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The Moderating Effects of Self-Compassion on the Relationship Between Shame and Depression in Military Populations

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THE MODERATING EFFECTS OF SELF-COMPASSION ON THE RELATIONSHIP

BETWEEN SHAME AND DEPRESSION IN MILITARY POPULATIONS

by

SARAH R. FORAN

Under the Direction of Ryan Couillou

ABSTRACT

The U.S. Military has faced a continuous rise in mental health concerns reported by service members and veterans (Currier et al., 2017; Rosenheck & Fontana, 2007). Studies of military personnel have found that up to 15% of service members meet the criteria for experiencing depression (Shen et al., 2012). Often, individuals with military experience face numerous stressors that positively contribute to this experience of depression and feelings of shame (Bradbard et al., 2014; Litz et al., 2009). Military culture (often emphasizing shame related to mental health) has also been found to put military personnel at higher risk of experiencing depression in the first place (Jakupcak et al., 2014; Lineberry & O'Connor, 2012). In recent years, self-compassion literature has emerged, showing evidence for its protective effects on mood, functioning, and experiencing distress (Liu et al., 2020; Neff, 2003b; Rutter et al., 2023). Despite this supporting evidence, no study, to our knowledge, has examined self-compassion as a protective factor for the experience of depression in military service members. In an attempt to address this gap and add valuable insight into the current literature by exploring these relationships, for this study, U.S. active duty service members and veterans completed self-report survey measures to assess their experiences of global shame, depression, and self-compassion. A total of 407 participants' data was included in the study's analyses. Quantitative survey data indicated that shame was significantly correlated to depression. Additionally, self-compassion

was significantly inversely related to shame and depression. Moderation analyses, however, did not indicate that self-compassion moderates the relationship between shame and depression. The effects of gender identity and rurality status on the moderating effect were also explored and discussed, as well as the clinical implications of such findings and future directions.

INDEX WORDS: Self-compassion, Shame, Depression, Active-duty military, Veterans

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DEDICATION

To my parents. For always loving and supporting me. Thank you for never letting me doubt that I can do hard things. Everything I do will forever be dedicated to you.

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INTRODUCTION

Purpose of the Study

The purpose of this study was to expand the current literature on using self-compassion as a protective measure to prevent depression resulting from the experience of feeling shame in military populations. Specifically, this study investigated whether self-compassion was inversely related to reports of depression and shame. Self-compassion was also expected to moderate the relationship between shame and depression within military populations. Additionally, this study investigated whether the moderation of self-compassion on shame and depression is moderated by gender identity and rural status.

Significance

The relationship between negative emotions, such as feeling shame, and the occurrence of depression is well established (Andrews, 1995; Andrews et al., 2002; Thompson & Berenbaum, 2006). Research on this relationship in military and veteran populations is currently limited despite the greater risk for experiencing both depression and shame compared to non-military affiliated populations. Additionally, while the literature on positive psychology practices, such as self-compassion, has grown recently, the research in this area is still minimal. The available research on self-compassion has predominately focused on civilian populations. To date, no known study examined the potential impact of self-compassion on the relationship between feelings of shame and depression in military service members and veterans.

Furthermore, while women make up one of the largest growing populations in the U.S. military (Vespa, 2020), few studies specifically focus on the potential impacts of gender identity within military personnel populations. Very few studies have examined how gender identity may

impact the relationships between shame, depression, and self-compassion. Additionally, no literature currently exists examining the impact of living within a rural area on the relationships between self-compassion, feelings of shame, and the occurrence of depression.

Literature Review

Military Populations

Military populations encompass various identities, experiences, and statuses (Parker et al., 2017). Individuals incorporated into military populations include those actively enlisted within the military and military veterans. The U.S. Department of Veterans Affairs (DVA, 2019) defines *active duty military* as individuals who serve full-time in the armed forces (Army, Navy, Air Force, Marines; DVA, 2019). Active duty does not include individuals serving in the Coast Guard or Reserves, as these are not full-time positions (The National Center for PTSD, 2012). Alternatively, the DVA defines *veteran status* as individuals discharged from active military, naval, or air service under conditions other than dishonorable (DVA, 2019). As of October 2022, there were 1.3 million individuals listed as active duty within the U.S. military, and around 18 million individuals identified as having veteran status as of 2018 (U.S. Department of Defense [DoD], 2022a; Vespa, 2020). The average age of veterans is 65 years old, and most (6.4 million) are Vietnam Era veterans (Vespa, 2020). While most active duty and veteran populations are comprised of individuals who identify as men, women are the largest growing population within the U.S. armed forces. As of 2021, women made up 17% of active duty service members, and the number of women veterans is projected to increase from 9% to 17% of the total veteran population by 2040 (DoD, 2022b; Vespa, 2020). Military populations also continue to diversify regarding race/ethnicity, as 40% of active duty military identified with racial and ethnic minority groups in 2015 (Parker et al., 2017).

In recent decades, mental health diagnoses/concerns have more than doubled within military populations, making them a prominent issue (Rosenheck & Fontanta, 2007). The Veterans Health Administration (VHA) reports increasing numbers of veterans seeking mental health care, leading to difficulties in meeting this demand (Currier et al., 2017; Rosenheck & Fontana, 2007). While the number of mental health diagnoses continues to rise within this population, the number of active duty service members seeking mental health treatment is limited due to cultural barriers and stigma present within the military. Specifically, military culture strongly promotes stereotypically masculine values of self-sufficiency, emotional control/emotional restriction, and strength, which creates stigma surrounding the utilization of mental health care (Bell et al., 2014; Herbert, 1998; Hoyt et al., 2012). Such intensity in values also correlates to increased levels of stress and decreased feelings of self-efficacy for those existing within this culture as these values are attempted to be upheld (Voller et al., 2015). Military men often experience self-blame following experiences perceived to conflict with values associated with societal constructs of masculinity (Hoyt et al., 2012; Mahalik et al., 2003; Voller et al., 2015). Veterans who are more strongly aligned with military culture are at higher risk for developing mental health concerns such as Post-traumatic Stress Disorder (PTSD) or depression (Jakupcak et al., 2014).

Additionally, power imbalances, harassment, and hostility are reflected in the experiences of military women (Bell et al., 2014). Military women report existing in lose-lose situations where they face criticism for identifying too strongly with the military's traditionally masculine values and for not identifying strongly enough (Bell et al., 2014; Herbert, 1998). Overall, military cultural values and their resulting impacts on mental health outcomes and increased

stigma surrounding mental health care create a strong need for greater insight into how stigma and self-blame can be decreased within this population.

Depression in Military Populations

With growing literature on the unique needs of active duty military personnel and veterans, limited studies explicitly focused on depression as a common condition affecting both populations worldwide. The U.S. Department of Veterans Affairs defines *Major Depressive Disorder* as a mental health condition involving depressed mood, lack of interest or pleasure in regular activities, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration (Management of Major Depressive Disorder Working Group, 2016). Individuals with depression also often experience decreased productivity and social difficulties (e.g., interpersonal conflict, stigma, employment difficulties). Depression is one of society's most prevalent mental health diagnoses, with nearly seven percent of the U.S. population experiencing at least one Major Depressive Episode within the past year (Management of Major Depressive Disorder Working Group, 2016). The World Health Organization (2023) estimates a global incidence rate of approximately 280 million people currently experiencing depression. Specific populations are at increased risk for depression, with young adults between the ages of 18 and 25 being 60% more likely to develop depression than older adults and women being 70% more likely than men to experience depression (Management of Major Depressive Disorder Working Group, 2016).

With active duty military personnel often falling within the young adult age range and increasing enlistment of women in the armed forces, depression literature must be expanded to support the well-being of this population. Veterans and active duty military have similar rates of depression compared to civilian populations, with women in the military being at higher risk for

depression than men (Goldstein et al., 2017; Gould et al., 2015; Maguen et al., 2010). A recent study indicates symptoms of depression to be currently impacting around 13 to 18% of military service members (Knobloch & Basinger, 2021). Additionally, studies surveying soldiers returning from Iraq note that around 15% of those surveyed met the criteria for depression (Shen et al., 2012). Even with a high prevalence, rates of depression are underestimated due to the stigma surrounding mental health (Lineberry & O'Connor, 2012).

Expanding research on depression in military populations is also essential to combat the elevated risk of suicide within this population. Previous studies report veterans' risk of suicide to be four times higher than non-veterans (Bossarte, 2023, as cited in Thomas et al., 2018). Recent studies also estimate that around 20 veterans die by suicide each day, making for a 22% increase in risk compared to civilian populations (Thomas et al., 2018). Compared to civilian samples, military personnel who die by suicide are more likely to have previously experienced depression (Raines et al., 2020). With such elevations in risk, a diverse discussion of factors related to depression is necessary due to the impact of life experiences and risk factors influencing military personnel during and after their time in service.

Service Risk Factors. Several factors experienced by service members during their time in the military contribute to this population's risk for depression. Following more recent conflicts such as Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND), there are increases in both PTSD and depression rates in military populations (Goldstein et al., 2017). While actively enlisted in the military, military personnel face many deployment-related stressors, increasing the risk for mental health conditions like depression. Both combat and non-combat deployment are factors of military life predicting mental health concerns (Booth-Kewley et al., 2013). For example, many military personnel deployed to OEF

and OIF experienced mental health concerns like depression following deployment (James et al., 2013).

The rates of military personnel mental health concerns following deployment can be traced to several factors. A large amount of military research focused on the influence of combat experiences on the development of PTSD and the occurrence of comorbid PTSD and depression is widely supported in veteran research (Hurlocker et al., 2017). Following traumatic exposures, such comorbidity impacts service members' recovery time (Jacoby et al., 2019). However, limited literature focuses on risk factors related to depression alone. Pre- and Post-deployment surveys completed by soldiers show that deployment increases rates of depression. These assessments show that the intensity of combat experiences during deployment is positively related to increases in reported depression (Lineberry & O'Connor, 2012). Other studies found deployment to combat zones to almost double the likelihood of service members having depression following deployment, and experiencing stressful events like war is a known risk factor for depression (Blore et al., 2015; Shen et al., 2012).

A growing literature also found chronic concerns related to safety and perceived threats during deployment to be a prevalent factor contributing to the development of depression in military personnel. From this limited literature, it is suggested that individuals who ruminate on their life-threatening experiences may be more likely to find such experiences prominent and be more prone to depression (James et al., 2013). Gaining an increased understanding of depression treatment for veterans who experienced traumatic events during their service is essential due to the often comorbid nature of PTSD and depression. Studies show that a decrease in depression during treatment is related to a better response to PTSD treatment (Keller et al., 2014).

Such risk for depression is not just limited to experiencing combat during deployment. Active duty military deployed in non-combat zones also face many stressors impacting their mental health. These factors include high-demand training, frequent job relocation, short-notice emergency response, prolonged separation from loved ones, sleep deprivation, and stress related to military rank (Bradbard et al., 2014; Vyas et al., 2016). In addition, one study found that 49% of their active duty respondents reported financial concerns as a top stressor, with worries about military life uncertainty and potential changes in benefits being the most identified contributing factors for distress (Bradbard et al., 2014). Further, previously mentioned values of military culture also often create increased stress and risk for developing depression for active duty personnel.

Currently, there is minimal research on depression in active-duty service members who have never been deployed. However, along with the abovementioned considerations, service members who have never been deployed still face stressors such as decreased social connectedness and extended geographical separation from family (Hoopsick et al., 2018). Additionally, in recent years, there has been an increase in the civilian-military divide as civilians report less contact and fewer relationships with current or past military service personnel, decreasing connection (Bradbard et al., 2014). Such a divide has decreased service member's feelings of being understood and the number of service providers competent in understanding their unique needs (Bradbard et al., 2014). Such stressors can further contribute to rates of depression in active duty service members.

