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Self-Reliance and Self-Efficacy as Determinants of Mental Health Treatment Seeking Intention in a Sample of Student Service Members/Veterans

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**Self-Reliance and Self-Efficacy as Determinants of Mental Health Treatment Seeking
Intention in a Sample of Student Service Members/Veterans**

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Date of Submission: April 23, 2021

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Abstract

Problem Statement: High rates of mental illness and poor treatment seeking have plagued the military for decades. As an organization that demands resilience, sacrifice, strength, and courage from its members, many servicemembers develop deep-seated self-reliance and self-efficacy. Though essential in many critical situations, these traits often complicate a servicemember's willingness to seek care for a mental health concern. Student servicemembers/veterans (SSM/Vs) are at an increased risk for poor mental health outcomes owing to the compounded stressors of military service and academia. **Purpose:** To measure the impact of elements of military service, namely self-reliance and self-efficacy, on mental health treatment seeking intention among a sample of SSM/Vs. **Review of Evidence:** Among military populations, a negative correlation is often seen between self-reliance and mental health treatment seeking. The evidence is mixed related to the relationship between mental health treatment seeking and self-efficacy. Few studies have examined these interactions among SSM/Vs. **Design:** A cross-sectional, anonymous, web-based survey employed three validated measurement tools. Student servicemembers/veterans ($N = 285$) from 54 universities across the nation were recruited using a multi-pronged strategy in the fall of 2020. **Results:** Results confirmed a negative correlation ($p < 0.001$) between self-reliance and mental health treatment seeking intention. No correlation arose between either measure and self-efficacy. **Conclusion:** Recognizing the link between military culture and the development of self-reliance, as well as the negative implications of self-reliance on mental health treatment seeking, healthcare providers should reframe mental health care in such a way that it does not conflict with deep-seated military values.

Keywords: Student servicemember/veteran, military culture, mental illness, self-reliance, self-efficacy, treatment seeking intention.

Introduction and Background

Among the 2.4 million veterans who have deployed in support of the Global War on Terror, 1,300 transition into veteran status each day (Office of the Chairman of the Joint Chiefs of Staff, 2014). While this reintegration is a multi-factorial phenomenon wrought with challenges, finding a new sense of purpose following military service is essential (Office of the Chairman of the Joint Chiefs of Staff, 2014). One avenue of reintegration for the veteran is by way of higher education. Veterans receive educational benefits in exchange for military service. The most generous and comprehensive package came in 2009 by way of the Post-9/11 GI Bill (United States Government Accountability Office, 2019). Each year over 750,000 veterans use their GI Bill to pursue educational endeavors (Dortch, 2017; United States Government Accountability Office, 2017). Experts estimate that by the end of 2020, over 5 million veterans will have claimed some form of educational benefit (Currier et al., 2017).

Transitioning from the military into academia presents unique challenges. Student service members/veterans (SSM/V) frequently encounter barriers to academic success related to logistics and physical health (Borsari et al., 2017; Currier et al., 2018; Vogt et al., 2020). Additionally, a large percentage concurrently struggle with some form of mental illness which could include post-traumatic stress disorder (PTSD), depression, anxiety, suicidal ideation, and substance abuse (Barry et al., 2014; Currier et al., 2018). Using a sample of 1,439 student and non-student National Guard members, researchers found approximately a quarter of those surveyed screened positive for a mental health diagnosis (Bonar et al., 2015). Among the SSM/Vs in this study, substance abuse was the most common diagnosis (52%), followed by depression (16%), anxiety (12%), and PTSD (12%). A comparative study of veterans and non-veterans students across multiple campuses noted that SSM/Vs were more likely than their civilian counterparts to suffer

from depression (33.1% versus 19.5%), PTSD (25.7% versus 12.6%), and suicidal ideation (19.2% versus 10.6%) (Fortney et al., 2016).

Despite the incidence of mental health symptoms, SSM/Vs consistently underutilize treatment services. Similar to the general veteran population, studies have suggested that over half of SSM/Vs in need of mental health treatment will not get help (Currier et al., 2017, 2018; Fortney et al., 2016). Throughout the literature, a myriad of causes link military veterans with a failure to seek treatment. These include structural barriers of cost, transportation, getting time off work, and not knowing where to go (Hernandez et al., 2014; Hom et al., 2017; Newins et al., 2019; Yamawaki et al., 2016). Others cite attitudinal factors in their decision to forgo treatment. Stigma, self-reliance, and not wanting to appear weak top this list and can be linked to military culture (Abraham et al., 2017; Porcari et al., 2017; Sharp et al., 2015).

Military culture promotes an ethos of bravery, personal sacrifice, stoicism, and resiliency (Abraham et al., 2017; Shields et al., 2017). These traits, though admirable and essential on the battlefield, may complicate a servicemember/veteran's understanding of the importance of mental health treatment and their willingness to engage in care. The military's unwritten emphasis on inner strength and self-reliance, when internalized, can increase a service member/veteran's tendency to "suck it up" or "shake off" an injury (Bryan & Morrow, 2011; Currier et al., 2017; Sharp et al., 2015). Relatedly, self-efficacy, or confidence in one's ability to succeed, can lead to diminished treatment seeking behaviors (Keeling et al., 2020). As such, some members view help seeking as a sign of weakness incompatible with service (Bryan & Morrow, 2011; Newins et al., 2019; Williston et al., 2019).

Addressing barriers to mental health treatment is of utmost importance as the literature links untreated psychiatric symptoms to a number of adverse outcomes for the SSM/V. Barry et

al. (2012a) found students with post-traumatic stress exhibited lower GPAs, and less academic motivation and persistence. Similarly, an inverse relationship existed between depression and anxiety and completion of academic degrees (Borsari et al., 2017). Further, when left untreated or when self-treatment was solely relied upon, several studies observed increased suicide attempts among this population with over 7% reporting a past suicide attempt and 14 to 35% endorsing suicidal ideations with a plan (Borsari et al., 2017; Bryan et al., 2015; Rudd et al., 2011). Noting the often persistent and effectual nature of military culture among servicemembers/veterans, mental health should be addressed within this context (Sharp et al., 2015). As Sir William Osler notably stated, “it is much more important to know what sort of a patient has a disease, than what sort of disease a patient has” (Meyer et al., 2016, p. 25).

Problem Statement

Mental illness is a well-documented occurrence among those who have served in the military. Existing literature suggests high rates of mental illness as well as poor treatment seeking intention (Britt et al., 2016; Britt et al., 2019; Hom et al., 2017). Despite being a predominately young and healthy population, rates of mental illness are on par with, if not higher, than those among civilians (Currier et al., 2016). Combat exposure, occupational stress, frequent or lengthy deployments, relational strain, and physical and emotional wounds can precipitate or worsen mental illness (True et al., 2015). Further, components of military culture, engrained within the belief system of these members may lead to a reduction in the intention to seek mental health treatment (Williston et al., 2019). For members who pride themselves in their ability to handle whatever life throws at them, seeking assistance can be synonymous with admitting defeat.

Student servicemembers/veterans are a unique subset of the military population. In addition to the stressors mentioned above, these men and women have the added strain of integrating into an academic setting, frequently as non-traditional students. Trying to maintain equilibrium among academia, family life, outside employment, and past trauma can burden even the most resilient members. When an SSM/V does not seek needed mental health treatment, a cascade of consequences can ensue to include relational strain, substance misuse, lower GPA, and perceived alienation on campus (Campbell & Riggs, 2015).

Although the literature on mental health treatment seeking intention among SSM/Vs is wanting, several studies noted discouraging rates similar to their non-academic peers. Currier and colleagues (2016) surveyed nearly 4,000 university students throughout the United States and found only one third were interested in receiving care from a mental health professional. This 1:2 ratio persisted among student veterans with clinically significant levels of depression. The study revealed comparably poor rates of help-seeking among matched civilian students as well as among the general public (Currier et al., 2016). Research is needed to further explore barriers faced by SSM/Vs which may be predictive of an unwillingness to seek care. This information is necessary to facilitate effective treatment engagement among this population.

Purpose

The purpose of this study was to measure the impact of elements of military service on mental health treatment seeking intention among SSM/Vs. This was accomplished by exploring the impact and relationship of two components of military culture, namely self-reliance and self-efficacy. Additionally, an analysis of both self-reliance and self-efficacy determined the potential predictive nature of each toward treatment seeking intention. Demographic predictors of self-reliance, self-efficacy, and treatment seeking intention were also assessed.

Hypotheses

Using the literature on mental health treatment seeking of military members and veterans as a guide, the researcher hypothesized the following:

H1: A correlation would exist between self-reliance and treatment seeking intention, with higher levels of self-reliance contributing a help-negating influence on mental health treatment seeking intention.

H2: A correlation would exist between self-efficacy and treatment seeking intention, with higher levels of self-efficacy contributing a help-negating influence on mental health treatment seeking intention.

H3: Treatment seeking intention would be impacted by gender, with lower rates of treatment seeking intention among male SSM/Vs.

H4: Treatment seeking intention would be impacted by military grade, with lower levels of treatment seeking intention seen among SSM/Vs who have achieved a higher grade.

Review of Evidence

Characteristics of SSM/Vs

Several demographic factors set SSM/Vs apart from their civilian peers. Compared to civilian students, SSM/Vs are older, with most in the 24 to 40-year-old range (Bernal, 2019; Fortney et al., 2016; VITAL, 2014; Whiteman et al., 2013). While a higher percentage are of the male gender (74%), female SSM/Vs are over-represented within this population as women make up 10% of the veteran population and 17% of the total military force (Student Veterans of America, 2019). When compared to their civilian peers, SSM/Vs are more likely to be a student of color and the first in their family to attend college (IVMF, 2017; Kim & Cole, 2013). Half of

student veterans cite full-time employment while one-in-four work part-time and over 10% work at least two jobs (Student Veterans of America, 2016, 2019). They are also more likely than traditional students to balance the stressors of employment and academia with family life as just under half are married, and close to 50% have children (Borsari et al., 2017; Student Veterans of America, 2014; VITAL, 2014). Among these, 20% are single parents and one-in-ten are married to another member of the military (IVMF, 2017). This can add significant stress if either member is called upon to attend training or deploy away from home (IVMF, 2017).

