

# CDP



## Research Update -- September 13, 2018

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#### Special Section Suicide Prevention Month

- Heterogeneity in Short-Term Suicidal Ideation Trajectories: Predictors of and Projections to Suicidal Behavior.
- Smartphones, Sensors, and Machine Learning to Advance Real-Time Prediction and Interventions for Suicide Prevention: A Review of Current Progress and Next Steps.
- Risk factors of suicidal ideation in a population of UK military veterans seeking support for mental health difficulties.
- Life after loss: Comparing student service member/veteran and civilian mental health characteristics among individuals exposed to death by suicide.
- Reaching Those at Risk for Psychiatric Disorders and Suicidal Ideation: Facebook Advertisements to Recruit Military Veterans.
- A Genome-Wide Association Study of Suicide Attempts and Suicidal Ideation in U.S. Military Veterans.

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- Treatment of trauma related anger in operation enduring freedom, operation Iraqi freedom, and operation New Dawn veterans: Rationale and study protocol.

- Death, Trauma and God: The Effect of Military Deployments on Religiosity.
- COMISA (Comorbid Insomnia and Sleep Apnea): a Practical Approach.
- The Phenomenology of Military Sexual Trauma Among Women Veterans.
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- Problems with the dissociative subtype of posttraumatic stress disorder in DSM-5.
- Explaining Variability in Therapist Adherence and Patient Depressive Symptom Improvement: The Role of Therapist Interpersonal Skills and Patient Engagement.
- Clinical review of user engagement with mental health smartphone apps: evidence, theory and improvements.
- Videoconferencing psychological therapy and anxiety: a systematic review.
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- Trajectory of Postconcussive Symptoms 12-Months Post-Deployment in Soldiers with and without Mild Traumatic Brain Injury - Warrior STRONG Study.
- Posttraumatic stress disorder and cigarette smoking: A systematic review.
- Patterns of conventional and complementary non-pharmacological health practice use by US military veterans: a cross-sectional latent class analysis.
- Links of Interest
- Resource of the Week: Evaluation of the Department of Veterans Affairs Mental Health Services (National Academies)

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<https://onlinelibrary.wiley.com/doi/abs/10.1111/sltb.12480>

## **Heterogeneity in Short-Term Suicidal Ideation Trajectories: Predictors of and Projections to Suicidal Behavior.**

Nicholas P. Allan PhD, Daniel F. Gros PhD, Cynthia L. Lancaster MS, Kevin G. Saulnier BA, Tracy Stecker PhD

Suicide and Life-Threatening Behavior

First published: 25 June 2018

<https://doi.org/10.1111/sltb.12480>

### Objective

Little is known about suicidal ideation stability, including whether stability is heterogeneous or homogeneous between individuals. Studies of this kind are necessary to understand the progression from suicidal ideation to action.

### Method

This study examined suicidal ideation trajectories, using growth mixture modeling, in a sample of 359 past/current military service members (M age = 32.1 years, SD = 7.7; 88.3% male). Self-reported suicidal ideation information was collected at baseline and follow-up sessions at months 1, 3, 6, and 12. Following extraction of the best-fitting solution, predictors of trajectory status were examined and trajectory status was used to predict suicidal behavior between baseline and month 12 assessments.

### Results

Results revealed four trajectories, Low-Stable (n = 125), Moderate-Stable (n = 101), High-Stable (n = 76), and High-Rapidly Declining (n = 57). In general, the High-Stable trajectory had the highest levels of perceived burdensomeness, thwarted belongingness, PTSD symptoms, and drug use. The High- and Moderate-Stable trajectories had the highest rates of suicidal behavior between baseline and month 12.

### Conclusions

Suicidal ideation, even in individuals with elevated ideation, is not a homogeneous construct over time. Stability of suicidal ideation might be an important risk factor, even if ideation is only moderately elevated.

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<https://link.springer.com/article/10.1007/s11920-018-0914-y>

## **Smartphones, Sensors, and Machine Learning to Advance Real-Time Prediction and Interventions for Suicide Prevention: a Review of Current Progress and Next Steps.**

John Torous, Mark E. Larsen, Colin Depp, Theodore D. Coscolan Barnett, Matthew K. Nock, Joe Firth

Current Psychiatry Reports

July 2018, 20:51

DOI <https://doi.org/10.1007/s11920-018-0914-y>

### Purpose of Review

As rates of suicide continue to rise, there is urgent need for innovative approaches to better understand, predict, and care for those at high risk of suicide. Numerous mobile and sensor technology solutions have already been proposed, are in development, or are already available today. This review seeks to assess their clinical evidence and help the reader understand the current state of the field.

### Recent Findings

Advances in smartphone sensing, machine learning methods, and mobile apps directed towards reducing suicide offer promising evidence; however, most of these innovative approaches are still nascent. Further replication and validation of preliminary results is needed.

### Summary

Whereas numerous promising mobile and sensor technology based solutions for real time understanding, predicting, and caring for those at highest risk of suicide are being studied today, their clinical utility remains largely unproven. However, given both the rapid pace and vast scale of current research efforts, we expect clinicians will soon see useful and impactful digital tools for this space within the next 2 to 5 years.

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<https://jramc.bmj.com/content/early/2018/06/26/jramc-2018-000921>

**Risk factors of suicidal ideation in a population of UK military veterans seeking support for mental health difficulties.**

Larissa Harden and D Murphy

Journal of the Royal Army Medical Corps

Published Online First: 27 June 2018

doi: 10.1136/jramc-2018-000921

**Background** Little has been reported regarding the risk factors of suicidal ideation in individuals once they have left the military in the UK. The aim of this paper was to explore the risk factors associated with suicidal ideation in a sample of treatment-seeking veterans.

