

Veteran Evolution Therapy

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Abstract

Veterans are an independent culture, and the lack of contextual and culturally normed therapeutic modalities and interventions may explain the disparities in mental health treatment for Veterans and the staggering suicide rate (Cameron, 2023a). Mental health providers are ethically responsible for not implementing clinical interventions without cultural adaption or norming (Perera et al., 2020). Cultural competence impacts the development of therapeutic rapport and treatment outcomes. Utilizing a true experimental design, this research examines Veteran Evolution Therapy as it quickly develops as an evidence-based, culturally informed treatment intervention for Veterans and Military Service Members. Veteran Evolution Therapy is a revolutionary and culturally informed treatment with promising implications that outperform traditional Veterans Administration CBT programs by addressing primary presenting problems nearly 80% faster in some clinical applications.

Keywords

Veteran, Military, Culture, PTSD, VA

1. Introduction

Current psychological practices may support poor treatment outcomes and the suicide rate in the Veteran culture. Researchers have validated Veterans as an independent culture (Cameron, 2023b), and mental health providers are ethically obligated not to implement clinical interventions without cultural adaption or norming (Perera et al., 2020). Implementation of psychological interventions that have not been culturally normed has been shown to have negative consequences on treatment outcomes, poor therapeutic alliance, and may cause harm to the client (Bernal & Adames, 2017; Cabassa & Baumann, 2013).

Unexamined cultural values in research can directly affect therapeutic interactions. Since colonial America, military service members and Veterans have been

a part of the United States (Cameron, 2023b; Gentile et al., 2020). They have evolved along with society and are based on the political needs of the nation (Gentile et al., 2020). Today's Military and Veteran cultures are diverse, with varying genders, races, ethnicities, religious ideologies, sexual orientations, and socioeconomic statuses (Davis et al., 2020; Cameron, 2023b). Adequate and appropriate modeling is a cornerstone of psychological research (Oswald, 2020). Ineffective or inappropriate modeling can generalize hierarchies, relationship types, attributes, and cardinalities of the population being studied (Rosenthal et al., 2020). Boer et al. (2018) identified that errors in cross-cultural contexts result in systematic measurement errors; there are concerns about validity or inference, cultural variability, and universality when quantitative measures differ in construct or measure across cultures (Boer et al., 2018).

As of 2019, more than 18 million Veterans are in the United States, representing approximately 9% of the population. Thirty percent of active-duty service members serving in Iraq and Afghanistan were identified as having a mental health condition requiring therapeutic intervention. Yet, less than 50 percent of those service members will engage in mental health services (Department of Veterans Affairs, 2021). This does not account for other military operations that service members have experienced within the last 20 years. The deficit of contextual knowledge and culturally appropriate operational terminology means that civilians and researchers may not fully understand military service, military and veteran identities, and traditional family and social dynamics. Since Veterans were not identified in research as an independent culture until 2023 (Cameron, 2023a), researchers may not understand Military Service Members and Veterans, resulting in poor research designs, misinterpreted results, and interventions not properly normed for the Veteran culture.

Current research reflects significant biopsychosocial disparities between the health outcomes of Veterans and their civilian counterparts within the United States (Crytzer, 2019; Gobin et al., 2018; Soberay et al., 2018; Thomas et al., 2017; Trivedi et al., 2015). When compared to their civilian counterparts, research shows that Veterans are at a greater risk of suicidality (Jamieson et al., 2020), problematic substance use and substance use disorders (Hunsaker & Bush, 2018), pathological gambling and high-risk behaviors (Levy & Tracy, 2018), and a range of psychological and other medical concerns, despite the presence of protective factors, disproportionately, as compared to normed civilian peers (Grossbard et al., 2013).

Although Veterans have been a part of any nation's heritage, it wasn't until 2023 that researchers identified the Veteran culture as independent from Military Service Members (Cameron, 2023a). Veterans have been shown to underutilize the services available, including Veterans Administration services, explicitly intended for this culture (Brown & Bruce, 2016; Cheney et al., 2018). The well-documented concerns regarding Veterans' experiences are not understood by the civilian clinicians tasked with their care, who lack the contextual apprecia-

tion of their experiences (Cheney et al., 2018; Randles & Finnegan, 2021). Cheney et al. (2018) identified concern of being misunderstood or pathologized as one of the prominent barriers facing Veterans in accessing what they believe to be effective healthcare.

Mental health conditions commonly associated with returning Service Members and stressors transitioning from military service have been well documented. Common mental health conditions such as PTSD, anxiety, depression, and others may be underestimated due to perceived similarities between Veteran and civilian cultures (McCaslin et al., 2021). Service Members contend with changes in worldview after military service, from distress related to service-related injuries, finances, academic, occupational, and relationship obligations of civilian life to diagnoses of mental health disorders and chronic medical conditions that can lead to internalized stigma shame and negative self-views (McCaslin et al., 2021; Don Richardson et al., 2017).

Due to the nature of their work, Veterans are at a higher risk of developing mental health issues. In addition to the common problems that are major risk factors for mental health issues, even for civilians, such as financial stress, gender, and unemployment, Veterans have to deal with other risk factors specific to their military career field (Inoue et al., 2021). Veterans are 1.5 more likely to die by suicide than non-Veterans, which has risen over the last decade (Schafer et al., 2022) and report higher rates of substance use disorders and homelessness (Carter et al., 2020). Veterans are more likely to report having greater access to care and excellent/very good health. Yet, they face a higher chronic disease burden and report higher rates of diagnoses of depression, past-year mental illness, and past-year suicidal thoughts than civilian women (Katon et al., 2018). Female Veterans have military exposures that contribute to disproportionate disparities compared to their civilian peers, consisting of adverse reproductive health outcomes, a high-risk population for adverse pregnancy outcomes, rape and sexual assaults, and mental health conditions such as depression and PTSD (Katon et al., 2018).

Despite well-established treatment guidelines for mental health conditions commonly affecting veterans, including PTSD, many clients are unwilling or unable to adhere to therapy (Zwiebach et al., 2019). Others fail to respond to evidence-based therapeutic approaches. This may partly be due to assessments and measures not normed for the Veteran culture. Although such clients are termed treatment-resistant or refractory, research shows that the lack of engineering therapeutics for the veterans contributes to such situations (Zwiebach et al., 2019). Lancaster et al. (2018), through Validation of the Warrior Identity Scale in the Chicagoland Veterans Study, sought to validate an assessment tool to understand cultural identity in military and Veteran populations. Researchers could not validate their scale but supported military identity's multidimensional nature. In research to promote military and cultural competence among civilian care providers, Nedegaard & Zwilling (2017) identified that assessments must meas-

ure military-specific knowledge to evaluate cultural competence for the Veteran population.

