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**CROSS-CULTURAL INSIGHTS ON TRAUMA
MANAGEMENT: RETHINKING WESTERN
PRACTICES FOR POSTTRAUMATIC STRESS
DISORDER (PTSD) TREATMENT**

by

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June 2023

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**CROSS-CULTURAL INSIGHTS ON TRAUMA MANAGEMENT: RETHINKING
WESTERN PRACTICES FOR POSTTRAUMATIC STRESS DISORDER (PTSD)
TREATMENT**

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ABSTRACT

Posttraumatic stress disorder (PTSD) is a serious condition affecting millions of people in the United States, particularly within the military and veteran populations. Traditional Western treatment methods for PTSD take a medical and behavioral approach and are often not fully effective. This thesis examines a body of existing research regarding trauma response in non-Western societies to explore the possibility of alternative approaches to PTSD treatment beyond the Western medical model. Findings reveal the societies studied define trauma differently and that these definitions impact how their people understand, experience, and manage traumatic events. Additional literature reviewed indicates the feeling of support from and value to the community is vital to effective veteran reintegration, determined to be a crucial factor in successful trauma recovery. The analysis included in this thesis supports the claim that Western society must consider ideas outside its own norms and cognitive boundaries to prevent and treat PTSD more effectively. Recommendations for future action include additional research and the implementation of a variety of potentially beneficial alternative or augmentative approaches to the Western medical model for treatment and prevention of PTSD within the military and veteran populations.

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LIST OF ACRONYMS AND ABBREVIATIONS

CBT	cognitive behavioral therapy
CPT	cognitive processing therapy
CSF	comprehensive soldier fitness
DOD	Department of Defense
DSM	Diagnostic and Statistical Manual of Mental Disorders
EDMR	eye movement desensitization and reprocessing
FDA	Food and Drug Administration
GAT	global assessment tool
MRT	master resilience training
PE	prolonged exposure
PRP	Penn resilience program
PTSD	posttraumatic stress disorder
PTSS	posttraumatic stress symptoms
SIT	stress inoculation therapy
SSRI	selective serotonin reuptake inhibitor
SUD	substance use disorder
WWI	World War I
WWII	World War II

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EXECUTIVE SUMMARY

Posttraumatic stress disorder (PTSD) is a serious and often debilitating condition affecting millions of people in the United States. Today, approximately 8% of the general population is affected by this disorder, with service members and veterans suffering at twice the rate of civilians.¹ PTSD, in conjunction with its compounding comorbidities, such as depression and substance use disorder, lead to an increased risk of suicide.² The heightened rates of PTSD contribute to a suicide rate among military members twice that of the rest of the population.³

PTSD-related research, training, and treatment consume a large portion of the DOD's mental health budget. According to the most current research, the total excess economic burden of PTSD in the U.S. military population was approximately \$42.7 billion in 2018 alone.⁴ Despite the hundreds of billions of dollars the U.S. spends annually on PTSD-related research and treatment, no new medications have been approved by the FDA in the last 20 years, and the disorder remains under-diagnosed and under-treated.⁵

In the West, PTSD is traditionally treated through individual medical and therapeutic solutions. This is not a universal approach. Looking at how other cultures and societies address combat stress and trauma may provide valuable insights. A more comprehensive approach, considering history, cultural context, and geographic location, may lead to a better understanding and additional solutions for preventing and treating PTSD in the military.

¹ Judkins et al., "Incidence Rates of Posttraumatic Stress Disorder Over a 17-Year Period in Active Duty Military Service Members," *Journal of Traumatic Stress* 33, no. 2 (2020): 994, <https://doi.org/10.1002/jts.22558>.

² Lori L. Davis et al., "The Economic Burden of Posttraumatic Stress Disorder in the United States From a Societal Perspective," *The Journal of Clinical Psychiatry* 83, no. 3 (April 25, 2022), <https://doi.org/10.4088/JCP.21m14116>.

³ Judkins et al., "Incidence Rates of Posttraumatic Stress Disorder," 994.

⁴ Davis et al., "The Economic Burden of Posttraumatic Stress Disorder."

⁵ Davis et al., "The Economic Burden of Posttraumatic Stress Disorder."

Review of existing research illuminates how culture impacts PTSD research, understanding, and treatment. The non-Western societies within India, Tibet, and Kenya are evidence of how cultural context effects the understanding of trauma and PTSD diagnosis. Additionally, discussion of related literature highlights the impact societal structure and attitudes as well as the reintegration process have on the mental health of returning veterans. Reentering individualistic societies, like that of the West, often leaves veterans feeling isolated, undervalued, and unsupported, exacerbating the effects of trauma experienced. To corroborate the cultural impacts discussed, they are applied to a case study of the Navajo and Zuni Native America tribes during and after World War II (WWII).

Research findings support a need for additional research and exploration into alternative approaches to PTSD treatment and prevention. Viewing this disorder solely through medical and therapeutic lenses limits the scope of Western research and potential treatment options. Non-Western societies demonstrate varying levels of success in treatment and prevention of PTSD by implementing different approaches. In addition to further research, recommendations include facilitating different opportunities for veterans to share their experiences, ultimately alleviating veterans' burden and increasing communal understanding, and incorporating rituals or traditions to help military members separate their normal lives from what they did and saw during their time in combat.

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I. INTRODUCTION

Every individual process trauma differently. For some individuals, a certain traumatic event, or series of events, has effects that last beyond the average length of time a person typically is in distress. These individuals suffer from posttraumatic stress disorder (PTSD). The most current *Diagnostic and Statistical Manual of Mental Disorders* (DSM), DSM-V, categorizes PTSD as a “trauma and stressor-related disorder” with symptoms brought on by the exposure to or experience of one or more traumatic events, such as traumatic combat-related exposure, and lasting more than one month.

Today, PTSD is a serious and often debilitating condition affecting millions of people in the United States. While this is a shockingly large portion of the population, some experts argue that, with PTSD becoming somewhat of a catch-all for anyone experiencing negative reactions to traumatic events, there is a potential that the diagnostic rates are inflated due to overdiagnosis.¹ Military service members and veterans are disproportionately affected by this disorder and its symptoms, suffering at a rate that is twice as high as the rest of the population.² The toll PTSD takes on an individual is often compounded by comorbidities such as depression and substance use disorder (SUD).³ It can impact social and occupational functioning, ultimately leading to decreased morale and career success. For veterans and members of the military, PTSD contributes to a suicide rate that is twice as high as the rest of the population and consistently decreasing rates of retention.⁴

Western treatment methods for PTSD are typically medical and thus prescribed by medical professionals. The selective serotonin reuptake inhibitors (SSRIs) Sertraline and

¹ Jesse Singal, “Positive Psychology Goes to War,” in *The Quick Fix: Why Fad Psychology Cant Cure Our Social Ills*, (New York: Farrar, Straus and Giroux, 2021), 99–139.

² Judkins et al., “Incidence Rates of Posttraumatic Stress Disorder Over a 17-Year Period in Active Duty Military Service Members,” *Journal of Traumatic Stress* 33, no. 2 (2020): 994, <https://doi.org/10.1002/jts.22558>.

³ Lori L. Davis et al., “The Economic Burden of Posttraumatic Stress Disorder in the United States From a Societal Perspective,” *The Journal of Clinical Psychiatry* 83, no. 3 (April 25, 2022), <https://doi.org/10.4088/JCP.21m14116>.

⁴ Judkins et al., “Incidence Rates of Posttraumatic Stress Disorder,” 994.

Paroxetine are Food and Drug Administration (FDA)-approved and considered the first-line pharmacotherapeutics PTSD treatment.⁵ These, in concert with at least one form of psychotherapy, are the gold standard of Western medicine’s traditional treatment of PTSD. Although this treatment method is evidence-based with verifiable results, it does not come without negative impacts and also does not work for every individual. As reported in the journal, *Nature Medicine*, an estimated 40–60% of patients do not respond to one or either of the approved, standardly prescribed SSRIs. Additionally, the prescribed psychotherapies are typically long-term and progress slowly, causing the process for patients to be drawn out and painful. The dropout rate for these therapy treatments remains high.⁶

The U.S. Department of Defense (DOD) grapples with the rising rates of PTSD among the active-duty service member and veteran populations. The impacts of this are profound and far-reaching. Suicide rates amongst the ranks are often PTSD-related and sit well above the rates of the rest of the population.⁷ This thesis explores the possibility of alternative approaches beyond the current Western medical model, examining how societies define trauma and its impact on how individuals understand, experience, and manage traumatic events. Additionally, this thesis explores the role of societal attitudes and support in effective veteran reintegration, which is a crucial factor in successful trauma recovery.

A. PROBLEM STATEMENT

PTSD is a major mental health issue affecting the lives of millions of people in the United States alone. Approximately 8% of the general population is affected by this disorder. PTSD affects U.S. servicemembers and veterans at a rate that is two times higher than that of the rest of the nation and contributes to a suicide rate that is twice as high as the rest of the population as well.⁸ In addition to the loss of life and decrease in individual

⁵ Mitchell et al., “MDMA-Assisted Therapy for Severe PTSD: A Randomized, Double-Blind, Placebo-Controlled Phase 3 Study,” *Nature Medicine* 27, no. 6 (June 2021): 1025, <https://doi.org/10.1038/s41591-021-01336-3>.

⁶ Mitchell et al., “MDMA-Assisted Therapy for Severe PTSD,” 1025.

⁷ Judkins et al., “Incidence Rates of Posttraumatic Stress Disorder,” 994.

⁸ Judkins et al., “Incidence Rates of Posttraumatic Stress Disorder,” 994.

well-being, it causes a massive strain on the military population physically, mentally, financially, and professionally.