**Methods** Using a cross-sectional design, participants included veterans (n=144) seeking treatment from a national mental health charity in the UK. Individuals completed questionnaires regarding their military experiences, pre-enlistment factors and health. Data were then linked to risk assessments extracted from clinical records.

**Results** After controlling for relevant variables, suicidal ideation was significantly higher in veterans who were unemployed (OR 8.01; 95% CI 1.79 to 35.80), were early service leavers (OR 8.46; 95% CI 2.21 to 32.35) and those with a history of childhood adversity (OR 6.92; 95% CI 2.10 to 22.82). In addition, taking longer than 5 years to seek help was associated with a reduced risk of suicidal ideation (OR 0.10; 95% CI 0.06 to 0.87). There was no association between health outcomes and suicidal ideation.

**Conclusions** Risk factors associated with suicidal ideation in this sample of veterans included: being unemployed, an early service leaver, taking less than 5 years to seek help and experiencing preservice adversity.

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<https://www.tandfonline.com/doi/abs/10.1080/07448481.2018.1469500>

**Life after loss: Comparing student service member/veteran and civilian mental health characteristics among individuals exposed to death by suicide.**

Jason I. Chen, Melanie L. Bozzay, Maureen F. Monahan, Kim Gryglewicz, Gabriela Romero, Lindsey H. Steding, LaDonna L. Gleason & Marc S. Karver

Journal of American College Health  
Accepted author version posted online: 28 Jun 2018  
DOI: 10.1080/07448481.2018.1469500

**Objective:**

This study evaluated mental health characteristics and beliefs of student service members/veterans (SSM/V) who have been exposed to another's death by suicide.

**Participants:**

A total of 39 SSM/Vs exposed to suicide and 32 SSM/Vs not exposed to suicide were sampled from a larger, epidemiological survey. An age- and gender-matched group of 39 civilian (C) students was drawn from a larger sample of individuals exposed to suicide.

**Methods:**

Data were collected as part of an internet-based, campus needs survey that occurred in Fall 2014. Participants were asked to complete measures about suicide-related behaviors, suicide prevention, help-seeking, and demographics.

**Results:**

SSM/Vs exposed to suicide had more positive mental health/suicide prevention beliefs than SSM/Vs not exposed to suicide. Cs exposed to suicide were not significantly different from either group. Unique help-seeking patterns were also identified.

**Conclusions:** The current study identifies unique characteristics of SSM/Vs exposed to suicide that may inform prevention programming.

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<http://mental.jmir.org/2018/3/e10078/>

**Reaching Those At Risk for Psychiatric Disorders and Suicidal Ideation:  
Facebook Advertisements to Recruit Military Veterans.**

Teo AR, Liebow SB, Chan B, Dobscha SK, Graham AL

JMIR Ment Health  
2018; 5(3): e10078  
DOI: 10.2196/10078

#### Background:

Younger military veterans are at high risk for psychiatric disorders and suicide. Reaching and engaging veterans in mental health care and research is challenging. Social media platforms may be an effective channel to connect with veterans.

#### Objective:

This study tested the effectiveness of Facebook advertisements in reaching and recruiting Iraq and Afghanistan-era military veterans in a research study focused on mental health.

#### Methods:

Facebook ads requesting participation in an online health survey ran for six weeks in 2017. Ads varied imagery and headlines. Validated instruments were used to screen for psychiatric disorders and suicidality. Outcomes included impressions, click-through rate, survey completion, and cost per survey completed.

#### Results:

Advertisements produced 827,918 impressions, 9,527 clicks, and 587 survey completions. Lack of enrollment in Veterans Affairs health care (193/587, 33%) and positive screens for current mental health problems were common, including posttraumatic stress disorder (266/585, 45%), problematic drinking (243/584, 42%), major depression (164/586, 28%), and suicidality (132/585, 23%). Approximately half of the survey participants (285/587, 49%) were recruited with just 2 of the 15 ads, which showed soldiers marching tied to an “incentive” or “sharing” headline. These 2 ads were also the most cost-effective, at US \$4.88 and US \$5.90 per participant, respectively. Among veterans with current suicidal ideation, the survey-taking image resulted in higher survey completion than the soldiers marching image ( $P=.007$ ).

#### Conclusions:

Facebook advertisements are effective in rapidly and inexpensively reaching military veterans, including those at risk for mental health problems and suicidality, and those not receiving Veterans Affairs health care. Advertisement image and headlines may help optimize the effectiveness of advertisements for specific subgroups.

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<https://www.sciencedirect.com/science/article/pii/S0165178118305833>

**A Genome-Wide Association Study of Suicide Attempts and Suicidal Ideation in U.S. Military Veterans.**

Nathan A. Kimbrel, Melanie E. Garrett, Michelle F. Dennis, VA Mid-Atlantic Mental Illness Research, Education, and Clinical Center Workgroup, ... Jean C. Beckham

Psychiatry Research

Available online 17 July 2018

<https://doi.org/10.1016/j.psychres.2018.07.017>

## Highlights

- Death by suicide and suicidal behavior are major concerns among U.S. military veterans.
- We conducted a GWAS of suicide attempts and suicidal ideation in U.S. veterans.
- The gene most significantly associated with suicide attempts was KCNMB2.
- KCNMB2 plays a key role in neuronal excitability.
- Replication analyses provided additional support for the role of ABI3BP in suicide.