One clinical tool used in VA healthcare settings is the Primary Care PTSD Screen for DSM-5 (PCL-PTSD-5). The measure is a five-item screener used to identify individuals with probable PTSD in primary care settings. Although researchers normed the assessment against Veterans seeking treatment at VA facilities, it does not account for cultural norms, such as a differential between traumatic events and conditioned responses due to military training (Bovin et al., 2021; Prins et al., 2016). Due to a lack of cultural context, over 50% of the assessment can be answered in the affirmative based on most Military Service Members' training (Cameron & Ginzburg, 2019). Interestingly, another VA-published PTSD assessment tool, the Clinician-Administered PTSD Scale for DSM-5 (CAPS-5), is an assessment used to help determine PTSD (Prins et al., 2015).

2. Review of Related Literature

Cultural sensitivity remains a crucial aspect of diagnosing and treating mental health patients. Not addressing cultural concerns when assessing patients may lead to unnecessary or even incorrect treatment modalities (Fogel et al., 2022). Current psychological practices may support poor treatment outcomes and the suicide rate in the Veteran culture. Researchers have validated Veterans as an independent culture (Cameron, 2023a), and mental health providers are ethically responsible for not implementing clinical interventions without cultural adaptation or norming (Perera et al., 2020). Implementing psychological interventions that have not been culturally normed has been shown to have negative consequences on treatment outcomes, poor therapeutic alliance, and may cause harm to the client (Bernal & Adames, 2017; Cabassa & Baumann, 2013).

2.1. Culture and Norming

Research lacking cultural contextual knowledge can have significant negative consequences for research and clinical practice, from one-dimensional research designs to stalled progress in therapy (Wu et al., 2022). Culturally adapting interventions, however, is also an ethical responsibility, as it reduces the risk of experiencing treatments or interventions that intrude or transgress individual cultural values and norms (Bernal & Adames, 2017). The greater effectiveness of culturally adapted interventions has been attributed to improved treatment outcomes, stronger therapeutic rapport, and treatment compliance (Wu et al., 2022; Bernal & Adames, 2017).

2.2. The VA and Veterans

Although the Veterans Administration is relied on by the Department of Defense and Congress for research, the Veterans Administration's primary focus is the health care of US Veterans (McClean, 2019). The Veterans Administration models Veterans based on eligibility for government-funded health care based on a cha-

racter of service identified on a Veteran's DD 214 and a minimum length of service (Oshinski, 2021). They meet eligibility requirements for enrollment in Veterans Administration health care programs (Oshinski, 2021).

For an agency that is supposed to be vested in research and the health outcomes of Veterans (Ramoni, 2022), the literature review illustrates that the Veterans Administration cannot provide a working definition for a Veteran that the administration standardizes or enforces. Research and the literature produced by the Veterans Administration cannot decide if a Veteran is only someone who meets eligibility for VA health care, someone who has been discharged from the military, or even if they are a Military Service Member (Carr et al., 2021; Chen et al., 2020; Cheney et al., 2018; Clausen et al., 2022; Jacobson et al., 2019; McClean, 2019; Oshinski, 2021; Ramoni, 2022; Smith et al., 2020; Stratton et al., 2014).

By the Veterans Administration's hand, they understand that there is a cultural misalignment in their modeling and treatment of Veterans. A Veterans Administration research team (Wendleton et al., 2019) stated that the Veterans Health Administration services research would require a cultural shift to embrace Veterans' perspectives and culture, utilizing a more collaborative partnership between the VA, researchers, and Veterans (Wendleton et al., 2019). With the difficulty Veterans express with getting VA health care, possibly the issue is how Veterans are perceived and the lack of modeling by the VA. An argument can be made that the Veterans Administration sets the social precedent for how a Veteran is perceived in society and calls into question the therapeutic assessments and interventions used to treat Veterans (Cameron, 2023b).

2.3. American Psychological Association (APA) Veteran Modeling

The literature has illustrated that the modeling of Veterans is muddy at best. According to the literature, psychology models Veterans as inconsistently as the Veterans Administration. Literature conflates Veterans with Military Service Members and other demographics not being able to decide if Veterans are active-duty Service Members, discharged Service Members, individuals who experienced deployment operations, or other categorical variables (Anderson et al., 2019; Blais et al., 2019; Friedman, 2019; Mukherjee & Kumar, 2019). It may say something when the College Level Examination Program (CLEP), which has only been around since 1965 (American Council on Education, 2022) and can be found in the APA online dictionary yet, Veterans have been around as long as our country and the cultural term is absent from the APA online dictionary of terms (American Psychological Association, 2022b).

2.4. Sociology

Sociological research on the modeling of Veterans appears to be sparser than that of traditional psychology, yet as inconsistent as psychological modeling (Crabb & Segal, 2018; Dyvik & Welland, 2018; Hirst, 2021; Reyes et al., 2022; Ridgeway, 2021). This may be due to a deficit of research on military and Veter-

an cultures or simply that sociology can socially be viewed as synonymous with psychology (Molina & Garip, 2019). It was not until 2023 (Cameron, 2023a, 2023b) that sociology journals published research identifying consistent modeling of Veterans and Service Members as independent cultures and independent of one another. Military Service Members are defined as actively serving as a member of the Armed Forces in an Active, Reserve, or National Guard component. Veterans are defined as former members of the Armed Forces who possess a discharge status (DD214) (Cameron, 2023a).

2.5. Assessments and Interventions

Despite well-established treatment guidelines for mental health conditions commonly affecting veterans, including PTSD, many clients are unwilling or unable to adhere to therapy (Zwiebach et al., 2019). Others fail to respond to evidence-based therapeutics. This may partly be due to assessments and measures not normed for the Veteran culture. Although such clients are termed treatment-resistant or refractory, research shows that the lack of engineering therapeutics for the veterans contributes to such situations (Zwiebach et al., 2019).

Lancaster et al. (2018), through Validation of the Warrior Identity Scale in the Chicagoland Veterans Study, sought to validate an assessment tool to understand cultural identity in military and Veteran populations. Researchers could not validate their scale but supported military identity's multidimensional nature. In research to promote military and cultural competence among civilian care providers, Nedegaard & Zwilling (2017) identified that assessments must measure military-specific knowledge to evaluate cultural competence for the Veteran population.