Post-Service Risk Factors. While most veteran literature focuses on the diagnosis of PTSD, prior studies show a higher incidence of depression compared to PTSD in veteran populations (Blore et al., 2015). Veterans report their experience of depression and suicidal

ideation at higher rates than individuals who are on active duty (Bradbard et al., 2014).

Additionally, in more recent decades, veterans have survived serious injuries and disabling

conditions at higher rates than ever before, leading to increased stressors related to financial

strain and enduring long-term rehabilitation (Rubin, 2013, as cited in Rishel et al., 2015). Such

difficulties also make reintegration into civilian society difficult for returning veterans and their

families (Franklin, 2009). Such factors may contribute to veterans' experiences with depression.

Lastly, despite experiencing high rates of depression, only about half of these veterans are

actively seeking mental health services; approximately 47% of service members and veterans

with PTSD or depression are not seeking help (Franklin, 2009; Tanielian et al., 2008).

Shame as a Risk Factor for Depression

Shame is a universal emotion that often goes unrecognized and is understudied in

psychological literature, which has predominantly focused on more basic emotions (Alvarez,

2020). *Shame* is an intense intrapersonal psychological state that entails global negative self-

evaluations of stable and uncontrollable feelings of being inferior, vulnerable, or helpless (Bryan

et al., 2013). It is a self-conscious cognitive-affective state, often including feelings of

inadequacy and low self-worth (Boring et al., 2021). Shame is often connected to a sense of

identity and is a self-conscious emotion that can also be linked to moral reasoning, psychosocial

function, and development (Ferreira et al., 2022; Slepian et al., 2019). Using the biopsychosocial

model for shame developed by Paul Gilbert, shame is described as a defensive emotion often

becoming involuntarily triggered when an individual's social status, sense of self, or social

attractiveness becomes threatened (Ferreira et al., 2022; Matos-Pina et al., 2022). Shame can

have distinct impacts on psychological well-being and experiences of depression (Ferreira et al.,

2022). Importantly, literature links feelings of shame to increases in various mental health concerns, including substance use, depression, suicide, and eating disorders (Alvarez, 2019).

When discussing the construct of shame, it is often essential to differentiate the experience of shame from feelings of guilt. Unlike shame, *guilt* is described as an interpersonal psychological state, including feelings of regret or remorse typically linked to a specific behavior. Individuals are generally considered to have more control over their experience of guilt compared to the experience of shame (Bryan et al., 2013).

The experience of shame can take many forms when discussed in the context of military populations. Combat exposure increases the likelihood of military personnel experiencing other emotions besides depression/sadness. Studies of combat veterans note feelings of shame as an important risk factor for veterans who have experienced combat, regardless of whether they meet the criteria for PTSD (Bryan et al., 2013). Compared to other schemas experienced by veterans who have experienced trauma (e.g., mistrust, abandonment, self-sacrifice), shame is strongly related to suicide ideation, plans, and attempts (Bryan et al., 2013). Previous literature also indicates that shame has a stronger correlation to suicidal ideation in veterans compared to the experience of depression (Bryan et al., 2013).

Military personnel who have experienced combat may experience feelings of shame in the form of moral injury. *Moral injury* is the psychological, relational, and potentially spiritual moral challenges related to modern warfare that individuals often interpret as a betrayal of what is "morally right" (Litz et al., 2009; Shay, 2014). It often describes the intense feeling of guilt or shame related to the experience of trauma (Bryan et al., 2013; Litz et al., 2009). Unlike PTSD, individuals facing moral injury may be the perpetrator, victim, or witness of a moral violation against others. They often feel like they have lost their sense of trust in others (Litz et al., 2009;

Shay, 2014). Moral injury may be especially present in military populations due to an intense moral code of conduct integrated into military culture, especially during times of war. Despite these moral guidelines, military personnel are often faced with unexpected and uncertain moral choices that can have lasting psychological, behavioral, and social impacts and lead to the experience of emotions like shame (Litz et al., 2009).

Further, self-conscious emotions (like shame) are often linked to more than just trauma and combat experiences. The definition of shame is often highly controlled by the studied population's social/cultural norms and values (Ferreira et al., 2022). Cultures will often have differing views regarding which behaviors will face stigma. The purpose of such cultural stigma is an attempt to regulate the culture's established social rules. For example, male-dominated groups (like the military) have historically faced stigma surrounding expressing emotions like fear and discussing mental illness (Gilbert, 2003; Roche et al., 2016). Therefore, it is crucial to understand shame further and how it may influence mental health characteristics like depression and suicide risk in military personnel and veterans (Bryan et al., 2013).

Lastly, studies find shame to be more closely linked than guilt to depressive symptoms, and higher rates of shame are correlated to depression diagnoses (Alvarez, 2019; Bryan et al., 2013). Shame and depression also overlap in many cognitive and behavioral components, such as self-criticism, decreased self-worth, rumination, and social withdrawal (Alvarez, 2019). Individuals who feel shame report a predominant focus for depressive rumination (Gilbert & Procter, 2006). Previous literature shows shame is a potential precursor to experiencing depression, and individuals with higher shame-proneness have been found to experience high levels of depression (Boring et al., 2021; Cândea & Szentagotai-Tatar, 2018). With such overlap

in characteristics of shame in depression, treatment of either shame or depression is suggested to affect both constructs (Alvarez, 2019).

Internal and External Shame

Internal shame, one dimension of the experience of shame, is focused on one's evaluation of themselves. Unlike the experience of external shame, *internal shame* is a global self-evaluation (Gilbert, 2003, as cited in Ferreira et al., 2022). Instead of feeling shame-related emotions like inferiority and inadequateness in specific contexts, internal shame describes a global sense of inadequacy, inferiority, or undesirableness (Ferreira et al., 2022). Such evaluations focus predominantly on one's shortcomings and personal attributes. According to the biopsychosocial model, internalized shame is often a defense mechanism resulting from the experience of external shame (Ferreira et al., 2022). Thus, when one experiences negative evaluations from others, one will also internalize those evaluations in the form of self-criticism/persecution to protect oneself from experiencing future rejection or attacks on one's sense of self.

Alternatively, one's experience of *external shame* is often focused on the negative evaluation of oneself by others. It is, specifically, being perceived as having failures, flaws, or deficits that have been exposed (Ferreira et al., 2022). The experience of external shame is often cognitively focused outwards on what other people may be thinking and incorporates internal beliefs of inferiority, inadequateness, or unfavorable characteristics (Ferreira et al., 2022; Matos-Pina et al., 2022). While experiencing external shame, one's behavior commonly focuses on preserving one's image in others' minds due to feelings of social rejection or exclusion (Ferreira et al., 2022; Proeve et al., 2018). Through previous studies, the experience of external shame has

been found to be more strongly associated with depression when compared to the experience of internalized shame (Proeve et al., 2018).

Self-Compassion

The study of self-compassion has only begun to emerge in recent years. Based on previous constructs from Buddhist principles, Fauvel and colleagues (2021) defined *self-compassion* as the awareness, acceptance, and non-judgment of one's own negative emotions, suffering, and flaws due to having an understanding of them as part of a shared human experience (Fauvel et al., 2021; Rutter et al., 2023). Instead of experiencing self-judgment, isolation, and over-identification with one's experiences, self-compassion encompasses the three elements of self-kindness, common humanity, and mindfulness (Neff, 2003b). *Self-kindness* describes one's ability to decrease self-criticism during moments of pain and to instead act out of understanding. *Common humanity* is having a larger connection to general human experiences. Lastly, *mindfulness* is being aware of one's emotions without over-identifying with them (Neff, 2003b). Through these three components, self-compassion focuses not on changing emotion but on creating a shift in how the person interacts with the emotion (Cardona et al., 2023).

However, many studies have yet to examine the relation of these three components in conceptualizing self-compassion. The literature on these dynamics suggests that all three components are positively correlated (Barnard & Curry, 2011). Much of the previous literature surrounding self-compassion focused on its use in addressing concerns related to bodily appearance, perception, and weight. Individuals with high rates of self-compassion have unconditional self-acceptance, view suffering as a shared human condition, are aware of difficult experiences, and have a balanced way of viewing them (Liu et al., 2020). Unlike self-esteem, self-compassion is not based on positive or negative performance evaluations or self-judgments.

Instead, it focuses on increasing feelings of connectedness toward others rather than making

oppositional comparisons (Neff, 2003b).

Generally, self-compassion is a protective factor against the negative impacts of

unfavorable self-comparisons (Rutter et al., 2023). It also decreases feelings of loneliness in

studies of university students and adults. It generally positively impacts individuals' social

functioning (e.g., social connectedness, prosocial behavior) (Liu et al., 2020). Self-compassion is

also identified as a proactive behavior that maintains and promotes well-being to prevent distress

(Neff, 2003b). Recent studies have built evidence of self-compassion as an effective coping skill

that should be more broadly studied to be used within treatments for various mental health

concerns (Sánchez, 2023).

The Influence of Self-Compassion on Depression and Shame

Self-compassion is a protective factor against the experiences of negative emotions like

shame and mental health outcomes such as depression and self-rumination (Fauvel et al., 2021).

It is also positively associated with well-being, life satisfaction, and effective emotion processing

and negatively associated with psychological distress (Fauvel et al., 2021; Neff, 2003b; Sánchez,

2023). In studies of depression within general populations, individuals experiencing depression

had increased self-coldness compared to those who were not experiencing depression (Körner et

al., 2015). Additionally, the incorporation of self-kindness (a component of self-compassion)

moderates the relationship previously found to exist between isolation and depression (Körner et

al., 2015). When looking at depression in college-aged students, one study found self-

compassion to have a strong negative association with depressive symptoms. It also identified

there being decreased long-term depressive symptoms and shame-proneness after students

completed a self-compassion activity for one week (Johnson & O'Brien, 2013). Additionally,

while few studies have examined the impact of self-compassion practices in military populations, one study found higher rates of self-compassion to be related to lower depression in veterans (Kearney et al., 2013).

Self-compassion is often conceptualized as a contrasting variable to emotions like shame. While shame is often inherently self-judgmental, self-compassion emphasizes a kind and accepting self-attitude (Proeve et al., 2018). However, few studies have examined the relationship between shame and self-compassion. Most previous literature on the relationship between shame and self-compassion focused on adolescent populations and individuals with concerns related to eating behaviors. One study investigating the moderating effect of self-compassion on the relationship between shame and depression in college-aged students found self-compassion to impact this relationship significantly. Specifically, the study found consistently significant positive relationships between shame and depression at various levels and that the strength of these associations significantly weakened as levels of self-compassion increased (Callow et al., 2021). Studies on disordered eating and body-related shame have also produced evidence supporting the influence of self-compassion on the relationship between shame and depression. One of these studies found supporting results for there being a negative relationship between self-compassion and external shame in women (Ferriera et al., 2013). Another study, looking at how self-compassion may impact the relationship between body-related shame and depression, found self-compassion to be a significant moderator for women in this relationship (Sick et al., 2020). Additionally, one study involving clergy members found self-compassion to be unrelated to feelings of guilt but negatively correlated with shame-proneness (Barnard & Curry, 2012). Lastly, further support for a potential moderating effect of self-compassion on the relationship between shame and depression was found in a 2019 study of

military veterans. This study investigated the impact of self-compassion on the relationship between morally injurious behaviors (often closely associated with shame, as mentioned above) and depression. They found that self-compassion significantly moderated this relationship, providing even further evidence of the utility of self-compassion practices within this population (Forkus et al., 2019).