Using Horn's (1996) definition of non-traditional student status, many SSM/Vs meet a majority of the seven characteristics—less than full-time enrollment, delayed enrollment, financial independence, full-time employment, without a standard high school diploma, being a single parent, and having dependents. Using data from the US Department of Education, Horn (1996) noticed that non-traditional students were more likely to drop out of school and that possessing more non-traditional characteristics lowered the likelihood of completing a bachelor's degree within five years.

In their systematic review of 13 peer-reviewed studies, Barry and colleagues (2014) noted that deployments and combat exposure further set SSM/Vs apart from their civilian peers. Due to the evolving nature of modern warfare, combat exposure is an increasingly common experience among the most recent generation of SSM/Vs (Campbell & Riggs, 2015). In a prospective cohort study of 10,671 service members who joined after September 11, 2001, 49% reported combat experience (Crum-Cianflone et al., 2016). Decreased overall health, intellectual problems resulting from traumatic brain injuries (TBI), hazardous drinking habits, depression, PTSD, and maladaptive coping were all linked to combat deployments (Barry et al., 2014; Rattray et al., 2019). Likewise, combat deployments were predictive of greater feelings of alienation on

campus, increased cognitive issues, and relational strain for SSM/Vs (Campbell & Riggs, 2015; Rattray et al., 2019). Not surprisingly, therefore, throughout several qualitative studies, SSM/Vs repeatedly noted how different they were from civilian students (Barry et al., 2014; Bernal, 2019; Norman et al., 2015). In addition to the dissimilarities listed above, SSM/Vs pointed to varied experiences, maturity levels, and educational needs (Barry et al., 2014; Bernal, 2019).

Mental Illness Among SSM/Vs

While mental illness impacts men and women across socioeconomic and demographic lines, a persistent and disproportionately high prevalence exists among those who have served in the military (RAND Corporation, 2019). Vogt et al. (2020) surveyed over 9,000 recently separated servicemembers and found 33% reported a chronic mental health complaint. Kulesza et al. (2015) likewise noted a mental health condition in 57% of their sample of veterans. Among another 3,000 veterans with a likely mental health diagnosis, anxiety was the most frequent diagnosis (73%), followed by PTSD (69%), substance abuse (57%), and depression (51%) (Aronson et al., 2020). In total, 20% of the study's sample reported a single mental health complaint, while 34% presented with two complaints, 30% with three, and 17% with four. Relatedly, the U.S. Department of Veterans Affairs (2017) estimates that one in three female veterans and one in fifty male veterans have experienced military sexual trauma and subsequent mental distress at least once in their careers.

Studies on SSM/Vs observed similar results. In a needs assessment conducted among SSM/Vs at a private university in South Carolina, researchers noted that 44% reported an existing mental health diagnosis, while an additional 15% reported symptoms indicative of an undiagnosed mental health condition (Thomas et al., 2018). Similarly, a national sample of 628 SSM/Vs found moderate anxiety in 35%, PTSD in 46%, and moderately severe depression in

24% (Rudd et al., 2011). Within this sample, 46% also endorsed suicidal ideations at some point, and 20% had a plan and were actively considering suicide. Substance abuse was also a significant concern within this population, with elevated levels of binge drinking and alcohol-related behavioral issues when compared to civilian students (Borsari et al., 2017). Researchers have likewise expressed substantiated concern related to misuse of prescription medications as many SSM/Vs suffer from chronic medical conditions (Borsari et al., 2017).

According to a review of 130 articles, mixed evidence exists on the pervasiveness of mental illness among SSM/Vs compared to civilian students (Borsari et al., 2017). In a study involving 211 SSM/Vs and 554 civilian students who attended one of eleven community colleges, Fortney et al. (2016) found higher rates of mental illness among SSM/Vs. While a large percentage of both student populations self-reported significant psychiatric symptoms, results suggested that SSM/Vs have increased rates of positive depression screens (33% vs. 19%), positive PTSD screens (25% vs. 12%), and reported suicidal ideation (19% vs 10%) (Fortney et al., 2016). This discrepancy related to depression and suicidal ideation persisted after adjusting for age, gender, and race/ethnicity (Fortney et al., 2016). Likewise, Barry and colleagues (2012b) discovered that among a sample of university students, PTSD and subsequent alcohol misuse were more common among veteran students than both non-veteran students and members of the Reserve Officer Training Corp. In contrast, an age and gender matched national comparison study of 3,290 college students with and without a history of military service, found no statistically significant difference in the rates of depression, suicidal ideation or attempt (Pease et al., 2015). Likewise, another comparative study of SSM/Vs and civilian students from 20 institutions, noted no differences in levels of psychological distress (Whiteman et al., 2013). Cleveland and colleagues (2015) reviewed self-reported psychological symptoms among 27,774

respondents from 44 colleges and universities and found a higher prevalence of symptoms indicative of poor mental health among civilian students than their SSM/V peers. Further, they observed SSM/Vs with combat exposure reported significantly lower levels of hopelessness than civilian students— 28% vs 45% respectively.

Mental Health Treatment-Seeking

Over the past few decades, treatment seeking among those with a mental illness has been a topic of interest throughout the literature. Typically accounting for one third of its variance, treatment seeking intention is an influential predictor of behavior (Seidman et al., 2018). Military personnel are particularly notorious for failing to seek treatment for mental health concerns (Britt et al., 2016; Hom et al., 2017; Valenstein et al., 2014). Naifeh et al. (2016) found that one quarter of a representative sample of 5,428 Army personnel had a mental health diagnosis. Among these, 78% were not in treatment. Exploring reasons why these soldiers did not seek or discontinued treatment, they discovered both structural and attitudinal barriers. Attitudinal barriers (i.e. stigma, self-reliance, negative beliefs about mental health treatment, and not perceiving the problem to be severe) were more common than structural barriers (i.e. financial issues, scheduling conflicts, confidentiality, and transportation). Over half of the sample who had not sought treatment endorsed at least four barriers (Naifeh et al., 2016). A systematic review of 111 articles reported similar findings (Hom et al., 2017). Based on weighted averages, the authors estimated that only 29% of military members with a mental health diagnosis sought care within the previous 12 months. This rate of past year treatment utilization is lower than the estimated rate among US civilians, both with and without a documented mental health concern (Hom et al., 2017).

The rate of treatment seeking among SSM/Vs appears to be similar to their non-military academic peers. Mental health treatment is afforded to many SSM/Vs by way of the Veterans Administration (VA) healthcare system, university health services, and community organizations targeted towards the veteran population. Despite the accessibility to care, researchers estimate that less than half of SSM/Vs in need of professional help will utilize it (Currier et al., 2017; 2018; Grossbard et al., 2014; Seidman et al., 2018). Other studies reported even lower numbers. Among 211 SSM/Vs at a university in the Midwest, a mere 25% of those in need sought mental health care within a 12-month period (Fortney et al., 2016). Likewise, a study of 945 SSM/Vs revealed just 33% of those with a mental health diagnosis endorsed a likelihood of seeking help (Currier et al., 2016). These varying statistics are relatively on par with a national survey of 32,133 college students, finding an average of 36% of those with a probable mental health problem agreeable to professional treatment (Eisenberg et al., 2011). Interestingly, this statistic varied by as much as three-fold across various campuses. Although a study comparing SSM/Vs with civilian students in Arkansas found a greater perceived need for mental health treatment among SSM/Vs, the groups did not differ related to likelihood of psychotropic use (Fortney et al., 2016). A matched cohort study of 3,780 SSM/Vs and 2,835 civilian university students again revealed relative uniformity with just 36% and 37% respectively endorsing a willingness to seek professional treatment (Currier et al., 2016).

When an individual fails to seek mental health treatment, the negative effects can be wide reaching. One study reported an increase in physical aggression, alcohol misuse, and intimate partner relational strain among SSM/Vs suffering with PTSD when compared to those without (Borsari et al., 2017). Likewise, additional studies found a positive association between PTSD and relational strain, substance misuse, lower GPA, and perceived alienation on campus (Barry

et al., 2012a; Campbell & Riggs, 2015; Fredman et al., 2019). Further, decreased academic performance was found to be impacted by the decision to forgo treatment (Eisenberg et al., 2011) with nearly 66% of college dropouts blaming their lack of academic success on an inadequately treated mental health condition (Gruttadaro & Crudo, 2012).

Military Culture

Organizational culture includes shared assumptions, structures, and values that distinguish one organization from another (Abraham et al., 2017). Comprised of six separate branches, each with unique traditions, military culture as a whole is a strict, hierarchal system which places great emphasis on the performance and character of its members (Bick et al., 2017). Introduction to this culture begins during recruitment as military members are portrayed as strong, proud, and dependable (Green et al, 2010). Next, during boot camp, servicemembers are stripped of their civilian identities and taught to embrace and embody the warrior ethos (Eskenasi, 2020). This ethos evokes a sense of pride as it further sets them apart from their peers and emphasizes traits such as mental toughness, comradery, and personal sacrifice (Abraham et al., 2017; Bryan & Morrow, 2011; Lane, 2020). Through this indoctrination, the military becomes less of an occupation and more of an identity (Lane, 2020). Fortification of this new mindset recurs throughout one's career through both direct and indirect means.

Though many of these traits are essential for high-risk, high-stress situations, when improperly applied to one's personal life, problems can ensue. Among those who have espoused the military culture of strength, admitting to, or seeking help for a mental health concern can be seen as incongruent with military service (Shields et al., 2017). Within this context, vulnerability and help-seeking lead to shame and stigmatization as many equate these actions with the failure to control themselves and their surroundings (Shields et al., 2017). Further, as the military

emphasizes personal sacrifice for the good of others, members within this community often avoid asking for help for fear of being a burden on others (Shields et al., 2017). Though varying degrees of cultural indoctrination exist among military members, for many, these values may persist for years after separation from the service. For this reason, understanding the mental health belief system of SSM/Vs should begin within the context of military culture.