One clinical tool used in VA healthcare settings is the Primary Care PTSD Screen for DSM-5 (PC-PTSD-5). The measure is a five-item screen designed to identify individuals with probable PTSD in primary care settings. Although researchers normed the assessment against Veterans seeking treatment at VA facilities, it does not account for cultural norms, such as a differential between traumatic events and conditioned responses due to military training (Bovin et al., 2021; Prins et al., 2016). Due to a lack of cultural context, over 50% of the assessment can be answered in the affirmative based on the training many Military Service Members receive (Cameron & Ginzburg, 2019). Interestingly, another published VA PTSD assessment tool, the Clinician-Administered PTSD Scale for DSM-5 (CAPS-5), is an assessment used to help determine PTSD (Prins et al., 2015).

2.6. Veteran Evolution Therapy (VET)

Veteran Evolution Therapy (VET) is a revolutionary and culturally informed treatment utilizing culturally normative elements that can be applied as an independent modality or integrated with other therapeutic theories. A contextual and culturally informed approach identifies Veterans and those serving in the

military as independent cultures and independent of one another (Cameron, 2023a). It was discovered that common therapeutic interventions were directly correlated with the cultural norms of Service Members and Veterans. Therapists lacked contextual knowledge and cultural competencies, resulting in significant biopsychosocial disparities between the health outcomes of Veterans and their civilian counterparts within the United States (Crytzer, 2019; Gobin et al., 2018; Soberay et al., 2018; Thomas et al., 2017; Trivedi et al., 2015). When compared to their civilian counterparts, research shows that Veterans are at a greater risk of suicidality (Jamieson et al., 2020), problematic substance use and substance use disorders (Hunsaker & Bush, 2018), pathological gambling and high-risk behaviors (Levy & Tracy, 2018), and a range of psychological and other medical concerns despite the presence of protective factors disproportionately more significant than their civilian counterparts (Grossbard et al., 2013).

VET took a culturally informed approach and was specifically developed to utilize the cultural normative training and operations of the military and utilize them in a therapeutic capacity. VET first approaches treatment by identifying that Veterans and Military Service Members are independent cultures and independent of one another. Veterans are operationally defined as individuals formerly serving in the Armed Forces possessing a military discharge (DD 214). Service Members are members of the Armed Forces actively serving in a branch of the military in an active, reserve, or National Guard component (Cameron, 2023a). VET utilizes the military's Operations Order, Risk Assessment, Communication fundamentals, and After-Action Reporting in a therapeutic format that allows for the treatment of trauma, social and occupational stressors, coping skill development, and resiliency for Military Service Members, Veterans, first responders and their family members (Cameron & Ginzburg, 2019).

2.7. Theoretical Orientation

The Bolton and Gillett (2019) biopsychosocial model was developed based on a 40-year meta-analysis of the biopsychosocial model. The Bolton and Gillett model specifically identifies that lifestyle factors (Biological, Psychological, and Sociological) are based on behaviors, beliefs, attitudes, and values that directly impact increasing or militating an individual's risk factors for a wide range of physical and psychological health conditions. These factors can be cultural, developmental, or conditioned and developed throughout an individual's life. Bolton and Gillett identify that there is a universal causal correlation. Those correlations can be expressed as "A" causes "B." In the life and human sciences, that correlation between factors is described as partial. Partial variation in "A" accounts for only part of the variance in the outcome "B," indicating that a change in "A" affects the probability of "B" (Wade & Halligan, 2019). The Bolton and Gillett (2019) model of biopsychosocial theory appears as the best-suited approach to investigating the complexity of Veteran culture and identity.

This research aims to evaluate Veteran Evolution Therapy as a culturally in-

formed treatment for the Veteran culture. It is the hope that this research will become a foundational element in improving mental health treatment outcomes, reducing suicidality, and assisting in developing culturally appropriate research and competencies.

3. Methodology

The conceptual framework utilizes the biopsychosocial model. The interdisciplinary model evaluates the interconnection between biology, psychology, and socio-environmental factors. The biopsychosocial model is widely used in the empirical evaluations of complex medical phenomena and is the theoretical basis for the World Health Organization's Internal Classification of Functioning (Wade & Halligan, 2017). Consequently, the lack of clinical attention to biological, psychological, or social variables risks over-simplifying or excessively pathologizing an individual's challenges. The biopsychosocial model appears as the best-suited approach to investigating the complexity of the Veteran and military cultures.

The study utilized an archival de-identified clinical data set from a quasi-experimental study on Veteran culture conducted by Anchor Therapy Clinic titled "Healing Our Heroes" in Sacramento, California. The study targeted Veterans and Military Service Members. In addition to demographics, the data provided information on primary presenting mental health problems, treatment lengths, and suicidality information (Anchor Therapy Clinic, 2020).

Participants relevant to this study come from military and Veteran populations. Military Service Members are culturally and operationally defined as members of the Armed Forces consisting of the United States Army, Navy, Air Force, Marine Corps, Coast Guard, or Space Force on active duty, National Guard, or reserve status (Cameron, 2023a, 2023b; Office of the Secretary of Defense, & Department of Defense, 2021). A Veteran is operationally defined as a former membership of the Armed Forces possessing a DD 214 (Cameron, 2023a, 2023b). The scope of the population used for this study required membership in one or more of those groups. An a priori power analysis was conducted using G * Power3 (Faul et al., 2007) to test the mean difference between two dependent means for a two-tailed test, a moderate effect size ($d = 0.20$), and an alpha of 0.05. Results showed that a sample of 272 participants was required to achieve a power of 0.95.

Participants came from an archival and unprocessed survey data set containing respondents from military and Veteran populations provided by Anchor Therapy Clinic of Sacramento, California (Anchor Therapy Clinic, 2020). Inclusion criteria for this study required participants to have self-identified as actively being in the Armed Forces or a Veteran of the Armed Forces. A member of the Armed Forces is operationally defined as a status variable by membership in the Army, Navy, Air Force, Marine Corps, Navy, Coast Guard, or Space Force serving on Active Duty, in a Reserve component or a National Guard component. A Veteran is operationally defined as a status variable by former membership in

the Army, Navy, Air Force, Marine Corps, Navy, Coast Guard, or Space Force serving on Active Duty, in a Reserve or National Guard component possessing a DD 214. Survey respondents were excluded if the participants were not active or former members of the Armed Forces, were former members without a DD 214, or did not complete the original study. The participants who met the inclusion criteria were randomly selected for inclusion in the study.