Rurality Considerations

According to the U.S. Census Bureau, a *rural area* is any territory, housing, geographical region, or population not residing within an urban area (United States Census Bureau, 2023). Living within a rural area increases individual risk of mental health concerns such as depression. While some studies show individuals living within rural areas to experience depression at rates similar to those living within urban areas, others find rural communities to have higher rates of depression compared to urban areas (Bushy, 1998, as cited in Smalley et al., 2010; Probst, 2006). However, studies within rural communities found rural men to have a greater prevalence of suicide compared to men living in urban areas (Singh & Siahpush, 2002). For military personnel specifically, individuals who join the military are more likely to be from rural areas than urban areas, increasing the population of veterans within rural communities following active duty service. Compared to civilians, veterans within rural communities have elevated rates of suicide and an overall greater risk of experiencing mental health concerns, such as depression (McCarthy et al., 2012). Additionally, veterans living in rural areas are also less likely to receive and utilize mental health treatment (Bommersbach et al., 2021).

The Current Study

The goal of the current study was to further examine the relationships between shame and depression while also gaining a better understanding of the role self-compassion may have on this relationship. With self-compassion, this study specifically sought to see if it moderated the relationship between shame and depression. Identifying the impacts of self-compassion on this relationship is important when considering treatment targets for active-duty military personnel and veterans experiencing concerns related to shame and depression.

Hypotheses

Based on previously conducted research highlighting the relationship between shame and depression, it was expected that feelings of shame positively correlated with depressive symptoms among active duty service members and veterans (Alvarez, 2019; Boring et al., 2021; Bryan et al., 2013). Based on previous literature related to the protective effects of self-compassion, it was predicted that greater levels of self-compassion inversely related to depressive symptoms (Fauvel et al., 2021; Neff, 2003b; Sánchez, 2023). Lastly, it was hypothesized that the use of self-compassion moderated the relationship between shame and depression among military personnel and veterans (Fauvel et al., 2021; Ferriera et al., 2013; Forkus et al., 2019). In addition to these hypotheses, through exploratory analysis, this study aimed to determine if gender identity and rurality status moderated the moderation of self-compassion on shame and depression (Bell et al., 2014; Maguen et al., 2010; Probst, 2006). Specifically, these hypotheses were outlined as follows:

1. Individuals' experience of shame would positively relate to depressive symptoms.

2. Self-compassion would inversely relate to both shame and depressive symptoms.

3. Self-compassion would moderate the relationship between shame and depressive symptoms. Specifically, self-compassion would weaken the relationship between shame and depression.

Exploratory Aim 1. An exploratory analysis examined whether gender identity moderated the moderation of self-compassion on shame and depression.

Exploratory Aim 2. An additional exploratory analysis examined whether rurality status moderated the moderation of self-compassion on shame and depression.

CHAPTER 2

METHOD

Participants

Using self-report methods only, participants included individuals currently on active duty in one of the four main branches of the armed forces (Air Force, Army, Marines, Navy) or veterans no longer actively serving in the U.S. military. All participants were over the age of 18. To ensure participant response validity, exclusion criteria included participants completing less than 90% of the survey measures and those responding incorrectly to two or more attention check questions. A total of 426 participants participated in the online Qualtrics survey. Of those 426 individuals, 14 were removed due to incompletion, and five were removed due to failing eligibility requirements (i.e., not meeting the study's definition of being active duty, not being a member of the United States military). A total of 407 participants were included in data the analyses. All participants meeting inclusion criteria were compensated with $1.75, funded through an internal grant provided by the Graduate Student Organization at Georgia Southern University. All participants in this study were recruited using the recruitment platform Prolific. To comply with recruitment strategies used by Prolific, two separate but identical surveys were published collecting both populations (active duty and veterans) individually. Once data were collected, all participant responses were consolidated. For both published surveys, potential participants read a brief study description and selected whether they were willing to participate.

A total of 407 participant responses were obtained during data collection. Of the total participants, there was a wide range of years participants experienced active-duty service, ranging from less than one year to 42 years ($M = 8.35$, $SD = 7.05$). For the 320 veteran respondents, there was also a range of years since discharge from active duty service from less

than one year to 56 years (M = 16.74, SD = 13.10). This study sample also included a broad age

range of participants ages ranging from 20 to 77 years (M = 42.73, SD = 13.65). See Table 1 for

full demographic information.

Table 1
Demographic Characteristics of the Retained Sample

Variable	Frequency	Percentage
Military Status		
Active Duty Service Member	104	25.6%
Veteran	303	74.4%
Military Branch		
Air Force	112	27.5%
Army	173	42.5%
Marines	33	8.1%
Navy	88	21.6%
Combat Experience		
Yes	130	31.9%
No	277	68.1%
Gender Identity		
Cisgender Man	289	71.0%
Cisgender Woman	108	26.5%
Non-binary or Gender non-conforming	3	0.7%
Transgender Man	2	0.5%
Transgender Woman	1	0.2%
Prefer not to say	1	0.2%
Race / Ethnic Identity		
African American/Black	47	11.5%
American Indian/Alaskan Native	4	1.0%
Asian/Asian American	17	4.2%
Bi-racial/Multi-racial	21	5.2%
Hispanic/Latino(a)	26	6.4%
White/Caucasian	286	70.3%
Another race/ethnicity	6	1.5%
Sexual Identity		
Asexual	6	1.5%
Bisexual	25	6.1%
Gay	11	2.7%
Heterosexual/Straight	345	84.8%
Lesbian	6	1.5%
Pansexual	8	2.0%
Queer	1	0.2%
Prefer not to say	3	0.7%

Education Level		
High school graduate/GED equivalent	43	10.6%
Some college	98	24.1%
Graduated 2-year college	50	12.3%
Graduated 4-year college	131	32.2%
Master's degree	72	17.7%
Doctorate / Professional degree	12	2.9%
Geographical Region Raised In		
Rural	162	39.8%
Urban	242	59.5%
Geographical Region Currently Living In		
Rural	130	31.9%
Urban	277	68.1%

Measures

Participation materials for this study included an informed consent document, demographics questionnaire, and three self-report measures of shame, depression, and self-compassion. These measures included the Center for Epidemiological Studies Depression Scale-10 (CES-D-10), the External and Internal Shame Scale (EISS), and the Self-Compassion Scale - Short Form (SCS-SF). All self-report measures were publicly accessible or used with permission from the original authors.

Demographics Form

Participants completed a demographics form to gather basic demographic information such as age, gender identity, racial identity, sexual orientation, education level, geographic location, military status (e.g., active duty, veteran), military branch (e.g., Air Force, Army, Marines, Navy), years of active duty service, years since active duty service, and combat experience status. Geographic location was assessed using two demographic questions: (1) "How would you describe the geographical region you were predominantly raised in?" and (2) "How would you describe the geographical region you are currently living in?"

Center for Epidemiological Studies Depression Scale-10 (CES-D-10)

The CES-D-10 is a shortened 10-item self-report measure created from the CES-D full 20-item scale, assessing the intensity of depressive symptoms per the Diagnostic and Statistical Manual – 5 (DSM-5) criteria for Major Depressive Disorder (Andersen et al., 1994). Total scores range from 0 to 30, with higher scores indicating higher levels of depressed mood (Andersen et al., 1994; Quiñones et al., 2016). The CES-D is widely supported in clarifying Major Depressive Disorder symptoms and diagnosing depression in both general and military populations (Quiñones et al., 2016; Radloff, 1977). The CES-D-10 improves clinical utility and demonstrates good reliability and validity in various populations (Andersen et al., 1994, as cited in Björgvinsson et al., 2013). It demonstrates good internal consistency (Cronbach's α = .89) and good construct validity through its correlation to other depression measures (Björgvinsson et al., 2013; Quiñones et al., 2016; Radloff, 1977). In the current study, the CES-D-10 had good internal consistency (Cronbach's α = .89). When comparing the full-scale CES-D to the CES-D-10 in veteran populations, no meaningful benefit was found for using the full-scale CES-D instead of the CES-D-10 when screening veterans for depression (Quiñones et al., 2016).

External and Internal Shame Scale (EISS)

The EISS is an 8-item self-report measure evaluating respondents' global sense of shame (Ferreira, 2022). This measure is the first to measure both external and internal shame and a global sense of shame under the biopsychosocial model. Responses on this scale range from 0 *(never)* to 4 *(always)*, with responses added to calculate a total score. Total scores range from 0 to 32, with higher scores indicating higher levels of experienced shame. Items were created based on the core domains of both external and internal shame (inferiority/inadequacy, emptiness, sense of isolation, and criticism). The EISS has good internal consistency

(Cronbach's α = .89) and reliability in assessing individuals' global sense of shame (Ferriera, 2022). In the current study, the EISS had good internal consistency (Cronbach's α = .89). When compared to the Forms of Self-Criticizing and Self-Reassurance Scale (FSCRS), a strong negative link was found between the global sense of shame measured by the EISS and the self-reassurance subscale of the FSCRS. Additionally, the EISS has good concurrent validity with a correlation to depressive symptoms (Ferriera, 2022). While this measure was initially tested in Portugal, prior literature shows evidence for the pancultural nature of shame (Saraiya & Lopez-Castro, 2016; Sznycer et al., 2018). When tested across five different countries, the EISS maintained good reliability and validity (Matos et al., 2021). Based on these findings, the EISS is considered a reliable, valid, and cost-effective measure of individuals' global sense of shame (Ferriera, 2022).

Self-Compassion Scale – Short Form (SCS-SF)

The SCS-SF is a 12-item self-report measure evaluating the general tendency to respond self-compassionately during difficult times (Matos et al., 2021; Neff et al., 2021). Responses on this scale range from 1 *(almost never)* to 5 *(almost always),* with participant responses averaged to create total average scores ranging from 1.00-2.49 (low self-compassion), 2.5-3.5 (moderate self-compassion), and 3.51-5.0 (high levels of self-compassion). The SCS-SF is derived from the long-form 26-item Self-Compassion Scale (SCS), which measures six main components of self-compassion and demonstrates good internal consistency (Cronbach's α = .93) and construct validity (Neff, 2003b). The SCS-SF demonstrates a nearly perfect correlation to the full SCS (r = .98), with a similar factor structure and almost no changes in the level of internal consistency (Cronbach's α = .86), thus, making it a recommended cost-effective scale for research and

clinical practice (Raes et al., 2011). In the current study, the SCS-SF had good internal consistency (Cronbach's α = .88).

Procedures

Potential participants read a short study description listed through the platform Prolific. Interested participants selected a link leading them to a Qualtrics survey. Participants then read and affirmed their informed consent. After consenting to participate, participants completed the main assessment measures (CES-D-10, EISS, and SCS-SF) in random order using a counterbalanced design in Qualtrics to reduce order effects. Participants then completed a brief demographics questionnaire.

After completing all study measures, participants read a debriefing statement reminding them of the study's primary purpose, their rights as participants, the researcher's contact information, and a code to receive compensation ($1.75) for their participation through the Prolific platform. Participants were also provided with accessible/free national mental health resources if they experienced any distress due to participating in this study.