Beyond these individual impacts, PTSD-related research, training, and treatment consume a large portion of the DOD's mental health budget. According to the most current data from 2018, the total excess economic burden of PTSD in the U.S. military population was approximately \$42.7 billion in that year alone.⁹ Despite the hundreds of billions of dollars the U.S. spends annually on PTSD-related research and treatment, no new medications have been approved by the FDA in the last 20 years, and PTSD continues to go underdiagnosed and often untreated in service members.¹⁰

Since the acknowledgment of conditions known as “soldier’s heart” and “shell-shock syndrome,” precursors to PTSD, the Western world has viewed the disorder as a medical, physical, and behavioral issue.¹¹¹² Following suit, Western society has viewed and treated it as such. It is only in the DSM-V, published in 2013, that PTSD was removed from the category of general anxiety disorders and classified within a new, separate category, “trauma and stressor-related disorders.”¹³ Although this new classification better categorized PTSD, it did not change the overall treatment methods. PTSD is still considered a medical and behavioral issue and is most commonly, if not always, treated with some form or mix of psychotherapy and medication(s). This costs the U.S., and the DOD especially, in great ways in the areas of safety, manning, efficiency, readiness, and budgeting.

By viewing PTSD from the medical perspective only, research and treatment have been limited to medication or therapeutic remedies. Taking a different perspective could

⁹ Davis et al., “The Economic Burden of Posttraumatic Stress Disorder.”

¹⁰ Davis et al., “The Economic Burden of Posttraumatic Stress Disorder.”

¹¹ Surgeon T.T. Steinbach, Dr. Jacob Da Costa – ‘Soldier’s Heart’,” Time Lines Magazine, last modified on May 6, 2020, https://www.timelinesmagazine.com/publications/civil-war-courier/dr-jacob-da-costa-soldier-s-heart/article_abc080f8-8fd5-11ea-89c7-0fe33219a1d0.html.

¹² “PTSD from DSM-III to DSM-5: Progress and Challenges,” in *Handbook of PTSD: Science and Practice*, 2nd edition, ed. Matthew J. Friedman, Terence Martin Keane, and Patricia A. Resick (New York: The Guilford Press, 2014).

¹³ “PTSD from DSM-III to DSM-5,” 3–7.

broaden our understanding and widen the realm of possible solutions. Looking at how other societies and cultures view and understand trauma response may shed light on different ways to tackle the prevention and treatment of this diagnosis.

Medical historians note the presence of post-war PTSD symptoms across many different cultures and societies throughout history, dating as far back as the Battle of Marathon in 490 B.C.¹⁴ This highlights that the disorder is a broader problem plaguing humanity as a whole, not just Western society. That being said, exploring the way other societies have considered and addressed the myriad of symptoms we categorize as PTSD might be crucial to expanding our overall understanding of the disorder.

B. RESEARCH QUESTION

Could broadening our approach to PTSD treatment and prevention, looking across time and geographic space in considering key human aspects that the Western medical model does not emphasize, provide us more effective solutions to this growing mental health crisis?

¹⁴ Erin Blakemore, “How PTSD Went From ‘Shell-Shock’ To A Recognized Medical Diagnosis,” National Geographic, last modified on June 16, 2020, <https://www.nationalgeographic.com/history/article/ptsd-shell-shock-to-recognized-medical-diagnosis>.

II. RESEARCH APPROACH

Through the completion of this thesis, I aim to determine if a broader approach, looking across time and disciplines and considering aspects of humanity, could reveal a better solution to preventing and/or treating PTSD in the U.S. military population. To accomplish this, I analyze Western ways of framing, understanding, and treating PTSD, explore how PTSD is understood and handled in other societies and cultures, and ultimately, determine if there are possible cross-cultural approaches to addressing PTSD that could potentially be introduced as effective alternatives to Western methods. I conclude with recommendations for future research and possible ways to implement the identified alternative approaches on a trial basis within the U.S. Department of Defense (DOD).

To achieve my desired end state, I start by more specifically defining PTSD. I provide a current description of the disorder, how it has been defined and understood throughout history, some potential causes, and the variety of possible symptoms. This information is derived from the existing body of psychology texts and PTSD-related research. In my discussion of PTSD, I also address how the Western world, and the U.S. DOD specifically, frames, studies, and treats PTSD. This includes typical treatment methods, emerging treatment methods, and treatment methods for veterans conducted by non-DOD affiliated organizations.

The main body of the thesis attempts to explore how culture impacts PTSD research, understanding, and treatment. I discuss examples from India, Tibet, and Kenya, followed by an exploration of the impact societal structure has on returning veterans. I then proceed to apply the cultural impacts discussed to a case study of the Navajo and Zuni Native American tribes during and after World War II (WWII). These examples were chosen based on the presence of existing PTSD-related research involving these populations and, more specifically, research on these populations regarding mental and emotional responses to trauma, conflict, or returning from war or war-like situations. The information used to explore these cross-cultural examples comes from a body of research and documentation already in existence.

Throughout my discussion of culture and PTSD, I synthesize the information discussed and provide my analysis of the differences between the cultures and societal structures discussed and Western society. I note that differences in the framing and understanding of trauma between societies contribute to differences in trauma response seen between populations. I also discuss the impacts of a servicemember living in and returning to a collectivistic, egalitarian style society versus a more individualistic society. Following the description of the selected case study, I hypothesize that the utilization of pre- and post-war rituals contributes to a decrease in the likelihood that a warfighter will experience PTSD symptoms upon return.

I conclude by summarizing the information discussed and providing recommendations of possible strategies the DOD could use to implement the discussed analysis and findings, as well as supplying suggestions for future research on this topic. The strategies discussed in this final section are developed based on the analysis conducted and my personal experience as an active-duty U.S. military member.

III. AN OVERVIEW OF STANDARD WESTERN PTSD TREATMENTS

The most common treatment approaches for individuals suffering from PTSD have not changed significantly since the early 2000s. Currently, the most successful treatment is a combination of psychotherapy and medication, specifically participation in some form of cognitive-behavioral therapy (CBT) and the administration of selective serotonin reuptake inhibitors (SSRIs).¹⁵

There are a variety of different types of both CBT and SSRIs. The determination of which type or combination of these treatments will be most beneficial is patient and population dependent. Prolonged exposure (PE) therapy and cognitive processing therapy (CPT) are two forms of CBT that obtained the best results through research and are the most common therapeutic approaches used with patients with PTSD. In addition, though less commonly used, therapy treatments include eye movement desensitization and reprocessing (EMDR) and stress inoculation therapy (SIT).¹⁶ PE therapy attempts to keep patients from undertaking avoidance strategies commonly implemented as coping mechanisms following trauma. It does this by helping them to address their trauma head-on and process it more fully.¹⁷ CPT, on the other hand, is a therapy for individuals already suffering from PTSD symptoms. It targets an individual's cognitive distortions, helping to rewire how their mind conceives of whatever trauma or traumatic event they experienced.¹⁸ Within the military population, a major complication for the use of both of these therapies is the willingness of the individuals who could potentially benefit from them to participate.

¹⁵ Matthew J. Friedman, MD, PhD, "PTSD: National Center for PTSD - PTSD History and Overview," U.S. Department of Veterans Affairs, https://www.ptsd.va.gov/professional/treat/essentials/history_ptsd.asp.

¹⁶ Friedman, "PTSD History and Overview."

¹⁷ Singal, "Positive Psychology Goes to War," 127.

¹⁸ Singal, "Positive Psychology Goes to War," 126.

Often prescribed in conjunction with a form of psychotherapy are a variety of different types and dosages of SSRIs. Evidence-based studies for PTSD psychopharmacology currently suggest the best SSRIs to use in the treatment of PTSD are: sertraline (Zoloft), paroxetine (Paxil), and fluoxetine (Prozac).¹⁹ Although there is evidence backing the effectiveness of all three of these antidepressants in treating PTSD symptoms, only sertraline and paroxetine are approved by the FDA for the treatment of PTSD specifically.^{20,21} Medication treatment plans vary in medication type and dosage for each patient. Medications are tailored to a specific patient depending on their “response and ability to tolerate” what is prescribed.²²

Although combinations of psychotherapy and medication are effective for some individuals, they do not work for everyone. Approximately 40–60% of PTSD patients fail to respond to traditional pharmacological treatment. Many patients also fail to respond to CBTs, the “gold standard” of trauma-focused psychotherapy treatment, as well, resulting in high dropout rates and the continued suffering of these individuals.²³

¹⁹ “Medications for PTSD,” American Psychological Association, last modified July 13, 2017, <https://www.apa.org/ptsd-guideline/treatments/medications>.

²⁰ Friedman, “PTSD History and Overview.”

²¹ American Psychological Association, “Medications for PTSD.”

²² American Psychological Association, “Medications for PTSD.”

²³ Mitchell et al., “MDMA-Assisted Therapy for Severe PTSD,” 1025–26.

IV. PTSD AND THE DOD

The correlation of trauma-related symptoms we now consider symptoms of PTSD were not always understood as they are today. Literature suggests that the Western world noted certain effects that war had on warriors beginning centuries ago. Since then, a large body of research has resulted in a greater understanding of the direct psychological effects combat stress can have on the human mind and the cultivation of a variety of medical and behavioral treatment methods to alleviate or ameliorate the disorder's symptoms. The U.S. DOD has both contributed to and benefited from this body of research.

A. HISTORY AND EVOLUTION OF PTSD FOR THE DOD

The existence of PTSD in the warfighter is not a recent development. Post-war PTSD-related symptoms are documented throughout history in both creative and factual texts. In the Greek historian Herodotus' writing on the Battles of Marathon in 490 B.C., he described the symptom of post-war blindness experienced by an Athenian soldier who experienced no vision-impacting injury. In Shakespeare's *Henry IV*, Part 1, written back in 1596, a husband experiences "sleeplessness and inability to enjoy life after fighting a battle."²⁴ The evidence of the psychological damage war can cause is also touched upon in the 1994 book *Achilles in Vietnam*, where the PTSD suffered by Vietnam veterans is compared to soldiers from Homer's *Iliad*, written in late 8th or early 7th century BC.²⁵ Although these, as well as other, combat-related symptoms of PTSD have been experienced as far back as historians have accounts, they were not given a name or provisional diagnosis until the U.S. Civil War in the early 19th century.