3.1. Data Analysis

Data analysis was conducted using IBM's Statistical Package for the Social Sciences (SPSS) to identify demographic information about the sample and trends in response categories regarding cultural self-identification. Demographics were analyzed for central tendency and to determine the distribution of participants. Differences between groups was evaluated using paired sample t-tests. The data for this research utilized unprocessed archival data provided by Anchor Therapy Clinic. Anchor Therapy Clinic has authorized the use of de-identified archival data from the Healing Heroes and Veteran Evolution program. Anchor Therapy provided the data of 885 respondents of Military Service Members and Veteran participants and their corresponding demographic data from a survey they conducted in 2019 (Anchor Therapy Clinic, 2020). Based on the power analysis to test the mean difference between two dependent means for a two-tailed test to achieve a moderate effect size ($d = 0.20$), a minimum of 272 participants is required (Faul et al., 2007).

The data was scrubbed for participant inclusion in the study. The remaining participants were randomly selected for inclusion. Demographic data was analyzed from the research population, and respondents will be categorized into Service Member or Veteran groups. Service Members are operationally defined as self-reported membership in the Army, Navy, Air Force, Marine Corps, Navy, Coast Guard, or Space Force serving on Active Duty, in a Reserve component or a National Guard component. A Veteran is operationally defined as a status variable by self-reported former membership in the Army, Navy, Air Force, Marine Corps, Navy, Coast Guard, or Space Force serving on Active Duty, in a Reserve component or a National Guard component possessing a DD 214. Clinical treatment records were reviewed, analyzing diagnostic elements including the primary presenting problem, length of time in treatment, length of time in treatment for the primary presenting problem, and crisis intervention. The clinical data was compared to the Veterans Administration (VA) reported Cognitive Behavioral Therapy (CBT) treatment outcomes. The VA's Cognitive Behavioral Therapy Strategies operationally defined CBT treatment as requiring 16 - 20 weeks to address the primary presenting problem (Crane & Watters, 2021). The mean differences between groups were analyzed by one-way ANOVA and paired sample t-tests.

3.2. Reliability & Validity

Threats to internal validity will be controlled using random assignment of par-

ticipants in the research population. Confounds will be controlled through the data analysis plan. Statistical Regression is not a concern because the original survey respondents were only provided the survey instrument once. History, Maturation, and Attrition are not a concern based on the research design. External validity is controlled through random selection. Generalizability is controlled because the sample directly represents the population of interest. Statistical conclusion validity is controlled with power analysis, and statistical test assumptions will be evaluated. Construct validity is controlled by the researcher possessing contextual, cultural knowledge of the population, preventing misclassification of participants and variables. Bias is being controlled by utilizing de-identified archival data from a third party, preventing interference at the hands of the researcher. The de-identified participants chosen for inclusion in the study will be selected randomly, preventing selection bias. Confounding is controlled through the study's design by evaluating the prevalence of responses provided by participants (Heppner et al., 2016).

4. Results

An a priori power analysis was conducted using G*Power3 (Faul, Erdfelder, Lang, & Buchner, 2007) to test the difference utilizing one constant for a two-tailed test, a moderate effect size ($d = 0.20$), and an alpha of .05. Result showed that a total sample of 326 participants was required to achieve a power of .95. The sample population ($N = 655$) reflected Military Service Members ($n = 190$, 25.60%) and Veterans ($n = 465$, 74.40%). Participants demographics were reported as African American/Black ($n = 52$, 8.32%), Asian ($n = 20$, 3.20%), Hispanic/Latinx ($n = 132$, 21.12%), Middle Eastern ($n = 8$, 1.28%), American Indian or Alaskan Native ($n = 24$, 3.84%), Pacific Islander ($n = 4$, 0.64%), White/Caucasian ($n = 256$, 40.96%), and Other ($n = 159$, 24.27%). The mean age was 38.50 (52.04%) years of age, was predominantly male ($n = 332$, 53.12%), and had obtained a bachelor ($n = 213$, 34.08%) level education.

Veteran Evolution Therapy Outcomes

The research sought to determine if Veteran Evolution Therapy addressed a client's primary presenting mental health problem in the same length of time as CBT outlined by the Veterans Administration. The null hypothesis that the means are equal in the population is rejected because the probability associated with the test statistic is less than α ($t_{656} = -26.89$, $p < 0.001$). A client's mean time to address their primary presenting problem with VET was 3.89 ($N = 655$) sessions. The mean reported time for the VA to treat a primary presenting problem is 18 weeks. The mean length of treatment for VET ($m = 3.89$) is lower than traditional CBT ($m = 18$), representing a large effect size.

An additional analysis was conducted to evaluate mean differences between independent groups of Veterans ($n = 465$, 74.40%) and Service Members ($n = 190$, 25.60%) time in treatment compared to VA normative CBT. Analysis indi-

cated no significant difference between time in treatment between Veteran and Service Member Groups.

VET: Veterans

For the Veteran group compared to the VA CBT model, the null hypothesis that the means are equal in the population is rejected because the probability associated with the test statistic is less than α ($t_{466} = -27.03, p < 0.001$). The mean time a client took to address their primary presenting problem with VET with the Veteran group was 3.88 sessions. The mean reported time for the VA to treat a primary presenting problem is 18 weeks. The mean length of treatment for VET is lower for the Veteran group than traditional CBT. The mean difference represents a large effect size.

VET: Service Members

For the Service Member Group compared to the VA CBT model, the null hypothesis that the means are equal in the population is rejected because the probability associated with the test statistic is less than α ($t_{191} = -26.27, p < 0.001$). The mean time a Service Member client took to address their primary presenting problem with VET was 3.88 sessions. The mean reported time for the VA to treat a primary presenting problem is 18 weeks. The mean length of treatment for a Service Member using VET is lower than traditional CBT. The mean difference represents a large effect size.

5. Discussion

This quantitative study aims to enhance the field of psychology by evaluating Veteran Evolution Therapy as a culturally competent approach to the mental health treatment of the Veteran and military cultures.

The classified nature of the military facilitates a deficit of knowledge and resources for researchers and mental health providers. This deficit results in varying and culturally inaccurate defining descriptions for Veterans and Military Service Members (Cameron, 2023a). Researchers and professionals in the field of psychology and those not possessing contextual knowledge or experience are left to obtain their perceptions of the military and veterans from television shows, films, and other media that are altered to create dynamic appeal and for marketing purposes (Schafer et al., 2022).

As of 2019, more than 18 million Veterans in the United States have committed suicide at an estimated rate of 22 per day. With 30 percent of active-duty service members in Iraq and Afghanistan identified as having a mental health condition requiring therapeutic intervention, less than 50 percent of those service members will engage in mental health services (Department of Veterans Affairs, 2021). This does not account for military reservists, National Guard, or other military operations that service members have experienced within the last 20 years. The deficit of contextual knowledge and culturally appropriate operational terminology means that Civilians, and researchers, may not fully understand military service, military and veteran identities, and traditional family and

social dynamics. Researchers and therapists may not understand Military Service Members and Veterans, resulting in poor research designs, misinterpreted results, and a lack of cultural norming of therapeutic interventions. The lack of cultural norming may cause medical care providers to misdiagnosis, stigmatization, individual shame, and negative self-attribution (McCaslin et al., 2021).