CHAPTER 3

RESULTS

Preliminary Data and Bivariate Correlations

The mean participant scores for each survey measure (e.g., CES-D-10, EISS, SCS-SF) were compared to national response averages. Three one-sample t-tests were performed to evaluate whether a difference existed between the current study's participants and the general population. The first t-test evaluated potential differences in participant CES-D-10 depression scores compared to average scores within general populations. The mean CES-D-10 scores of the study population ($M = 10.81$, $SD = 6.96$) were significantly higher than the scores of general populations ($M = 4.4$), $t(402) = 17.63$, $p < .001$ (Andersen et al., 1994). The second t-test evaluated potential differences in participant EISS scores compared to average scores within general populations. The mean EISS score of the study population ($M = 11.75$, $SD = 6.69$) was significantly higher than the average scores of civilian men ($M = 7.99$), $t(403) = 11.31$, $p < .001$ (Ferreira, 2022). Only data for civilian men was compared because it was the primary data available at the time of this study. The last t-test evaluated potential differences in participants' SCS-SF scores compared to average scores within general populations. The mean SCS-SF score of the study population ($M = 3.08$, $SD = .78$) was significantly higher than the scores of general populations ($M = 2.79$), $t(402) = 7.52$, $p < .001$ (Kotera & Sheffield, 2020).

The current study's main variables, which included feelings of shame, depression, and self-compassion, were also analyzed using bivariate correlations. Please see the correlation matrix presented in Table 2 for reference of correlation coefficients. As anticipated, feelings of shame were significantly positively correlated to depression ($r = .74$, $p < .01$). In addition, there was a significant negative correlation between self-compassion and depression ($r = -.67$, $p <$

.01). Lastly, shame had a significant negative correlation with self-compassion ($r = -.68$, $p <$

.01). All correlations aligned with expected hypotheses.

Table 2
Bivariate Correlations for Study's Main Variables

Variables	1	2	3
1. Shame	--		
2. Depression	.74*	--	
3. Self-Compassion	-.68*	-.67*	--

*Note: *Correlations significant at the .01 level

Moderation Models

One moderation model was analyzed to determine whether levels of self-compassion

impact the relationship between shame and depression. Additionally, three moderated-

moderation models were run to determine whether the relationship between feelings of shame

and depression were impacted by gender identity and rurality status (e.g., raised in a rural area,

currently living in a rural area).

Self-Compassion Moderation Model

A moderation model analyzed using PROCESS macro (Model 1; Hayes, 2017) examined

the impact of self-compassion on the relationship between feelings of shame and depression.

Within this regression model, the focal predictor was feelings of shame, whereas self-

compassion served as the moderator and depression was the outcome variable. Please reference

Table 3 below for regression statistics. The main and interactive effects accounted for 60% of the

variance in depression, $F(3, 392) = 194.06$, $p < .01$. Within this model, the main effect for shame

was positive and significant ($b = .77$, $p < .01$) and the main effect for self-compassion was

inversely significant ($b = -2.11$, $p < .01$). Looking at multivariate interactions, the shame X self-

compassion interaction (b = -.08, p = .06) was not significant. These scores suggest that self-compassion did not moderate the relationship between shame and depression in the sample of active duty service members and veterans.
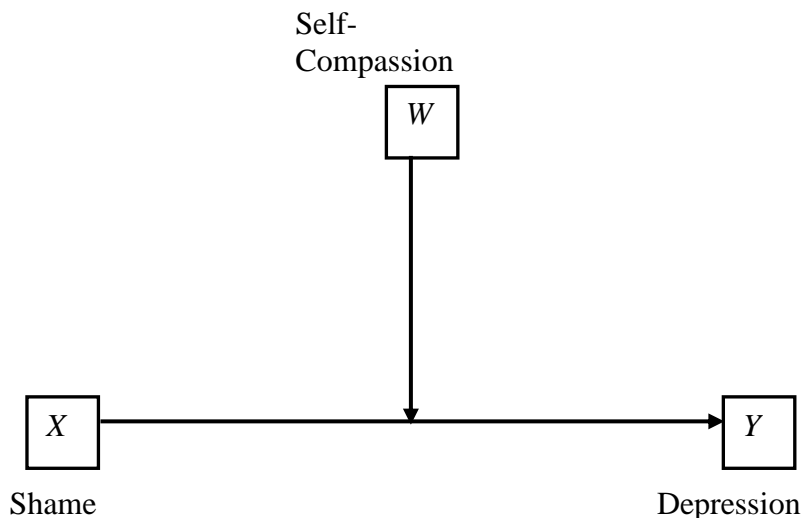
Figure 1
Self-Compassion Moderation Model

Table 3
Regression Statistics Feelings of Shame and Self-Compassion on Depression

Variable	b	Std. Error	t	p	LLCI	ULCI
Constant	10.75	2.04	5.28	.00	6.75	14.75
Shame	.77	.13	6.00	.00	.52	1.02
Self-Compassion	-2.11	.55	-3.88	<.001	-3.19	-1.04
Interaction Effect	-.08	.04	-1.86	.06	-.16	.00

Gender Identity Moderated-Moderation Model

To evaluate the potential impact of gender identity and self-compassion on the relationship between feelings of shame and depression, a moderated-moderation model was analyzed using PROCESS macro (Model 3; Hayes, 2017). This model is represented in Figure 2. This model examined the main effects of shame, self-compassion, and gender identity. In this model, multiple two-way and one three-way interaction effects were evaluated to account for any

variation in depression scores. For regression statistics for this model, see Table 4. Examining

the total model, the main and interactive effects accounted for 60% variance in depression

scores, $F(7, 388) = 83.17$, $p < .01$). The main effects for shame ($b = .58$, $p = .05$) and gender

identity ($b = -2.01$. $p = .52$) did not show significant variance in depression scores. The main

effect of self-compassion ($b = -3.03$, $p = .02$) was significant. For the two-way interactions, the

shame X self-compassion interaction effect ($b = -.02$, $p = .83$), shame X gender identity

interaction effect ($b = .14$, $p = .50$), and the self-compassion X gender identity interaction effect

($b = .70$, $p = .45$) did not account for any significant variance in depression scores. Lastly, no

significant variance was explained in depression scores by the three-way interaction effect for

shame X self-compassion X gender identity ($b = -.04$, $p = .53$), $F(1, 388) = .40$, $p = .53$. With no

significant interaction effects, these findings suggest that neither gender identity nor self-

compassion were significant moderators in this model; thus, no further analyses were completed.

Figure 2
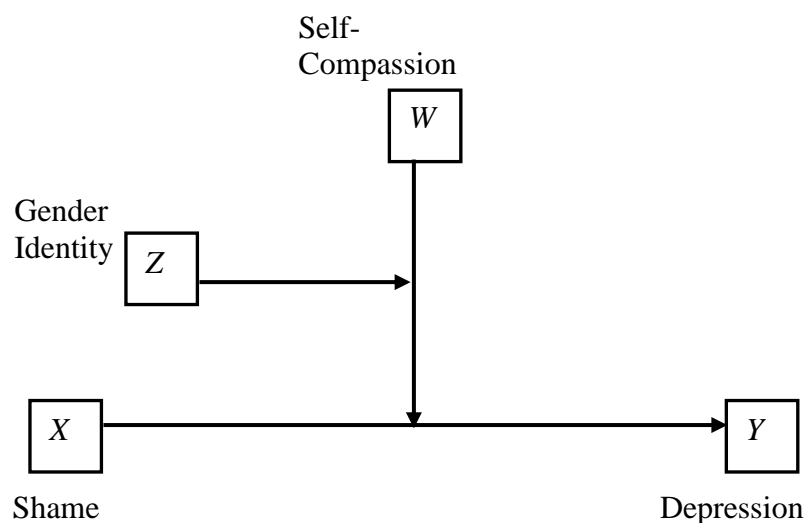*Gender Identity Moderated-Moderation Model*

Table 4

Multivariate Associations with Depression for Gender Identity

Main Effects	b	Std. Error	t	p	LLCI	ULCI
Shame	.58	.30	1.95	.05	-.00	1.17
Self-Compassion	-3.03	1.30	-2.33	.02	-5.58	-.47
Gender Identity	-2.01	3.10	-.65	.52	-8.12	4.10
Interaction Effects						
Shame x Self-Compassion	-.02	.10	-.21	.83	-.22	.17
Shame x Gender Identity	.14	.21	.68	.50	-.27	.55
Self-Compassion x Gender Identity	.70	.92	.76	.45	-1.10	2.50
Shame x Self-Compassion x Gender Identity	-.04	.07	-.63	.53	-.18	.09

Note: Model R^2 = .60

Raised in a Rural Area Moderated-Moderation Model

To evaluate the potential impact of being raised in a rural area and self-compassion on the relationship between feelings of shame and depression, a moderated-moderation model was analyzed using PROCESS macro (Model 3; Hayes, 2017). This model is represented in Figure 3. This model examined the main effects of shame, self-compassion, and being raised in a rural area. In this model, multiple two-way and one three-way interaction effects were also evaluated to account for any variation in depression scores. For regression statistics for this model, see Table 5. Looking at the total model, the main and interactive effects accounted for 60% variance in depression scores, $F(7, 385) = 82.64$, $p < .01$). When examining main effects specifically, main effects for self-compassion ($b = -2.35$, $p = .21$), and being raised in a rural area ($b = -.33$, $p = .94$) did not show significant variance in depression scores; however, the main effect for shame ($b = 1.10$, $p = .02$) was significant. For the two-way interactions, none accounted for significant variance in depression scores (shame X self-compassion interaction effect: $b = -.18$, $p = .23$; shame X being raised in a rural area interaction effect: $b = -.20$, $p = .46$; self-compassion X being

raised in a rural area interaction effect: $b = .18$, $p = .87$). Finally, no significant variance in depression scores was explained by the three-way interaction effect for shame X self-compassion X being raised in a rural area ($b = -.06$, $p = .48$), $F(1, 385) = .49$, $p = .48$. With no significant interaction effects, these findings suggest that neither being raised in a rural area nor self-compassion were significant moderators in this model; thus, no further analyses were completed.

Figure 3
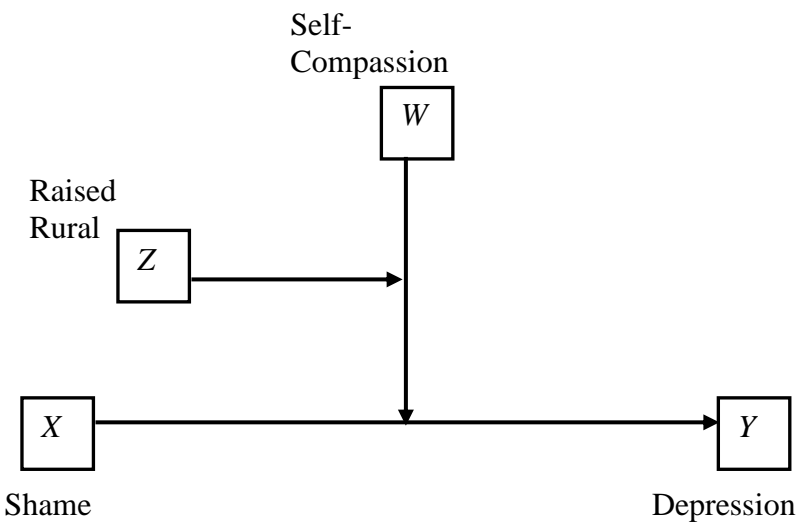*Raised in a Rural Area Moderated-Moderation Model*

Table 5

Multivariate Associations with Depression for Raised Rural Status

Main Effects	b	Std. Error	t	p	LLCI	ULCI
Shame	1.10	.46	2.40	.02	.20	2.00
Self-Compassion	-2.35	1.86	-1.26	.21	-6.01	1.31
Raised Rural	-.33	4.17	-.08	.94	-8.53	7.84
Interaction Effects						
Shame x Self-Compassion	-.18	.15	-1.19	.23	-.47	.12
Shame x Raised Rural	-.20	.27	-.74	.46	-.72	.33
Self-Compassion x Raised Rural	.18	1.12	.16	.87	-2.01	2.37
Shame x Self-Compassion x Raised Rural	.06	.09	.70	.48	-.11	.23

Note: Model $R^2 = .60$

Currently Living in a Rural Area Moderated-Moderation Model

To evaluate the potential impact of currently living in a rural area and self-compassion on the relationship between feelings of shame and depression, a moderated-moderation model was analyzed using PROCESS macro (Model 3; Hayes, 2017). This model is represented in Figure 4. This model examined the main effects of shame, self-compassion, and currently living in a rural area. In this model, multiple two-way and one three-way interaction effects were also evaluated to account for any variation in depression scores. For regression statistics for this model, see Table 6. The main and interactive effects accounted for 60% variance in depression scores, $F(7, 388) = 83.32$, $p < .01$). When examining main effects specifically, main effects for shame ($b = .67$, $p = .20$), self-compassion ($b = -3.45$, $p = .08$), and currently living in a rural area ($b = -2.61$, $p = .54$) did not show significant variance in depression scores. Examining the two-way interactions, the shame X self-compassion interaction effect ($b = -.08$, $p = .65$), shame X currently living in a rural area interaction effect ($b = .06$, $p = .83$), and the self-compassion X currently living in a rural area interaction effect ($b = .82$, $p = .47$), also did not account for any

significant variance in depression scores. Finally, no significant variance was explained in depression scores by the three-way interaction effect for shame X self-compassion X currently living in a rural area ($b = -.00$, $p = .99$), $F(1, 388) = .0001$, $p = .99$. With no significant interaction effects these findings suggest that neither currently living in a rural area nor self-compassion were significant moderators in this model; thus, no further analyses were completed.