During the Civil War, many soldiers experienced a variety of cardiac symptoms that did not completely resemble diseases known to physicians at the time. Observations of these specific cardiac symptoms were only noted among many types of soldiers, including infantry, artillery, and cavalry. The diagnosis was termed "soldier's heart" or

²⁴ Blakemore, "How PTSD Went from 'Shell-Shock' to a Recognized Medical Diagnosis."

²⁵ Jonathan Shay, M.D., Ph.D., *Achilles in Vietnam: combat trauma and the undoing of character* (New York: Touchstone, 1994).

“irritable heart” and was later known as “Da Costa Syndrome” after the doctor who discovered it.²⁶ One of the causes of irritable heart was said to be “frequent excitement,” which can be attributed to the reoccurring trauma and high stress experienced during extended time in combat situations.

At this time, post-war specific symptoms were purely tied to physical causes or ailments. It was not until the 1880s, when psychiatrists took a vested interest in the syndrome, that the symptoms were looked at beyond a purely physical standpoint. The connection between the symptoms exhibited and an individual’s brain and mental status led to a new diagnosis, “traumatic hysteria.”²⁷ Doctors noted that the emotional expressions, said to stem from the uterus, exhibited by women, known as “hysteria,” were now being seen in men following traumatic events.²⁸ This allowed doctors to dissociate the symptoms from being physical in nature and tie them to the mental functioning of the brain.

The following century saw the dramatic mental and physical effects of World War I (WWI). The improvements in military weaponry and technology led to never-before-seen devastating impacts. Soldiers were exposed to gruesome and horrific sights on what seemed to be a magnified scale. A new term appeared to describe the post-combat symptoms and mental injuries experienced and exhibited by these soldiers. This was the birth of the term “shell-shock” or “shell-shock syndrome.”²⁹ Some soldiers during this time were able to receive psychiatric treatment on a very basic level for symptoms of what would now be considered PTSD. This was the first time the Western world saw medical treatment for this mental syndrome.

The diagnosis terminology changed yet again only a few decades later with the start of WWII. Now that combat was recognized as a cause of or trigger for these mental health symptoms and ramifications, almost double the number of soldiers diagnosed in WWI were

²⁶ Steinbach, “Dr. Jacob Da Costa – ‘Soldier’s Heart’.”

²⁷ Blakemore, “How PTSD Went from ‘Shell-Shock’ to a Recognized Medical Diagnosis.”

²⁸ Blakemore, “How PTSD Went from ‘Shell-Shock’ to a Recognized Medical Diagnosis.”

²⁹ Blakemore, “How PTSD Went from ‘Shell-Shock’ to a Recognized Medical Diagnosis.”

diagnosed in WWII. Although the observations and symptoms noted were the same, the disorder was now called “psychiatric collapse,” “combat fatigue,” or “war neurosis.”³⁰ With this new terminology and understanding came new procedures and treatments. Soldiers exhibiting symptoms were typically removed from combat or given injections of early forms of psychiatric drugs to alleviate the mental distress. These new treatments proved to be unsuccessful, with combat fatigue eventually accounting for 40% of all WWII military discharges.³¹

The final major shift in terminology came with the Vietnam War starting in 1955. Although the DSM was published just a few years before the beginning of the war (in 1952), previously noted combat-related mental health symptoms were not identified in their own specific category or labeled with an official diagnostic name. The symptoms merely fell under more common diagnoses, such as anxiety, depression, and schizophrenia.³² The term “Post-Vietnam Syndrome” arose in 1972 as the War was winding down. Soldiers and veterans suffering during this time often had no access to treatment since the numbers affected were so high and many experienced delayed-onset symptoms. Because of this, many veterans sought relief through self-help communities in what became known as “street corner psychiatry.” This home remedy was often combined with anti-war protests ongoing at the time.³³ It was not until the 1980s that PTSD became a formal diagnosis. This occurred after veterans pleaded and lobbied for an official diagnosis for their symptoms in an attempt to both establish eligibility for disability compensation and obtain the legitimacy of a recognized disorder.³⁴ This diagnosis was codified in the DSM III under the category of general anxiety disorders.

³⁰ Blakemore, “How PTSD Went from ‘Shell-Shock’ to a Recognized Medical Diagnosis.”

³¹ Blakemore, “How PTSD Went from ‘Shell-Shock’ to a Recognized Medical Diagnosis.”

³² Blakemore, “How PTSD Went from ‘Shell-Shock’ to a Recognized Medical Diagnosis.”

³³ Blakemore, “How PTSD Went from ‘Shell-Shock’ to a Recognized Medical Diagnosis.”

³⁴ Hanna Kienzler, “Debating War-Trauma and Post-Traumatic Stress Disorder (PTSD) in an Interdisciplinary Arena,” *Social Science & Medicine* 67, no. 2 (July 2008): 220, <https://doi.org/10.1016/j.socscimed.2008.03.030>.

The terminological history of PTSD in association with war and the military progressed from vague and uninformed to specific and concrete. The diagnostic history developed from direct connection to physical ailments to an understanding of invisible wounds and the link between trauma and mental injury. Great strides were made in these areas between the 19th and 20th centuries; however, the same progress was not seen with the treatment of this now-diagnosable disorder. PTSD affects the military population disproportionately and at higher rates than the civilian populous, with U.S. service members and veterans experiencing symptoms at a rate two times higher than that of the rest of the nation.³⁵ Along with experiencing the symptoms related to PTSD, comorbidities, such as depression and SUD, put individuals at a higher risk factor of suicide. As it stands today, the rate of suicide among veterans and active-duty service members is also twice that of the rest of the population.^{36,37}

B. NOTABLE MILITARY EFFORTS TO COMBAT PTSD BEYOND ROUTINE TREATMENT

Given the rates of PTSD and PTSD-related suicides amongst the military and veteran populations, the DOD has a vested interest in finding the most effective way(s) to both prevent and treat PTSD within its population. Some efforts taken go beyond just the typical medical and behavioral approaches.

1. Comprehensive Soldier Fitness (CSF)

PTSD-related research, training, and treatment account for a large portion of the DOD's mental health budget. The total excess economic burden of PTSD within the U.S. military population was approximately \$42.7 billion in 2018 alone.³⁸ The DOD faces a problem amongst its ranks that is causing significant financial impact and also wreaking

³⁵ Judkins et al., "Incidence Rates of Posttraumatic Stress Disorder," 994.

³⁶ Judkins et al., "Incidence Rates of Posttraumatic Stress Disorder," 994.

³⁷ Thomas Howard Suitt, III, "High Suicide Rates Among United States Service Members and Veterans of the Post-9/11 Wars," *20 Years of War: A Cost of War Research Series*, (June 2021): 5, chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://watson.brown.edu/costsofwar/files/cow/imce/papers/2021/Suitt_Suicides_Costs%20of%20War_June%2021%202021.pdf.

³⁸ Davis et al., "The Economic Burden of Posttraumatic Stress Disorder."

havoc in the mind and hearts of its service members and veterans. In 2007, acknowledging this major issue, the chairman of the Joint Chiefs of Staff tasked the “Special Assistant to the Chairman for Returning Warrior Issues” with figuring out a way to remedy this growing crisis within the DOD.³⁹

After reading *Learned Optimism: How to Change Your Mind and Your Life* by Dr. Martin Seligman, COL Jill Chambers, the Special Assistant for this task, began to explore Seligman’s world of Positive Psychology. She was inspired by his claim that an individual could prepare themselves to face adversity by priming themselves beforehand. Seligman was consulted in the development of the U.S. Army resilience-building program that came to be known as comprehensive soldier fitness (CSF). Once implemented, this program eventually became mandatory for every soldier. Overall, it was one of the largest, and possibly most expensive, mental health initiatives “geared at a single population in the history of humanity.”⁴⁰

The CSF program was comprised of three components. First was a set of online training modules, adapted from a preexisting military mental health program, that aimed to “boost mental health.” Every soldier was required to complete a certain number of hours of this online learning each year. The next component was an annual survey required for all soldiers each year known as the global assessment tool (GAT). The main component of CSF was the master resilience training (MRT) program, which served as a “train-the-trainer” program that Seligman modeled after his Positive Psychology Center’s popular Penn resilience program (PRP).⁴¹ It should be noted that the PRP was geared toward 10–14-year-old students with the goal of improving their mental health by instilling “cognitive habits and skills that will prevent depression and anxiety.”⁴² This program was never aimed toward or trialed on adults nor was it tested for its benefits or effects on individuals with PTSD. In fact, two separate sets of meta-analysis did not even find statistically

³⁹ Singal, “Positive Psychology Goes to War,” 120–21.

⁴⁰ Singal, “Positive Psychology Goes to War,” 122.

⁴¹ Singal, “Positive Psychology Goes to War,” 122.

⁴² Singal, “Positive Psychology Goes to War,” 110–11.

significant results for the target population of children and early adolescents.⁴³ Until it was associated with the Army, PRP never claimed it could, or even aspired to, prevent PTSD or suicide at all.⁴⁴

Despite the lack of positive or relevant results for Seligman’s “premier” PRP program, the U.S. Army chose to implement CSF and award Seligman’s Positive Psychology Center with a \$31 million initial no-bid contract, with promises of follow-on funding, in 2010.⁴⁵ By 2015, the program had become an estimated \$287 million enterprise. As of 2021, CSF had cost the Army upwards of half a billion dollars. If the funding put into initiating the Air Force version of CSF, Comprehensive Airman Fitness, is taken into account, the Pentagon has spent even more money attempting to increase resilience and optimism in the military ranks with Seligman’s methods.⁴⁶ Despite the massive, possibly historic, amount of funding spent on this adapted-PRP approach, the Army, and DOD as a whole, have very little, if any, success and progress to tout.