The research findings evaluated the length of time to treat the client's primary presenting problem by comparing reported VA outcomes using CBT with that of reported outcomes of Veteran Evolution Therapy to gain a deeper understanding of Veteran and military cultures, leading to the culturally relevant operational definitions for clinical research, facilitating the means to strengthen dynamics in therapeutic settings, and working to improve treatment outcomes for these populations.

The researcher utilized a biopsychosocial model conceptualized by George Engel in 1977. Engel's biopsychosocial model is interdisciplinary and looks at the interconnection between biology, psychology, and so-cio-environmental factors. At a practical level, the biopsychosocial model is a way of understanding a client's subjective experience as an essential contribution to diagnosis and health outcomes (Epstein & Borrell-Carrio, 2005). Historically, the biopsychosocial model is widely used in the empirical evaluation of complex medical phenomena and is the theoretical basis for the World Health Organization's Internal Classification of Functioning (Wade & Halligan, 2017). Consequently, the lack of clinical attention to biological, psychological, or social variables risks over-simplifying or excessively pathologizing the challenges an individual may face. The biopsychosocial model was evaluated as the best-suited approach to investigating the complexity of Veteran outcomes.

The researcher conducted a systematic review of the subject matter using peer-reviewed literature predominantly from the last five years, federal regulatory statutes, and current regulations of the Armed Forces. The researcher thoroughly evaluated the data and the selected articles to obtain appropriate and relevant information for the study. The researcher synthesized information to address the following research questions: Is Veteran Evolution Therapy a culturally appropriate model of therapy for the Veteran culture?

5.1. Findings

The Veteran Evolution Therapy model utilized the culturally normative training of Military Service Members and Veterans to meet the same therapeutic goals as CBT. The VET model applied fundamental therapeutic interventions within a militaristic format by communicating and processing information in a manner in line with military standards. The findings indicate Veteran Evolution Therapy is a culturally informed approach to mental health treatment for Veterans and Military Service Members.

The results indicate that Veteran Evolution Therapy can be nearly 80% faster in addressing the primary mental health concerns of the Veteran and military

cultures. Although further research is needed, it may be a viable culturally informed approach to treating mental health Veterans and Service Members. VET would best be served with duplication to assess long-term viability and applicability to specific mental health diagnoses. Additional research is planned to assess further clinical and demographic diagnostic data such as diagnosis, recidivism, substance use, and dual diagnosis elements.

5.2. Implications for Professional Practice

This research shows that with the appropriate contextual and cultural information, research on the Veteran and military cultures can be conducted and applied to culturally normed interventions. Mental health providers have a professional and ethical responsibility to be culturally competent and engage in culturally normed therapy with their clients. With the ever-rising social outcry to be more inclusive and culturally sensitive, it is surprising that it wasn't until 2023 that Veterans were classified as a culture in research. Although more research still needs to be conducted before VET can be classified as an evidence-based therapeutic modality or intervention, the initial results are promising. This may be the first step to combat Veteran treatment disparities and their suicidality.

6. Conclusion

Veteran Evolution Therapy (VET) is a revolutionary and culturally informed treatment utilizing culturally normative elements that can be applied as an independent modality or integrated with other therapeutic theories. VET took a culturally informed approach and was specifically developed to utilize the cultural normative training and operations of the military and utilize them in a therapeutic capacity. VET first approaches treatment by identifying that Veterans and Military Service Members are independent cultures and independent of one another. Veterans are operationally defined as individuals formerly serving in the Armed Forces possessing a military discharge (DD 214). Service Members are members of the Armed Forces actively serving in a branch of the military in an active, reserve, or National Guard component (Cameron, 2023a). VET utilizes the military's Operations Order, Risk Assessment, communication fundamentals, and After-Action Reporting (AAR) in a therapeutic format that allows for the treatment of trauma, social and occupational stressors, coping skill development, and resiliency for Military Service Members, Veterans, first responders and their family members (Cameron & Ginzburg, 2019).

The VET Model was developed by Cameron and Ginzburg (2019) identifies the transitional process in which an individual acculturates from their culture of origin into a Military culture and then on to a Veteran culture after the termination of their service obligations (Anchor Therapy Clinic, 2020; Cameron, 2020a). The conceptual framework of the model is based on the biopsychosocial model that was conceptualized by George Engel in 1977 and is an interdisciplinary model that looks at the interconnection between biology, psychology, and socio-environ-

mental factors. The model is viewed as a philosophy of clinical care and a practical clinical guide. Philosophically, it is a means of understanding how suffering, disease, and illness are affected by multiple levels of human experiences. At a practical level, the biopsychosocial model is a way of understanding the client's subjective experience as an essential contribution to diagnosis and health outcomes (Epstein & Borrell-Carrio, 2005). The biopsychosocial model is widely used in the empirical evaluations of complex medical phenomena and is the theoretical basis for the World Health Organization's Internal Classification of Functioning (Wade & Halligan, 2017).

Veteran Evolution Therapy is a revolutionary and culturally informed treatment utilizing culturally normative elements that can be applied as either an independent modality or intervention as a part of other modalities. VET utilizes the military's Operations Order, Risk Assessment, Communication fundamentals, and After-Action Reporting in a therapeutic format that allows for the treatment of trauma, social and occupational stressors, coping skill development, and resiliency for Military Service Members, Veterans, first responders, and their family members.