Figure 4
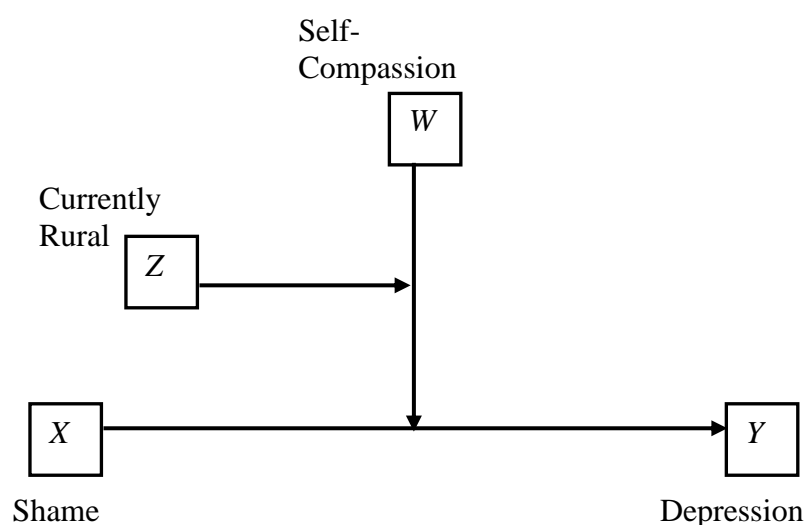*Currently Living in a Rural Area Moderated-Moderation Model*

Table 6
Multivariate Associations with Depression for Currently Rural Status

Main Effects	b	Std. Error	t	p	LLCI	ULCI
Shame	.67	.53	1.27	.20	-.36	1.70
Self-Compassion	-3.45	1.96	-1.76	.08	-7.30	.40
Currently Rural	-2.61	4.24	-.62	.54	-10.95	5.72
Interaction Effects						
Shame x Self-Compassion	-.08	.17	-.45	.65	-.42	.26
Shame x Currently Rural	.06	.29	.22	.83	-.52	.64
Self-Compassion x Currently Rural	.82	1.14	.72	.47	-1.43	3.07
Shame x Self-Compassion x Currently Rural	-.00	.10	-.01	.99	-.19	.19

Note: Model $R^2 = .60$

CHAPTER 4

DISCUSSION

Review of Purpose

The goal of this study was to investigate how self-compassion may impact the relationship between shame and depression in U.S. military populations (active duty service members and veterans). This analysis was intended to determine if self-compassion serves as a protective factor for depression within this population. It was my hope that this project could assist in providing evidence of effective treatment for military populations who are experiencing feelings of shame and depression. By completing this study, the following questions were examined: (a) Are feelings of shame significantly related to feelings of depression within military populations? (b) Is self-compassion negatively related to feelings of shame and depression within military populations? (c) Does self-compassion moderate the relationship between feeling shame and depression?

Preliminary Data

A significant increase was found in participant's depression, shame, and self-compassion levels when the study's data was compared to average civilian scores on the study's three assessment measures for each construct. Specifically, the study population's responses indicated higher levels of depression, shame, and self-compassionate traits than what has been previously found in civilian populations. These findings appear to contrast some existing depression literature, which states there is little difference in levels of depression in military populations compared to civilian populations (Gould et al., 2015; Jackson et al., 1999). However, some literature has supported these findings of military populations experiencing higher rates of depression (Flor et al., 2023; Hoerster et al., 2012). Few studies have examined potential

differences in shame and self-compassion levels in the military compared to civilian populations. Examining these results suggests a greater need to understand the specific factors that may be influencing higher rates of depression within military populations. Additionally, with this study being one of the first to compare the military population's scores of shame and self-compassion to civilian populations, future research may benefit from continuing to explore these findings to see if they can be supported in other military samples.

Correlations

Shame and Depression

A significant, positive relationship was found between feelings of shame and depression, supporting the first hypothesis. Specifically, within the study population, individuals who indicated stronger feelings of shame also reported stronger feelings of depression. This finding is consistent with previous literature on the positive relationship between shame and depression within both civilian and military populations (Alvarez, 2019; Boring et al., 2021; Bryan et al., 2013; Cândea & Szentagotai-Tatar, 2018; Ferreira et al., 2022). Examining these results suggests a need to better understand the relationship between shame and depression within this population. Future research could further investigate this relationship by exploring specific contexts of shame that are most closely linked to depression within this population. For example, future studies may investigate whether military personnel are more likely to experience depressive symptoms following shame related to childhood trauma/complex trauma compared to shame related to combat-related moral injury. This exploration may help researchers and clinicians obtain a better idea of who is more likely to potentially experience depressive symptoms and may provide further evidence for why this relationship is observed within this population. Additionally, due to the assessment measures used for this study, only broad, general

levels of shame were measured for participants. Future studies may benefit from exploring potential differences in internal and external shame experiences within military populations, as previous literature on civilian populations shows external shame is more strongly linked to depression than internal shame (Proeve et al., 2018).

Self-Compassion and Depression

In support of the study's second hypothesis, depression was significantly, inversely related to self-compassion within military populations. Specifically, individuals reporting higher levels of depression also reported lower levels of self-compassion. This finding is consistent with previous literature on the protective effects of self-compassion on emotion dysregulation and depression (Fauvel et al., 2021; Johnson & O'Brien, 2013; Kearney et al., 2013). Further research would be beneficial to better understand this inverse relationship. Specifically, future studies may examine how domains of self-compassion impact this relationship differently. The current study examined individuals' global self-compassion scores but did not investigate the different domains of self-compassion specifically. Previous literature identified the three domains of self-compassion as self-kindness, common humanity, and mindfulness (Neff, 2003b). Investigating how these factors may influence depression individually may be helpful for future clinicians and researchers to determine moderating factors further strengthening this relationship so that preventative methods utilizing self-compassion for depression can be developed.

Self-Compassion and Shame

Self-compassion was also significantly, inversely correlated to feelings of shame. This relationship indicates that individuals experiencing higher levels of self-compassion also reported lower levels of shame. This study provides further evidence for this relationship, which is shown in previous literature investigating shame and self-compassion (Callow et al., 2021;

Forkus et al., 2019). Future studies could further investigate this relationship by examining how the three specific pillars of self-compassion (i.e., self-kindness, common humanity, mindfulness) may interact with specific aspects of shame (e.g., internal shame, external shame) within this population to develop further self-compassionate treatment interventions that can specifically target aspects of shame most often experienced by active duty military personnel and veterans. Such studies would also be beneficial in finding potential avenues to decrease mental health stigma and better foster compassionate environments to promote self-compassion within military communities.

Moderated Effects of Self-Compassion

Unlike the significant correlations found between shame, depression, and self-compassion, which were consistent with the study's expectations for Hypotheses 1 and 2, the results of testing for Hypothesis 3 were not found to be upheld. Self-compassion did not significantly moderate the relationship between shame and depression. Participant's self-compassion levels did not change the relationship between scores on the shame and depression measures of this study. As few previous studies examined the moderating effects of self-compassion in military populations, this study is one of the first to search for a possible significant moderating effect within this population. Currently, little is known why this relationship was not significant, as previous studies have found self-compassion to be a significant moderator for the relationship between shame and depression (Callow et al., 2021; Forkus et al., 2019; Sick et al., 2020).

One potential explanation for the nonsignificant findings is the participant's stress levels while completing the survey measures. Military populations face many unique stressors compared to civilian populations, including separation from family, leadership climate, cultural

ambiguity, combat exposure, and social support (Campbell & Nobel, 2009). Some literature shows the protective effects of self-compassion on depression is significantly impacted by participants' perceived levels of stress (Callow et al., 2021; Luo et al., 2019; Raes, 2011; Salinger & Whisman, 2021). Thus, participants' stress levels while completing the survey measures may have impacted the significance of self-compassion as a protective factor against depression within this study. Participants' stress levels were not examined in the current study.

Another potential explanation for the nonsignificant findings may be the differences between participants' internal and external shame-related distress. Specifically, while external shame is primarily focused on external perceptions of oneself, depression and self-compassion can be conceptualized as internal processes that exist outside of external factors (Callow et al., 2021; Ferreira et al., 2022; Proeve et al., 2018; Salinger & Whisman, 2021). Thus, some researchers suggest that due to its internal focus, self-compassion may be a more effective moderator for internal shame compared to external shame when protecting against depression (Neff, 2003a; Pinto-Gouveia et al., 2013; Zhang et al., 2018). If the study's population was experiencing more external shame (which may be likely given the stressful nature of military environments), this may explain why the moderating effect of self-compassion was not found to be significant in the current study. Further research is needed to explain whether differences in internal and external shame experiences affect the significance of self-compassion's moderating effects within a military population.

Lastly, the trait-stability of the Self-Compassion Scale – Short Form (SCS-SF) may also explain why self-compassion was not a significant moderator within this study. The self-compassion scores incorporated in this study's moderation analysis were based on participants' scores related to global self-compassionate traits, which would be considered relatively stable.

Previous literature finding self-compassion to significantly moderate the relationship between shame and depression focused specifically on self-compassionate practices and how they impact shame and depression-proneness (Johnson & O'Brien, 2013). This suggests that the act of engaging in self-compassion may be more impactful than just holding self-compassionate traits. Thus, more research is needed to gain a deeper understanding of how different aspects of self-compassion (e.g., self-kindness, common humanity, mindfulness) or engaging specific self-compassionate practices (e.g., loving-kindness, affectionate breathing, letter writing) may change the significance of self-compassion's moderating effect on the relationship between shame and depression.