Self-Reliance

Self-reliance, an individual's preference for handling situations independently, is an understudied construct within the mental health literature (Jennings et al., 2016). While the notion of exaggerated self-reliance impacting help-seeking behaviors is most prominent among literature focused on masculinity, less research exists on the interplay between self-reliance and mental health treatment seeking. The past decade, however, witnessed an increased interest in this potential relationship. Presently, the literature, though sparse, exhibits relatively consistent findings on the impact of self-reliance on treatment seeking intention.

As an amalgam of resourcefulness, personal responsibility, and performance, self-reliance is viewed by servicemembers as a means to ensure success in many perilous situations. Unquestionably necessary at times, self-reliance can become problematic when utilized to address mental health concerns. Unfortunately, research suggests that many servicemembers and veterans default to this approach.

Over half (52-64%) of servicemembers included within Hom and colleagues' (2017) systematic review, endorsed the belief that self-management of a mental health problem was more advantageous. Additionally, among a representative sample of 5,428 non-deployed members with a perceived need for treatment, the desire to handle the problem on one's own was the most frequently endorsed barrier (77%; Naifeh et al., 2016). Recent military literature

repeatedly confirmed this theme of preferring to handle mental health problems independently (Britt et al., 2019; Keeling et al., 2020; Newins et al., 2019; True et al., 2015).

Self-reliance can also negatively impact treatment maintenance. When looking at correlates of mental health treatment dropout among US Army personnel, Jennings et al. (2016) identified the predictive nature of self-reliance. Several additional studies involving veterans confirmed this negative impact of exaggerated self-reliance on treatment initiation and maintenance (Adler et al., 2015; Britt et al., 2016; Jennings et al., 2016). Further, among soldiers who prematurely discontinued treatment, Naifeh et al. (2016) found a self-reliant attitude was the most repeated (52.5%) motivation.

Although there is data suggesting the impact of self-reliance on treatment seeking among military members, there is a noted absence of literature looking specifically at the SSM/V population. SSM/Vs, as a whole, have experienced the same cultural indoctrination as their non-academic military peers. While self-reliance and a preference for self-management may have served them well during their military careers, allowing these attitudes to impact their beliefs on mental health treatment can be harmful. Negative effects of inappropriate self-reliance historically seen among service members and veterans at disproportionate rates include substance use, domestic violence, and sexual violence (Meyer et al., 2016).

Self-Efficacy

Reliance upon self arguably necessitates a significant amount of self-efficacy (Keeling et al., 2020). Self-efficacy, often equated with one's belief in their ability to successfully manage a variety of situations, shares many similarities with concepts such as resiliency and coping (Chen et al., 2001). One theorist argued that, in order to succeed, "people need a sense of self-efficacy, to struggle together with resilience to meet the inevitable obstacles and inequalities of life"

(Bandura, 1997, p. 5). High levels of self-efficacy were linked to improved coping, higher levels of self-esteem, and lower levels of psychological distress among various populations, whereas those who possessed lower levels were often less resilient and more prone to poor coping and increased distress (Streeb et al., 2019; Thomas, et al., 2016; Welsh et al., 2019). Further, individuals with low self-efficacy may feel as if they are a burden on others if they perceive an inability to manage challenging situations (Streeb et al., 2019). This can be especially relevant in and problematic for groups, like the military, expected to overcome challenges of all kinds (Britt et al., 2016; Streeb et al., 2019).

Incapable of determining behavior on its own, self-efficacy is arguably one of the most significant prerequisites for human motivation and behavior change (Huck et al., 2019; Koepl, 2013). Based on individualized perceptions and evaluations of endorsed or anticipated stressors, it is both person and context specific (Koepl, 2013; Welsh et al., 2019). While many believe self-efficacy to be an innate trait, others have suggested that it is cultivated through lived experiences, whether personal, vicarious, or based on societal persuasion or emotional response (Chen et al., 2001; Koepl, 2013). This assumed learned nature of self-efficacy provides the link to military culture. Both on and off the battlefield, military members pride themselves in their ability to accomplish difficult tasks. Similarly, acts of courage and sacrifice are rewarded while those who seek help are often shunned. Through these repeated experiences, many develop a deep-seated self-efficacy which, in turn, can impact their appraisal of mental health help seeking.

Related to the experience of mental health disorders among combat exposed veterans, the literature is relatively consistent with studies finding elevated levels of self-efficacy to be related to improved coping and decreased depression and PTSD scores (Blackburn & Owens, 2015; Luszczynska et al., 2009). Relatedly, another study noted a significant negative correlation

between perceived self-efficacy and self-reported mental health morbidity of SSM/Vs (Mastrocola & Flynn, 2017). Mixed literature exists, however, regarding the relationship between self-efficacy and mental health treatment seeking among military connected individuals. For example, Koepl (2013) discovered a weak but statistically significant positive correlation between self-efficacy and treatment seeking intention. To the contrary, looking to 525 veterans with PTSD or depression, Keeling et al. (2020) found elevated levels of self-efficacy to have a direct negative association with treatment seeking. Several studies involving other military and veteran populations also demonstrated this negative correlation (Hoge et al., 2004; Porcari et al., 2017). Among university students, a negative correlation existed between general self-efficacy and stress, physical, and psychological symptoms but did not directly impact health care utilization (Roddenberry & Renk, 2010). Unfortunately, most studies involving SSM/Vs focused exclusively on educational self-efficacy and therefore were not applicable to this study (Barry et al., 2012a; Mastrocola & Flynn, 2017; Ness et al., 2014; Whiteman et al., 2013).

Demographic Measures

Gender

Looking to studies conducted among the general population, the impact of gender on mental health treatment seeking behavior is relatively consistent. Women as a whole are more likely to pursue mental health treatment (Brand et al., 2019; Roberts et al., 2018; Shafer & Wendt, 2015). Relatedly, they are less likely to endorse barriers to treatment seeking and more likely to view help seeking in a positive manner (Clement et al., 2015; DeLuca et al., 2020; Wong et al., 2018).

Gender roles and therefore, the relationship between gender and mental health treatment seeking are less straight forward constructs within the literature involving military members.

Several studies on the mental health beliefs of US servicemembers/veterans suggested few differences between male and female servicemembers' willingness to engage in mental healthcare (Britt et al., 2019; Koepl, 2013) but observed more negative beliefs regarding mental health disorders and treatment among men (Fox et al., 2015). Relatedly, a systematic review of 100+ articles found female servicemembers to be more likely to seek help than their male counterparts (Hom et al., 2017). Additional studies found female soldiers to be more likely to report mental health symptoms and less likely to prefer self-management of mental health concerns (Britt et al., 2019; Williston et al., 2019; Welsh et al., 2019), while another observed high levels of self-reliance among female veterans (Newins et al., 2019). Related to self-efficacy, several older studies indicated no difference among the genders, while a more recent study found lower levels among female servicemembers (Welsh et al., 2019).

The military remains a male dominated profession despite an increasing number of women joining the military. Further, many of the personal qualities required by the military are synonymous with masculinity (Bass et al., 2016; McGarry et al., 2015). These include ideals such as restricted emotionality and self-sufficiency (Caddick et al., 2015; Heath et al., 2017). As such, female servicemembers often find themselves in a precarious position when directly or indirectly encouraged to embody these standards. While some female servicemembers will reject these cultural norms, others may embrace hypermasculinity as a way to prove themselves to themselves and their male counterparts (McGarry et al., 2015).

Rank

Of note, throughout this narrative, military grade and rank are used interchangeably. This was intentional to reduce confusion during data analysis and discussion. Military grade is consistent across the branches of services and includes a continuum ranging from O-1 to O-10

for officers, W-1 to W-5 for warrant officers, and E-1 to E-9 for enlisted members. Rank, on the other hand, is a branch specific title corresponding to each grade. The potential for confusion exists when rank alone is relied upon. For example, the rank of Captain in the Air Force equates to the military grade of O-3 whereas a Captain in the Navy is an O-7.

The military is a hierarchical organization, in which the chain of command is an essential component. Military rank affords structure for this system and includes officers and enlisted personnel. As rank increases, so does authority and responsibility. Knowing who is ultimately in charge is of utmost importance when faced with life-or-death circumstances. Similarly, those tasked with making important decisions must have confidence that those under them will obey their lawful orders. The chain of command structure persists within the garrison setting.

Recent studies on the mental health needs of military members have suggested that rank may impact a member's willingness to admit a mental health diagnosis and to seek treatment (Britt et al., 2019; Hom et al., 2017; Naifeh et al., 2016). One study looking at the facilitators and barriers to mental health treatment among 2,048 US soldiers, noted officers consistently reported more barriers and less facilitators than their enlisted counterparts (Britt et al., 2019). Of note, 27% of junior enlisted members endorsed a preference for the self-management of mental health concerns compared to 43% of officers. Similarly, higher ranking individuals endorsed greater levels of perceived stigma and therefore reduced likelihood of seeking treatment (Brown et al., 2011; Valenstein et al., 2014) and increased rationalization of premature treatment discontinuation (Naifeh et al., 2016). By analyzing a secondary data set of over 7,000 US soldiers, Koepl (2013) also found differences in treatment seeking intention based on rank. Lower ranking enlisted members and officers were significantly less likely (10% and 16% respectively) to seek mental healthcare for themselves when compared to higher ranking enlisted

members (26%). In contrast to this, Aikins et al. (2020) found older servicemembers were more inclined to seek treatment. Though increased age does not necessarily correlate with higher rank, this was put forth by the study's authors as one possible explanation for the differences seen.