## Abstract

Death by suicide and suicidal behavior are major concerns among U.S. military veterans; however, no genome-wide association studies (GWAS) studies of suicidal behavior have been conducted among U.S. military veterans to date, despite the elevated rate of suicidal behavior observed within this population. Accordingly, the primary objective of the present research was to conduct the first GWAS of suicide attempts and suicidal ideation in a large and well-characterized sample of U.S. military veterans. The gene most significantly associated ( $p=9.28 \times 10^{-7}$ ) with suicide attempts was the Potassium Calcium-Activated Channel Subfamily M Regulatory Beta Subunit 2 (KCNMB2) gene, which plays a key role in neuronal excitability. In addition, replication analyses provided additional support for the potential role of the ABI Family Member 3 Binding Protein (ABI3BP) gene in the pathogenesis of suicidal behavior, as numerous nominal associations were found between this gene and both suicide attempts and suicidal ideation. Additional work aimed at replicating and extending these findings is needed.

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<https://www.sciencedirect.com/science/article/pii/S2451865418300449>

## **Treatment of trauma related anger in operation enduring freedom, operation Iraqi freedom, and operation New Dawn veterans: Rationale and study protocol.**

M. Tracie Shea, Jennifer Lambert, Madhavi K. Reddy, Candice Presseau, ... Robert L. Stout

Contemporary Clinical Trials Communications

Available online 24 August 2018

<https://doi.org/10.1016/j.conctc.2018.08.011>

### Background

Problems with anger and aggression are highly prevalent in Veterans of multiple war eras, including the most recent conflicts in Afghanistan (Operation Enduring Freedom; OEF) and Iraq (Operation Iraqi Freedom; OIF). The consequences of these problems, such as increased rates of divorce, domestic violence, occupational instability, arrests and incarceration, are often devastating. Despite the seriousness of these problems, relatively little is known about effective treatments for anger in Veterans.

### Method and design

This paper describes the rationale and study protocol of a randomized controlled trial comparing an adapted cognitive behavioral intervention (CBI) with an active control condition (supportive intervention, SI) for the treatment of anger problems in OEF/OIF Veterans. The sample includes 92 OEF/OIF Veterans, randomized to CBI or SI. Both treatments include 12 weekly, 75-min individual sessions. Participants are assessed at baseline, after sessions 4 and 8, at post-treatment, and at 3 and 6 months post-treatment. Primary outcomes are reduction in anger and aggression; secondary outcomes are improved functioning and quality of life. We hypothesize that CBI will be associated with significantly more improvement than SI on primary and secondary measures.

### Discussion

Findings from this study will help to address the gap in evidence for effective treatments for anger in Veterans. The use of an active control condition will provide a stringent test of the effects of CBI beyond that of common factors of psychotherapy such as therapeutic relationship, mobilization of hope, and support. Findings have the potential to improve treatment outcomes for Veterans struggling with post-deployment anger problems.

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<http://www.nber.org/papers/w24954>

## **Death, Trauma and God: The Effect of Military Deployments on Religiosity.**

Resul Cesur, Travis Freidman, Joseph J. Sabia

NBER Working Paper No. 24954

Issued in August 2018

Learning to cope with man's mortality is central to the teachings of the world's major religions. However, very little is known about the impact of life-and-death trauma on religiosity. This study exploits a natural experiment in military deployments to estimate the causal effect of traumatic shocks on religiosity. We find that combat assignment is associated with a substantial increase in the probability that a serviceman subsequently attends religious services regularly and engages in private prayer. Combat-induced increases in religiosity are largest for enlisted servicemen, those under age 25, and servicemen wounded in combat. The physical and psychological burdens of war, as well as the presence of military chaplains in combat zones, emerge as possible mechanisms.

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<https://link.springer.com/article/10.1007/s40675-018-0127-2>

## **COMISA (Comorbid Insomnia and Sleep Apnea): a Practical Approach.**

Matthew S. Brock, Shannon N. Foster, Vida Motamedi, Vincent Mysliwicz

Current Sleep Medicine Reports

First Online: 23 August 2018

<https://doi.org/10.1007/s40675-018-0127-2>

### **Purpose of Review**

Comorbid insomnia and sleep apnea (COMISA) is prevalent and carries significant morbidity but lacks a standardized diagnostic and therapeutic approach. Through a critical evaluation of the literature, we propose a novel approach to COMISA that

incorporates the underlying etiology and existence of different phenotypes in this disorder.

### Recent Findings

A low arousal threshold and/or hyperarousability may underlie the development of COMISA. Pretreatment symptoms may serve as baseline predictors of response to positive airway pressure therapy in COMISA and differentiate insomnia secondary to OSA from independent insomnia. A variety of therapeutic strategies for COMISA have been put forward with evidence supporting the use of monotherapy or combined therapy in the appropriate clinical setting.

### Summary

Patients with either OSA or insomnia must be effectively screened for both disorders based on presenting symptoms and response to therapy. Recognition of the underlying etiology of COMISA and the different COMISA phenotypes can guide therapy.

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<http://journals.sagepub.com/doi/abs/10.1177/0361684318791154>

## **The Phenomenology of Military Sexual Trauma Among Women Veterans.**

Lisa M. Brownstone, Brooke Dorsey Holliman, Holly R. Gerber, Lindsey L. Monteith

Psychology of Women Quarterly

First Published August 23, 2018

<https://doi.org/10.1177/0361684318791154>

Although researchers have examined health outcomes among survivors of military sexual trauma, knowledge regarding the phenomenology of military sexual trauma among women veterans remains limited. We used a qualitative, phenomenological approach to describe the experience, context, and perceived effects of military sexual trauma among women veterans. Thirty-two cisgender female military sexual trauma survivors participated in interviews, which we analyzed through thematic analysis. The following themes emerged: (1) sexual harassment: “expected,” “constant,” and “normal”; (2) silencing and disempowerment: “If you want a career, then shut up”; (3) changed attitudes toward the military: “I lost faith”; (4) loss of relational trust: “I can protect me if I’m not involved with someone”; (5) survivor internalization of messages conveyed by military sexual trauma: “If I looked different, none of this would have happened”; (6) coping by escape and avoidance: “I put my head in the sand and hoped it would go

away”; and (7) a path to healing through validation and justice: “You’ll get through it.” Results suggest the importance of increasing stakeholders’ knowledge regarding military sexual trauma complexities and contexts. Military sexual trauma survivors should be heard, believed, and supported in pursuing justice. We also suggest cultural shifts and continued efforts to prevent military sexual trauma.