Gender Identity Differences/Gender Identity Considerations

A moderated moderation was used to examine how participants' gender identity may impact the relationship between shame and self-compassion. The results indicated gender identity did not have significant moderating effects on the relationship between shame, self-compassion, and depression. Previous literature indicated that identifying as a woman in the military related to an increased risk for depression and feelings of shame related to fitting into traditionally masculine cultural norms compared to those identifying as men (Bell et al., 2014; Goldstein et al., 2017; Gould et al., 2015; Herbert, 1998; Maguen et al., 2010). Additionally, a previous study examining the unique experiences of military veterans identifying as transgender indicated that military experiences of discrimination are related to increased internalized minority stress (e.g., internal feeling of shame) and suicidal ideation (Tucker et al., 2019). Overall, very few studies have examined gender differences in shame, self-compassion, and depression in the military population. The non-significant findings of this current study may be due to the sample size, consisting largely of individuals identifying as cisgender men (71%),

limiting the potential for variations based on gender identity. In future studies, it would be beneficial to gather more information related to the unique experiences of women and other traditionally marginalized gender identities within the military. It would also be helpful for future studies to focus on the potential protective effects of self-compassion within specific gender minority military populations to obtain a greater understanding of how self-compassion practices may be beneficial in fighting against shame and depression related to one's experiences of gender identity discrimination.

Rurality Differences/Rurality Considerations

To address aim two of this study, two additional moderated moderations were used to examine how past rurality status and current rurality status impact the relationships between shame, depression, and self-compassion. When analyzing the results of this study, rurality status (both past and current) did not have any significant impact on the relationships between shame, depression, and self-compassion. While there are differences in lived experiences between rural and urban areas, with veterans living within rural areas often experiencing increased difficulties related to accessing mental health care, this nonsignificant finding is consistent with prior literature finding no differences between depression rates of rural compared to urban populations (Bommersbach et al., 2021; Probst, 2006). Despite there being no significant findings, self-compassion is largely understudied within rural populations. Future studies may benefit from gaining more insight into the unique experiences of military personnel living in rural areas. Specifically, it may be important to ask individuals about their experiences with shame and self-compassion and explore any differences in rural vs. urban populations. Obtaining this information might be beneficial to obtain a holistic view of any potential relationships between rurality status, shame, depression, and self-compassion.

Limitations

Methodological Concerns

There were some notable limitations related to the study's design. Specifically, survey measures used to collect participant responses for the three main variables (e.g., shame, depression, self-compassion) were based on participants' self-report. Specifically, limitations related to social desirability bias may have impacted study results as participants may attempt to maintain a positive self-image, especially when responding to questions related to more socially sensitive topics within military populations, such as shame and depression (King & Burner, 2000; Thunholm, 2001; Van de Mortel et al., 2008). For example, study participants may have underreported experiences of shame or depression and overemphasized their own self-compassionate traits due to stigma surrounding mental health concerns and intense expectations to cope with stress within military culture. Additionally, this study's cross-sectional and correlational nature may serve as a shortcoming as these designs have inherent limitations on timeframes, conclusion inferences, and the possibility of unknown confounding variables. Lastly, utilizing binary measures of past and current rurality status limits expanding such findings as such binary measures do not capture the unique experiences of individuals living in rural areas. For example, it would be useful to use more in-depth measures of rurality status to capture potentially important variables such as geographical isolation, mental health stigma, or familial cultural values within the conceptualization of past or current rural experiences. The binary measures of rurality may also serve as a limitation due to potential variations in what responders consider to be rural or urban. For example, there may be potential differences in what someone raised in a rural area considers to be urban compared to someone raised in an urban area.

Recruitment

Another limitation of this study was recruiting participants through the platform Prolific. Prolific is still a relatively new recruitment platform; thus, more information may be needed related to its strengths and limitations. Most participants in this study (74%) identified as U.S. military veterans. Additionally, most study participants identified as white (70%), straight (84%), cisgender men (71%). When considering the lack of diversity in this study's population, it is important to note that the study results may differ with more racial, sexual orientation, or gender diversity within the study sample. Additionally, the average age (44) and birth year (1978) of military personnel within this sample suggests the average participant would most likely have been involved in the Global War on Terror (GWOT), including Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) conflicts. Thus, this is an important limitation to the study's generalizability to other eras of U.S. active-duty service members and veterans.

Clinical Implications

While self-compassion did not significantly moderate the relationship between shame and depression within this population of active duty service members and veterans, the significance of the study's main effects provides important considerations for protecting against depressive symptoms within military populations. Specifically, the significant correlation between shame and depression further bolsters evidence of the role shame plays in the development of depressive symptoms within this population. When clinicians are treating military personnel with depression, it may be beneficial to ask specific questions related to their unique shameful experiences. Specifically, there may be differences between treatment outcomes for internalized compared to externalized shame. In addition to implications from the study's main effects, important clinical implementations can also be gathered from comparing the study populations'

mean scores on shame, depression, and self-compassion measures to those of the general (civilian) population. Specifically, this study found that, on average, active duty service members and veterans report higher levels of these experiences and traits on the CES-D-10, EISS, and SCS-SF measures than civilian populations (i.e., those used in the norming of these measures). These findings are important for clinicians and healthcare providers to be aware of when working with active-duty military personnel and veterans as they highlight the unique experiences held within this population. It may be beneficial for clinicians to proactively work with veterans to protect against feelings of shame and depression, as this population appears to be at higher risk for these experiences.

Future Directions

This study provided further evidence for a significant, positive relationship between shame and depression. Future research should expand the literature on this relationship, specifically within military populations, and examine other potential interventions or factors that strengthen or weaken this relationship. Specifically, future studies may benefit from examining how pre-military experiences (e.g., childhood/complex trauma) and active duty experiences (e.g., moral injury) related to feelings of shame may impact this relationship. Additionally, further study of potential differences in the effectiveness of self-compassion practices with internal compared to external shame would be helpful in further examining other potential factors influencing the significant, negative relationship found between shame and self-compassion within this study. A significant and inverse relationship was also found between self-compassion and depression. Due to the limitations related to diversity in the present sample, further studies may benefit from examining diverse active duty and veteran samples to determine if this inverse relationship is generalizable to a broader population. While self-compassion did not significantly

moderate the findings within this sample, future research may benefit from investigating whether engaging in specific self-compassion practices (e.g., affectionate breathing, letting writing, loving kindness) moderates the relationship between shame and depression. It may also be useful to investigate what specific aspects of mindfulness (e.g., common humanity, mindfulness, self-kindness) may increase or decrease the relationship between shame and depression. Lastly, although rurality status was not significantly associated with shame or depression in the current study, there is limited available research on military populations' unique experiences with shame and depression within rural areas. Future literature could examine culturally relevant factors that may impact the experiences of shame and depression for veterans in rural areas.

REFERENCES

Alvarez, D. V. (2020). Using shame resilience to decrease depressive symptoms in an adult

    intensive outpatient population. *Perspectives in Psychiatric Care*, *56*(2), 363-370. doi:

    10.1111/ppc.12443

Andersen, E. M., Malmgren, J. A., Carter, W. B., & Patrick, D. L. (1994). Screening for

    depression in well older adults: Evaluation of a short form of the CES-D. *American*

    Journal of Preventive Medicine, *10*(2), 77-84. Retrieved February 2023, from

    https://www.researchgate.net/profile/Judith-

    Malmgren/publication/15161183_Screening_for_depression_in_well_older_adults_Evalu

    ation_of_a_short_form_of_the_CES-

    D_Center_for_Epidemiologic_Studies_Depression_Scale/links/5a0472810f7e9beb177b6

    90e/Screening-for-depression-in-well-older-adults-Evaluation-of-a-short-form-of-the-

    CES-D-Center-for-Epidemiologic-Studies-Depression-Scale.pdf

Andrews, B. (1995). Bodily shame as a mediator between abusive experiences and

    depression. *Journal of Abnormal Psychology*, *104*(2), 277-285.

    https://doi.org/10.1037/0021-843X.104.2.277

Andrews, B., Qian, M., & Valentine, J. D. (2002). Predicting depressive symptoms with a new

    measure of shame: The Experience of Shame Scale. *British Journal of Clinical*

    Psychology, *41*(1), 29-42. https://doi.org/10.1348/014466502163778

Barnard, L. K., & Curry, J. F. (2011). Self-compassion: Conceptualizations, correlates, &

    interventions. *Review of General Psychology*, *15*(4), 289-303. doi: 10.1037/a0025754

Bell, M. E., Turchik, J. A., & Karpenko, J. A. (2014). Impact of gender on reactions to military sexual assault and harassment. *Health & Social Work*, *39*(1), 25-33. doi: 10.1093/hsw/hlu004

Björgvinsson, T., Kertz, S. J., Bigda-Peyton, J. S., McCoy, K. L., & Aderka, I. M. (2013). Psychometric properties of the CES-D-10 in a psychiatric sample. *Assessment*, *20*(4), 429-436. doi: 10.1177/1073191113481998

Blore, J. D., Sim, M. R., Forbes, A. B., Creamer, M. C., & Kelsall, H. L. (2015). Depression in Gulf War veterans: A systematic review and meta-analysis. *Psychological Medicine*, *45*(8), 1565-1580. doi:10.1017/S0033291714001913

Bommersbach, T., Stefanovics, E., & Rosenheck, R. (2021). Mental health service utilization in rural areas nationally in the Veterans Health Administration. *Journal of Rural Mental Health*, *45*(3), 229-242. https://doi.org/10.1037/rmh0000182

Booth-Kewley, S., Schmied, E. A., Highfill-McRoy, R. M., Larson, G. E., Garland, C. F., & Ziajko, L. A. (2013). Predictors of psychiatric disorders in combat veterans. *BMC Psychiatry*, *13*, 1-11. doi:10.1186/1471-244X-13-130

Boring, B. L., Walsh, K. T., Nanavaty, N., & Mathur, V. A. (2021). Shame mediates the relationship between pain invalidation and depression. *Frontiers in Psychology*, *12*, 743584. doi: 10.3389/fpsyg.2021.743584

Bossarte, R. M. (2013). *Veteran suicide: a public health imperative*. American Public Health Association.

Bradbard, D. A., Maury, R. V., Kimball, M., Wright, J., LoRe, C. E., Levingston, K., Levingston, K., Shiffer, C. O., Simon-Boyd, G., Taylor, J. A., & White, A. M. (2014). 2014 Military Family Lifestyle Survey: Comprehensive report. *Institute for Veterans and Military Families. 56*. Retrieved December 2022, from https://surface.syr.edu/ivmf/56

Bryan, C. J., Morrow, C. E., Etienne, N., & Ray-Sannerud, B. (2013). Guilt, shame, and suicidal ideation in a military outpatient clinical sample. *Depression and Anxiety*, *30*(1), 55-60. doi: 10.1002/da.22002

Bushy, A. (1998). Health issues of women in rural environments: An overview. *Journal of the American Medical Women's Association (1972)*, *53*(2), 53-56.