Theoretical Model

The Social Cognitive Theory (SCT) provided the theoretical framework for this scholarly project. This theory was birthed out of the Social Learning Theory in 1986 by psychologist Albert Bandura (LaMorte, 2019). Initially created to describe the impact of the social context in which learning occurs, it has since shifted to include the unique patterns of behavior acquirement and maintenance. Recognizing that behavior is not inert, both the person performing the behavior and the environment in which the behavior occurs receive emphasis (LaMorte, 2019). As such it is useful within the field of health promotion (LaMorte, 2019) and present in recent military mental health literature (Ellis, 2017; Etzler, 2018; Schweitzer, 2018).

Composed of six unique principles, the central tenet of the SCT is triadic reciprocal determinism or the dynamic, bi-directional interaction between person, environment, and behavior (LaMorte, 2019). Simply put, this theory posits that an individual's behavior both influences and is influenced by internal and external elements. Internal or personal elements include expectations, beliefs, and biological properties (Bandura, 1989). Physical and social surroundings, to include cultural norms and societal influence, impact external or environmental factors (Bandura, 1989). It is important to note that these reciprocal relationships are situation and person dependent and therefore do not possess equal strength of influence, nor a predictable timeline (Bandura, 1989; LaMorte, 2019).

The SCT also recognizes the impact of past success on the initiation and maintenance of new behaviors (Bandura, 1989; LaMorte, 2019). One important aspect of this is outcome

expectation, which refers to an individual's perceptions about the costs and benefits of performing a certain behavior (Huck et al., 2019). Anticipated physical, personal, and social impact allows for the evaluation of outcomes (Huck et al., 2019). For an SSM/V considering help seeking for a mental health concern, physical outcomes could include time, cost, and anticipated success of treatment. Social outcomes could include the stigmatizing or supportive opinions of others, while personal outcomes include perceptions of self-reliance, self-worth, and shame (Huck et al., 2019).

Ultimately, the researcher chose the SCT for its multifactorial approach to predicting behavior. This is applicable to the SSM/V as a number of personal and environmental factors likely impact intention to seek care for a mental health concern. While it would be unwise to assume that factors outside of military service do not impact an SSM/V's willingness to seek mental health care, this study was not designed to explore these factors. Rather, the impact of personal factors to include self-efficacy, self-reliance, rank, and gender were studied. Although a direct measurement of military culture did not occur, behavior and personal factors were examined within this cultural context and believed to both impact and be impacted by these norms.

Using relevant literature and the SCT as a guide, the researcher theoretically predicted mental health treatment seeking intention among SSM/Vs based on the following dynamic relationships among study variables. Personal factors of self-efficacy and self-reliance may negatively impact the behavior of treatment seeking intention owing to the military culture's emphasis on personal strength and resiliency. Looking further to the impact of the military cultural environment on the personal factor of rank, those who have achieved a higher rank may be less likely to seek mental health care because of increased pressure to perform and greater

levels of shame associated with perceived failure. Lastly, lower levels of treatment seeking intention are often linked to the male gender. While many population studies note this trend, the military's celebration of traits commonly tied to hyper-masculinity may further enforce this way of thinking. See figure 1 for a visual representation of the SCT's application within this study.

Project Design

This cross-sectional descriptive study employed a short, online survey. Collected data elicited the presence of and correlations between self-reliance, self-efficacy, and mental health treatment seeking intention among a national sample of SSM/Vs. Additionally, gender and rank were assessed as potential predictors of treatment seeking intention. Purposive convenience sampling was accomplished through three methods discussed below. Participation was voluntary and all responses were anonymous and confidential. Belmont University Institutional Review Board verified the study's exempt status in August of 2020.

Population

Following the example of Barry et al. (2014), SSM/V referred to any former or current military member presently participating in higher education. This terminology allows for greater consistency throughout the literature and ensures the inclusion of the entire spectrum of military connected students, including those presently serving in the Reserve/Guard capacity (Barry et al., 2014). The number of SSM/Vs in academia is growing. Over the past decade, close to three million veterans have entered into higher education (IVMF, 2017). The majority of these were enlisted (82%) males (73%) with at least one deployment to Iraq or Afghanistan (93%) (IVMF, 2017; PNPI, 2017). Far less has been published on the demographic makeup of those attending an academic institution while concurrently serving in the military, whether on Active-Duty or as Reservists/Guardsmen. Researchers, however, estimate that 45% of those classified as student

veterans serve part-time as members of the Reserves or Guard (IVMF, 2017). Further, approximately 30% of student veterans initiated their college education while serving on Active-Duty. Collectively quite diverse, SSM/Vs likely represent all career fields, ranks, branches of service, and service components. Obtaining a representative sample was not possible for this study due to limited time and resources.

Clinical Setting

The clinical settings in which this study took place were as varied as the participants. In total, SSM/Vs from 54 colleges and universities throughout the United States completed the survey. These universities ranged in size from 700 to 61,000 students and included 22 private and 31 public institutions. No data on educational delivery methods was collected from participants. The assumption, however, based on national trends, is that participants enrolled in a variety of methods to include online, in-person, and hybrid learning.

Sources of Data/Data Collection Instruments

This project utilized an online survey for data collection. The survey contained 29 questions and took less than five minutes to complete. See Appendices D & E. Beta-testing occurred using a sampling of university faculty, military members, veterans, and non-military connected university students. The researcher fashioned the survey using a compilation of three validated measurement tools found in the mental health literature. These tools were chosen based on their use in previous studies to measure concepts of self-reliance, self-efficacy, and treatment seeking intention. Although related ideas, the measurement of both self-efficacy and self-reliance allowed for a more robust understanding of how military cultural norms may impact the SSM/V's preference for self-management of mental health concerns.

Student servicemembers/veterans were eligible for participation in this study if they were at least 18 years old, enrolled as students within an academic institution at the time of survey completion, and were presently serving or had previously served in the US military. Exclusion criteria consisted of minor status (less than 18 years old), non-current academic enrollment, no history of military service, and service in a non-US military. Additionally, the survey asked participants to specify their MOS/AFSC (career descriptors) to increase the likelihood that only SSM/Vs provided data.

Self-reliance

Six items from the Beliefs About Treatment Seeking subscale of the Endorsed and Anticipated Stigma Inventory (EASI) acted as the measurement tool for self-reliance (Vogt et al., 2014). This subscale assesses various dimensions of the mental health belief systems of the military and veteran populations (Vogt et al., 2014). The authors of the EASI link the Beliefs About Treatment Seeking subscale to stigma by way of the military's emphasis on self-reliance. Questions include: "If I had a mental health problem, I would prefer to deal with it myself rather than to seek treatment" and "[i]f I were to seek mental health treatment, I would feel stupid for not being able to fix the problem on my own". Items were scored using a five-point Likert-scale ranging from *strongly disagree* (1) to *strongly agree* (5). Higher scores corresponded with greater concurrence and therefore an increased endorsement of self-reliance. The authors of this measurement tool reported a Cronbach's alpha of 0.86 for this subscale (Vogt et al., 2014).

Self-efficacy

The New General Self-Efficacy (NGSE) scale served as the measurement tool to assess self-efficacy as it provided a unidimensional measure of this construct (Chen et al., 2001). The NGSE is modification of the widely used General Self-Efficacy scale (SGSE) (Sherer et al.,

1982). Alteration of the original scale was necessary due to its inability to operationalize a concept distinct from self-esteem (Chen et al., 2001). The NGSE consists of eight items and uses a five-point Likert-style scale ranging from *strongly disagree* (1) to *strongly agree* (5).

Responses to the eight items were summed, with higher scores representing greater agreement and therefore higher levels of self-efficacy. Sample items included: “When facing difficult tasks, I am certain that I will accomplish them.” and “[c]ompared to other people, I can do most tasks very well”. Cronbach’s alpha for this scale ranged from 0.86 to 0.90 with high levels of test-retest reliability and good internal consistency (Chen et al., 2001).

Treatment seeking intention

The Mental Help Seeking Intention Scale (MHSIS) measured mental health treatment seeking intention among the study’s sample (Hammer & Spiker, 2018). Using this newly standardized tool, participants were asked to rate their opinion on three statements using a seven-point Likert-continuum with “1” representing *extremely unlikely/definitely false/strongly disagree* and “7” representing *extremely likely/definitely true/strongly agree*. The included statements progressed from “intend to” to “try to” to “plan to” when participants were asked about seeking help if a mental health concern were present. Adding together each response provided a single score with higher numbers representing an increased likelihood to seek treatment. The scale’s creators reported a Cronbach’s alpha of 0.87 (Hammer & Spiker, 2018).

Demographics

Participants were asked to complete a short questionnaire to obtain demographic information. Items included gender, race/ethnicity, age, educational classification, university attended, branch(es) of the military, service component(s), years of service, MOS/AFSC (career

descriptors), and highest awarded military grade. The final question inquired if participants were currently receiving or had previously received care for a mental health concern.

Data Collection Process/Procedures

Using purposive convenience sampling, a total of 310 SSM/Vs chose to participate. Figure 2 outlines the sampling process. The recruitment of potential participants occurred through one of three means. First, through a partnership with two universities in Middle Tennessee, a recruitment email (see Appendix A) with embedded survey link was sent to military connected students at each university. The recruitment e-mail provided an overview of the study's purpose, design, and inclusion criteria. Further, in order to build rapport, the researcher briefly provided both personal ties to the military and her passion for the topic. An SSM/V representative at each university was ultimately responsible for the distribution of this email using dedicated listservs. This approach prevented the researcher from obtaining any personally identifiable information from potential participants. A reminder email (see Appendix B) was sent at two-weeks using the method described above. Because not all participants provided the name of their university, a total response rate for this recruitment strategy could not be calculated.

In addition to this approach, utilization of the social media platform Facebook allowed for a more widespread distribution. The researcher had access to two unique groups within this setting, the first being aeromedical evacuation personnel of all service components and the second being female officers within the Guard and Reserves. Within each group, the researcher provided a paragraph detailing IRB approval, the purpose, design, and inclusion criteria of the study, along with contact information to address any questions. See Appendix C. Due to the widespread dissemination of information that frequently occurs within social media, it was not possible to determine the actual number of individuals who received an invitation to participate.

