significantly greater long-term PTSD symptoms than those deployed once or with dwell time greater than 12 months.

CONCLUSION:
In addition to combat exposure, time between deployments warrants clinical attention as an important deployment characteristic for predicting long-term PTSD symptoms.

© 2017 Wiley Periodicals, Inc.

-----


Military-related trauma is associated with eating disorder symptoms in male veterans.

Arditte Hall KA, Bartlett BA, Iverson KM, Mitchell KS

OBJECTIVE:
Eating disorders are understudied among male veterans, who may be at increased risk due to the high rates of trauma exposure and experiences of multiple traumatization in this population. This study sought to examine the associations between specific types of trauma (i.e., childhood physical abuse, adult physical assault, childhood sexual abuse, adult sexual assault, and military-related trauma) and eating disorder symptoms in a large, nationally-representative sample of trauma-exposed male veterans.
METHOD:
Survey data were collected from N = 642 male veterans. Traumatic experiences in childhood and adulthood were assessed using the Trauma History Screen and the National Stressful Events Survey. Eating disorder symptoms were assessed with the Eating Disorder Diagnostic Scale. Analyses also controlled for age and body mass index.

RESULTS:
Multiple traumatization was associated with increased eating disorder symptoms. However, military-related trauma was the only trauma type that was uniquely associated with eating disorder symptoms when controlling for other trauma types. Examination of different types of military-related trauma indicated that this association was not driven by exposure to combat.

DISCUSSION:
Noncombat, military-related trauma was associated with eating disorder symptom severity in male veterans. Results highlight the need for better assessment of eating disorder symptoms in this population.
© 2017 Wiley Periodicals, Inc.


J Nerv Ment Dis. 2017 Sep;205(9):692-698. doi: 10.1097/NMD.0000000000000712

Can Anger Be Helpful?: Soldier Perceptions of the Utility of Anger.

Adler AB, Brossart DF, Toblin RL

Studies have found that soldiers returning from combat deployment report elevated levels of anger and aggression. The present study examined the perception that anger was helpful in performing occupationally related duties and whether this perception was associated with mental health problems, somatic symptoms, and functioning. Soldiers (N = 627) completed a survey 4 months after their deployment to Afghanistan and again 3 months later. When examining anger over time, findings revealed four groups of different latent classes: low stable (resilient), high stable (chronic), decreasing over time (improved), and increasing over time (delayed problems). For two of the groups (chronic and delayed problems), perceiving anger as helpful was closely related to anger
reactions. Perceiving anger as helpful was also associated with worse mental health symptoms. Further work in understanding how to mitigate this positive perception of anger in prevention initiatives may be useful in addressing anger reactions.


Cannabis use disorder and suicide attempts in Iraq/Afghanistan-era veterans.

Kimbrel NA, Newins AR, Dedert EA, Van Voorhees EE, Elbogen EB, Naylor JC, Ryan Wagner H, Brancu M; VA Mid-Atlantic MIRECC Workgroup, Beckham JC, Calhoun PS

The objective of the present research was to examine the association between lifetime cannabis use disorder (CUD), current suicidal ideation, and lifetime history of suicide attempts in a large and diverse sample of Iraq/Afghanistan-era veterans (N = 3233) using a battery of well-validated instruments. As expected, CUD was associated with both current suicidal ideation (OR = 1.683, p = 0.008) and lifetime suicide attempts (OR = 2.306, p < 0.0001), even after accounting for the effects of sex, posttraumatic stress disorder, depression, alcohol use disorder, non-cannabis drug use disorder, history of childhood sexual abuse, and combat exposure. Thus, the findings from the present study suggest that CUD may be a unique predictor of suicide attempts among Iraq/Afghanistan-era veterans; however, a significant limitation of the present study was its cross-sectional design. Prospective research aimed at understanding the complex relationship between CUD, mental health problems, and suicidal behavior among veterans is clearly needed at the present time.

Published by Elsevier Ltd.

http://www.sleep-journal.com/article/S1389-9457(17)30355-6/abstract

Does CO-MORBID obstructive sleep apnea impair the effectiveness of cognitive and behavioral therapy for insomnia?