Callow, T. J., Moffitt, R. L., & Neumann, D. L. (2021). External shame and its association with depression and anxiety: The moderating role of self-compassion. *Australian Psychologist*, *56*(1), 70-80. doi: 10.1080/00050067.2021.1890984

Campbell, D. J., & Nobel, O. B. Y. (2009). Occupational stressors in military service: A review and framework. *Military Psychology*, *21*(sup2), S47-S67. doi: 10.1080/08995600903249149

Cândea, D. M., & Szentagotai-Tătar, A. (2018). Shame-proneness, guilt-proneness and anxiety symptoms: A meta-analysis. *Journal of Anxiety Disorders*, *58*, 78-106. https://doi.org/10.1016/j.janxdis.2018.07.005

Cardona, N. D., Cohen, J. M., & Feinstein, B. A. (2023). Targeting self-compassion among sexual and gender minority people experiencing psychological distress: A comment on Helminen et al. (2022). *Clinical Psychology: Science and Practice*, *30*(1), 40-42. https://doi.org/10.1037/cps0000116

Currier, J. M., Stefurak, T., Carroll, T. D., & Shatto, E. H. (2017). Applying trauma-informed

    care to community-based mental health services for military veterans [Abstract]. *Best*

    Practices in Mental Health, *13*(1), 47-65. Retrieved November 2022 from

    https://www.ingentaconnect.com/content/follmer/bpmh/2017/00000013/00000001/art000

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Fauvel, B., Strika-Bruneau, L., & Piolino, P. (2021). Changes in self-rumination and self-

    compassion mediate the effect of psychedelic experiences on decreases in depression,

    anxiety, and stress. *Psychology of Consciousness: Theory, Research, and Practice, 10*(1),

    88-102. https://doi.org/10.1037/cns0000283

Ferreira, C., Moura-Ramos, M., Matos, M., & Galhardo, A. (2022). A new measure to assess

    external and internal shame: Development, factor structure and psychometric properties

    of the External and Internal Shame Scale. *Current Psychology*, *41*(4), 1892-1901.

    https://doi.org/10.1007/s12144-020-00709-0

Flor, S. F., López, C. V., & Molina-Peral, J. A. (2023). Anxiety and depression in a sample of

    military and civilian musicians. *Anxiety and Stress, 29*(2), 124-129.

    https://doi.org/10.5093/anyes2023a15

Forkus, S. R., Breines, J. G., & Weiss, N. H. (2019). Morally injurious experiences and mental

    health: The moderating role of self-compassion. *Psychological Trauma: Theory,*

    Research, Practice, and Policy, *11*(6), 630-638. http://dx.doi.org/10.1037/tra0000446

Franklin, E. (2009). The emerging needs of veterans: A call to action for the social work

    profession. *Health & Social Work*, *34*(3), 163. doi: 10.1093/hsw/34.3.163

Gilbert, P. (2003). Evolution, social roles, and the differences in shame and guilt. *Social Research: An International Quarterly*, *70*(4), 1205-1230. https://doi.org/10.1353/sor.2003.0013

Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, *13*(6), 353-379. doi: 10.1002/cpp.507

Goldstein, L. A., Dinh, J., Donalson, R., Hebenstreit, C. L., & Maguen, S. (2017). Impact of military trauma exposures on posttraumatic stress and depression in female veterans. *Psychiatry Research*, *249*, 281-285. http://dx.doi.org/10.1016/j.psychres.2017.01.009

Gould, C. E., Rideaux, T., Spira, A. P., & Beaudreau, S. A. (2015). Depression and anxiety symptoms in male veterans and non-veterans: The health and retirement study. *International Journal of Geriatric Psychiatry*, *30*(6), 623-630. doi: 10.1002/gps.4193

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Publications.

Herbert, M. S. (1998). *Camouflage isn't only for combat: Gender, sexuality, and women in the military*. New York University Press.

Hoerster, K. D., Lehavot, K., Simpson, T., McFall, M., Reiber, G., & Nelson, K. M. (2012). Health and health behavior differences: US military, veteran, and civilian men. *American Journal of Preventive Medicine*, *43*(5), 483-489. https://doi.org/10.1016/j.amepre.2012.07.029

Hoopsick, R. A., Homish, D. L., Bartone, P. T., & Homish, G. G. (2018). Developing a measure to assess emotions associated with never being deployed. *Military Medicine*, *183*(9-10), e509-e517. https://doi.org/10.1093/milmed/usy005

Hoyt, T., Rielage, J. K., & Williams, L. F. (2012). Military sexual trauma in men: Exploring treatment principles. *Traumatology*, *18*(3), 29-40. doi: 10.1177/1534765611430724

Hurlocker, M. C., Vidaurri, D. N., Cuccurullo, L. A. J., Maieritsch, K., & Franklin, C. L. (2018). Examining the latent structure mechanisms for comorbid posttraumatic stress disorder and major depressive disorder. *Journal of Affective Disorders*, *229*, 477-482. https://doi.org/10.1016/j.jad.2017.12.076

Jackson, J. L., O'Malley, P. G., & Kroenke, K. (1999). A psychometric comparison of military and civilian medical practices. *Military Medicine*, *164*(2), 112-115. https://doi.org/10.1093/milmed/164.2.112

Jacoby, V. M., Hale, W., Dillon, K., Dondanville, K. A., Wachen, J. S., Yarvis, J. S., Litz, B. T., Mintz, B., Young-McCaughan, S., Peterson, A. L., & Resick, P.A. for the STRONG STAR Consortium. (2019). Depression suppresses treatment response for traumatic loss–related posttraumatic stress disorder in active duty military personnel. *Journal of Traumatic Stress*, *32*(5), 774-783. doi: 10.1002/jts.22441

Jakupcak, M., Blais, R. K., Grossbard, J., Garcia, H., & Okiishi, J. (2014). "Toughness" in association with mental health symptoms among Iraq and Afghanistan war veterans seeking Veterans Affairs health care. *Psychology of Men & Masculinity*, *15*(1), 100-104. https://doi.org/10.1037/a0031508

James, L. M., Van Kampen, E., Miller, R. D., & Engdahl, B. E. (2013). Risk and protective factors associated with symptoms of post-traumatic stress, depression, and alcohol misuse in OEF/OIF veterans. *Military Medicine*, *178*(2), 159-165. doi: 10.7205/MILMED-D-12-00282

Johnson, E. A., & O'Brien, K. A. (2013). Self-compassion soothes the savage ego-threat system: Effects on negative affect, shame, rumination, and depressive symptoms. *Journal of Social and Clinical Psychology*, *32*(9), 939-963. https://doi.org/10.1521/jscp.2013.32.9.939

Kearney, D. J., Malte, C. A., McManus, C., Martinez, M. E., Felleman, B., & Simpson, T. L. (2013). Loving-kindness meditation for posttraumatic stress disorder: A pilot study. *Journal of Traumatic Stress*, *26*(4), 426-434. doi: 10.1002/jts.21832

Keller, S. M., Feeny, N. C., & Zoellner, L. A. (2014). Depression sudden gains and transient depression spikes during treatment for PTSD. *Journal of Consulting and Clinical Psychology*, *82*(1), 102. https://doi.org/10.1037/a0035286

King, M. F., & Bruner, G. C. (2000). Social desirability bias: A neglected aspect of validity testing. *Psychology & Marketing*, *17*(2), 79-103. https://doi.org/10.1002/(SICI)1520-6793(200002)17:2<79::AID-MAR2>3.0.CO;2-0

Knobloch, L. K., & Basinger, E. D. (2021). Communication mediators of the link between depressive symptoms and relationship satisfaction among army soldiers. *Family Relations*, *70*(2), 422-436. doi: 10.1111/fare.12447

Körner, A., Coroiu, A., Copeland, L., Gomez-Garibello, C., Albani, C., Zenger, M., & Brähler, E. (2015). The role of self-compassion in buffering symptoms of depression in the general population. *PloS One*, *10*(10). doi: 10.1371/journal.pone.0136598

Kotera, Y., & Sheffield, D. (2020). Revisiting the Self-Compassion Scale-Short Form: Stronger
associations with self-inadequacy and resilience. *SN Comprehensive Clinical
Medicine*, *2*(6), 761-769. https://doi.org/10.1007/s42399-020-00309-w

Lineberry, T. W., & O'Connor, S. S. (2012, September). Suicide in the US army. *Mayo Clinic
Proceedings, 87*(9), 871-878. https://doi.org/10.1016/j.mayocp.2012.07.002

Litz, B. T., Stein, N., Delaney, E., Lebowitz, L., Nash, W. P., Silva, C., & Maguen, S. (2009).
Moral injury and moral repair in war veterans: A preliminary model and intervention
strategy. *Clinical Psychology Review*, *29*(8), 695-706. doi: 10.1016/j.cpr.2009.07.003

Liu, X., Yang, Y., Wu, H., Kong, X., & Cui, L. (2020). The roles of fear of negative evaluation
and social anxiety in the relationship between self-compassion and loneliness: A serial
mediation model. *Current Psychology*, 1-9. https://doi.org/10.1007/s12144-020-01001-x

Luo, Y., Meng, R., Li, J., Liu, B., Cao, X., & Ge, W. (2019). Self-compassion may reduce
anxiety and depression in nursing students: A pathway through perceived stress. *Public
Health*, *174*, 1-10. https://doi.org/10.1016/j.puhe.2019.05.015

Maguen, S., Ren, L., Bosch, J. O., Marmar, C. R., & Seal, K. H. (2010). Gender differences in
mental health diagnoses among Iraq and Afghanistan veterans enrolled in Veterans
Affairs health care. *American Journal of Public Health*, *100*(12), 2450-2456.
https://doi.org/10.2105/AJPH.2009.166165

Mahalik, J. R., Locke, B. D., Ludlow, L. H., Diemer, M. A., Scott, R. P., Gottfried, M., &
Freitas, G. (2003). Development of the Conformity to Masculine Norms
Inventory. *Psychology of Men & Masculinity*, *4*(1), 3. doi: 10.1037/1524-9220.4.1.3

Management of Major Depressive Disorder Working Group. (2016, April). *VA/DoD clinical practice guideline for the management of major depressive disorder*. VA/DoD Clinical Practice Guidelines.

https://www.healthquality.va.gov/guidelines/MH/mdd/VADoDMDDCPGFINAL82916.pdf

Matos, M., Galhardo, A., Moura-Ramos, M., Steindl, S. R., Bortolon, C., Hiramatsu, Y., Baumann, T., Xin Qi Yiu, R., & Ferreira, C. (2021). Measuring shame across five countries: Dimensionality and measurement invariance of the External and Internal Shame Scale. *Current Psychology*, *42*(9), 7161-7170. https://doi.org/10.1007/s12144-021-02019-5

Matos-Pina, I., Trindade, I. A., & Ferreira, C. (2022). Internal and external shame in healthy and chronically ill samples: Exploring links to psychological health. *Journal of Clinical Psychology in Medical Settings*, *29*(2), 412-420. https://doi.org/10.1007/s10880-022-09855-y

McCarthy, J. F., Blow, F. C., Ignacio, R. V., Ilgen, M. A., Austin, K. L., & Valenstein, M. (2012). Suicide among patients in the Veterans Affairs Health System: Rural–urban differences in rates, risks, and methods. *American Journal of Public Health*, *102*(S1), S111-S117. doi: 10.2105/AJPH.2011.300463

National Center for PTSD. (2012, April 6). *Active Duty vs. Reserve or National Guard.* U.S. Department of Veterans Affairs.

https://www.va.gov/vetsinworkplace/docs/em_activereserve.html#:~:text=A%20person%20who%20is%20active,time%20should%20the%20need%20arise

Neff, K. D. (2003a). The development and validation of a scale to measure self-compassion. *Self and Identity*, *2*(3), 223-250. https://doi.org/10.1080/15298860309027

Neff, K. D. (2003b). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, *2*(2), 85-101. https://doi.org/10.1080/15298860309032

Neff, K. D., Tóth-Király, I., Knox, M. C., Kuchar, A., & Davidson, O. (2021). The development and validation of the state Self-Compassion Scale (long-and short form). *Mindfulness*, *12*, 121-140. https://doi.org/10.1007/s12671-020-01505-4

Parker, K., Cilluffo, A., & Stepler, R. (2017, April 13). *6 facts about the U.S. military and its changing demographics*. Pew Research Center. https://www.pewresearch.org/short-reads/2017/04/13/6-facts-about-the-u-s-military-and-its-changing-demographics/

Pinto-Gouveia, J., & Matos, M. (2011). Can shame memories become a key to identity? The centrality of shame memories predicts psychopathology. *Applied Cognitive Psychology*, *25*(2), 281-290. doi: 10.1002/acp.1689

Probst, J. C., Laditka, S. B., Moore, C. G., Harun, N., Powell, M. P., & Baxley, E. G. (2006). Rural-urban differences in depression prevalence: Implications for family medicine. *Family Medicine-Kansas City*, *38*(9), 653-659.