As such, the calculation of an overall response rate was not possible. Relatedly, the final method of survey distribution employed was word of mouth. This allowed, through acquaintances of the researcher, further dissemination to participants not invited using the methods described above. Again, due to the nature of this recruitment method, the response rate was unknown.

Data collection took place during the months of October and November 2020. Qualtrics functioned as the online platform for the design and launch of the survey in addition to archiving responses awaiting analysis. Data was then extracted from survey responses and imported into SPSS for analysis. Entry into a drawing for one of two \$50 Amazon gift cards was offered to all who completed the survey and chose to enter an email address using a separate survey to ensure separation of personal information from survey responses. A randomization feature of Excel allowed the random selection of gift card winners.

Data Analysis

Data obtained was quantitative in nature. Based on previous help seeking literature, the researcher used an α of 0.05, an anticipated power of 0.80, and a moderate effect size of 0.3 for the purpose of performing a power analysis (Britt et al., 2011; Khan, 2017; Nam et al., 2010). Utilizing G*Power, a correlational power analysis indicated the need to achieve a sample size of at least 83.

In total 310 individuals responded to the survey request and answered at least one question. Twenty-five completed less than 5% of the survey and underwent listwise deletion. Of the 285 remaining responses, 11 (3.8%) did not provide answers to at least one of the measurement tools. These missing values were resolved using the imputation of the series mean.

Descriptive statistics provided the mean and standard deviation (SD) of self-reliance, self-efficacy, treatment seeking intention, and several demographic questions. To allow for

statistical analysis, classification of variables occurred in the following manner. Self-reliance, self-efficacy, and treatment seeking intention acted as scale variables due to their use of a Likert-style scoring system with more than 10 possible scores. Gender was as a nominal variable with three categorical options—male, female, and other. Rank was an ordinal variable as an inherent order existed within the categories created for this study.

Pearson correlation tested the first hypothesis owing to the normal distribution of mental health treatment seeking intention and self-reliance. This hypothesis posited an inverse relationship between self-reliance and treatment seeking intention. Pearson correlation likewise examined the second hypothesis which predicted a negative correlation between self-efficacy and treatment seeking intention. Although self-efficacy possessed outliers, the data was not seriously non-normal and the sample size was adequate to allow for parametric testing. For both hypotheses, treatment seeking intention was the dependent variable while self-reliance and self-efficacy respectively functioned as the independent variable.

The performance of an independent t-test allowed for examination of the third hypothesis. This hypothesis predicted a lower likelihood of treatment seeking intention among male SSM/Vs, with treatment seeking intention being the dependent variable and gender the independent variable. The final hypothesis suggested lower treatment seeking intention among SSM/Vs who had achieved a higher grade. A one-way ANOVA assessed the relationship between the dependent variable of treatment seeking intention and the independent variable of military grade.

Results

Demographic Characteristics

The final sample consisted of 285 respondents. Of those who provided answers to the demographic questions, the majority identified as male (64.3%, $n = 173$, $N = 269$) and white non-Hispanic (69.7%, $n = 184$, $N = 264$). Just over half were undergraduate students (54%, $n = 142$, $N = 263$), while only 13% ($n = 35$, $N = 269$) were traditional college-aged (18-25). Most had served or were serving within the Active-Duty service component (82.95%, $n = 214$, $N = 258$). Three-fourths of the sample were enlisted (73.3%, $n = 195$, $N = 266$), and the majority (70%, $n = 187$, $N = 267$) served for less than 11 years. Those with a history of serving in the Army made up 39.33% ($n = 105$, $N = 267$) of the sample, while 35.58% ($n = 95$, $N = 267$) had served in the Air Force, 16.48% ($n = 44$, $N = 267$) in the Navy, and 10.86% ($n = 29$, $N = 267$) as Marines. In total, most respondents (59.3%, $n = 159$, $N = 268$) had sought or were seeking care for a mental health concern. Complete demographics are available in Table 1.

Self-Efficacy/Self-Reliance/Mental Health Treatment Seeking Intention

Self-reliance scores of the SSM/Vs ranged from 6-30 with a mean of 17.5 ($SD = 5.18$) demonstrating modest self-reliance scores. Self-efficacy scores ranged from 9-45 with a mean of 37.29 ($SD = 5.91$), indicating high levels of self-efficacy. Overall, participants indicated a moderate level of mental health treatment seeking intention with scores ranging from 3-21 with a mean of 13.35 ($SD = 4.91$). See Table 2.

Varying correlations existed between the variables of self-reliance, self-efficacy, and mental health treatment seeking intention using Pearson correlation. Although somewhat related concepts, no correlation existed between self-reliance and self-efficacy, $r(285) = .03$, $p = .67$. Self-reliance and mental health treatment seeking intention were negatively correlated at a statistically significant level, $r(285) = -.68$, $p < .001$, indicating those with higher levels of self-reliance displayed a lower intention to seek treatment. To the contrary, no correlation existed

between self-efficacy and mental health treatment seeking intention, $r(285) = -.07, p = .27$, suggesting no impact of self-efficacy on intention to seek treatment. Pearson correlations are presented in Table 3.

Other Factors

Looking to the potential impact of gender on treatment seeking intention, Levene's test suggested equal variances between the genders ($F = 1.24, p = .26$). An independent-sample t-test found female SSM/Vs ($M = 14.01, SD = 4.70$) possessed a greater intention to seek mental health treatment than their male counterparts ($M = 12.97, SD = 5.12$), although not at a significant level, $t(267) = -1.64, p = .10, d = .21$. The average score for treatment seeking intention was one point lower for male SSM/Vs. See Table 4.

No participants indicated achieving the military grades of W1-W5 or O-7 and above. A one-way ANOVA was used to assess differences between the remaining five categories (E1-E4, E5-E6, E7 and above, O1-O3, O4-O6) and mental health treatment seeking intention. This analysis found no discernable impact of military grade on the intention to seek mental health treatment, $F(4, 261) = .52, p = .72, \eta^2 = .01$. See Table 5.

Discussion

This study aimed to examine the potential influencer of military service on mental health treatment seeking intention among a sample of SSM/Vs. This occurred by exploring relationships between the study's variables, namely self-reliance, self-efficacy, mental health treatment seeking intention, gender, and rank. Key findings included the following: 1) a negative correlation between self-reliance and the intention to seek mental health treatment, 2) insufficient evidence for a relationship between self-efficacy and mental health treatment seeking intention, 3) a lower reported intention to seek mental health care among male SSM/Vs, and 4) insufficient

evidence to conclude that there is a difference in intention to seek treatment based on military rank.

Self-Reliance and Self-Efficacy

The results of this study confirmed a negative correlation ($p < .001$) between self-reliance and mental health treatment seeking intention. This substantiated the researcher's prediction that those with high levels of self-reliance would be less likely to endorse an intention to seek outside assistance for a mental health concern. While the literature on military members and veterans steadily attests to this negative relationship (Adler et al., 2015; Britt et al., 2016; Elbogen et al., 2013), this study confirmed its presence among a sample of SSM/Vs.

An examination of the military ethos provides context for this correlation. Though the military as a whole emphasizes the essential nature of teamwork, it simultaneously demands individual performance (Bick, 2017). Within this, the assumption is that the success of the team hinges upon the performance of the individual (Green et al., 2010). Because no one wants to be the weak link or the one who cannot pull their own weight, reliance upon self is cultivated and reinforced. This way of thinking is further exacerbated by the near perfection that is required of servicemembers in many combat situations to ensure survival of both self and team (Mastrocola & Flynn, 2017). For many therefore, asking for help is synonymous with failure as it is seen as the inability to subjugate one's internal and external circumstances (Gibbons et al., 2014). As such, servicemembers holding to the belief that difficult circumstances can and should be managed independently, will be less likely to reach out for assistance (Britt et al., 2011). The results of this study further confirmed this as the mean self-reliance scores differed substantially between those who had previously sought mental health care ($M = 16.48$) and those who had not ($M = 18.91$). See Table 6.

As the military emphasizes both mental and physical strength, this preference for self-reliance may be an attempt to protect one's military identity. The landmark study on military mental health illustrated this as Hoge et al. (2004) found 65% of servicemembers with a mental health diagnosis were unwilling to seek treatment for fear of being perceived as weak. Likewise, in their qualitative study, True, Rigg, and Butler (2015) identified themes of "self-reliance and prioritizing the needs of the unit over the needs of the individual" (p.1446). Further, a former Marine expressed the perceived necessity of shedding her military identity to allow help-seeking for a mental health concern (True et al., 2015). It should come as no surprise, therefore, that servicemembers/veterans with a mental health diagnosis often choose to ignore their symptoms or attempt self-treatment (Britt et al., 2016). While self-treatment may provide temporary respite and allow the member to maintain some degree of performance, the underlying issue is unlikely to be resolved.

Overall, SSM/Vs demonstrated moderate levels of self-reliance but high levels of self-efficacy. This is a curious finding as the assumption was that these related variables would increase at relatively equal rates. One explanation for this discrepancy is the potential inability of the NGSE scale to differentiate between self-efficacy related to self-management of a mental health condition and self-efficacy related to the ability to seek mental health care if needed. The former would likely be related to higher levels of self-reliance while the latter to lower levels.

Another possible explanation, and an encouraging one, is that for the SSM/Vs within this study, self-efficacy did not culminate in self-reliance. In this scenario, individuals may be quite confident in their ability to handle difficult situations without simultaneously holding to the belief that they must manage mental health concerns independently. If true, this is a great

testament to various strategies employed throughout the Department of Defense in recent years which allow for and encourage mental health help seeking behaviors (Gibbons et al., 2014).

Contrary to the researcher's hypothesis, no correlation existed between mental health treatment seeking intention and self-efficacy, suggesting an independence of these variables. Corroborating this finding, Andersson et al. (2014) noted higher rates of mental illness among those with low perceived self-efficacy but was unable to associate these findings with an alteration in treatment seeking intention among a sample of the general population. Similarly, Roddenberry and Renk (2010) found no impact of general self-efficacy on treatment utilization among a sample of undergraduate students.