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<https://www.sciencedirect.com/science/article/pii/S0272735817302465>

### **Posttraumatic stress disorder and relationship functioning: A comprehensive review and organizational framework.**

Sarah B. Campbell, Keith D. Renshaw

Clinical Psychology Review

Volume 65, November 2018, Pages 152-162

<https://doi.org/10.1016/j.cpr.2018.08.003>

#### Highlights

- Presents organizational framework of links between PTSD and relationship functioning.
- Specific elements of psychopathology, mediators, and moderators are discussed.
- Moderators are categorized as individual, relational, or environmental.
- Clinical implications of findings are discussed.
- Recommendations for future research are made.

#### Abstract

Posttraumatic stress disorder (PTSD) is associated with impairments in relationship functioning. Beyond the abundance of research that has demonstrated this basic link, more recent research has begun to explore possible mediators and moderators of this association. The present paper reviews and synthesizes existing literature in the context of an overarching organizational framework of potential ways in which PTSD impacts relationship functioning. The framework organizes findings in terms of specific elements of PTSD and comorbid conditions, mediators (factors that are posited to explain or account for the association), and moderators (factors that are posited to alter the strength of the association). Specific symptoms of PTSD, comorbid symptoms, and many of the potential mediators explored have extensive overlap, raising questions of possible tautology and redundancy in findings. Some findings suggest that non-specific symptoms, such as depression or anger, account for more variance in relationship

impairments than trauma-specific symptoms, such as re-experiencing. Moderators, which are characterized as individual, relational, or environmental in nature, have been the subject of far less research in comparison to other factors. Recommendations for future research and clinical implications of the findings reviewed are also presented.

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<http://psycnet.apa.org/record/2018-36068-001>

### **Intrarural variation in mental health status and help-seeking of veterans in the upper midwest.**

Beehler, S., Chiou, S. H. (S.), Balmer, B., & Li, X

Journal of Rural Mental Health

Advance online publication.

<http://dx.doi.org/10.1037/rmh0000099>

Rural-urban disparities in the prevalence of mental disorders and in access to mental health care among veterans have been documented, but no consistent pattern has emerged. Mixed research findings may be because of broad distinctions between rural and urban that mask intrarural variation in veteran mental health. This study explored the extent to which location and veteran status predict lifetime prevalence of mental illness (depression and anxiety or panic attacks), delayed help seeking for an emotional problem, binge drinking, and general health. We analyzed survey data from a regionally representative survey of residents of 9 counties in northeastern Minnesota and northwestern Wisconsin (N = 4,050). Generalized linear models were used to analyze the effects of veteran status, location, and an interaction term on 5 dependent variables. Veterans in the sample (n = 124) were more rural, older, and more male than nonveterans. Within the subgroup of veterans, those who lived in the most rural areas reported the lowest lifetime prevalence of depression and the best general health. Compared with nonveterans, veterans living in the least rural areas reported poorer general health and significantly higher lifetime rates of depression. Our findings show a health advantage for the most rural veterans, extending previous research by analyzing intrarural variation in a community-based sample of veterans. Analyses of more refined geographic categories are needed to identify meaningful disparity patterns and inform community-based interventions to promote veteran mental health. (PsycINFO Database Record (c) 2018 APA, all rights reserved)

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<https://www.ncbi.nlm.nih.gov/pubmed/29132272>

J Neuropsychiatry Clin Neurosci. 2018 Spring;30(2):91-100. doi:  
10.1176/appi.neuropsych.17090180. Epub 2017 Nov 14

**Traumatic Brain Injury and Posttraumatic Stress Disorder: Conceptual,  
Diagnostic, and Therapeutic Considerations in the Context of Co-Occurrence.**

Vasterling JJ, Jacob SN, Rasmusson A

The events leading to traumatic brain injury (TBI) are often psychologically traumatic (e.g., motor vehicle accidents) or occur within a broader context of psychological trauma, such as military combat or recurrent interpersonal violence. In such cases, posttraumatic stress disorder (PTSD) may develop and serve to complicate TBI recovery. Likewise, brain trauma may impede emotional resolution following psychological trauma exposure. This article addresses comorbid PTSD and TBI, including the epidemiology of PTSD following TBI; the clinical presentation of the comorbidity; potential mechanisms that complicate recovery from psychological trauma and TBI when they co-occur; and considerations for the clinical management of PTSD in the context of TBI, including implications for both psychosocial and psychopharmacological PTSD treatments. Although the authors address the full spectrum of TBI severity, because PTSD more commonly co-occurs with mild TBI, compared with moderate and severe TBI, the authors focus in particular on mild TBI.

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<https://psychiatryonline.org/doi/full/10.1176/appi.ajp-rj.2018.130902>

**Military Culture: Working With Veterans.**

Gregory Burek, M.D., M.S.