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Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- American Council on Education (2022). *College Board's College-Level Examination Program (CLEP)*. ACE National Guide. <https://www.acenet.edu/National-Guide/Pages/Organization.aspx?oid=e9089b28-9016-e811-810f-5065f38bf0e1>
- American Psychological Association (2022). *APA Dictionary of Psychology*. American Psychological Association. <https://dictionary.apa.org/college-level-examination-program>
- Anchor Therapy Clinic (2020). *V.E.T. Program Data*. Anchor Therapy Clinic.
- Andresen, F. J., Monteith, L. L., Kugler, J., Cruz, R. A., & Blais, R. K. (2019). Institutional Betrayal Following Military Sexual Trauma Is Associated with More Severe Depression and Specific Posttraumatic Stress Disorder Symptom Clusters. *Journal of Clinical Psychology, 75*, 1305-1319. <https://doi.org/10.1002/jclp.22773>
- Bernal, G., & Adames, C. (2017). Cultural Adaptations: Conceptual, Ethical, Contextual, and Methodological Issues for Working with Ethnocultural and Majority-World Populations. *Prevention Science, 18*, 681-688. <https://doi.org/10.1007/s11121-017-0806-0>
- Blais, R. K., Brignone, E., Fargo, J. D., Livingston, W. S., & Andresen, F. J. (2019). The Importance of Distinguishing between Harassment-Only and Assault Military Sexual

- Trauma during Screening. *Military Psychology*, 31, 227-232.
<https://doi.org/10.1080/08995605.2019.1598218>
- Boer, D., Hanke, K., & He, J. (2018). On Detecting Systematic Measurement Error in Cross-Cultural Research: A Review and Critical Reflection on Equivalence and Invariance Tests. *Journal of Cross-Cultural Psychology*, 49, 713-734.
<https://doi.org/10.1177/0022022117749042>
- Bovin, M. J., Kimerling, R., Weathers, F. W., Prins, A., Marx, B. P., Post, E. P., & Schnurr, P. P. (2021). Diagnostic Accuracy and Acceptability of the Primary Care Posttraumatic Stress Disorder Screen for the Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition) among US Veterans. *JAMA Network Open*, 4, e2036733.
<https://doi.org/10.1001/jamanetworkopen.2020.36733>
- Brown, N. B., & Bruce, S. E. (2016). Stigma, Career Worry, and Mental Illness Symptomatology: Factors Influencing Treatment-Seeking for Operation Enduring Freedom and Operation Iraqi Freedom Soldiers and Veterans. *Psychological Trauma: Theory, Research, Practice, and Policy*, 8, 276-283. <https://doi.org/10.1037/tra0000082>
- Cabassa, L. J., & Baumann, A. A. (2013). A Two-Way Street: Bridging Implementation Science and Cultural Adaptations of Mental Health Treatments. *Implementation Science*, 8, Article No. 90. <https://doi.org/10.1186/1748-5908-8-90>
- Cameron, K. (2023a). Veteran Evolution: Re-Classifying the Military and Veterans as Independent Cultures. *Advances in Applied Sociology*, 13, 47-95.
<https://doi.org/10.4236/aasoci.2023.131005>
- Cameron, K. (2023b). Defining Elemental Components of Veteran Cultural Competency for Mental Health Professionals. *Advances in Applied Sociology*, 13, 309-316.
<https://doi.org/10.4236/aasoci.2023.134019>
- Cameron, K. P., & Ginzburg, M. (2019). *Healing Heroes: Veteran and First Responder Cultural Competency*. Anchor Therapy Clinic.
- Carr, M. M., Potenza, M. N., Serowik, K. L., & Pietrzak, R. H. (2021). Race, Ethnicity, and Clinical Features of Alcohol Use Disorder among US Military Veterans: Results from the National Health and Resilience in Veterans Study. *The American Journal on Addictions*, 30, 26-33. <https://doi.org/10.1111/ajad.13067>
- Carter, S. P., Malte, C. A., Rojas, S. M., Hawkins, E. J., & Reger, M. A. (2020). Examination of Potential Disparities in Suicide Risk Identification and Follow-up Care within the Veterans Health Administration. *Suicide & Life-Threatening Behavior*, 50, 1127-1139. <https://doi.org/10.1111/sltb.12673>
- Chen, J. A., Fortney, J. C., Bergman, H. E., Browne, K. C., Grubbs, K. M., Hudson, T. J., & Raue, P. J. (2020). Therapeutic Alliance across Trauma-Focused and Non-Trauma-Focused Psychotherapies among Veterans with PTSD. *Psychological Services*, 17, 452-460. <https://doi.org/10.1037/ser0000329>
- Cheney, A. M., Koenig, C. J., Miller, C. J., Zamora, K., Wright, P., Stanley, R., Fortney, J., Burgess, J. F., & Pyne, J. M. (2018). Veteran-Centered Barriers to V.A. Mental Health-care Services Use. *BMC Health Services Research*, 18, Article No. 591.
<https://doi.org/10.1186/s12913-018-3346-9>
- Clausen, A. N., Fercho, K. A., Monsour, M., Disner, S., Salminen, L., Haswell, C. C., Rubright, E. C., Watts, A. A., Buckley, M. N., Maron-Katz, A., Sierk, A., Manthey, A., Suarez-Jimenez, B., Olatunji, B. O., Averill, C. L., Hofmann, D., Veltman, D. J., Olson, E. A., Li, G., Forster, G. L. et al. (2022). Assessment of Brain Age in Posttraumatic Stress Disorder: Findings from the ENIGMA PTSD and Brain Age Working Groups. *Brain and Behavior*, 12, e2413. <https://doi.org/10.1002/brb3.2413>
- Crabb, T., & Segal, D. R. (2018). Comparative Systems of Analysis: Military Sociology in