The inability of this study to find a relationship between self-efficacy and treatment seeking intention mirrors the inconclusiveness of past studies involving servicemembers/veterans which noted positive (Koepl, 2013), negative (Keeling et al., 2020; Porcari, 2017), and no correlation (Johnson & Possemato, 2019) between the variables. One likely reason for these conflicting results is that the assessment of self-efficacy can occur from two differing perspectives—self-efficacy related to the perceived ability to seek formal treatment and self-efficacy related to the perceived ability to self-manage the condition without formal treatment. A study conducted on a national sample of Active-Duty personnel, found evidence of both with 78% either strongly or somewhat agreeing that they could find needed mental health services and 84% endorsing the belief that they could usually handle whatever situations they were to encounter (Koepl, 2013). When self-efficacy is associated with confidence in one's ability to find and utilize help, the literature on service members and veterans notes a positive correlation (Koepl, 2013). When it is associated with assurance of one's ability to self-manage, the literature often endorses a negative relationship with treatment seeking behavior (Hoge et al., 2004; Porcari et al., 2017).

Ultimately, the interpretation of results involving self-efficacy must occur within the context of this significant limitation. To the researcher's knowledge, no standardized tool currently exists to measure self-efficacy exclusively from either vantage point. As such, when analyzing self-efficacy, researchers must make assumptions as to how respondents likely interpreted questions aiming to measure self-efficacy. Alternatively, the researcher may attempt to steer the participant towards one application of the concept by placing self-efficacy questions within a specific context. This scholarly project serves to amplify the call for development of a measurement tool which can distinguish between the two conflicting applications of self-efficacy within the help-seeking realm.

Despite potentially differing interpretations of this concept, the high levels of self-efficacy reported by SSM/Vs within this study was not unexpected. The New General Self-Efficacy (NGSE) scale asked participants to rate their agreement with statements such as confidence in their ability to achieve goals, accomplish difficult tasks, and overcome challenges. Service in the military equips its members specifically for these types of difficult circumstances (Britt et al., 2016). Involvement within post-secondary education likewise requires a certain measure of self-efficacy. As members of both the military community and academia, participants within this study unsurprisingly endorsed significant self-efficacy.

Gender

The data provided partial support for the study's third hypothesis, which predicted lower rates of treatment seeking intention among male SSM/Vs. Although male SSM/Vs within this study were less likely to endorse mental health treatment seeking intention than their female peers ($M = 12.971$ vs $M = 14.010$), the results were not statistically significant ($p = .102$). Among those who were currently receiving or had previously received mental health treatment,

rates were much higher among female respondents (69.8% of females vs. 53.5% of males). Readers should interpret the latter finding with caution, however, as the rate of mental illness among participants in this sample was unknown.

This difference between the genders falls in line with much of the literature addressing mental health treatment seeking among the general population (Nam et al., 2010). In concurrence with these findings, a systematic review of 111 articles focusing on veterans found females were consistently more likely to seek treatment than males (Hom et al., 2017). Several other studies involving university students (Eisenberg et al., 2011) and military populations (Currier et al., 2017; Elbogen et al., 2013; Naifeh et al., 2016; Williston et al., 2019) likewise supported this.

Perhaps owing to the impact of military culture on gender norms, the difference between the mental health treatment seeking intention of male and female SSM/Vs within this study did not reach statistical significance. Similarly, the literature involving military members is inconsistent. For example, Diramio and colleagues (2015) found comparable attitudes regarding treatment seeking between male and female student veterans, suggesting an impact of a male-dominated culture on the attitudes of female veterans. Likewise, Koepl (2013) and Britt et al. (2019) did not assess gender to be a significant predictor of mental health treatment seeking among a sample of military personnel.

Although women have historically been more apt to seek help for mental health concerns, women in the military face unique challenges. Enculturation of gender norms begins with initial military training in which members are taught to override feelings of fear or grief in order to perform in critical situations (Green et al., 2010; Shields et al., 2017). The projection of strength and demonstration of control over internal and external circumstances is often the catalyst for true belonging within this culture (Eskenasi, 2020; Shields et al., 2017). Women choosing to

serve within the military must therefore conform to some form of masculinity or risk a level of exclusion (Green et al., 2010; Shields et al., 2017). As such, studies involving service men and women have increasingly noted blurred lines between the genders related to help-seeking behaviors.

Rank

The final hypothesis predicted lower treatment seeking intention among those who had achieved a higher military rank, primarily owing to the career harm that many higher ranking servicemembers anticipate accompanying mental health treatment. The results of this study did not support this as little variation and no significant differences existed between the ranks. Though the related literature often found officers and higher-ranking enlisted members to be more likely to endorse barriers to mental health treatment (Britt et al., 2019; Naifeh et al., 2016), little research exists on the relationship between rank and help seeking behaviors. In line with the findings of this study, Koepl (2013) noted the lack of influence of rank on treatment seeking intention among a sample of Active-Duty soldiers. He did notice, however, that a servicemember's willingness to seek care decreased at specific time frames within one's career. The assumption was that these aligned with opportunities for major promotions and that, in the eyes of the study's participants, many members feared the impact of help seeking on promotion eligibility. This study, however, was not designed to assess this relationship.

Several scenarios may explain the inability of this study to confirm lower rates of treatment seeking intention among higher ranking military members. One possible explanation is the similarity of military culture indoctrination received across the ranks. Whether officer or enlisted, the military ethos is introduced during initial training and reinforced throughout one's career. It should also be noted that although higher ranking individuals may feel as if they have

“more to lose” from a career standpoint, junior ranking members may be at a greater disadvantage if forced to forfeit their military careers. This is due to the fact that many enlisted occupations do not transfer as smoothly into the civilian sector. As such, military members of all ranks often view help seeking as a potential threat to their careers (Roanova, 2016).

Another potential explanation is the decreased prevalence of mental health treatment stigma among military members. Though still a significant problem, the Department of Defense has noted a reduction in endorsed stigma among its members in recent years owing to its multidimensional approaches (Acosta et al., 2014). However, despite this apparent progress, the results of this study suggest that those with a history of military service may be less likely than civilians to seek help for a mental health concern. Looking at recent studies which employed the Mental Help Seeking Intention Scale (MHSIS), this study’s sample of SSM/Vs endorsed a lower intention to seek treatment ($M = 13.5$) compared to various samples involving US adults ($M = 14.7, 16.5, 17.04$; Brenner et al., 2020; Hammer et al., 2019; Lefevor et al., 2021). This reinforces the notion that military service may dissuade mental health treatment seeking.

Practice Implications

The results of this study have several implications for those tasked with providing care to the SSM/V population. Recognizing the link between military culture and the development of self-reliance, as well as the negative implications of self-reliance on mental health treatment seeking, healthcare providers have the opportunity to reframe mental health care in such a way that it does not conflict with deep-seated military values. Rather, by focusing on the strength of character required to seek assistance, SSM/Vs are afforded the opportunity to receive needed care without compromising their identities (Adler et al., 2015). A simple rephrasing of the conversations surrounding mental health may prove to be beneficial. Rather than asking patients

about their mental health *problems*, providers can discuss areas where mental health can be strengthened. Further, by harnessing the SSM/V's tendency towards self-reliance, this conversation should also include actions that the member can take upon themselves to improve their mental well-being whether through an exercise regimen, attending counselling, or starting an anti-depressant (Aikins et al., 2020). Moreover, by placing emphasis on the positive impact of treatment seeking on the health of relationships, academic performance, and quality of life, providers can offer the SSM/V ammunition to combat the false notion that treatment seeking is a direct assault on their embodiment of strength and courage (Bryan and Morrow, 2011).

The military organization as a whole should likewise heed this call to redefine mental health treatment seeking into a display of inner strength rather than one of dependency (Bryan and Morrow, 2011). Military ideals such as courage, sacrifice, and strength are not at odds with help-seeking, rather help-seeking can demonstrate these ideals in a unique way. Just as military members dedicate significant time and energy to attain goals related to physical performance, the military should normalize this type of dedication to mental health as well. After all, achieving optimal mental well-being likely affords the servicemember increased capacity for future service both in the civilian and military sectors.

Finally, recognizing that the decision to seek mental health care is ambiguous, future research on the SSM/V population stands to benefit from qualitative studies. This methodology would allow for a more robust understanding of the mental health belief systems of the SSM/V, to include facilitators and barriers to care (Hilliard, 2020). It would be of particular benefit to interview those with a documented mental health concern who had sought mental health care as well as those who opted for self-management, deciphering any characteristics or belief systems that may set these two groups apart.

Strengths and Limitations

A strength of this study was its multifaceted recruitment strategy. This approach allowed participation of SSM/Vs with a variety of characteristics to include age, ethnicity, rank, time in service, career specialty, branch, and component of service. In total, 54 universities were represented within the study's sample. This diversity may allow for increased generalizability among the SSM/V population. Generalizability to the broader servicemember and veteran population should be considered with caution, however, as SSM/Vs possess several demographic characteristics which distinguish them from their non-academic peers. Additionally, because the attainment of educational goals can be impacted by mental fitness, SSM/Vs may be more likely to utilize mental health services than their non-academic peers (Bonar et al., 2015). Another strength of this study was its use of the Social Cognitive Theory. This well-tested theory provided a solid foundation on which this study melded together the constructs of self-reliance, self-efficacy, and mental health treatment seeking intention. This thereby demonstrated the theory's continued applicability in a variety of settings. Finally, as a student servicemember herself, the author of this study attests to the importance of addressing mental health among this population. The amalgam of military culture and the stressors of academia creates an environment ripe for poor mental health outcomes. The results of this study add to the existing SSM/V literature by reinforcing the importance of addressing mental health within the context of military culture.