2. Emerging Alternative Treatments

The medical community has long been interested in the effects of psychedelics on the body and the human mind. Ongoing research is exploring the effects of psychedelic-assisted therapies on a variety of different types of mental health care. Of note, large amounts of time and funding have been put toward identifying the potential for these therapies to augment existing evidence-based treatments for depression, anxiety, and PTSD.⁴⁷

Nature Medicine journal reports that 3,4-methylenedioxymethamphetamine, commonly known as MDMA, and Psilocybin, the primary chemical in psychedelic or “magic” mushrooms, are being used in new forms of therapies that have shown to be low

⁴³ Singal, “Positive Psychology Goes to War,” 114.

⁴⁴ Singal, “Positive Psychology Goes to War,” 123–25.

⁴⁵ Singal, “Positive Psychology Goes to War,” 122–23.

⁴⁶ Singal, “Positive Psychology Goes to War,” 135.

⁴⁷ Patrick Albert, Coty R. Trivellin, and Thomas M. Stanley, “Exploring the Potential of Psychedelic-Assisted Therapies for Suicide Prevention in SOCOM,” (master’s thesis, Naval Postgraduate School, 2022), 21–36, <https://hdl.handle.net/10945/71424>.

side effect treatments with fast-acting and long-term reductions in the symptoms of depression, anxiety, and PTSD. Although commonly associated with addictive qualities, these drugs have also shown “lower rates of addiction potential” when utilized within therapeutic settings in the correct dosage.⁴⁸ The DOD has taken an interest in these results and is exploring the possibilities of implementing these augmentative psychedelic-assisted treatments for the active-duty and veteran populations. These treatments save both time and money. Typical therapies, such as prolonged exposure therapy, often require servicemembers to step out of their typical duties for long periods.⁴⁹ Some studies have suggested psychedelic-assisted treatments have faster and longer-lasting effects with fewer sessions, which could allow for a faster return to duty. However, these effects are not well established in large-scale, replicated clinical trials. The average cost per person for the traditional course of treatments is also significantly higher when compared to the average all-inclusive psychedelic retreat, averaging only \$2,600 to \$8,900 depending on the length of stay and accommodations.⁵⁰⁵¹

3. Non-DOD Affiliated Organizational Efforts

There are many organizations outside of the DOD that support and assist veterans suffering from PTSD. These non-DOD affiliated organizations offer a variety of services and types of assistance, varying in nature from informal to more professional. Opportunities made available through these organizations range from access to retreats and support groups to more professional therapeutic services, such as group and individual psychologist guided sessions offered either in-person or virtually.

While most organizations offer more traditional support and treatment, some have branched out to more unique and alternative methods to assist veterans in overcoming both

⁴⁸ Albert, Trivellin, and Stanley, “Exploring the Potential of Psychedelic-Assisted Therapies for Suicide Prevention in SOCOM,” 35.

⁴⁹ Albert, Trivellin, and Stanley, “Exploring the Potential of Psychedelic-Assisted Therapies for Suicide Prevention in SOCOM,” 35.

⁵⁰ Davis et al., “The Economic Burden of Posttraumatic Stress Disorder.”

⁵¹ Max Berlinger, “All-Inclusive Magic Mushroom Retreats Are the New Luxury ‘Trips,’” Bloomberg Businessweek, last modified on August 19, 2021, <https://www.bloomberg.com/news/articles/2021-08-19/all-inclusive-magic-mushroom-ayahuasca-retreats-are-new-luxury-trips>.

physical and mental long-term challenges. These organizations take different approaches to providing support and aid. Examples of these alternative methods include, but are not limited to, dog and equine-facilitated therapy, outdoor recreation and adventuring, meditation, wellness guidance and training, jiu-jitsu, and assistance in restoring financial stability and self-sufficiency.⁵² Each of these approaches attempts to help veterans cope with and overcome challenges stemming from their military service through different avenues than the traditional medical and behavioral forms of PTSD treatment.

⁵² Joshua A. Herrington, “A Descriptive Account of Mustang Horse Therapy” (master’s thesis, Naval Postgraduate School, 2022), <https://calhoun.nps.edu/handle/10945/69655>.

V. CULTURE AND PTSD

“It’s such a destructive idea to think that PTSD is dysfunction. We’re getting it fundamentally wrong when we think it’s a sign of brokenness. It’s the sign of the impulse to survive.”⁵³

—**MaryCatherine McDonald**
PhD trauma researcher and author

In the Western world, we understand what we consider to be normal types of events and experiences for an individual to live through. Negative experiences outside of this normal range are often considered to be traumatic. Within a population with a common understanding of what “normal experiences” are, this may work as a basic working definition for trauma and traumatic events. However, when that same experience occurs in a different sociocultural context, the understanding and impact may vary. A traumatic event cannot simply be taken at face value, because every individual experiences events differently. The impacts these events have on people will not be the same universally, because the cultural context matters.

PTSD is generally described as a persistent condition that’s onset occurs following direct or indirect exposure to some type of traumatic event.⁵⁴ By understanding the disorder in this way, one is inherently making the assumption that trauma and traumatic events are defined and understood consistently across all individuals and all cultures. This, however, is not the case. Anthropologists and relativists would argue that “all human behaviors are culturally patterned,”⁵⁵ which brings the standard understanding and description of PTSD into question.

Contrary to mainstream thought processes and intuition, the prevalence of symptoms associated with PTSD in a culture or society may be due to more than simply

⁵³ Blakemore, “How PTSD Went from ‘Shell-Shock’ to a Recognized Medical Diagnosis.”

⁵⁴ Gilmoor, Adithy, and Regeer, “The Cross-Cultural Validity of Post-Traumatic Stress Disorder and Post-Traumatic Stress Symptoms in the Indian Context,” 2.

⁵⁵ Gilmoor, Adithy, and Regeer, “The Cross-Cultural Validity of Post-Traumatic Stress Disorder and Post-Traumatic Stress Symptoms in the Indian Context,” 2.

the presence of or exposure to traumatic events. Research indicates that how societies define trauma has an impact on how those within the society understand, experience, and manage traumatic events.⁵⁶ How trauma and traumatic events are defined and understood differs in different sociocultural contexts. In a context where certain experiences are common, it may be less likely for those experiences to be perceived as traumatic or abnormal. Within some cultures, what the West considers to be posttraumatic stress symptoms (PTSS) or PTSD is viewed as “normal human reactions to very abnormal situations.”⁵⁷

With trauma being experienced differently in different cultures, the way each society understands, views, treats, and prevents PTSD varies as well. Consider the country of India, which is known to endure enormous amounts of trauma on an annual basis. India encompasses roughly three million square kilometers and has significant topographic and cultural diversity. It is the seventh largest country in the world by area and, with a population of over 1.4 billion, recently surpassed China to become the most populous country in the world.⁵⁸⁵⁹ This area is divided into 29 states and union territories, all of which operate under their own political architecture as well as social and economic structure, including language.⁶⁰ This abundance of diversity encompasses wealth, disparity, and exposure to trauma, traumatic events, and natural disasters.

People across India’s 29 diverse states experience traumatic events, including conflict, natural disasters, and sexual violence. The nation has been greatly affected by

⁵⁶ Gilmoor, Adithy, and Regeer, “The Cross-Cultural Validity of Post-Traumatic Stress Disorder and Post-Traumatic Stress Symptoms in the Indian Context,” 1–24.

⁵⁷ Gilmoor, Adithy, and Regeer, “The Cross-Cultural Validity of Post-Traumatic Stress Disorder and Post-Traumatic Stress Symptoms in the Indian Context,” 13.

⁵⁸ Victor Kiprop, “How Many States are in India?” WorldAtlas, last modified October 19, 2018, <https://www.worldatlas.com/articles/how-many-states-are-in-india.html>.

⁵⁹ Sara Hertog, Patrick Gerland, and John Wilmoth, “UN DESA Policy Brief No. 153: India Overtakes China as the World’s Most Populous Country,” United Nations, last modified April 24, 2023, <https://www.un.org/development/desa/dpad/publication/un-desa-policy-brief-no-153-india-overtakes-china-as-the-worlds-most-populous-country/>.

⁶⁰ Andrew Roderick Gilmoor, Adithy Adithy, and Barbara Regeer, “The Cross-Cultural Validity of Post-Traumatic Stress Disorder and Post-Traumatic Stress Symptoms in the Indian Context: A Systematic Search and Review,” *Frontiers in Psychiatry* 10, no. 439 (July 2019): 2, <https://doi.org/10.3389/fpsy.2019.00439>.

earthquakes, tsunamis, and cyclones throughout the last millennium. The people have suffered through a variety of political and military conflicts while also grappling with continuously worsening income inequality.⁶¹ Each individual's experience of or exposure to any of these traumas can lead to or result in the onset of PTSS and, in many cases, PTSD. Because of India's high rates of trauma exposure, it has been the subject of a large body of research related to access to mental health care and services, the prevalence of PTSD, depression, and other mental illnesses following trauma, and the treatment and conceptualization of PTSD and PTSS within the local population.

Although the majority of studies suggest there is a need for further research on the topic and more longitudinal studies, most are in agreement that rates of trauma exposure within the Indian population are high and trauma-related psychiatric disorders affect a considerable portion of those exposed. A review of the relevant Indian research, however, reveals inconsistencies in how PTSD is defined and contextualized.⁶² The definitions ranged from different variants of the DSM classification to much more vague descriptions emphasizing functional impairments. Many of the studies utilized the terms physical distress, emotional distress, or social anxiety interchangeably with PTSD. Despite the inconsistencies and lack of a unified understanding, the majority of the studies reviewed defined PTSD using some variant of DSM criteria, although none referenced criteria from the current version (DSM-V).⁶³

This emphasis on the DSM's categorization and definition of PTSD throughout Indian research stresses the influence and dominance of Western science and medicine on the conceptualization of this disorder in this vastly different sociocultural context. These DSM criteria were researched and formulated within Western societies whose populations experience trauma differently and in differing amounts. None of these definitions consider

⁶¹ Gilmoor, Adithy, and Regeer, "The Cross-Cultural Validity of Post-Traumatic Stress Disorder and Post-Traumatic Stress Symptoms in the Indian Context," 2.