- the United States and Europe. In G. Caforio, & M. Nuciari (Eds.), *Handbook of the Sociology of the Military* (pp. 61-86). Springer.
https://doi.org/10.1007/978-3-319-71602-2_4
- Crane, K., & Watters, K. (2021). *Cognitive Behavioral Therapy Strategies*. South Central MIRECC.
- Crytzer, M. L. (2019). Caring for Military Veterans in the Community: An Interprofessional Approach. *Journal of Community Health Nursing*, *36*, 57-64.
<https://doi.org/10.1080/07370016.2019.1583839>
- Davis, J. D., Orr, R., Knapik, J. J., & Harris, D. (2020). Functional Movement Screen (FMS™) Scores and Demographics of US Army Pre-Ranger Candidates. *Military Medicine*, *185*, e788-e794. <https://doi.org/10.1093/milmed/usz373>
- Department of Veterans Affairs (2021). *National Center for Veterans Analysis and Statistics: Percent change in veteran population by state from 2000 to 2020*. Department of Veterans Affairs.
- Don Richardson, J., Ketcheson, F., King, L., Shnaider, P., Marlborough, M., Thompson, A., & Elhai, J. D. (2017). Psychiatric Comorbidity Pattern in Treatment-Seeking Veterans. *Psychiatry Research*, *258*, 488-498.
<https://doi.org/10.1016/j.psychres.2017.08.091>
- Dyvik, S. L., & Welland, J. (2018). War Ink: Sense-Making and Curating War through Military Tattoos. *International Political Sociology*, *12*, 346-361.
<https://doi.org/10.1093/ips/oly018>
- Epstein, R. M., & Borrell-Carrio, F. (2005). The Biopsychosocial Model: Exploring Six Impossible Things. *Families, Systems, & Health*, *23*, 426-431.
<https://doi.org/10.1037/1091-7527.23.4.426>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A Flexible Statistical Power Analysis Program for the Social, Behavioral, and Biomedical Sciences. *Behavior Research Methods*, *39*, 175-191. <https://doi.org/10.3758/BF03193146>
- Fogel, A., Nazir, S., Hirapara, K., & Ray, S. (2022). Cultural Assessment and Treatment of Psychiatric Patients. In *StatPearls [Internet]*. StatPearls Publishing.
<https://www.ncbi.nlm.nih.gov/books/NBK482311/>
- Friedman, M. J. (2019). *Treating PTSD in Military Personnel: A Clinical Handbook*. Guilford Publications.
- Gentile, G., Karns, J., Shurkin, M., & Givens, A. (2020). *The Evolution of U.S. Military Policy from the Constitution to the Present, Volume I: The Old Regime: The Army, Militia, and Volunteers from Colonial Times to the Spanish-American War*. Rand Corporation. <https://doi.org/10.7249/RR1995.1>
- Gobin, R. L., Mackintosh, M., Willis, E., Allard, C. B., Kloezeman, K., & Morland, L. A. (2018). Predictors of Differential PTSD Treatment Outcomes between Veteran and Civilian Women after Cognitive Processing Therapy. *Psychological Trauma: Theory, Research, Practice, and Policy*, *10*, 173-182. <https://doi.org/10.1037/tra0000266>
- Grossbard, J. R., Lehavot, K., Hoerster, K. D., Jakupcak, M., Seal, K. H., & Simpson, T. L. (2013). Relationships among Veteran Status, Gender, and Key Health Indicators in a National Young Adult Sample. *Psychiatric Services*, *64*, 547-553.
<https://doi.org/10.1176/appi.ps.003002012>
- Heppner, P. P., Wampold, B. E., Owen, J., Thompson, M. N., & Wang, K. T. (2016). *Research Design in Counseling* (4th ed.). Cengage Learning.
- Hirst, A. (2021). "Videogames Saved My Life": Everyday Resistance and Ludic Recovery among US Military Veterans. *International Political Sociology*, *15*, 482-503.
<https://doi.org/10.1093/ips/olab018>

- Hunsaker, J. D., & Bush, R. J. (2018). Substance Use in Military and Veteran Populations. In L. Roberts, & C. Warner (Eds.), *Military and Veteran Mental Health* (pp. 295-305). Springer. https://doi.org/10.1007/978-1-4939-7438-2_19
- Inoue, C., Shawler, E., Jordan, C. H., & Jackson, C. A. (2021). *Veteran and Military Mental Health Issues*. StatPearls. <https://www.statpearls.com/ArticleLibrary/viewarticle/131236>
- Jacobson, I. G., Williams, E. C., Seelig, A. D., Littman, A. J., Maynard, C. C., Bricker, J. B., Rull, R. P., Boyko, E. J., & Millennium Cohort Study Team (2020). Longitudinal Investigation of Military-Specific Factors Associated with Continued Unhealthy Alcohol Use among a Large US Military Cohort. *Journal of Addiction Medicine, 14*, e53-e63. <https://doi.org/10.1097/ADM.0000000000000596>
- Jamieson, N., Usher, K., Maple, M., & Ratnarajah, D. (2020). Invisible Wounds and Suicide: Moral Injury and Veteran Mental Health. *International Journal of Mental Health Nursing, 29*, 105-109. <https://doi.org/10.1111/inm.12704>
- Katon, J. G., Zephyrin, L., Meoli, A., Hulugalle, A., Bosch, J., Callegari, L., Galvan, I. V., Gray, K. E., Haeger, K. O., Hoffmire, C., Levis, S., Ma, E. W., McCabe, J. E., Nillni, Y. I., Pineles, S. L., Reddy, S. M., Savitz, D. A., Shaw, J. G., & Patton, E. W. (2018). Reproductive Health of Women Veterans: A Systematic Review of the Literature from 2008 to 2017. *Seminars in Reproductive Medicine, 36*, 315-322. <https://doi.org/10.1055/s-0039-1678750>
- Lancaster, S. L., Kintzle, S., & Castro, C. A. (2018). Validation of the Warrior Identity Scale in the Chicagoland Veterans Study. *Identity, 18*, 34-43. <https://doi.org/10.1080/15283488.2017.1410157>
- Levy, L., & Tracy, J. K. (2018). Gambling Disorder in Veterans: A Review of the Literature and Implications for Future Research. *Journal of Gambling Studies, 34*, 1205-1239. <https://doi.org/10.1007/s10899-018-9749-z>
- McCaslin, S. E., Becket-Davenport, C., Dinh, J. V., Lasher, B., Kim, M., Choucroun, G., & Herbst, E. (2021). Military Acculturation and Readjustment to the Civilian Context. *Psychological Trauma: Theory, Research, Practice, and Policy, 13*, 611-620. <https://doi.org/10.1037/tra0000999>
- McClean, H. B. (2019). Delay, Deny, Wait Till They Die: Balancing Veterans' Rights and Non-Adversarial Procedures in the VA Disability Benefits System. *SMU Law Review, 72*, Article No. 277. <https://doi.org/10.2139/ssrn.3341489>
- Molina, M., & Garip, F. (2019). Machine Learning for Sociology. *Annual Review of Sociology, 45*, 27-45. <https://doi.org/10.1146/annurev-soc-073117-041106>
- Mukherjee, S., & Kumar, U. (2019). Military Psychology in War and Peace: An Appraisal. In U. Kumar (Ed.), *The Routledge International Handbook of Military Psychology and Mental Health* (pp. 3-11). Routledge. <https://doi.org/10.4324/9780429281266-1>
- Nedegaard, R., & Zwilling, J. (2017). Promoting Military Cultural Competence among Civilian Care Providers: Learning through Program Development. *Social Sciences, 6*, Article No. 13. <https://doi.org/10.3390/socsci6010013>
- Office of the Secretary of Defense, & Department of Defense (2021). Department of Defense.
- Oshinski, R. (2021). *Under Secretary for Health for Operations, & VHA Directive 1601A.02(3)*. Eligibility Determination Department of Veterans. https://www.va.gov/vhapublications/ViewPublication.asp?pub_ID=8908
- Oswald, F. L. (2020). Future Research Directions for Big Data in Psychology. In S. E. Woo, L. Tay, & R. W. Proctor (Eds.), *Big Data in Psychological Research* (pp. 427-441). American Psychological Association. <https://doi.org/10.1037/0000193-020>