Limitations include the cross-sectional nature of the study which prevented the determination of causation. Additionally, as the study utilized convenience sampling and relied on voluntary participation, the possibility of self-selection bias cannot be excluded. The study's focus on mental health may have further amplified this bias. Lastly, although mental health

treatment seeking intention often acts as a proxy for the behavior of treatment seeking, experts concur that individuals may overreport a willingness to seek care or may display inconsistencies between intent and actual behavior (Koepl, 2013; Institute of Medicine, 2007). This may be due to a myriad of causes to include a social desirability bias. The rates of treatment seeking intention within this study should therefore be carefully interpreted.

Conclusion

Student servicemembers/veterans are a unique population, distinct in many ways from their veteran and academic peers. Owing to their military experiences and the compounded stressors of academia, these men and women are at an increased risk for various mental health conditions. Though military service endowed them with many admirable traits, it may have also complicated their beliefs regarding mental health, leading to a reduced intention to seek treatment. This is especially problematic for the SSM/V as these individuals must frequently balance numerous competing demands (school, work, military service, family) which may further reduce their likelihood of seeking professional assistance. It is essential, therefore, for those providing care to this population to recognize the influence of military culture on the mental health belief systems of the SSM/V. This comprehensive awareness enables providers and organizations alike to begin reframing discussions surrounding mental health treatment seeking to allow those who have served the ability to retain their military identity while simultaneously accessing needed mental health care.

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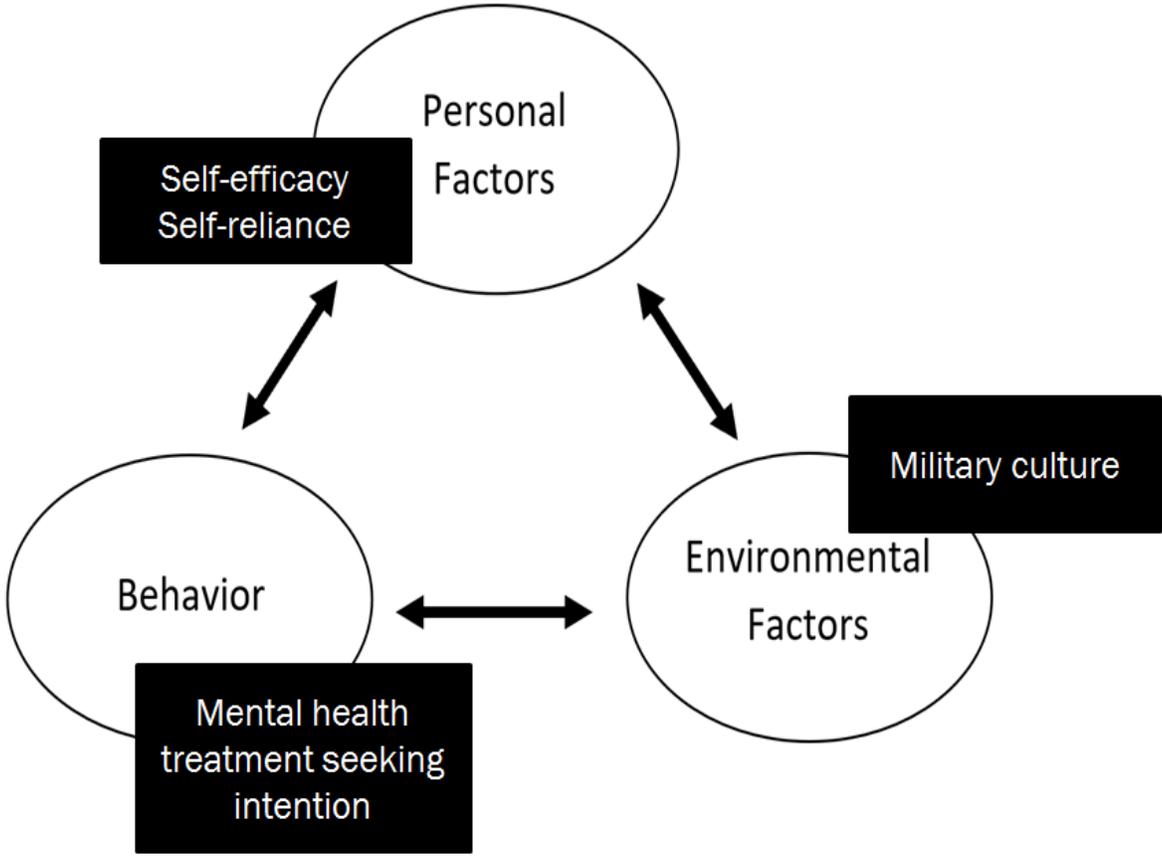
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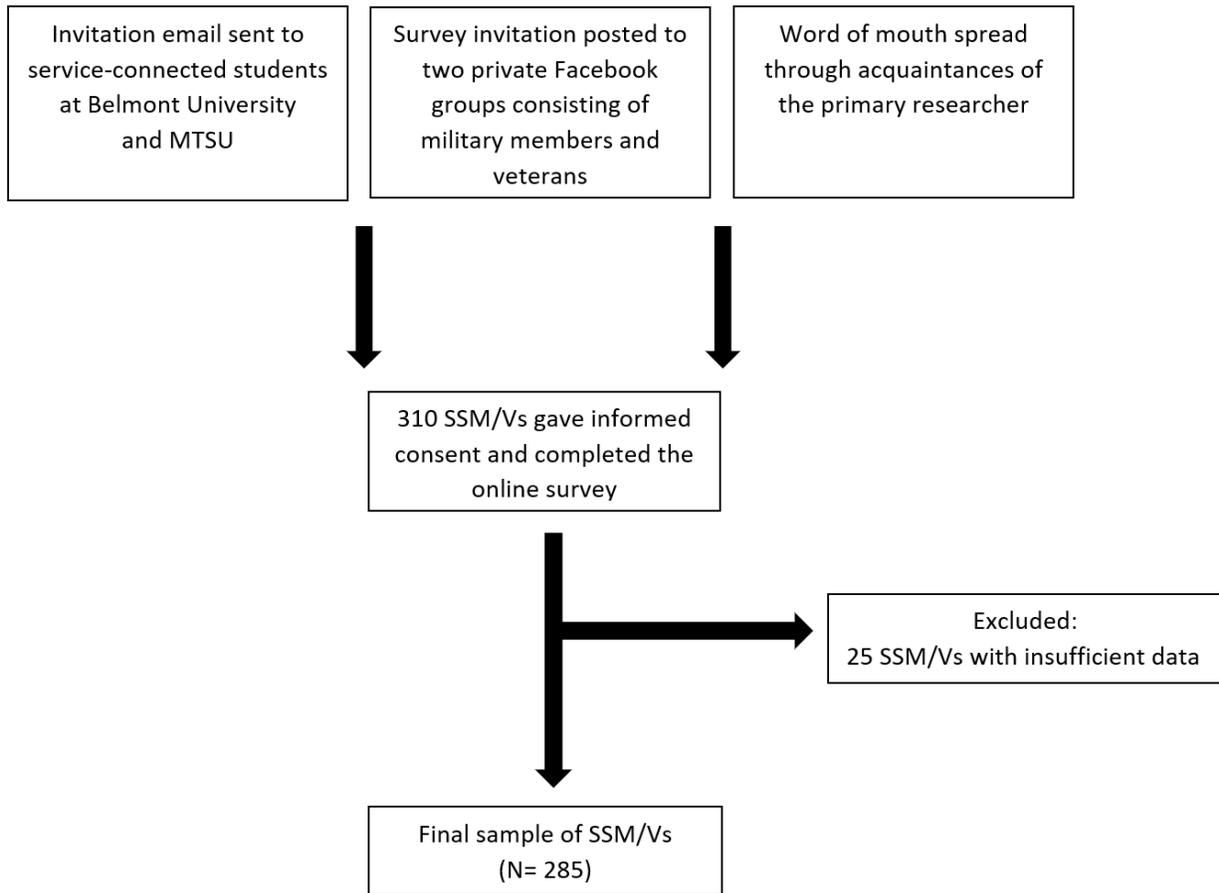
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Figure 1. *Social Cognitive Theory Model*



Adapted from Pajares (2002)

Figure 2. *Sampling Process Flowsheet*

Appendix A. Recruitment Email

Hello!

My name is Leigh Holdsambeck. I am a Family Nurse Practitioner student at Belmont University in Nashville, Tennessee. I am also a Flight Nurse approaching my ninth year as a proud member of the United States Air Force.

I am researching the impact of military culture on the mental health belief system of military members and veterans. Having served in the military for close to a decade I have personally witnessed the pervasive and destructive nature of mental illness. Through my research I am hoping to identify aspects of military culture which may act as a barrier to treatment seeking among those who have served. This subject matters deeply to me as I have not only seen marriages, families, and careers fall apart when mental illness goes unaddressed, but I have also lost several peers and patients to suicide throughout my career.

For the purpose of this study, I will be surveying student servicemembers and veterans. You are eligible to participate if you are at least 18 years old, are currently enrolled at [name of school], and have served or are presently serving in the US military. Past or present experience with a mental health concern is not necessary for participation as the aim of this study is to assess military cultural beliefs.

Your participation is completely **voluntary** and **100% confidential**. If you choose to participate you are invited to complete a short online survey using the link below. This should take less than five minutes.

In order to say thank you, completion of this survey allows entry into a random drawing for one of two **\$50 Amazon gift cards**. Winners will be notified by email NLT 31 December 2020. Additionally, your participation will help gain a better understanding of the unique cultural barriers that may place our service brothers and sisters at a disadvantage when confronting mental illness.

If you are eligible and willing to participate, please follow the link below. Additionally, if you have any questions or concerns, please contact me using the information at the bottom of this email. This study was approved by Belmont University's Institutional Review Board.

Thank you so much for your potential participation and service to our great nation.

Appendix B. *Reminder Email*

Dear fellow student servicemembers/veterans,

Earlier this month you were invited to participate in a short survey related to mental health. The aim of this study is to assess how aspects of military culture may predict willingness to seek treatment for a mental health concern.

From the first day we entered military service, resiliency, personal strength and mental toughness were required of us. These traits, though crucial in many situations, may complicate our willingness to seek help for personal concerns. As a currently deployed member of the military, I am witnessing this first hand.