⁶² Gilmoor, Adithy, and Regeer, "The Cross-Cultural Validity of Post-Traumatic Stress Disorder and Post-Traumatic Stress Symptoms in the Indian Context," 4–13.

⁶³ Gilmoor, Adithy, and Regeer, "The Cross-Cultural Validity of Post-Traumatic Stress Disorder and Post-Traumatic Stress Symptoms in the Indian Context," 4–13.

the possible effects sociocultural norms may have on how individuals understand and experience trauma or how PTSS and PTSD may manifest in non-Western populations.

This begs the question of whether Western definitions of PTSD are adequate to use in non-Western contexts. Some argue that the Western understanding and treatment of the disorder only make sense within the context in which they were researched and developed.⁶⁴ An individual or society that experiences what the Western world would consider traumatizing events on a routine basis as part of daily life is not likely to respond in the same way mentally or physically as those not experiencing life in this manner. The baseline understanding and conceptualization of trauma are fundamentally different. Hanna Kienzler, a professor of Global Health at McGill University and co-director of the ESRC Centre for Society and Mental Health, states in her interdisciplinary research on war-trauma and PTSD, “war-affected populations are often reluctant to accept Western mental health models and are disinclined to speak to mental health specialists about their experiences, as they do not consider their symptoms pathological.”⁶⁵ The effects of war and resulting impacts are viewed as “normal” responses in these cases.

This desensitization to combat trauma is evident in many societies around the globe. The Turkana of northwestern Kenya are a pastoral society that routinely engages in and experiences lethal cattle raiding. Turkana warriors are typically men, but many women and children experience raids by other groups as well.⁶⁶ Combat experience is commonly shared and discussed within the community. The frequency of exposure to this type of combat and the communally shared understanding result in combat experiences being normalized and thus considered less traumatic. Engaging in war is accepted and often venerated in Turkana society, allowing warriors to participate while accepting less social

⁶⁴ Kienzler, “Debating War-Trauma and Post-Traumatic Stress Disorder,” 218–19.

⁶⁵ Kienzler, “Debating War-Trauma and Post-Traumatic Stress Disorder,” 224.

⁶⁶ Matthew R. Zefferman and Sarah Mathew, “Combat Stress in a Small-Scale Society Suggests Divergent Evolutionary Roots for Posttraumatic Stress Disorder Symptoms,” *Proceedings of the National Academy of Sciences* 118, no. 15 (April 13, 2021): 7, <https://doi.org/10.1073/pnas.2020430118>.

risk and without fear of moral disapproval.⁶⁷ Ultimately, this contributes to lower rates of depressive PTSD symptoms after combat.⁶⁸⁶⁹

Along with the frequency of exposure, the language a society or community speaks can also alter how events or symptoms are experienced. It can have a major impact on the conceptualization of events, with translations of the same words or phrases having different connotations and some explanations or descriptions of experiences in one language not translating at all into another.⁷⁰ This can shape the potential for residual, lasting effect(s), such as PTSD, individuals may experience. The research and treatment of PTSD are dominated by a Western-derived conceptualization of the disorder, its potential causes, and possible treatments.

Expanding our exploration of PTSD in non-Western societies to include the rest of the Indian Subcontinent provides more examples of cultural impacts on trauma response, including the effects of language. Following a study in neighboring Tibet regarding the traumatization of Tibetan torture survivors, comments from Tibetan lamas were recorded by researchers who reported that the lamas “questioned the validity of our Western rating scales and explained that our results might be influenced by the Tibetan culture, which among other things can be characterized as having a view and articulation of suffering much more complex than the units of our study’s rating scales.”⁷¹ The Tibetan people have an understanding of trauma that cannot be characterized or diagnosed using Western definitions and diagnostic methods. Our criteria and rating scales are not relatable or applicable in the same way in their cultural context.

⁶⁷ Zefferman and Mathew, “Combat Stress in a Small-Scale Society, 7.

⁶⁸ Zefferman and Mathew, “Combat Stress in a Small-Scale Society, 7–8.

⁶⁹ Matthew R. Zefferman and Sarah Mathew, “An Evolutionary Theory of Moral Injury with Insight from Turkana Warriors,” *Evolution and Human Behavior* 41, no. 5 (September 2020): 341–53, <https://doi.org/10.1016/j.evolhumbehav.2020.07.003>.

⁷⁰ Leslie Swartz, *Culture and Mental Health—A Southern African View*, (Capetown, South Africa: Oxford University Press, 1998), <https://doi.org/10.4102/hsag.v4i1.7>.

⁷¹ Peter Elsass et al., “Questioning Western Assessment of Trauma Among Tibetan Torture Survivors. A Quantitative Assessment Study with Comments from Buddhist Lamas,” *Torture* 19, no. 3(2009): 194–203, <https://pubmed.ncbi.nlm.nih.gov/20065538/>.

How an individual experiences and understands the world around them impacts the way they respond to it. The way trauma is framed and the language used to describe it can result in varying post-trauma symptoms and severity following the event. PTSD is defined and diagnosed from the Western perspective without taking into consideration any cultural sensitivities or the understanding of a specific community. Moving forward, it may be useful to tailor research and treatment of PTSD to individual target populations, such as military members and veterans, to understand and treat the disorder most effectively in different sociocultural contexts.⁷²

In his book, *Tribe*, Sebastian Junger explores the effects different cultural contexts have on the mental health of returning warfighters. He specifically homes in on the differences between warfighters who live in and return to egalitarian cultures that handle issues at more of a societal level and those living in and returning to more isolating, individualistic cultures where issues are considered to be the individual's own problem to handle. He breaks down a human's basic needs and describes how those needs are either satisfied or not satisfied in these different sociocultural settings. Ultimately, he asserts our roots as people go back to egalitarian societies and that these societal structures allow for our needs to be met in ways that the individualistic societies of the Western world cannot. When at war, a servicemember experiences living in a communal culture where each person depends on the others for survival and feels a sense of responsibility to the group. When they return, they are thrust back into a culture that isolates them, resulting in the exacerbation of the impacts of their wartime experiences and additional trauma.⁷³ Humans are meant to live in groups with the division of labor and where every person has a role, not in isolation where they fend for themselves.

The history of our people is rooted in communal living. We survived in groups where the people relied and depended on each other for resource sharing, protection, and survival in general. There was a sense of responsibility to the group and everyone in it. We live in a way today that deviates far from this. We follow much more of an “every man for

⁷² Gilmoor, Adithy, and Regeer, “The Cross-Cultural Validity of Post-Traumatic Stress Disorder and Post-Traumatic Stress Symptoms in the Indian Context,” 20–22.

⁷³ Sebastian Junger, *Tribe: On Homecoming and Belonging*, (New York: Twelve, 2016), 39–51.

himself' mentality and often climb over each other to get to the top. People look out for their own well-being and that of their small group or family unit, but very rarely is this feeling of responsibility to protect and support stretched to include the greater community in which they are a part. Evolutionarily, this way of living is not in our best interest.

The act of war is inherently an act of destruction. Although this is the case, it often also builds a greater sense of community. It gives people a unified goal to fight toward or an enemy to band together to fight against. In certain circumstances, it can also force individuals within a community to rely on each other in ways they typically would not. Those who serve and fight during wartime become part of a community that is very dependent on everyone in the group. For many military units at war, their relation to and connection with their unit is very similar to that of our ancestral communities. This community-building response to war is to some extent a positive effect of this destructive act.

The feeling and responsibility of community is crucial to survival at war. That sense of brotherhood keeps service members banded together, creates a greater feeling of responsibility for and protection of each other, and provides comradery and a sense of purpose. Most veterans experience at least elements of this type of community during wartime. Unfortunately, when they return home, this often vanishes as they are thrust directly back into our individualistic society.

Effective reintegration is arguably the best predictor of successful trauma recovery, especially returning from combat. In *Tribe*, Junger breaks reintegration down into three crucial factors: the presence of egalitarian beliefs and social resilience, views of victimhood, and the ability to regain a sense of purpose. In the U.S., we rank poorly for all three.⁷⁴

- Our individualistic society with poor wealth distribution and lack of resource sharing is a stark contrast to the communal culture a service member experiences within their unit on the battlefield. Returning military

⁷⁴ Junger, *Tribe*, 50–51.

members are at risk of struggling to integrate back into a society with low social resilience, leaving them longing for the feeling of community that they left.⁷⁵

- Western societies tend to cast the identity of “victim” onto veterans. Things as simple as thanking someone for their service can come with certain connotations. The category of the victim has a shared public meaning that is acknowledged by most of society.⁷⁶ A veteran referred to as a victim is often inherently associated with sacrifice and loss. It can be easy for service members to latch onto that stereotype and allow that mindset to blossom into other negative effects and implications. Categorizing or labeling veterans as victims further alienates them from the rest of society. It also places them at risk of self-identifying as victims and falling into a class of society that remains dependent on the government and government resources and programs to survive.⁷⁷
- The difficulty of finding jobs following time in service further contributes to poverty and welfare dependence while also leaving returning service members without the ability to contribute to society. Upon returning home, veterans leave a context where they are needed and useful. It is important to fulfill that desire to contribute and feel necessary and valuable. Without jobs, these individuals then must cope with the adjustment from being a necessary and productive member of a unit on the battlefield to feeling a lack of sense of purpose.⁷⁸

All three of these factors are dependent on society, its structure, and its response to and support of veterans. A society’s approach and attitude toward veterans has a massive

⁷⁵ Junger, *Tribe*, 50–51.