American Journal of Psychiatry

Published Online: 1 Sep 2018

<https://doi.org/10.1176/appi.ajp-rj.2018.130902>

According to the U.S. Department of Veterans Affairs (VA), around 70% of physicians in the United States have received some of their training with the VA. A total of 178 of 183 U.S. medical schools are affiliated with the VA, and 43,565 medical residents, 24,683 medical students, and 463 advanced fellows received some or all of their clinical

training within the VA system in 2017 (1). Despite this training, most clinicians do not feel adequately prepared to provide high-quality care for veterans. In a recent study, only 13% of mental health providers met readiness criteria for culture competency in treating veterans (2).

To better serve this population, it is imperative that clinicians understand military culture. The present article provides clinicians with useful information to consider when treating active-duty service members and veterans.

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<https://www.sciencedirect.com/science/article/pii/S2468749918300206>

## **Problems with the dissociative subtype of posttraumatic stress disorder in DSM-5.**

C.A.Ross

European Journal of Trauma & Dissociation

Available online 31 August 2018

<https://doi.org/10.1016/j.ejtd.2018.08.005>

The diagnostic criteria set for posttraumatic stress disorder (PTSD) has gradually evolved from DSM-III, to DSM-IV, to DSM-5. Besides a broadening of the event criterion for PTSD, the symptom domain now involves many different brain circuits and types of symptoms, including: fear and anxiety; anger and aggression; negative cognition and mood; hypo-arousal; and dissociative symptoms. The dissociative subtype of PTSD in DSM-5 is defined by the presence of depersonalization or derealization. However, the diagnostic criteria for PTSD also include dissociative flashbacks and dissociative amnesia. If these symptoms were included in the definition of the dissociative type of PTSD in future editions of the manual, then most cases of PTSD would be dissociative in nature, and non-dissociative cases would be a minority subtype. There does not appear to be any sound conceptual reason for excluding amnesia and flashbacks from the criteria for dissociative PTSD.

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<https://onlinelibrary.wiley.com/doi/abs/10.1002/cpp.2332>

## **Explaining Variability in Therapist Adherence and Patient Depressive Symptom Improvement: The Role of Therapist Interpersonal Skills and Patient Engagement.**

Evelien Snippe, Maya J. Schroevers, Annika Tovote, Robbert Sanderman, Paul M.G. Emmelkamp, Joke Fleer

Clinical Psychology & Psychotherapy

First published: 10 September 2018

<https://doi.org/10.1002/cpp.2332>

Understanding why therapists deviate from a treatment manual is crucial to interpret the mixed findings on the adherence-outcome association. The current study aims to examine whether therapists' interpersonal behaviors and patients' active engagement predict treatment outcome and therapist adherence in Cognitive Behavior Therapy (CBT) and Mindfulness-Based Cognitive Therapy (MBCT) for depressive symptoms. In addition, the study explores rater's explanations for therapist non-adherence at sessions in which therapist adherence was low. Study participants were 61 patients with diabetes and depressive symptoms who were randomized to either CBT or MBCT. Depressive symptoms were assessed by the BDI-II. Therapist adherence, therapist interpersonal skills (i.e., empathy, warmth, and involvement), patients' active engagement, and reasons for non-adherence were assessed by two independent raters (based on digital video recordings). Therapist adherence, therapists' interpersonal skills, and patients' active engagement did not predict post-treatment depressive symptom reduction. Patients' active engagement was positively associated with therapist adherence in CBT and in MBCT. This indicates that adherence may be hampered when patients are not actively engaged in treatment. Observed reasons for non-adherence mostly covered responses to patient's in-session behavior. The variety of reasons for therapist non-adherence might explain why therapist adherence was not associated with outcomes of CBT and MBCT.

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<https://ebmh.bmj.com/content/21/3/116>

**Clinical review of user engagement with mental health smartphone apps: evidence, theory and improvements.**



John Torous, Jennifer Nicholas, Mark E Larsen, Joseph Firth, Helen Christensen

Evidence-Based Mental Health

2018;21:116-119

<http://dx.doi.org/10.1136/eb-2018-102891>

The potential of smartphone apps to improve quality and increase access to mental health care is increasingly clear. Yet even in the current global mental health crisis, real-world uptake of smartphone apps by clinics or consumers remains low. To understand this dichotomy, this paper reviews current challenges surrounding user engagement with mental health smartphone apps. While smartphone engagement metrics and reporting remains heterogeneous in the literature, focusing on themes offers a framework to identify underlying trends. These themes suggest that apps are not designed with service users in mind, do not solve problems users care most about, do not respect privacy, are not seen as trustworthy and are unhelpful in emergencies. Respecting these current issues surrounding mental health app engagement, we propose several solutions and highlight successful examples of mental health apps with high engagement. Further research is necessary to better characterise engagement with mental health apps and identify best practices for design, testing and implementation.

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<https://academic.oup.com/fampra/advance-article-abstract/doi/10.1093/fampra/cmy072/5090669>

### **Videoconferencing psychological therapy and anxiety: a systematic review.**

M Blake Berryhill, Anne Halli-Tierney, Nathan Culmer, Nelle Williams, Alex Betancourt, Michael King, Hannah Ruggles

Family Practice

Published: 04 September 2018

<https://doi.org/10.1093/fampra/cmy072>

Background

The growing worldwide prevalence of individuals with anxiety disorders has increased needs for mental health services. Due to limited number of mental health providers and community resources, especially in low-income countries, individuals often seek services from primary care settings. Through collaborative care models, services via

telemedicine address the mental health provider shortage. While previous reviews show telemedicine effectively treats mental illness, a gap exists for reviews on videoconferencing psychological therapy for anxiety treatment.

#### Objective

This systematic review aims to summarize videoconferencing psychological therapy for anxiety disorder treatment.

#### Methods

Database searches were performed with PubMed, PsychINFO and Embase. Inclusion criteria identified controlled and uncontrolled studies evaluating videoconferencing psychological therapy. Studies were appraised using the Effective Public Health Practice Project Quality Assessment tool. Data collected included research design, sample size, intervention details, outcome results, intervention effect size and differences between videoconferencing psychological therapy and face-to-face therapy.