If you already completed the survey, THANK YOU! If you have not yet participated, please consider following the link below. The survey will take less than 5 minutes to complete. Your participation is **completely voluntary** and **100% confidential**.

https://belmont.az1.qualtrics.com/jfe/form/SV_abnePEB44XliFF3

There will be a random drawing for one of two **\$50 Amazon gift cards** for survey completion. Winners will be notified by email NLT 31 December 2020. Additionally, your participation will help provide a better understanding of the unique cultural barriers that may place our service brothers and sisters at a disadvantage when confronting mental illness.

Eligibility requirements:

- At least 18 years old
- Current enrollment at [name of school]
- Past or present service in the US military

If you have any questions or concerns, please contact me using the information at the bottom of this email. This study was approved by Belmont University's Institutional Review Board.

Thank you so much for your potential participation and your service to our great nation.

Appendix C. Social Media Post

ATTN: Current and former members of the US military presently enrolled in higher education

Your unique perspective is valuable to assess the impact of military culture on the mental health belief systems of student servicemembers and veterans. As an Air Force Flight Nurse and current grad student who cares deeply about the mental health of my military peers, I invite you to complete this short survey.

Eligibility requirements are:

- Current or former service in the US military and
- Current enrollment in some form of higher education

Your participation is completely **voluntary** and **100% confidential**. If you choose to participate you are invited to complete an online survey which takes less than five minutes. This study was approved by Belmont University's Institutional Review Board.

Completion of this survey allows entry into a random drawing for one of two **\$50 Amazon gift cards**. Winners will be notified by email NLT 31 December 2020.

If eligible and willing to participate, please follow the link below. For questions or a copy of the email invitation, please contact the primary researcher at leigh.holdsambeck@pop.belmont.edu.

Thank you for your consideration and you service!

Appendix D. Study Survey

Beliefs About Treatment Seeking subscale of the Endorsed and Anticipated Stigma

Inventory (EASI)

1. A problem would have to be really bad for me to be willing to seek mental health care.
2. If I had a mental health problem, I would prefer to deal with it myself rather than to seek treatment.
3. Most mental health problems can be dealt with without seeking professional help.
4. Seeing a mental health provider would make me feel weak.
5. I would think less of myself if I were to seek mental health treatment.
6. If I were to seek mental health treatment, I would feel stupid for not being able to fix the problem on my own.

Note: Answer choices for each item will be as follows: (1) strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree, (5) strongly agree.

Mental Help Seeking Intention Scale (MHSIS)

Please select the answer that best represents your opinion

1. If I had a mental health concern, I would intend to seek help from a mental health professional
2. If I had a mental health concern, I would try to seek help from a mental health professional
3. If I had a mental health concern, I would plan to seek help from a mental health professional

Note: Answer choices for each item will be on a seven-point continuum ranging from extremely unlikely/definitely false/strongly disagree to extremely likely/definitely true/strongly agree.

New General Self Efficacy Scale (NGSE)

Please select the answer that best represents your agreement with the following statements

1. I will be able to achieve most of the goals that I have set for myself.
2. When facing difficult tasks, I am certain that I will accomplish them.
3. In general, I think that I can obtain outcomes that are important to me.
4. I believe I can succeed at most any endeavor to which I set my mind.
5. I will be able to successfully overcome many challenges.
6. I am confident that I can perform effectively on many different tasks.
7. Compared to other people, I can do most tasks very well.
8. Even when things are tough, I can perform quite well.

Note: Answer choices for each item will be as follows: (1) strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree, (5) strongly agree.

Appendix E. Demographic Survey

Prior to beginning the survey, participants were asked

Are you 18 years or older?

- a. Yes
- b. No

If participants answered yes, they were taken to the questions below. If they answered no, they were taken to the end of the survey and not allowed to participate.

Please choose the most accurate response.

1. Age
 - a. 18-25
 - b. 26-35
 - c. 36-45
 - d. 46-55
 - e. 55+
2. Gender
 - a. Male
 - b. Female
 - c. Other
3. Race/Ethnicity that you most identify with
 - a. American Indian or Alaska Native
 - b. Asian
 - c. Black or African American
 - d. Native Hawaiian or Other Pacific Islander
 - e. White/Hispanic or Latino
 - f. White/Non-Hispanic
4. Educational classification
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Graduate student
5. What college/university do you attend?
 - a. Fill in the blank
6. Branch of service (select all that apply)
 - a. Air Force
 - b. Army
 - c. Navy
 - d. Marine Corp
 - e. Coast Guard

7. Service component (select all that apply)
 - a. Active Duty
 - b. Reserves/Guard
 - c. IMA
 - d. ROTC/Military scholarship
8. Years of military service:
 - a. 0-5
 - b. 6-10
 - c. 11-15
 - d. 16-20
 - e. 21+
9. AFSC/MOS
 - a. Fill in the blank
10. Highest awarded military grade
 - a. E1-E4
 - b. E5-E6
 - c. E7-E9
 - d. W1-W5
 - e. O1-O3
 - f. O4-O6
 - g. O7 and above
11. Are you *currently* receiving, or have you *ever received* care for a psychological concern (to include depression, anxiety, PTSD, psychosis, substance abuse, etc)?
 - a. Yes
 - b. No

Table 1*Demographic Statistics of Participants*

Age (<i>N</i> = 269)	<i>n</i>	%
18-25	35	13
26-35	152	56.5
36-45	58	21.6
46-55	16	5.9
55+	8	3

Gender (<i>N</i> = 269)	<i>n</i>	%
Male	173	64.3
Female	96	35.7
Other	—	—

Note. Dash indicates no participants selected that response.

Race/Ethnicity (<i>N</i> = 264)	<i>N</i>	%
American Indian or Alaska Native	2	.8
Asian	11	4.2
Black or African American	22	8.3
Native Hawaiian or Other Pacific Islander	3	1.1
White/Hispanic or Latino	42	15.9
White/Non-Hispanic	184	69.7

Educational Classification (<i>N</i> = 263)	<i>N</i>	%
Freshman	13	4.9
Sophomore	24	9.1
Junior	39	14.8
Senior	66	25.1
Graduate Student	121	46

Branch of Service (<i>N</i> = 267)	<i>n</i>	%
Air Force	95	35.58
Army	105	39.33
Coast Guard	—	—
Marine Corps	29	10.86
Navy	44	16.48

Note. Dash indicates no participants selected that response.

Service Component (<i>N</i> = 258)	<i>N</i>	%
Active Duty	214	82.95
IMA	3	1.16
Reserve/Guard	78	30.23
ROTC/Scholarship	5	1.94

Time in Service (<i>N</i> = 267)	<i>n</i>	%
0-5	94	35.2
6-10	93	34.8
11-15	43	16.1
16-20	18	6.7
21+	19	7.1

Military Grade (<i>N</i> = 266)	<i>n</i>	%
E1 – E4	74	27.8
E5 – E6	114	42.9
E7 – E9	7	2.6
W1 – W5	—	—
O1 – O3	42	15.8
O4 – O6	29	10.9
O7 and above	—	—

Note. Dash indicates no participants selected that response.

E represents enlisted ranks, W represents warrant officers, and O represents officers.

Mental Health Care (<i>N</i> = 268)	<i>n</i>	%
Yes	159	59.3
No	109	40.7

Table 2*Descriptive Statistics: Self-Efficacy, Self-Reliance, and Treatment Seeking Intention*

	<i>N</i>	Minimum	Maximum	Mean	SD	Range
Self-Reliance ^a	285	6	30	17.50	5.18	24
Self-Efficacy ^b	285	9	45	37.29	5.91	36
Intention ^c	285	3	21	13.35	4.91	18

Note. Higher scores indicate greater expression of the concepts.

^a Self-reliance was measured using a subscale of the Endorsed and Anticipated Stigma Inventory.

^b Self-efficacy was measured using the New General Self-Efficacy scale.

^c Mental health treatment seeking intention was measured using the Mental Help Seeking Intention Scale.

Table 3*Pearson Correlation: Self-Reliance, Self-Efficacy, and Treatment Seeking Intention*

		Self-Reliance ^a	Intention ^c
Self-Reliance ^a	Pearson Correlation	—	-.68**
	<i>p</i>	—	<.001
	<i>N</i>	—	285
Self-Efficacy ^b	Pearson Correlation	.03	-.07
	<i>p</i>	.66	.27
	<i>N</i>	285	285

**Correlation is significant at the 0.01 level (2-tailed).

Note.

^a Self-reliance was measured using a subscale of the Endorsed and Anticipated Stigma Inventory.

^b Self-efficacy was measured using the New General Self-Efficacy scale.

^c Mental health treatment seeking intention was measured using the Mental Help Seeking Intention Scale.

Table 4

Independent Sample T-Test: Gender and Mental Health Treatment Seeking Intention

Group	Statistic	N	Mean	Std. Deviation	Std. Error Mean
Male		173	12.97	5.12	0.39
Female		96	14.01	4.70	0.48

t-test for Equality of Means	t	df	p	Mean Dif.	Std. Error Dif.	95% CI		Cohen's d
						LL	UL	
Equal variances assumed	-1.64	267	.10	-1.04	0.63	-2.29	.21	.21

Note. Mental health treatment seeking intention was measured using the Mental Help Seeking Intention Scale.

Table 5*ANOVA: Mental Health Treatment Seeking Intention by Military Grade*

	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>P</i>	η^2
Between Groups	52.73	4	12.18	.52	.72	.01
Within Groups	6562.38	261	25.14			
Total	6615.12	265				

Note. Mental health treatment seeking intention was measured using the Mental Help Seeking Intention Scale.

Table 6*Self-Reliance Scores by History of Mental Health Treatment Seeking*

	<i>N</i>	Mean
History of treatment seeking	159	16.48
No history of treatment seeking	109	18.91

Note. Self-reliance was measured using a subscale of the Endorsed and Anticipated Stigma Inventory.