⁷⁶ Junger, *Tribe*, 49.

⁷⁷ Junger, *Tribe*, 51.

⁷⁸ Junger, *Tribe*, 51.

impact on how a veteran views themselves and sees themselves fitting back into the local community.

Veterans and military members cannot erase the trauma they saw or experienced while serving. Those events are in the past, and in many cases, were unavoidable or necessary. What can be affected is how these individuals relate to their trauma and the support they receive and feel. Successful reintegration into society can leave a veteran with a good support system, a sense of purpose and value within their community, and the ability to be self-sufficient. It sets them up for overall success. Often, the biggest trauma veterans experience is not on the battlefield, but rather, it occurs through the process of transitioning home.⁷⁹ The loss of community and all that comes with it can, for many, be the hardest loss to grapple with.

The Turkana are an example of a society that enables a smoother, more successful reintegration of their warriors. Their society as a whole appreciates and celebrates its warriors. They are venerated and outwardly supported through celebration upon their safe return, and their raiding successes are acknowledged through a ritual ceremony in which their family members take part.⁸⁰ This helps the warriors feel as though their time in combat was appreciated and that they are valued in the community. According to Junger, these feelings are potentially the most important.⁸¹

Ritual ceremonies are also used to help resolve the moral injury that comes when Turkana warriors kill someone in battles.⁸²⁸³ These rituals are recognized and legitimized by society, often involving community members, and serve multiple purposes. For the individual undergoing the rituals, the ceremony enables them to understand that their violent acts are accepted by the community and not viewed in violation of societal norms.⁸⁴

⁷⁹ Junger, *Tribe*, 45.

⁸⁰ Zefferman and Mathew, "An Evolutionary Theory of Moral Injury," 349.

⁸¹ Junger, *Tribe*, 51.

⁸² Zefferman and Mathew, "Combat Stress in a Small-Scale Society," 7–8.

⁸³ Zefferman and Mathew, "An Evolutionary Theory of Moral Injury," 349–50.

⁸⁴ Zefferman and Mathew, "An Evolutionary Theory of Moral Injury," 350.

They also provide the comfort of protection from weakness and being haunted by the ghosts of the enemy warrior they killed going forward.⁸⁵⁸⁶ Because these rituals require community member participation, they also signal to the community that the warrior's killing was justified and is morally acceptable.⁸⁷⁸⁸ Although Turkana warriors experience PTSD symptoms that evolved to enable heightened response to danger, such as hypervigilance and flashbacks, they exhibit lower rates of depressive PTSD symptoms following combat.⁸⁹⁹⁰ The post-raid rituals assist in the ease and success of Turkana warrior reintegration on both an individual and societal level.

Junger argues in his book that reintegration and the return home from war is a crucial time for the welfare of a veteran's mental health. When describing why the rates of PTSD are higher today than in previous generations, despite the fact that wars today are on the whole less brutal and gruesome, he goes as far as to say: "the problem doesn't seem to be trauma on the battlefield so much as reentry into society."⁹¹ If this is the case, then we, as a society, play a large and vital role in the mental health outcomes of our veterans. Rather than solely focusing on the individual when aiming to prevent and treat PTSD in our service members, perhaps taking more of a whole-of-society approach could prove to be more effective.

⁸⁵ Zefferman and Mathew, "An Evolutionary Theory of Moral Injury," 349–50.

⁸⁶ Zefferman and Mathew, "Combat Stress in a Small-Scale Society, 8.

⁸⁷ Zefferman and Mathew, "An Evolutionary Theory of Moral Injury," 350.

⁸⁸ Zefferman and Mathew, "Combat Stress in a Small-Scale Society, 8.

⁸⁹ Zefferman and Mathew, "An Evolutionary Theory of Moral Injury," 341–53.

⁹⁰ Zefferman and Mathew, "Combat Stress in a Small-Scale Society, 1–10.

⁹¹ Junger, *Tribe*, 45.

VI. CASE STUDY: THE IMPACTS OF WWII ON THE NAVAJO AND ZUNI TRIBES

During WWII, over 44,000 Native Americans, many of whom did not even have the right to vote, served in the U.S. armed forces.⁹² The mental toll this took on Native American men returning from warfighting varied. At the time the war ended, the American Anthropological Association noted that men from some tribes who experienced wartime trauma exposure suffered more severe combat stress symptoms than men from other tribes who experienced similar trauma. These differences were attributed to the effects of their cultural backgrounds.

A comparison of two tribes, the Navajo and the Zuni, can be used as an example of how differing attitudes and approaches toward involvement in the war can result in different outcomes for veterans reintegrating upon return. The attitudes towards the war in each community were completely different. The Zuni people showed disinterest in the war and reluctance to serve, while the Navajo were much more cooperative and willing.⁹³ These negative and positive attitudes were visible in the approaches and actions of the two tribes before, during, and after a veteran's service, resulting in the Navajo veterans having noticeably more successful reintegration upon return with fewer complications than those of the Zuni community.

The Navajo viewed service in the U.S. military as a positive experience that had the potential to benefit the community. Veterans were regarded as “potential forces for constructive change”⁹⁴ and obtained prestige through their raiding triumphs.⁹⁵ Beyond this general positive and encouraging attitude toward service, the Navajo community had

⁹² “Why We Serve: Native Americans in the United States Armed Forces: World War II,” Smithsonian: National Museum of the American Indian, 2020, <https://americanindian.si.edu/static/why-we-serve/topics/world-war-2/>.

⁹³ John Adair and Evon Vogt, “Navaho and Zuni Veterans: A Study of Contrasting Modes of Culture Change,” *American Anthropologist* 51, no. 4 (October 1949): 551, <https://doi.org/10.1525/aa.1949.51.4.02a00020>.

⁹⁴ Adair and Vogt, “Navaho and Zuni Veterans,” 547.

⁹⁵ Adair and Vogt, “Navaho and Zuni Veterans,” 559.

traditions and rituals in place that helped rationalize and separate traumatic events that may be experienced during a service member's time away. Either prior to basic training or as soon as possible after, the departure of all Navajo servicemen was ritualized. The Blessing Way ritual was conducted as a sendoff and a way to ensure the service member stayed safe and felt fine while away.⁹⁶ This, in a way, gave the men permission to depart their normal lives and embark on whatever journey their service required.

While away, the Navajo service members had little to no contact with their families and community back home. Kinsman from home did not make strong efforts to communicate regularly, and service members did not reach out to those back home.⁹⁷ Not having frequent contact or connection with home allowed the men to better separate their lives at home from their lives at war. It also resulted in them being under less pressure to keep up with religious patterns and forcing parts of their normal lives back home into their wartime circumstances.⁹⁸ Because of the actions and allowances of their community, Navajo servicemen were able to lead lives at war that were both different and separate from their lives at home. They could act as the person they needed to in the wartime context.

The return of Navajo veterans was ritualized, similarly to their departure, as a way to bring them back into themselves, stave off potential misfortune, and reintegrate them back into the community.⁹⁹ The ritualization occurred in a variety of ways, the most common of which was a reiteration of the Blessing Way. Ritualizing the return allowed the men to feel welcomed home and reintroduced to their normal lives and the person they are in their normal setting. Along with welcoming the veterans back into the community, the Navajo also welcomed new customs, thoughts, and skills the men learned in service and brought back with them.¹⁰⁰ They were not forced to conform to the exact customs characteristic of the Navajo. Veterans did not face formal resistance to the introduction of new knowledge and customs, but rather the community embraced what the men learned

⁹⁶ Adair and Vogt, "Navaho and Zuni Veterans," 552.

⁹⁷ Adair and Vogt, "Navaho and Zuni Veterans," 553.

⁹⁸ Adair and Vogt, "Navaho and Zuni Veterans," 552–53.

⁹⁹ Adair and Vogt, "Navaho and Zuni Veterans," 553–54.

¹⁰⁰ Adair and Vogt, "Navaho and Zuni Veterans," 554.

and viewed them as potential beacons of knowledge and leadership both within their community as well as to the outside world.

In contrast to the Navajo, the Zuni took a much more negative approach and view toward their men serving in WWII. They did not consider the war to be any of their concern and were reluctant to send their men and accept any deviation from their traditions.¹⁰¹ They had no formal sendoff rituals, nor did they publicly ritualize their veterans' homecomings. Any rituals conducted were done so secretly within the home, isolated from the rest of the community.¹⁰² While service members were away, a formal effort to maintain a steady line of communication with family back home was prominent.¹⁰³ Zuni soldiers were kept closely tied with customs, traditions, and people from their normal lives and were not allowed the opportunity to embrace and assimilate fully into their wartime environment. Upon return, anything learned that did not fit with the Zuni customs and traditions was rejected and the soldiers were forced to conform back to the ways of their community.¹⁰⁴ Influence from outside their own community was not accepted, and because of this, the veterans were viewed as "forces for destructive change."¹⁰⁵ Those who did not or were unable to revert to their pre-wartime customs were isolated and sometimes even exiled.

Overall, Navajo veterans had a much easier and more successful reintegration into their community than Zuni veterans after service in WWII. The Navajo veterans were sent off and welcomed home in ways that embraced who they were, despite any change, and expressed the service member's value to their community, while Zuni veterans had much more isolating, dejected experiences. Navajo servicemen were valued as part of their community and appreciated for what they learned and the experience they gained. Their community embraced who they were upon return and any changes that might include. The Zuni did not have the same support or acceptance. Their veterans were welcomed back into

¹⁰¹ Adair and Vogt, "Navaho and Zuni Veterans," 547–59.

¹⁰² Adair and Vogt, "Navaho and Zuni Veterans," 554.