Alexander Sweetman, Leon Lack, Sky Lambert, Michael Gradisar, Jodie Harris
Aims
Co-morbid insomnia and obstructive sleep apnea (OSA) represents a highly prevalent and debilitating condition, however physicians and researchers are still uncertain as to the most effective treatment approach. Several research groups have suggested that these patients should initially receive treatment for their insomnia before the sleep apnea is targeted. The current study aims to determine whether cognitive and behavioral therapy for insomnia (CBT-i) can effectively treat insomnia in patients with co-morbid OSA, and whether its effectiveness is impaired by the presence of OSA.

Methods
A retrospective chart review was conducted to examine 455 insomnia patients entering a CBT-i treatment program in a hospital outpatient setting. 314 patients were diagnosed with insomnia-alone, and 141 with insomnia and co-morbid obstructive sleep apnea. Improvements in average sleep diary parameters, global insomnia severity, and several daytime functioning questionnaires from baseline, to post-treatment, to 3-month follow-up were compared between insomnia patients with- and without co-morbid sleep apnea.

Results
Insomnia patients with co-morbid OSA experienced significant improvements in insomnia symptoms, global insomnia severity, and other daytime functioning measures during and following treatment. Furthermore, improvements were no different between patients with or without co-morbid OSA. Sleep apnea presence and severity were not related to rates of insomnia-remission or treatment-resistance following treatment.

Conclusions
CBT-i is an effective treatment in the presence of co-morbid OSA. This information offers support for the suggestion that patients with co-morbid insomnia and obstructive sleep apnea should be treated with CBT-i prior to treatment of the OSA.

https://link.springer.com/article/10.1007/s11910-017-0792-4

Sleep Disturbance After TBI.
Surendra Barshikar, Kathleen R. Bell
Purpose of Review
Present relevant literature to update knowledge on sleep science, identify common sleep disturbances seen in TBI, discuss evidence for available treatment options, and illuminate future areas for research.

Recent Findings
Sleep disturbances, including insomnia, circadian rhythm disturbances, and sleep apnea, are prevalent for all severities of traumatic brain injury (TBI), can be chronic, and affect both rehabilitation and recovery from the TBI.

Summary
New knowledge of basic sleep mechanisms and neurochemistry has exploded in the last decade. In addition to known effects on mood and cognition from sleep deprivation in persons with TBI, new evidence indicates potential deleterious effects on neurorecovery and acceleration of long-term neurodegeneration.


Wolf, Gregory K. PsyD; Mauntel, Gregory J. PsyD; Kretzmer, Tracy PhD; Crawford, Eric PhD; Thors, Christina PhD; Strom, Thad Q. PhD; Vanderploeg, Rodney D. PhD

Journal of Head Trauma Rehabilitation
Post Author Corrections: September 18, 2017
doi: 10.1097/HTR.00000000000000344

Objectives:
To examine (a) generalization of the effectiveness of prolonged exposure (PE) therapy
for posttraumatic stress disorder (PTSD) in improving postconcussive symptoms (PCSs) and other outcomes in military service members and Veterans (VA) with histories of mild to severe traumatic brain injury (TBI), and (b) factors associated with PCS reduction.

Setting:
VA polytrauma medical center.

Participants:
Consecutive referrals for PTSD treatment of Active Duty (n = 17) or Veterans (n = 27) diagnosed with PTSD and TBI (N = 44).

Main Outcome Measures:
Neurobehavioral Symptom Inventory, Key Behaviors Change Inventory, Self-Efficacy for Symptom Management, Posttraumatic Stress Disorder Checklist, and Beck Depression Inventory, 2nd edition.

Design:
Post hoc analysis of archival clinical effectiveness program evaluation data.

Interventions:
PE for PTSD.

Results:
There were significant improvements on all outcome measures with large effect sizes (Cohen's d ranging from 0.68 to 2.02). Improvement on PCS (Cohen's d = 1.21) was associated with lower levels of VA service-connected disability and PE treatment completion.

Conclusion:
PE treatment-related improvements for participants with comorbid PTSD and TBI generalize from PTSD outcomes to PCS and other TBI-related outcomes. Positive outcomes were independent of TBI severity, treatment setting, or Veteran status, but dependent upon PE treatment completion and lower levels of VA service-connected disability.