#### Results

The search revealed 1253 articles, with 21 meeting inclusion criteria. Sample sizes ranged from 1 to 121 participants; cognitive-behavioral therapy was most commonly evaluated. Participants' diagnoses included panic disorder with and without agoraphobia, generalized anxiety disorder, social anxiety disorder, social phobia and hypochondriasis. Three studies occurred in outpatient health care settings. Fourteen studies reported statistically significant improvement on anxiety measures; 11 reported clinically significant improvements. Effect sizes ranged from small to very large, and all controlled studies found no differences between videoconferencing and face-to-face groups.

#### Conclusion

Results provide promise for evidence-based interventions delivered via videoconferencing psychological therapy. More rigorous research is needed in various settings and populations.

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<http://psycnet.apa.org/record/2018-33712-001>

**Use of reflective journaling to understand decision making regarding two evidence-based psychotherapies for PTSD: Practice implications.**

Cook, J. M., Simiola, V., McCarthy, E., Ellis, A., & Stirman, S. W.

Practice Innovations  
2018; 3(3), 153-167.  
<http://dx.doi.org/10.1037/pri0000070>

As part of a longitudinal investigation on implementation of 2 evidence-based psychotherapies (EBPs) for posttraumatic stress disorder, psychotherapists from 38 Department of Veterans Affairs residential treatment programs across the United States were asked to complete reflective journals every 4 months for a 1-year time period in regard to their successes and challenges in using prolonged exposure and cognitive processing therapy. This paper provides content analysis on the reflective journals of 24 of these providers. Five main themes were identified: EBPs are great but not sufficient for patients in residential treatment with chronic posttraumatic stress disorder and complicated life circumstances, and thus, more treatment is necessary after discharge. Modifications were made or thought needed for optimal outcome and successful delivery of these 2 EBPs; some providers blended aspects of prolonged exposure and cognitive processing therapy; what happens when providers and patients do not agree on choice of which EBP to first implement; and provider concerns on when to discontinue an EBP. Reflective journaling appears to be a promising way for trainers and treatment developers to gather important information about the clinical application and decision-making process for front-line providers, which may offer insight into how to improve EBP implementation and sustainability. Incorporating reflective journaling and strategies for accomplishing this into training, supervision, and consultation may also be 1 strategy for increasing feedback, expanding implementation, and informing ways to increase sustainability of EBPs in populations with multiple clinical and psychosocial needs. (PsycINFO Database Record (c) 2018 APA, all rights reserved)

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<https://www.cambridge.org/core/journals/psychological-medicine/article/attention-to-threat-in-posttraumatic-stress-disorder-as-indexed-by-eyetracking-indices-a-systematic-review/C1DD77291673690919F00699A0CCA1C7>

**Attention to threat in posttraumatic stress disorder as indexed by eye-tracking indices: a systematic review.**

Lazarov, A., Suarez-Jimenez, B., Tamman, A., Falzon, L., Zhu, X., Edmondson, D., & Neria, Y.

## Background

Cognitive models of posttraumatic stress disorder (PTSD) implicate threat-related attentional biases in the etiology and phenomenology of the disorder. However, extant attentional research using reaction time (RT)-based paradigms and measures has yielded mixed results. Eye-tracking methodology has emerged in recent years to overcome several inherent drawbacks of RT-based tasks, striving to better delineate attentional processes.

## Methods

A systematic review of experimental studies examining threat-related attention biases in PTSD, using eye-tracking methodology and group-comparison designs, was conducted conforming to Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) guidelines. Studies were selected following a systematic search for publications between 1980 and December 2017 in PsycINFO, MEDLINE and the National Center for PTSD Research's Published International Literature on Traumatic Stress (PILOTS) database. Additional records were identified by employing the Similar Articles feature in PubMed, and the Cited Reference Search in ISI Web of Science. Reference sections of review articles, book chapters and studies selected for inclusion were searched for further studies. Ongoing studies were also sought through Clinicaltrials.gov.

## Results

A total of 11 studies ( $n = 456$  participants in total) were included in the final review. Results indicated little support for enhanced threat detection, hypervigilance and attentional avoidance. However, consistent evidence emerged for sustained attention on threat (i.e. attention maintenance) in PTSD.

## Conclusions

This review is the first to systematically evaluate extant findings in PTSD emanating from eye-tracking studies employing group-comparison designs. Results suggest that sustained attention on threat might serve as a potential target for therapeutic intervention.

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<https://academic.oup.com/aje/advance-article/doi/10.1093/aje/kwy199/5092643>

## **Trajectory of Postconcussive Symptoms 12-Months Post-Deployment in Soldiers with and without Mild Traumatic Brain Injury - Warrior STRONG Study.**

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Epidemiology

Published: 07 September 2018

<https://doi.org/10.1093/aje/kwy199>

Postconcussive symptoms are believed to resolve in days or months in most instances for civilian injuries, though recent evidence suggests that recovery may be slower for injuries sustained during military deployment. The present study is based on a cohort of recently deployed soldiers from two US Army military bases (Fort Carson and Fort Bragg, followed from 2009-2015). Soldiers with and without a recent history of a deployment mild traumatic brain injury (mTBI) were evaluated within days of return and at 3, 6, and 12-months. Those with mTBI were more likely than non-mTBI to endorse one or more postconcussive symptoms at a severe and or very severe level (47% vs. 21% baseline; aRR=1.7 95% CI: 1.51,1.93 all-time points) and remained significant after adjusting for PTSD (aRR=1.34 95%CI: 1.41,1.82). Prevalence and relative risks (for three of most common baseline symptoms remained constant over time: sleep problems (RR=2.19), forgetfulness (RR=2.56), irritability (RR=2.73). The pattern was slightly different for headache, decreasing from RR=3.44 at baseline to RR=3.26 at 12 months, due to increased prevalence of headache in those without mTBI. . The prevalence of clinically relevant postconcussive symptoms remained relatively constant over one year of follow-up, whether or not symptoms were associated with concussion. Service members with recent mTBI reported more symptoms than non-mTBI at all time-points.