¹⁰³ Adair and Vogt, "Navaho and Zuni Veterans," 552–53.

¹⁰⁴ Adair and Vogt, "Navaho and Zuni Veterans," 554–55.

¹⁰⁵ Adair and Vogt, "Navaho and Zuni Veterans," 547.

the community only under the stipulation that they abandoned what they experienced and learned to conform to cultural norms. These men were often isolated and viewed in a negative light, creating a sense of loss of value to their community.

The comparison between Navajo and Zuni veterans during and after WWII serves as a case study for post-wartime reintegration within our own country's history. The two tribes had virtually opposing approaches and attitudes toward the war and their fellow tribesmen who served. These differences and the subsequent impacts suggest that a society's cultural norms and the support and acceptance it provides play largely into the success of veterans' reintegration into communities as well as their social success.

For our service members today, preparation prior to departure for combat and reintegration into society and their local communities upon return are just as important as they proved to be for the Native Americans who fought in WWII. Although it is important, we do not do our service members justice by preparing them mentally and spiritually for what they may encounter and the people they need to become while in a wartime context. Because there are no rituals or traditions signifying or acknowledging that those serving are about to enter into different circumstances and potentially become a different version of themselves, it can be hard for our veterans to grapple with what they saw or had to do at war. There is no built-in way to help our people detach from their normal lives.

Upon return, following time in combat or wartime traumatic events, veterans are thrust directly back into society. This typically happens with the expectation that they will act and think just as they did before their exposure to trauma. A veteran immediately returning to their pre-war self is not realistic, and this abrupt transition back into society is not practical. By ritualizing the return, the Navajo allowed their veterans to shed the life they led while at war and provided them with a concrete time and act to signify and acknowledge their return to the community and normal life.

We use rituals and ceremonies all throughout our lives in association with life-changing events. In his book *The Rites of Passage*, anthropologist Arnold van Gennep showed that changes in life stage are typically marked as "rites of separation," "rites of

transition,” and “rights of incorporation.”¹⁰⁶ These acts are not only for the individual’s benefit but also to signify to the rest of the community that the individual undergoing the ritual is entering or exiting a cycle of their life. They have changed. For veterans, an act like a ritual can help their minds make a clean break; it makes it easier to separate who they were and what they did in the wartime context from who they are as a person in their normal, daily lives. This distinction can help with the cognitive dissonance a service member may feel regarding violent acts they committed or traumatic events they experienced or witnessed.

Another advantage of the Navajo return rituals that our veterans today could also benefit from is effective reintegration into their home community, both spiritually and physically. When servicemembers leave a wartime context, they are leaving a way of life that is rooted in a sense of community. At war, everyone has each other’s backs and feels a sense of responsibility to the group. Coming back into normal society, a veteran loses that. They often feel suddenly alone and isolated. Western society today is very individualistic. We no longer rely on our neighbors for protection or assistance, and we do not feel we must take that responsibility for them either. The Navajo return rituals not only welcomed a veteran home but also emphasized support for the individual veteran and showed them their value to the community. This is true reintegration.

Many aspects of these Native American traditions could potentially be beneficial for our veterans today. The Navajo traditions and rituals were tailored toward what was important in their community and fit their sociocultural norms. We could potentially see benefits for the prevention of post-combat PTSD if traditions similar to those of the Navajo were developed for and implemented within our society.

¹⁰⁶ Arnold van Gennep, *The Rites of Passage* (Chicago, IL: University of Chicago Press, 1960).

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VII. CONCLUSION

This thesis was written as an attempt to identify possible alternative approaches to or areas of research regarding the understanding and treatment of PTSD in our society. It does so by exploring these matters in both the historical and cross-cultural contexts through selected case studies. The U.S., specifically the DOD, is experiencing a rise in rates of suicide and suicide attempts, often related to the effects of PTSD.¹⁰⁷ Despite this steady increase, affected individuals are receiving the same traditional Western medicine treatments, with no real change in the approach or medication options and very little effort put toward prevention. Western society has tunnel vision in its approach to PTSD, not considering alternative methods. The case studies highlighted in this thesis shed light on effective ways other cultures address the disorder and the impacts a society's structure has on a servicemember's return, their risk of suffering from PTSD, and their treatment and recovery.

When exploring PTSD in non-Western cultures, India is a logical society to examine. In a typical year, the citizens of India experience an enormous number of traumatic events, from natural disasters to economic and financial distress.¹⁰⁸ The population's sensitivity to and conceptualization of trauma vastly differs from ours in the Western world. This is not only true in comparison to India, but it is also true of the Turkana people in Kenya. Aside from the differences in the amount of exposure, the definition of trauma and the words used to describe it impact trauma's general effect on individuals. Our understanding and descriptions of trauma could be priming people to associate certain events or exposures with trauma in a way that potentially could be avoided if the experiences were framed differently. More preventative measures that revolve around a service member's understanding and expectations of what they may encounter in combat or at war could potentially lower the risk of a service member viewing their experiences as traumatizing.

¹⁰⁷ Judkins et al., "Incidence Rates of Posttraumatic Stress Disorder," 994.

¹⁰⁸ Gilmoor, Adithy, and Regeer, "The Cross-Cultural Validity of Post-Traumatic Stress Disorder and Post-Traumatic Stress Symptoms in the Indian Context," 2.

The reintegration of individuals following war or other traumatic events is critical. For veterans returning from war, there is often a strong desire for the sense of community and support they experienced while a part of their military units. An individualistic society, like that of the West, is not entirely conducive to achieving this need, leading to a sense of isolation and alienation.¹⁰⁹ In many non-Western societies, such as the Turkana pastoral society, returning warriors experience acceptance and endorsement upon return from combat and are supported and assisted through various ritual ceremonies.¹¹⁰ For Western war veterans, the feeling of isolation is further exacerbated by the actions, attitudes, and responses of civilians. Service members and veterans tend to be put on a pedestal or in a separate category and viewed as victims, which unintentionally drives the divide between those who serve and the rest of society even wider.¹¹¹ The sense of isolation and alienation, elicitation of the feelings and identity of victimhood, and struggle to find a sense of usefulness and purpose often lead to negative mental health repercussions, such as the increased risk of PTSD and suicide. In this way, all of society plays a vital role in the successful reintegration of service members. The onus is not simply on the individual veteran and their treatment plans and options.

The Native Americans during WWII provide an example of this communal or societal approach and additional insight into the benefits of pre-war preventative measures. A comparison between the Navajo and Zuni tribes during this time highlights the effects of societal and cultural differences in response to service members. The Zuni functioned as a very segmented, private society with negative views of the war and their own tribe's involvement.¹¹² This resulted in a lack of support for or recognition of their fellow tribesmen who served and the isolation of the veterans upon return. In contrast, the Navajo supported and prepared their men for war through rituals. They gave them space to be who they needed to be at war and then welcomed them home with cleansing rituals, support,

¹⁰⁹ Junger, *Tribe*, 50–51.

¹¹⁰ Zefferman and Mathew, “An Evolutionary Theory of Moral Injury,” 349–50.

¹¹¹ Junger, *Tribe*, 49–51.

¹¹² Adair and Vogt, “Navaho and Zuni Veterans,” 551.

and pride in what they had done and accomplished.¹¹³ These positive attitudes and traditions kept Navajo veterans from a feeling of isolation, helping their reintegration into society and ultimately their ability to function back in their normal lives.

Moving forward, there is a need for much more research and exploration into alternative approaches to PTSD treatment and prevention. By viewing this disorder solely through a medical and behavioral lens, Western medicine has limited its scope and therefore the potential treatment options. By looking to history and across different societies and cultures, different approaches have been and are taken with varying levels of success. Although not all methods apply to every different population, it is worth exploring the potential positive effects that these, or other related or tangential methods, may have on our military and veteran populations.

¹¹³ Adair and Vogt, “Navaho and Zuni Veterans,” 551–54.

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VIII. RECOMMENDATIONS

The research conducted in the development of this thesis leads to the following recommendations for future research and study. The recommendations listed below are not all-inclusive.

- An individual's experiences prior to war or combat have a great impact on their chances of experiencing or suffering from chronic PTSD.¹¹⁴ The implementation of pre-screening for mental health risk factors before an individual joins the service or embarks on a combat deployment may provide valuable insight into the likelihood an individual will experience strong negative mental health effects, such as PTSD or other comorbidities, if exposed to the traumatic events typically encountered during the war.
- The sense of isolation resulting from a lack of shared experiences and shared understanding can lead to debilitating mental health effects. Providing a place, such as a town hall meeting or community event, for veterans to share their experiences with their community could allow these individuals to release whatever feelings and thoughts they have been holding onto while also bringing their friends, family, and neighbors into the fold. This would allow the weight of war that a veteran feels to be spread amongst their community and supporters. The creation of the feeling of shared experience and shared understanding could stave off the common veteran experience of alienation and isolation. These times and places for veterans to vent could be made routinely available and open to the public. They could also be integrated into a service member's transition home from combat.

¹¹⁴ Junger, *Tribe*, 42.

- Building on van Gennep’s “rites of passage,” specifically focusing on the liminal portions of transitions, several anthropologists developed the idea of “communitas.”¹¹⁵ Communitas is “an unstructured community in which people have a sense of sharing and intimacy that develops among persons who experience liminality as a group.”¹¹⁶ Veterans who fought together often have this feeling of communitas after the joint experience of combat and traumatic events. These veterans can find it therapeutic to revisit memories of their time in combat and certain events with individuals who understand what they went through and shared the same experiences. The DOD is in the best position to facilitate these types of meet ups and reunions for veterans to accommodate their nostalgia. It could be beneficial to initiate gatherings for veterans and service members to share and process their experiences during circumstances other than funerals or other tragic events. This would furthermore be a demonstration of the value of the veterans to the DOD.
- The military community already uses traditions and rituals for many different reasons, such as commemorating honorable service, paying respects to a fallen soldier, or memorializing a significant day or event in military history. Implementing rituals and traditions, similar to that of the Navajo, could potentially have positive effects on service members and lower the risk of PTSD. Acts or rituals that are both culturally and situationally relevant and appropriate would need to be developed with the target audience in mind. The most advantageous times for these rituals would also need to be researched, but it could prove to be helpful to have these rituals both pre- and post-deployment or service, just as the Navajo did, to separate their normal life from who they were in a wartime context.