Copyright (C) 2017 Wolters Kluwer Health, Inc. All rights reserved.
Differential neural activation when voluntarily regulating emotions in service members with chronic mild traumatic brain injury.


Applied Neuropsychology: Adult
Published online: 19 Sep 2017
http://dx.doi.org/10.1080/23279095.2017.1362406

The objective of this study was to characterize the functional activation of the neural correlates of voluntary regulation of emotion in soldiers both with and without chronic mild traumatic brain injury (mTBI). Using functional magnetic resonance imaging (fMRI) and a battery of cognitive and psychological health measures, we assessed differences between active-duty U.S. soldiers with chronic mTBI (n = 37) and without (Controls, n = 35). Participants were instructed to maintain (passively view), enhance, and suppress emotions associated with negative and neutral visual stimuli. The mTBI group showed significantly greater clinical symptoms, but only a mild decrement in attention. Group contrasts, while controlling for posttraumatic stress disorder (PTSD) symptoms, revealed a differential neural activation pattern compared to controls, but only during the enhance condition. Specifically, the mTBI group showed greater activation in the precentral gyrus, postcentral gyrus, inferior parietal lobe, insula, and superior temporal gyrus. Finally, the effect of PTSD symptoms during the enhance condition was associated with accentuated activation of the frontal and limbic regions implicated in both emotion regulation and PTSD. Hyperactivation of neural regions in the mTBI group during the enhance condition may reflect vigilance towards negative contextual stimuli and/or poor strategy that might result in suboptimal allocation of resources to regulate emotions.

-----

https://link.springer.com/article/10.1007/s10865-017-9885-4

Developing a typology of patient-generated behavioral goals for cognitive behavioral therapy for chronic pain (CBT-CP): classification and predicting outcomes.
Patient-generated treatment goals describe what patients value, yet the content of these goals, and the relationship among goal types, goal accomplishment, and treatment outcomes has received little examination. We used inductive sorting to categorize patient-generated goals made by 147 adults receiving cognitive-behavioral therapy for chronic pain. The resulting goal categories were: Physical Activity (29.0%), Functional Status (24.6%), Wellness (16.3%), Recreational Activities (11.3%), House/Yard Work (9.7%), Socializing (7.1%), and Work/School (2.0%). Next, we examined associations between number of goals by category, goal accomplishment, and clinically meaningful improvements in pain-related interference, pain intensity and depressive symptoms. Improvement in all outcome domains was related to goal accomplishment. Additionally, depressive symptoms were related to number of Physical Activity, House/Yard Work, Recreational Activities, and Wellness goals, whereas improved pain-intensity was significantly related to House/Yard Work. Classifying patient-generated goals facilitates investigation of the relationships among goal type, goal accomplishment and treatment outcomes.

-----

Documented Family Violence and Risk of Suicide Attempt Among U.S. Army Soldiers.

Robert J. Ursano, Murray B. Stein, Holly B. Herberman Mash, James A. Naifeh, Carol S. Fullerton, Alan M. Zaslavsky, Tsz Hin Hinz Ng, Pablo A. Aliaga, Gary H. Wynn, Hieu M. Dinh, James E. McCarroll, Nancy A. Sampson, Tzu-Cheg Kao, Michael Schoenbaum, Steven G. Heeringa, Ronald C. Kessler

Psychiatry Research
Available online 20 September 2017
https://doi.org/10.1016/j.psychres.2017.09.046
Suicide attempt (SA) rates in the U.S. Army increased substantially during the wars in Afghanistan and Iraq. This study examined associations of family violence (FV) history with SA risk among soldiers. Using administrative data from the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS), we identified person-month records of active duty, Regular Army, enlisted soldiers with medically documented SAs from 2004–2009 (n=9,650) and a sample of control person-months (n=153,528). Logistic regression analyses examined associations of FV with SA, adjusting for socio-demographics, service-related characteristics, and prior mental health diagnosis. Odds of SA were higher in soldiers with a FV history and increased as the number of FV events increased. Soldiers experiencing past-month FV were almost five times as likely to attempt suicide as those with no FV history. Odds of SA were elevated for both perpetrators and those who were exclusively victims. Male perpetrators had higher odds of SA than male victims, whereas female perpetrators and female victims did not differ in SA risk. A discrete-time hazard function indicated that SA risk was highest in the initial months following the first FV event. FV is an important consideration in understanding risk of SA among soldiers.