- Perera, C., Salamanca-Sanabria, A., Caballero-Bernal, J. et al. (2020). No Implementation without Cultural Adaptation: A Process for Culturally Adapting Low-Intensity Psychological Interventions in Humanitarian Settings. *Conflict and Health*, 14, Article No. 46. <https://doi.org/10.1186/s13031-020-00290-0>
- Prins, A., Bovin, M. J., Kimerling, R., Kaloupek, D. G., Marx, B. P., Pless Kaiser, A., & Schnurr, P. P. (2015). *The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5)*.
- Prins, A., Bovin, M. J., Smolenski, D. J., Mark, B. P., Kimerling, R., Jenkins-Guarnieri, M. A., Kaloupek, D. G., Schnurr, P. P., Pless Kaiser, A., Leyva, Y. E., & Tiet, Q. Q. (2016). The Primary Care PTSD Screen for *DSM-5* (PC-PTSD-5): Development and Evaluation within a Veteran Primary Care Sample. *Journal of General Internal Medicine*, 31, 1206-1211. <https://doi.org/10.1007/s11606-016-3703-5>
- Ramoni, R. (2022). *Office of Research & Development, & VA FY 2022-2028 Strategic Plan*. U.S. Department of Veterans Affairs.
- Randles, R., & Finnegan, A. (2021). Veteran Help-Seeking Behaviour for Mental Health Issues: A Systematic Review. *BMJ Military Health*, 168, 99-104. <https://doi.org/10.1136/bmjilitary-2021-001903>
- Reyes, A. T., Song, H., Bhatta, T. R., & Kearney, C. A. (2022). Exploring the Relationships between Resilience, Mindfulness, and Experiential Avoidance after the Use of a Mindfulness- and Acceptance-Based Mobile App for Posttraumatic Stress Disorder. *Perspectives in Psychiatric Care*, 58, 776-784. <https://doi.org/10.1111/ppc.12848>
- Ridgeway, C. L. (2022). Sociology and Psychology. In *Oxford Research Encyclopedia of Psychology*. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190236557.013.896>
- Rosenthal, K., Strecker, S., & Pastor, O. (2020). Modeling Difficulties in Data Modeling: Similarities and Differences between Experienced and Non-Experienced Modelers. In G. Dobbie, U. Frank, G. Kappel, S. W. Liddle, & H. C. Mayr (Eds.), *Conceptual Modeling. ER 2020. Lecture Notes in Computer Science* (vol. 12400, pp. 501-511). Springer. https://doi.org/10.1007/978-3-030-62522-1_37
- Schafer, K. M., Duffy, M., Kennedy, G., Stentz, L., Leon, J., Herrerias, G., Fulcher, S., & Joiner, T. E. (2022). Suicidal Ideation, Suicide Attempts, and Suicide Death among Veterans and Service Members: A Comprehensive Meta-Analysis of Risk Factors. *Military Psychology*, 34, 129-146. <https://doi.org/10.1080/08995605.2021.1976544>
- Smith, A. K., Ratanatharathorn, A., Maihofer, A. X., Naviaux, R. K., Aiello, A. E., Amstatter, A. B., Ashley-Koch, A. E., Baker, D. G., Beckham, J. C., Boks, M. P., Bromet, E., Dennis, M., Galea, S., Garrett, M. E., Geuze, E., Guffanti, G., Hauser, M. A., Katrinli, S., Kilaru, V. et al. (2020). Epigenome-Wide Meta-Analysis of PTSD across 10 Military and Civilian Cohorts Identifies Methylation Changes in AHRR. *Nature Communications*, 11, Article No. 5965. <https://doi.org/10.1038/s41467-020-19615-x>
- Soberay, K. A., Hanson, J. E., Dwyer, M., Plant, E. A., & Gutierrez, P. M. (2018). The Relationship between Suicidal Responses and Traumatic Brain Injury and Severe Insomnia in Active Duty, Veteran, and Civilian Populations. *Archives of Suicide Research*, 23, 391-410. <https://doi.org/10.1080/13811118.2018.1479322>
- Stratton, K. J., Hawn, S. E., Amstatter, A. B., Cifu, D. X., & Walker, W. C. (2014). Correlates of Pain Symptoms among Iraq and Afghanistan Military Personnel Following Combat-Related Blast Exposure. *Journal of Rehabilitation Research and Development*, 51, 1189-1202. <https://doi.org/10.1682/JRRD.2014.04.0111>
- Thomas, M. M., Harpaz-Rotem, I., Tsai, J., Southwick, S. M., & Pietrzak, R. H. (2017). Mental and Physical Health Conditions in US Combat Veterans: Results from the National Health and Resilience in Veterans Study. *The Primary Care Companion for CNS*

Disorders, 19. <https://doi.org/10.4088/PCC.17m02118>

- Trivedi, R. B., Post, E. P., Sun, H., Pomerantz, A., Saxon, A. J., Piette, J. D., Maynard, C., Arnow, B., Curtis, I., Fihn, S. D., & Nelson, K. (2015). Prevalence, Comorbidity, and Prognosis of Mental Health among US Veterans. *American Journal of Public Health*, 105, 2564-2569. <https://doi.org/10.2105/AJPH.2015.302836>
- Wade, D. T., & Halligan, P. W. (2017). The Biopsychosocial Model of Illness: A Model Whose Time Has Come. *Clinical Rehabilitation*, 31, 995-1004. <https://doi.org/10.1177/0269215517709890>
- Wendleton, L. R., Martin, L. A., Stewart Steffensmeier, K. R., LaChappelle, K., Fehling, K., Etingen, B., Ray, C., Carnevale, D., Hardie, C., Grimes, I., & Ono, S. S. (2019). Building Sustainable Models of Veteran-Engaged Health Services Research. *Journal of Humanistic Psychology*. <https://doi.org/10.1177/0022167819845535>
- Wu, H., Peek, L., Mathews, M. C., & Mattson, N. (2022). Cultural Competence for Hazards and Disaster Researchers: Framework and Training Module. *Natural Hazards Review*, 23, Article ID: 06021005. [https://doi.org/10.1061/\(ASCE\)NH.1527-6996.0000536](https://doi.org/10.1061/(ASCE)NH.1527-6996.0000536)
- Zwiebach, L., Lannert, B. K., Sherrill, A. M., McSweeney, L. B., Sprang, K., Goodnight, J. R., Lewis, S. C., & Rauch, S. A. (2019). Military Cultural Competence in the Context of Cognitive Behavioural Therapy. *The Cognitive Behaviour Therapist*, 12, E5. <https://doi.org/10.1017/S1754470X18000132>