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<https://onlinelibrary.wiley.com/doi/abs/10.1002/da.22828>

## **Posttraumatic stress disorder and cigarette smoking: A systematic review.**

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Depression and Anxiety

First published: 07 September 2018

<https://doi.org/10.1002/da.22828>

## Background

Previous reviews of the PTSD and cigarette smoking literature showed high PTSD-smoking comorbidity and problematic smoking outcomes (Feldner et al., 2007, *Clinical Psychology Review*, 27, 141-150; Fu et al., 2007, *Nicotine & Tobacco Research*, 9, 1071-1076). However, past reviews also noted several prominent gaps in the literature, including a lack of etiological work examining underlying mechanisms and research on specialized PTSD-smoking treatments. The present review summarizes an extensive body of research conducted since the previous reviews targeting these areas of need.

## Methods

Literature searches identified 66 empirical studies specific to smoking and PTSD.

## Results

Smokers were approximately twice more likely to have PTSD than nonsmokers in the general population, and individuals with PTSD were approximately twice as likely to be current smokers. Smokers with PTSD evidenced more negative affect, trauma history, and comorbid psychiatric history, as well as quit attempts and higher relapse rates. PTSD symptoms were associated with expectations that smoking would reduce negative affect, which, in turn, was associated with increased smoking rate and nicotine dependence. Male sex was associated with nicotine dependence and PTSD avoidance, while the relationship between PTSD and smoking relapse due to withdrawal was stronger in females. Specialized, integrated PTSD and smoking cessation treatments showed promise in increasing quit success relative to standard care in randomized trials.

## Conclusions

Rates of PTSD-smoking co-occurrence remain high. Notable gains have been made in relevant epidemiological and etiological research, although more work is needed in trauma-specific subpopulations. Several promising specialized treatments for comorbid smoking-PTSD have been developed and empirically tested but require replication.

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<https://bmccomplementalmed.biomedcentral.com/articles/10.1186/s12906-018-2313-7>

## **Patterns of conventional and complementary non-pharmacological health practice use by US military veterans: a cross-sectional latent class analysis.**

Melvin T. Donaldson, Melissa A. Polusny, Rich F. MacLehose, Elizabeth S. Goldsmith, Emily M. Hagel Campbell, Lynsey R. Miron, Paul D. Thuras and Erin E. Krebs

BMC Complementary and Alternative Medicine  
2018; 18:246  
<https://doi.org/10.1186/s12906-018-2313-7>

### Background

Non-pharmacological therapies and practices are commonly used for both health maintenance and management of chronic disease. Patterns and reasons for use of health practices may identify clinically meaningful subgroups of users. The objectives of this study were to identify classes of self-reported use of conventional and complementary non-pharmacological health practices using latent class analysis and estimate associations of participant characteristics with class membership.

### Methods

A mailed survey (October 2015 to September 2016) of Minnesota National Guard Veterans from a longitudinal cohort (n = 1850) assessed current pain, self-reported overall health, mental health, substance use, personality traits, and health practice use. We developed the Health Practices Inventory, a self-report instrument assessing use of 19 common conventional and complementary non-pharmacological health-related practices. Latent class analysis was used to identify subgroups of health practice users, based on responses to the HPI. Participants were assigned to their maximum-likelihood class, which was used as the outcome in multinomial logistic regression to examine associations of participant characteristics with latent class membership.

### Results

Half of the sample used non-pharmacological health practices. Six classes of users were identified. “Low use” (50%) had low rates of health practice use. “Exercise” (23%) had high exercise use. “Psychotherapy” (6%) had high use of psychotherapy and support groups. “Manual therapies” (12%) had high use of chiropractic, physical therapy, and massage. “Mindfulness” (5%) had high use of mindfulness and relaxation practice. “Multimodal” (4%) had high use of most practices. Use of manual therapies

(chiropractic, acupuncture, physical therapy, massage) was associated with chronic pain and female sex. Characteristics that predict use patterns varied by class. Use of self-directed practices (e.g., aerobic exercise, yoga) was associated with the personality trait of absorption (openness to experience). Use of psychotherapy was associated with higher rates of psychological distress.

## Conclusions

These observed patterns of use of non-pharmacological health practices show that functionally similar practices are being used together and suggest a meaningful classification of health practices based on self-directed/active and practitioner-delivered. Notably, there is considerable overlap in users of complementary and conventional practices.

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## Links of Interest

Vets walk across US to draw attention to mental health fight

<https://www.militarytimes.com/veterans/2018/09/07/vets-walk-across-us-to-draw-attention-to-mental-health-fight/>

Soldier featured in 'King of the Hill' meme leans on training to rise above internet bullying

<https://www.stripes.com/news/soldier-featured-in-king-of-the-hill-meme-leans-on-training-to-rise-above-internet-bullying-1.546848>

Secretary promises VA will be more 'welcoming' to women veterans

<https://www.militarytimes.com/veterans/2018/09/07/secretary-promises-va-will-be-more-welcoming-to-women/>

Sexual Violence and Traumatic Memories

<https://www.psychologytoday.com/gb/blog/cravings/201809/sexual-violence-and-traumatic-memories>

Experts identify 10 research priorities for digital technology in mental health care

<https://www.healio.com/psychiatry/practice-management/news/online/{13a5a551-9c90-44d3-aa16-48b8570050f0}/experts-identify-10-research-priorities-for-digital-technology-in-mental-health-care>



Can Coffee and Nicotine Contribute to Your Anxiety?