A behavioral and cognitive neuroscience perspective on impulsivity, suicide, and non-suicidal self-injury: Meta-analysis and recommendations for future research.

Richard T. Liu, Zoë M. Trout, Evelyn M. Hernandez, Shayna M. Cheek, Nimesha Gerlus

Neuroscience & Biobehavioral Reviews
Available online 18 September 2017
https://doi.org/10.1016/j.neubiorev.2017.09.019

We conducted a meta-analysis of neurobehavioral and neurocognitive indices of impulsivity in relation to suicidal thoughts and behaviors, as well as non-suicidal self-injury (NSSI). In our systematic review, 34 studies were identified and submitted to a random-effects meta-analysis. A small pooled effect size was observed for the association between behavioral impulsivity and NSSI (OR = 1.34, p < 0.05). A small-to-medium pooled effect size (OR = 2.23, p < 0.001) was found for the association between behavioral impulsivity and suicide attempts, and a medium-to-large pooled effect size was observed for this outcome in relation to cognitive impulsivity (OR = 3.14, p < 0.01). Length of time between suicide attempt and impulsivity assessment moderated the strength of the relation between impulsivity and attempts, with a large
pooled effect size (OR = 5.54, p < 0.001) evident when the suicide attempt occurred within a month of behavioral impulsivity assessment. Studies of clinically significant NSSI temporally proximal to impulsivity assessment are needed. Longitudinal research is required to clarify the prognostic value of behavioral and cognitive impulsivity for short-term risk for self-harm.


Factors protecting against the development of suicidal ideation in military veterans.

Robert H. Pietrzak, Barbara L. Pitts, Ilan Harpaz-Rotem, Steven M. Southwick, Julia M. Whealin

World Psychiatry
First published: 21 September 2017
DOI: 10.1002/wps.20467

The growing rate of suicide among military veterans is a critical public health concern[1, 2]. Accordingly, there is an urgent need to better identify at-risk veterans and provide early targeted interventions[3]. Numerous studies have examined risk factors for suicide in veterans, which have generally focused on mental and physical health problems[4, 5]. Surprisingly scarce research has sought to identify modifiable protective factors, despite emerging theoretical frameworks of suicide risk emphasizing such factors, including psychological resilience (i.e., psychological qualities that allow one to better manage adversity, such as self-efficacy and cognitive flexibility), acceptance-based coping (i.e., acceptance that a traumatic or stressful life event is real and must be addressed), social support, optimism, and curiosity[6-8].

Characterization of risk and protective factors linked to early indicators of suicide risk, such as suicidal ideation, is critical to informing targeted suicide prevention efforts[3]. Prospective cohort studies that follow population-based, non-psychiatric samples prior to the development of suicidal ideation are an ideal context within which to identify such factors. We explored the risk and protective factors associated with the development of suicidal ideation over a 4-year period in a nationally representative sample of military veterans.
We analyzed data from the National Health and Resilience in Veterans Study, a nationally representative, prospective cohort study of US veterans. The sample was drawn from a survey panel of 50,000 US adults maintained by GfK Knowledge Networks Inc. The baseline survey was conducted in September-October 2011, and follow-up surveys were carried out in September-October 2013 and 2015. In the current study, we analyzed data from 2,093 veterans who did not endorse suicidal ideation at baseline and who completed at least one follow-up assessment over the 4-year follow-up period. The study was approved by the Human Subjects Subcommittee of the VA Connecticut Healthcare System.

Suicidal ideation was assessed using a two-part question from the Patient Health Questionnaire-9: “Over the last 2 weeks, how often have you been bothered by the following problems: thoughts you might be better off dead, and thoughts of hurting yourself in some way?”. Items were coded 0 (“not at all”), 1 (“several days”), 2 (“more than half the days”), or 3 (“nearly every day”). Incident suicidal ideation was operationalized as endorsement of “1” or higher on either question over the 4-year follow-up period. A comprehensive range of socio-demographic, military, health and psychosocial (perceived resilience, optimism, purpose in life, social support, coping strategies, and religiosity/spirituality) characteristics were assessed[9].