Proeve, M., Anton, R., & Kenny, M. (2018). Effects of mindfulness-based cognitive therapy on shame, self-compassion and psychological distress in anxious and depressed patients: A pilot study. *Psychology and Psychotherapy: Theory, Research and Practice*, *91*(4), 434-449. doi: 10.1111/papt.12170

Quiñones, A. R., Thielke, S. M., Clark, M. E., Phillips, K. M., Elnitsky, C., & Andresen, E. M. (2016). Validity of Center for Epidemiologic Studies Depression (CES-D) scale in a sample of Iraq and Afghanistan veterans. *SAGE Open Medicine*, *4*, 1-8. doi: 10.1177/2050312116643906

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*(3), 385-401. https://doi.org/10.1177/014662167700100306

Raes, F. (2011). The effect of self-compassion on the development of depression symptoms in a non-clinical sample. *Mindfulness*, *2*, 33-36. doi: 10.1007/s12671-011-0040-y

Raines, A. M., Allan, N. P., Franklin, C. L., Huet, A., Constans, J. I., & Stecker, T. (2020). Correlates of suicidal ideation and behaviors among former military personnel not enrolled in the Veterans Health Administration. *Archives of Suicide Research*, *24*(4), 517-533. https://doi.org/10.1080/13811118.2019.1660286

Rishel, C. W., & Hartnett, H. P. (2015). Preparing MSW students to provide mental and behavioral health services to military personnel, veterans, and their families in rural settings. *Journal of Social Work Education*, *51*(sup1), S26-S43. https://doi.org/10.1080/10437797.2015.1001278

Roche, A. M., Pidd, K., Fischer, J. A., Lee, N., Scarfe, A., & Kostadinov, V. (2016). Men, work, and mental health: A systematic review of depression in male-dominated industries and occupations. *Safety and Health at Work*, *7*(4), 268-283. http://dx.doi.org/10.1016/j.shaw.2016.04.005

Rosenheck, R. A., & Fontana, A. F. (2007). Recent trends in VA treatment of post-traumatic stress disorder and other mental disorders. *Health Affairs*, *26*(6), 1720-1727. https://doi.org/10.1377/hlthaff.26.6.1720

Rubin, A. (2013). Introduction: Understanding and intervening with military personnel and their families: An overview. In A. Rubin, E. L. Weiss, & J. E. Coll (Eds.), *Handbook of military social work* (pp. 23-30). Wiley.

Rutter, H., Campoverde, C., Hoang, T., Goldberg, S. F., & Berenson, K. R. (2023). Self-compassion and women's experience of social media content portraying body positivity and appearance ideals. *Psychology of Popular Media*, *13*(1), 12-22. https://dx.doi.org/10.1037/ppm0000453

Salinger, J. M., & Whisman, M. A. (2021). Does self-compassion moderate the cross-sectional association between life stress and depressive symptoms?. *Mindfulness*, *12*, 889-898. https://doi.org/10.1007/s12671-020-01554-9

Sánchez, F. J. (2023). Self-compassion in today's regressive sociopolitical climate. *Clinical Psychology: Science and Practice, 30*(1), 43-44. https://doi.org/10.1037/cps0000115

Saraiya, T., & Lopez-Castro, T. (2016). Ashamed and afraid: A scoping review of the role of shame in post-traumatic stress disorder (PTSD). *Journal of Clinical Medicine*, *5*(11), 94. doi: 10.3390/jcm5110094

Shay, J. (2014). Moral injury. *Psychoanalytic Psychology*, *31*(2), 182. doi: 10.1037/a0036090

Shen, Y. C., Arkes, J., & Williams, T. V. (2012). Effects of Iraq/Afghanistan deployments on major depression and substance use disorder: Analysis of active duty personnel in the US military. *American Journal of Public Health*, *102*(S1), S80-S87. doi: 10.2105/AJPH.2011.300425

Sick, K., Pila, E., Nesbitt, A., & Sabiston, C. M. (2020). Does self-compassion buffer the detrimental effect of body shame on depressive symptoms?. *Body Image*, *34*, 175-183. https://doi.org/10.1016/j.bodyim.2020.05.012

Singh, G. K., & Siahpush, M. (2002). Increasing rural–urban gradients in US suicide mortality, 1970–1997. *American Journal of Public Health*, *92*(7), 1161-1167. https://doi.org/10.2105/AJPH.92.7.1161

Slepian, M. L., Kirby, J. N., & Kalokerinos, E. K. (2020). Shame, guilt, and secrets on the mind. *Emotion*, *20*(2), 323. http://dx.doi.org/10.1037/emo0000542

Smalley, K. B., Yancey, C. T., Warren, J. C., Naufel, K., Ryan, R., & Pugh, J. L. (2010). Rural mental health and psychological treatment: A review for practitioners. *Journal of Clinical Psychology*, *66*(5), 479-489. doi: 10.1002/jclp.20688

Sznycer, D., Xygalatas, D., Agey, E., Alami, S., An, X. F., Ananyeva, K. I., Atkinson, Q. D., Broitman, B. R., Conte, T. J., Flores, C., Fukushima, S., Hitokoto, H., Kharitonov, A. N., Onyishi, I. E., Romero, P. P., Schrock, J. M., Snodgrass, J. J., Sugiyama, L. S., Takemura, K., …& Tooby, J. (2018). Cross-cultural invariances in the architecture of shame. *Proceedings of the National Academy of Sciences*, *115*(39), 9702-9707. https://doi.org/10.1073/pnas.1805016115

Tanielian, T. L., Tanielian, T., & Jaycox, L. (2008). *Invisible wounds of war: Psychological and cognitive injuries, their consequences, and services to assist recovery (Vol. 1).* RAND Corporation.

Thomas, K. H., Albright, D. L., Phillips, D., Roosevelt, K., Crawley, R., & Taylor, S. P. (2018).

    Mental health status in service member and veteran students at four-year postsecondary

    institutions: A pilot needs assessment. *Best Practices in Mental Health*, *14*(1), 1-14.

    Retrieved December 2022, from https://www.proquest.com/scholarly-journals/mental-

    health-status-service-member-veteran/docview/2012129494/se-2

Thompson, R. J., & Berenbaum, H. (2006). Shame reactions to everyday dilemmas are

    associated with depressive disorder. *Cognitive Therapy and Research*, *30*, 415-425. doi:

    10.1007/s10608-006-9056-3

Thunholm, P. (2001). Social desirability in personality testing of military officers. *Military*

    Psychology, *13*(4), 223-234. https://doi.org/10.1207/S15327876MP1304_3

Tucker, R. P., Testa, R. J., Reger, M. A., Simpson, T. L., Shipherd, J. C., & Lehavot, K. (2019).

    Current and military-specific gender minority stress factors and their relationship with

    suicide ideation in transgender veterans. *Suicide and Life-Threatening Behavior*, *49*(1),

    155-166. https://doi.org/10.1111/sltb.12432

United States Census Bureau. (2023, April 19). *Urban and Rural*. United States Census Bureau.

    https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-

    rural.html

U.S Department of Defense. (2022a). *Active Duty Military Personnel by Rank/Grade and*

    Service [data sheet]. Defense Manpower Data Center.

    https://dwp.dmdc.osd.mil/dwp/app/dod-data-reports/workforce-reports

U.S. Department of Defense. (2022b, December 14). *Department of Defense Releases Annual Demographics Report – Upward Trend in Number of Women Serving Continues.* U.S. Department of Defense. https://www.defense.gov/News/Releases/Release/Article/3246268/department-of-defense-releases-annual-demographics-report-upward-trend-in-numbe/

U.S. Department of Veterans Affairs. (2019, October). *Determining Veteran Status.* U.S. Department of Veterans Affairs. https://www.va.gov/OSDBU/docs/Determining-Veteran-Status.pdf

Van de Mortel, T. F. (2008). Faking it: Social desirability response bias in self-report research [Abstract]. *The Australian Journal of Advanced Nursing, 25*(4), 40-48. Retrieved April 2024, from https://search.informit.org/doi/pdf/10.3316/informit.210155003844269?download=true

Vespa, J. E. (2020, June). *Those who served: America's veterans from World War II to the War on Terror.* U.S. Census Bureau. https://www.census.gov/content/dam/Census/library/publications/2020/demo/acs-43.pdf

Voller, E., Polusny, M. A., Noorbaloochi, S., Street, A., Grill, J., & Murdoch, M. (2015). Self-efficacy, male rape myth acceptance, and devaluation of emotions in sexual trauma sequelae: Findings from a sample of male veterans. *Psychological Services*, *12*(4), 420. http://dx.doi.org/10.1037/ser0000046

Vyas, K. J., Fesperman, S. F., Nebeker, B. J., Gerard, S. K., Boyd, N. D., Delaney, E. M., Webb-Murphy, J. A., & Johnston, S. L. (2016). Preventing PTSD and depression and reducing health care costs in the military: A call for building resilience among service members. *Military Medicine*, *181*(10), 1240-1247. doi: 10.7205/MILMED-D-15-00585

World Health Organization. (2023, March 31). *Depressive disorder (depression)*. World Health

    Organization. https://www.who.int/news-room/fact-sheets/detail/depression

Zhang, H., Carr, E. R., Garcia-Williams, A. G., Siegelman, A. E., Berke, D., Niles-Carnes, L. V.,

    Patterson, B., Watson-Singleton, N. N., & Kaslow, N. J. (2018). Shame and depressive

    symptoms: Self-compassion and contingent self-worth as mediators?. *Journal of Clinical

    Psychology in Medical Settings*, *25*, 408-419. https://doi.org/10.1007/s10880-018-9548-9

APPENDIX A

DEMOGRAPHICS SURVEY

How old are you? (Fill in) _____

What year were you born in? (Fill in) _____

What is your gender?
    Cisgender Man
    Cisgender Woman
    Gender Queer
    Non-binary or gender non-conforming
    Transgender Man
    Transgender Woman
    Prefer not to say
    Prefer to self-describe: (Fill in) _____

What race/ethnicity do you identify with the most?
    African American / Black
    American Indian / Alaskan Native
    Asian / Asian American
    Bi-Racial / Multi-Racial
    Hispanic / Latino(a)
    Native Hawaiian / Pacific Islander
    White / Caucasian
    Another Race / Ethnicity: (Fill in) _____

What is your sexual orientation?
    Asexual
    Bisexual
    Gay
    Heterosexual / Straight
    Lesbian
    Pansexual
    Queer
    Prefer not to say
    Prefer to self-describe: (Fill in) _____

What is the highest grade or level of school that you have completed?
Middle School (Grades 6-8)
Some high school
High School Graduate / GED Equivalent
Some College
Graduated 2-year College
Graduated 4-year College
Masters Degree
Doctorate / Professional Degree

How would you describe the geographical region you were predominantly raised in?
Rural
Urban

How would you describe the geographical region you are currently living in?
Rural
Urban

What branch of the United States military are you actively serving in / have actively served in?
Air Force
Army
Marines
Navy

How many years did you serve as active duty in the United States armed forces? If you are currently still on active duty, how many years have you served? (Fill in) _____

If you are no longer active duty in the United States armed forces, how many years have you been discharged? (Fill in) _____

During your time actively enlisted in the armed forces were you / have you been exposed to combat?
Yes
No