<https://health.usnews.com/wellness/mind/articles/2018-09-07/can-coffee-and-nicotine-contribute-to-your-anxiety>

Sexual violence haunts women with vivid memories decades later

<https://www.sciencedaily.com/releases/2018/09/180905124708.htm>

Achieving the Promise of Suicidality Interventions: Managing vs. Treating Suicide Risk in Service Members

<http://www.pdhealth.mil/news/blog/achieving-promise-suicidality-interventions-managing-vs-treating-suicide-risk-service-members>

VA Study Will Compare Effectiveness of Two Leading PTSD Treatments

<https://www.military.com/daily-news/2018/09/10/va-study-will-compare-effectiveness-two-leading-ptsd-treatments.html>

Psychologist Alan Peterson Recognized for Veterans' PTSD Treatment Research

<https://therivardreport.com/psychologist-alan-peterson-recognized-for-veterans-ptsd-treatment-research/>

Is Computer-Assisted CBT Effective for Treating Depression?

<https://www.medscape.com/viewarticle/901550>

Air Force may investigate SpaceX CEO for smoking pot, while Canada greenlights its use for troops

<https://www.airforcetimes.com/news/your-air-force/2018/09/11/air-force-may-investigate-spacex-ceo-for-smoking-pot-while-canada-greenlights-its-use-for-troops/>

Lawmakers Urge VA Secretary to Offer Gender Reassignment Surgery to Vets

<https://www.military.com/daily-news/2018/09/11/lawmakers-urge-v-a-secretary-offer-gender-reassignment-surgery-vets.html>

VA undecided on whether to pay for sex reassignment surgery

<https://www.militarytimes.com/news/2018/09/12/va-undecided-on-whether-to-pay-for-sex-reassignment-surgery/>

VIDEO: Unruly traveler arrested after making scene at TIA because of flight delay (PTSD)

<https://www.abcactionnews.com/news/region-tampa/video-unruly-traveler-arrested-after-making-scene-at-tia-because-of-flight-delay>

Trailblazing female who became infantry Marine is getting kicked out for fraternization  
<https://www.marinecorpstimes.com/news/your-marine-corps/2018/09/12/trailblazing-female-who-became-infantry-marine-is-getting-kicked-out-for-fraternization/>

Student vet enrollment spikes at Ivy League schools  
<https://rebootcamp.militarytimes.com/news/education/2018/09/12/think-vets-like-you-dont-belong-at-ivy-league-schools-the-schools-may-disagree/>

VA establishes new research center focused on caregivers  
<https://www.militarytimes.com/news/2018/09/12/va-establishes-new-research-center-focused-on-caregivers/>

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**Resource of the Week: [Evaluation of the Department of Veterans Affairs Mental Health Services](#)**

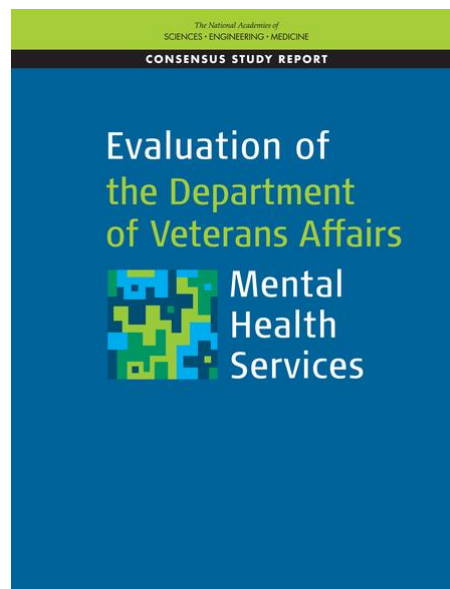
From [press release](#):

While the U.S. Department of Veterans Affairs (VA) provides mental health care of comparable or superior quality to care provided in private and non-VA public sectors, accessibility and quality of services vary across the VA health system, leaving a substantial unmet need for mental health services among veterans of the recent wars in Afghanistan and Iraq, says a new congressionally mandated report from the National Academies of Sciences, Engineering, and Medicine. A survey of these veterans developed and fielded by the committee that conducted the study found that approximately half of those who may have a need for mental health care do not use VA or non-VA services, indicating that a large proportion of veterans do not receive any treatment for conditions such as post-traumatic stress disorder, substance use disorder, or depression. In addition, more than half of veterans who screened positive in the survey for having a mental health care need do not perceive a need for mental health services.

Approximately 4 million U.S. service members took part in the wars in Afghanistan and Iraq. In Afghanistan, Operation Enduring Freedom (OEF) began on Oct. 7, 2001, and ended on Dec. 31, 2014. In Iraq, Operation Iraqi Freedom (OIF) began on March 20, 2003, and on Sept. 1, 2010, operations there continued under the name Operation New Dawn (OND). To help carry out its charge, the committee conducted site visits and sought input on the use of VA

mental health services directly from veterans of these wars, their families and caregivers, health care providers, and others at each of the Veterans Integrated Service Networks across the U.S.

A lack of awareness about how to connect with the VA for mental health care is pervasive among OEF/OIF/OND veterans, the report says. Among veterans who have a mental health care need and who have not sought VA mental health services, their main reasons for not doing so are that they do not know how to apply for VA mental health care benefits, they are unsure whether they are eligible, or they are unaware that VA offers these benefits.



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