A hierarchical multivariate binary logistic regression analysis was conducted to evaluate baseline predictors of incident suicidal ideation over the 4-year period. Socio-demographic (e.g., age) and military (e.g., combat veteran status) variables were entered in step 1; potential risk factors (e.g., depression, post-traumatic stress disorder (PTSD), somatic problems) in step 2; and potential protective factors (e.g., scores on measures of psychosocial characteristics and social connectedness) in step 3. Incident suicidal ideation (no/yes) was the dependent variable. The analysis was weighted post-stratification based on the demographic distribution from the most contemporaneous current population survey of the US Census Bureau, to permit generalizability to the US veteran population.

The mean age of the sample was 62.4 ± 13.8 years (range 22-93) and included predominantly male (92.0%), white (78.5%) and non-combat-exposed (68.4%) veterans. One hundred forty-three (weighted 7.5%) veterans developed suicidal ideation over the 4-year follow-up period.

Increased risk of incident suicidal ideation was associated with loneliness (i.e., score on Short Loneliness Scale; relative risk ratio, RRR=1.22, p=0.002; relative variance explained, RVE=16.5%); disability in instrumental activities of daily living (i.e., endorsement of needing help with activities such as doing housework and taking
medication properly; RRR=3.46, p<0.001; RVE=14.8%); PTSD symptoms (score on PTSD Checklist; RRR=1.05, p<0.001; RVE=7.9%); somatic problems (i.e., score on somatization subscale of Brief Symptom Inventory-18; RRR=1.09, p<0.001; RVE=7.0%); alcohol use problems (i.e., score on Alcohol Use Disorders Identification Test-Consumption; RRR=1.10, p=0.001; RVE=5.7%); denial-based coping (i.e., endorsing use of denial to cope with trauma on the Brief COPE; RRR=3.36, p=0.002; RVE=4.3%); and higher age (RRR=1.02, p=0.015; RVE=2.0%).

Decreased risk of incident suicidal ideation was independently associated with greater social support (score on Medical Outcomes Study Social Support Scale-5; RRR=0.94, p=0.002; RVE=20.3%); curiosity (score on “I frequently find myself looking for new opportunities to grow as a person (e.g., information, people, resources)” item from the Curiosity and Exploration Inventory; RRR=0.85, p<0.001; RVE=9.3%); resilience (score on Connor-Davidson Resilience Scale-10; RRR=0.96, p=0.009; RVE=8.0%); and acceptance-based coping (endorsement of use of acceptance-based coping on the Brief COPE; RRR=0.60, p=0.014; RVE=4.2%).

This study provides one of the most comprehensive assessments to date of risk and protective factors for developing suicidal ideation in a nationally representative sample of military veterans. They replicate prior work implicating mental and physical health problems as risk factors for suicidality in veterans[4, 5] and extend these findings to suggest that loneliness, disability in instrumental activities of daily living, and denial-based coping may additionally contribute to suicidal ideation risk in this population.

Greater perceived social support, curiosity, resilience, and acceptance-based coping accounted for more than 40% of the total variance in predicting suicidal ideation risk. These protective factors are modifiable and addressed in contemporary cognitive-behavioral psychotherapies[6-8], and thus may be promising targets in prevention efforts designed to mitigate suicide risk in veterans.

Taken together, the results of this study underscore the importance of comprehensive and multi-modal assessment, monitoring, prevention, and treatment approaches that target a broad range of risk and protective factors for suicidal ideation[10].
The Burden of Mental Illness Among Veterans: Use of VHA Health Care Services by Those With Service-connected Conditions.

Maynard, Charles PhD; Batten, Adam BA; Liu, Chuan-Fen PhD; Nelson, Karin MD, MSHS; Fihn, Stephan D MD, MPH

Medical Care
Post Author Corrections: September 19, 2017
doi: 10.1097/MLR.0000000000000806

Background:
Little is known about how Veterans with service-connected conditions use health care provided by the Veterans Health Administration (VHA).