¹¹⁵ van Gennep, *The Rites of Passage*.

¹¹⁶ Gayla S. Napier, “Beyond Community: Understanding the Experience of Communitas Among Information Technology Road Warriors” (PhD diss, Fielding Graduate University, 2016), ii, ProQuest (10244284).

They may also act as a sense of personal or spiritual cleansing upon return from a combat environment.

- Although difficult, and potentially not feasible, working toward a societal shift in attitudes toward and views of service members and veterans could result in decreased incidences of chronic PTSD within this population. Lessening the separation between those who serve and the rest of the population and decreasing the idea that service members are victims and inherently different will help change the way they view themselves and are reintegrated back into society. This would be a long-term undertaking that requires community and societal buy-in and could potentially take multiple generations to fully come to fruition. Despite the time, effort, and cooperation this would take, the effects could be staggering.

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LIST OF REFERENCES

- Adair, John, and Evon Vogt. "Navaho and Zuni Veterans: A Study of Contrasting Modes of Culture Change." *American Anthropologist* 51, no. 4 (October 1949): 547–61. <https://doi.org/10.1525/aa.1949.51.4.02a00020>.
- Albert, Patrick, Coty R. Trivellin, and Thomas M. Stanley. "Exploring the Potential of Psychedelic-Assisted Therapies for Suicide Prevention in SOCOM." Master's Thesis, Naval Postgraduate School, 2022. <https://hdl.handle.net/10945/7142>.
- American Psychological Association. "Medications for PTSD." July 13, 2017. <https://www.apa.org/ptsd-guideline/treatments/medications>.
- Berlinger, Max. "All-Inclusive Magic Mushroom, Ayahuasca Retreats Are New Luxury Trips." Bloomberg Businessweek. Last modified on August 19, 2021. <https://www.bloomberg.com/news/articles/2021-08-19/all-inclusive-magic-mushroom-ayahuasca-retreats-are-new-luxury-trips>.
- Blakemore, Erin. "How PTSD Went from 'Shell-Shock' to a Recognized Medical Diagnosis." National Geographic. Last modified on June 16, 2020. <https://www.nationalgeographic.com/history/article/ptsd-shell-shock-to-recognized-medical-diagnosis>.
- Crocq, Marc-Antoine, and Louis Crocq. "From Shell Shock and War Neurosis to Posttraumatic Stress Disorder: A History of Psychotraumatology." *Dialogues in Clinical Neuroscience* 2, no. 1 (March 2000): 47–55. <https://doi.org/10.31887/DCNS.2000.2.1/macrocq>.
- Davis, Lori L., Jeff Schein, Martin Cloutier, Patrick Gagnon-Sanschagrín, Jessica Maitland, Annette Urganus, Annie Guerin, Patrick Lefebvre, and Christy R. Houle. "The Economic Burden of Posttraumatic Stress Disorder in the United States From a Societal Perspective." *The Journal of Clinical Psychiatry* 83, no. 3 (April 2022): 1–10. <https://doi.org/10.4088/JCP.21m14116>.
- Elsass, Peter, Jessica Carlsson, Kristian Jespersen, and Kalsang Phuntsok. "Questioning Western Assessment of Trauma Among Tibetan Torture Survivors. A Quantitative Assessment Study with Comments from Buddhist Lamas." *Torture* 19, no. 3(2009): 194–203, <https://pubmed.ncbi.nlm.nih.gov/20065538/>.
- Friedman, Mathew J. U.S. Department of Veterans Affairs. "PTSD: National Center for PTSD - PTSD History and Overview." https://www.ptsd.va.gov/professional/treat/essentials/history_ptsd.asp.

- Gilmoor, Andrew Roderick, Adithy Adithy, and Barbara Regeer. "The Cross-Cultural Validity of Post-Traumatic Stress Disorder and Post-Traumatic Stress Symptoms in the Indian Context: A Systematic Search and Review." *Frontiers in Psychiatry* 10, no. 439 (July 2019): 1–24. <https://doi.org/10.3389/fpsyt.2019.00439>.
- Herrington, Joshua A. "A Descriptive Account of Mustang Horse Therapy." Master's thesis, Naval Postgraduate School, 2022. <https://calhoun.nps.edu/handle/10945/69655>.
- Hertog, Sara, Patrick Gerland, and John Wilmoth. "UN DESA Policy Brief No. 153: India Overtakes China as the World's Most Populous Country." United Nations. Last modified April 24, 2023. <https://www.un.org/development/desa/dpad/publication/un-desa-policy-brief-no-153-india-overtakes-china-as-the-worlds-most-populous-country/>.
- Judkins, Jason L., Brian A. Moore, Tyler L. Collette, Willie J. Hale, Alan L. Peterson, and Sandra B. Morissette. "Incidence Rates of Posttraumatic Stress Disorder Over a 17-Year Period in Active Duty Military Service Members." *Journal of Traumatic Stress* 33, no. 6 (December 2020): 994–1006. <https://doi.org/10.1002/jts.22558>.
- Junger, Sebastian. *Tribe - On Homecoming and Belonging*. New York: Twelve, 2016.
- Kienzler, Hanna. "Debating War-Trauma and Post-Traumatic Stress Disorder (PTSD) in an Interdisciplinary Arena." *Social Science & Medicine* 67, no. 2 (July 2008): 218–27. <https://doi.org/10.1016/j.socscimed.2008.03.030>.
- Kiprop, Victor. "How Many States are in India?" WorldAtlas. Last Modified on October 19, 2018. <https://www.worldatlas.com/articles/how-many-states-are-in-india.html>.
- Mitchell, Jennifer M., Michael Bogenschutz, Alia Lilienstein, Charlotte Harrison, Sarah Kleiman, Kelly Parker-Guilbert, Marcela Ot'alora G., Wael Garas, Casey Paleos, Ingmar Gorman, Christopher Nicholas, Michael Mithoefer, Shannon Carlin, Bruce Poulter, Ann Mithoefer, Sylvestre Quevedo, Gregory Wells, Sukhpreet S. Klaire, Bessel van der Kolk, Keren Tzarfaty, Revital Amiaz, Ray Worthy, Scott Shannon, Joshua D. Woolley, Cole Marta, Yevgeniy Gelfand, Emma Hapke, Simon Amar, Yair Wallach, Randall Brown, Scott Hamilton, Julie B. Wang, Allison Coker, Rebecca Matthews, Alberdina de Boer, Berra Yazar-Klosinski, Amy Emerson, and Rick Doblin. "MDMA-Assisted Therapy for Severe PTSD: A Randomized, Double-Blind, Placebo-Controlled Phase 3 Study," *Nature Medicine* 27, no. 6 (June 2021): 1025–1033, <https://doi.org/10.1038/s41591-021-01336-3>.
- Napier, Gayla S. "Beyond Community: Understanding the Experience of Communitas Among Information Technology Road Warriors." PhD diss, Fielding Graduate University, 2016. ProQuest (10244284).

- “PTSD from DSM-III to DSM-5: Progress and Challenges,” in *Handbook of PTSD: Science and Practice*, 2nd edition, edited by Matthew J. Friedman, Terence Martin Keane, and Patricia A. Resick, 3–20. New York: The Guilford Press, 2014.
- Schwartz, Leslie. *Culture and Mental Health - A Southern African View*. Capetown, South Africa: Oxford University Press, 1998.
- Shay, Jonathan. *Achilles in Vietnam: Combat Trauma and the Undoing of Character*. New York: Touchstone, 1994.
- Singal, Jesse. “Positive Psychology Goes to War,” in *The Quick Fix: Why Fad Psychology Can’t Cure Our Social Ills*, 99–139. New York: Farrar, Straus and Giroux, 2021.
- Smithsonian: National Museum of the American Indian. “Why We Serve: Native Americans in the United States Armed Forces: World War II.” 2020. <https://americanindian.si.edu/static/why-we-serve/topics/world-war-2/>.
- Steinbach, Surgeon T.T. “Dr. Jacob Da Costa – ‘Soldier’s Heart’” Time Lines Magazine. Last modified on May 6, 2020. https://www.timelinesmagazine.com/publications/civil-war-courier/dr-jacob-da-costa-soldier-s-heart/article_abc080f8-8fd5-11ea-89c7-0fe33219a1d0.html.
- Suitt, Thomas Howard, III, “High Suicide Rates Among United States Service Members and Veterans of the Post-9/11 Wars.” *20 Years of War: A Cost of War Research Series*. (June 2021): 1–35, chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://watson.brown.edu/costsofwar/files/cow/imce/papers/2021/Suitt_Suicides_Costs%20of%20War_June%2021%202021.pdf.
- van Gennep, Arnold. *The Rites of Passage*. Chicago, IL: University of Chicago Press, 1960.
- Zefferman, Matthew R. and Sarah Mathew. “An Evolutionary Theory of Moral Injury with Insight from Turkana Warriors.” *Evolution and Human Behavior* 41, no. 5 (September 2020): 341–53. <https://doi.org/10.1016/j.evolhumbehav.2020.07.003>.
- Zefferman, Matthew R. and Sarah Mathew. “Combat Stress in a Small-Scale Society Suggests Divergent Evolutionary Roots for Posttraumatic Stress Disorder Symptoms.” *Proceedings of the National Academy of Sciences* 118, no. 15 (April 13, 2021): 1–10. <https://doi.org/10.1073/pnas.2020430118>.

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