Objectives:
To ascertain what proportion of Veterans with service-connected conditions used VHA health care and whether it varied according to type of condition, combined disability rating, age, sex, military rank, or other characteristics and whether there were differences in receipt of inpatient and outpatient care.

Research Design:
Cross-sectional analysis of administrative benefits and claims data for 2015 and 2016.

Subjects:
In total, 4,029,672 Veterans who had an active award status for service-connected conditions in October 2016.

Measures:
Independent variables included age, sex, military rank, service branch, combined disability rating, Agent Orange exposure, and type of service-connected condition. The key-dependent variable was VHA health care use including specific types of health care utilization such as inpatient and outpatient services.

Results:
In total, 52% of those with service-connected conditions used VHA health care. Type of condition and disability rating were associated with use. Over 65% of those with major
depression, posttraumatic stress disorder (PTSD), Agent Orange exposure, or diabetes used VHA health care, as did 76% of those with a 100% rating. Almost one third of users of VHA health care were compensated for PTSD. In general, both inpatient and outpatient mental health services were frequently used by Veterans with service-connected mental health conditions.

Conclusions:
Veterans with service-connected conditions, particularly those with diabetes or mental illness such as depression or PTSD, depend heavily upon VHA for health care, including mental health services.

Copyright (C) 2017 Wolters Kluwer Health, Inc. All rights reserved.


Veterans' Views on Military Tobacco Use and Tobacco Control Policy.

Elizabeth A. Smith, Walker S. C. Poston, Christopher K. Haddock, Sara A. Jahnke & Ruth E. Malone

Military Behavioral Health
Published online: 31 Aug 2017
http://dx.doi.org/10.1080/21635781.2017.1374221

National military and veteran service organizations (MVSOs) have the potential to be advocates for stronger military tobacco control. This study consisted of qualitative analysis of interviews with 5 MVSO leaders (or their designees) and 6 focus groups conducted with veterans, to explore the opinions of MVSO leaders and veterans about military tobacco use and tobacco control policy, and to assess their current knowledge, attitudes, and likelihood of engaging with civilian tobacco control. Themes discussed include the impact of tobacco use on the military mission and on veterans; the possibility of stronger military tobacco control policies; and the idea that such policies would affect the rights of military personnel. Participants considered whether tobacco use impacts the military mission in the most literal sense (e.g., giving away patrol locations), ignoring larger scale effects on long-term health and costs. Although familiar with tobacco's impacts on veterans' health, MVSO leaders did not endorse stronger policies, although some veterans did. Participants were largely unaware of the impact of tobacco use on military readiness. Establishment of better alliances among MVSOs and
civilian public health groups for mutual education about tobacco's many negative effects on the military's mission may be necessary to achieve a tobacco-free military.

-----

http://online.liebertpub.com/doi/abs/10.1089/acm.2017.0176

Mind–Body Therapy for Military Veterans with Post-Traumatic Stress Disorder: A Systematic Review.

Cushing Robin E. and Braun Kathryn L.

The Journal of Alternative and Complementary Medicine
September 2017, ahead of print
https://doi.org/10.1089/acm.2017.0176

Objective:
About a third of service members returning from post-9/11 deployment in Afghanistan and Iraq report combat-related mental health conditions, but many do not seek conventional treatment. Mind–body therapies have been offered as alternative approaches to decreasing post-traumatic stress disorder (PTSD), but no review of studies with veterans of post-9/11 operations was found. The objective of this study was to fill that gap.

Design:
A systematic literature review was conducted following the preferred items for systematic reviews and meta-analyses (PRISMA) guidelines. PubMed MeSH terms were used to capture articles reporting on the military population (veteran and veterans) with PTSD who received a portable mind–body intervention (e.g., mindfulness, mind–body therapy, and yoga). PubMed/MEDLINE and PsycINFO were searched. Studies were included if participants were a mixed group of war veterans, as long as some post-9/11 veterans were included. In addition, participants must have had a diagnosis of PTSD or subthreshold PTSD, and the PTSD must have been attributable to combat, rather than another event, such as sexual trauma or natural disaster.

Results:
Of 175 records identified, 15 met inclusion criteria. Studies reported on seated or gentle yoga that included breath work, meditation, mantra repetition, or breathing exercises. For 14 of the 15 studies, study retention was 70% or higher. Overall, studies reported significant improvements in PTSD symptoms in participants in these interventions.
Although each study included post-9/11 veterans, about 85% of participants were from other conflicts, predominantly Vietnam.

Conclusion:
Although findings were positive, future studies are needed to evaluate the short- and long-term impact of mind–body therapies on larger samples of post-9/11 veterans and to address research questions related to broadening service member and veteran participation in these therapies.

https://link.springer.com/chapter/10.1007/7854_2017_31

Sleep Disruption, Safety Learning, and Fear Extinction in Humans: Implications for Posttraumatic Stress Disorder.

Straus L.D., Drummond S.P., Risbrough V.B., Norman S.B.

In: Current Topics in Behavioral Neurosciences. Springer, Berlin, Heidelberg 2017
https://doi.org/10.1007/7854_2017_31

Fear learning is critical in the development and maintenance of posttraumatic stress disorder (PTSD) symptoms, and safety learning and extinction are necessary for recovery. Studies in animal models suggest that sleep disruption, and REM sleep fragmentation in particular, interfere with safety learning and extinction processes, and recently, studies are extending these findings to humans. A discussion of the human literature is presented here, which largely consists of experimental studies in healthy human control subjects. A theoretical model for the relationship between fear learning, sleep disruption, and impaired safety learning and extinction is proposed, which provides an explanatory framework for sleep disruption and its relationship to PTSD. Overall, findings suggest that sleep disruption plays a role in the development and maintenance of PTSD symptoms, and thus presents an important modifiable target in PTSD treatment.
Links of Interest

Identify, Intervene: Help Your Loved One with TBI

How Brain Injury Affects Sleep Cycles

No rest for the weary: Lack of sleep threatens safety and readiness

DoD official: States 'spotty' in easing military spouses' licensing burdens

Getting ZZZZs: Military sleep clinics keep troops on their toes by shutting their eyes

First Prescription App for Substance Abuse Approved by FDA

Expert addresses top clinical challenges in substance use disorder treatment

No Quick Fixes: Evidence-Based Treatment for Trauma and PTSD
https://www.goodtherapy.org/blog/no-quick-fixes-evidence-based-treatment-for-trauma-ptsd-0919175

The Neurobiology of Fear-Based Learning—and Unlearning

Navy issues new sleep and watch schedule rules for the surface fleet
Air Force’s top enlisted pledges transgender airmen will be treated with respect

This Algorithm Can Tell How Much Pain You’re In

Federal agencies partner for military and veteran pain management research

Three Suicide Prevention Methods Livesaving, 'Highly' Cost-effective

Stopping antidepressants tied to increased relapse risk

Following Up with Suicidal Patients in the Military: Preparation is Key

One Small Act Can Save a Life
https://www.dvidshub.net/news/248856/one-small-act-can-save-life

Commentary: Suicide-prevention efforts on right path, but VA, lawmakers can't rest

Top military general says he didn't back ban on transgender troops

New Thinking Questions Gold Standard Status for Cognitive Behavioral Therapy (CBT)

Preparing for potential PTSD triggers after PBS Vietnam War documentary
https://www.healio.com/psychiatry/ptsd/news/online/(9cb41897-cd05-4f2a-806f-dd133fc8eabf)/preparing-for-potential-ptsd-triggers-after-pbs-vietnam-war-documentary
Hiring new staff remains a problem for VA's suicide prevention efforts

Don't abandon our female veterans to staggering risk of suicide

-----

Resource of the Week -- Suicide Prevention Resources: Read Them, Share Them

September is recognized as Suicide Prevention Awareness Month in the Defense Department, and also in mental health communities worldwide. At the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE) our mission is to bring the military community resources on psychological health and traumatic brain injury prevention and treatment, which ultimately helps in the battle against suicide.

We know that one of the keys to suicide prevention is getting the right resources to the right people at the right time. We rounded up some must-bookmark suicide prevention resources for everyone within the military community – service members, veterans, providers, family members, caregivers and friends. Please take a look and if you find any of them helpful, please share with others.

-----