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Veteran social network: peer support impact on mental health service utilization

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**VETERAN SOCIAL NETWORK:
PEER SUPPORT IMPACT ON MENTAL HEALTH SERVICE UTILIZATION**

APPROVED:

Dan Ratliff, Ph.D., M.Div., LMFT-S
Dissertation Advisor

Kai Chitaphong, Ph.D., LCSW, BCD

Andrew Rawdon, J.D.

APPROVED:

Leona Pallansch, Ph.D.
Interim Dean, College of Arts, Humanities, and Social Sciences

Date

**VETERAN SOCIAL NETWORK:
PEER SUPPORT IMPACT ON MENTAL HEALTH SERVICE UTILIZATION**

**A
DISSERTATION**

**Presented to the Faculty of the Graduate School of
St. Mary's University in Partial Fulfillment
of the Requirements
for the Degree of**

DOCTOR OF PHILOSOPHY

**in
Marriage and Family Therapy**

**by
Stacy A. Harris
San Antonio, Texas**

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To Veterans who have lost their lives by suicide,
to Veterans who have thoughts of suicide,
to Veterans who have made an attempt on their lives,
to those caring for a Veteran,
to those left behind after a death by suicide,
to Veterans in recovery, and
to all those who work tirelessly to prevent Veteran suicide and suicide attempts in our nation.

Abstract

VETERAN SOCIAL NETWORK: PEER SUPPORT IMPACT ON MENTAL HEALTH SERVICE UTILIZATION

Stacy Harris

St. Mary's University, 2021

Dissertation Advisor: Dan Ratliff, Ph.D.

Of the 20 million US Veterans, approximately 30% receive health care benefits from the Veterans Affairs system. Research confirms that these Veterans are less likely to seek professional mental health services as a result of a belief that mental illness equates with weakness. Research on peer support with Veterans suggests that Veteran social networks reduce stigma and facilitate help seeking behavior. Most studies on Veteran help seeking for mental health services use subjects who receive health care from the Veterans Health Administration or Department of Defense. The purpose of the current study is to gain an understanding of Veterans who are outside of the VA health care network; specifically, how their social networks influence help seeking for mental health symptoms. This study will examine the relative influence of stigma and social networks on a Veteran's help seeking behavior. The research findings indicate that Veterans in the cohort perceived greater stigma related to talking to a counselor ($M = 3.07$; $SD = 1.17$) than [talking to] a fellow Veteran ($M = 2.90$; $SD = 0.68$). Also, the researcher established that the size of a Veteran's network of Veteran peers ($M = 2.49$, $SD = 3.23$) was significantly smaller than that of their civilian [network of] peers ($M = 10.52$, $SD = 7.39$). The research found that the size of a Veteran's social network was a significant and a positive predictor of health seeking behavior among the Veterans.

Keywords: peer support, help seeking, Veteran social network, social network diversity

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Chapter I

With over 6,000 Veteran suicides per year, or an average of 22 per day (U.S. Department of Veteran Affairs, 2019), mental health professionals need effective strategies to encourage help seeking behavior with Veterans battling mental health challenges. Veterans who do not seek mental health support for their mental health symptoms face a higher risk of suicide and mental health symptoms (Sripada et al., 2015). Approximately 6 million (around 30 percent) receive Veterans Affairs health care and 9.6 million Veterans use at least one Veterans Affairs benefit or service (U.S. Department of Veteran Affairs, 2019). The result is that 10.2 million Veterans are either not being served through the Veterans Affairs system, are not being served at all, or are receiving community-based services. Mental health professionals have long sought effective strategies to encourage help seeking behavior among those struggling with mental health challenges. This study seeks to understand the value of peer support on Veterans' decisions to seek professional mental health care. The purpose of the current study is to investigate the impact of Veteran and civilian social networks and stigma on help seeking behaviors.

Most Veterans who die by suicide do not access or qualify for VA services (U.S. Department of Veteran Affairs, 2019). In 2017, among Veterans who died by suicide, 38% had a Veterans Health Administration (VHA) service rendered in 2016 or 2017 (6.3 suicide deaths per day), while 62% had not. Among Veterans with recent VHA use who died by suicide in 2017, 58.7% had a diagnosed mental health or substance use disorder in 2016 or 2017. Veterans are far less likely to seek professional mental health services as a result of cultural beliefs that promote both public and self-stigma (Stana et al., 2017). Active duty military members are dissuaded from seeking mental health support as a result of cultural standards and expectations, a practice that contributes to the Veteran culture of help seeking avoidance (Meyer, Writer & Brim, 2016).

While there are many factors impacting resistance to help seeking, few models focus on active decision-making processes that encourage the use of mental health supports and services. Vogel, Wester, Larson and Wade (2006) developed an Information Processing Model (IPM) to break down help seeking processes. While this model is developmental and claims to incorporate social–cognitive theories, current research applies the Information Processing Model to Veterans’ cultural norms and values. The Information Processing Model emphasizes the need for early detection, educational and outreach at a group level, and the use of nontraditional methods to guide specialized populations into sound choices regarding addressing their mental health symptoms (Vogel et al., 2006). This model also breaks down help seeking behavior into four steps which are encoding and interpreting, generating options, decision making, and evaluation of behavior. This model suggests that Veterans must establish that symptoms are impeding life’s daily functioning before generating options to relieve the acknowledged psychological distress. Next, they must overcome barriers and act on their decision in order to later evaluate their decision to seek help.

Inadequate social networks are associated with negative mental health outcomes. However, their impact on mental health service utilization is less clear (Sripada et al., 2015). Low social support is linked with greater mortality, suicidal ideation, and depression (Hatch et al., 2013). Veterans experience dynamic shifts in social support as they transition in and out of military life bringing significant challenges during very high stress periods (Sripada et al., 2015). Little is known about the impact of peer social networks on mental health service utilization. Research indicates that social supports are closely related to mental health symptoms. However, it is less relevant to mental health service utilization (Frey et al., 2016). Additionally, data show

that social network support increases help seeking behavior, while some data show that discouragement from social networks is a barrier to treatment (Kulesza et al., 2015).

A Veteran's social network can have a facilitating or a supportive role on mental health utilization depending on the message delivered by the network. It is possible that Veterans with encouraging social networks may experience a reduction of need for formal mental health services because the support network itself is stress reducing. However, studies do not yet prove a linear connection between likelihood of treatment utilization and social networks in Veterans (Kulesza et al., 2015). Additionally, social network diversity and the number of social roles one inhabits, have not been assessed with peer support in the Veteran population (Liebke et al., 2017)

Theoretical Framework

The Information Processing Model of the Decision to Seek Professional Help provides a framework in which a Veteran may seek professional mental health support and overcome barriers to seeking and receiving support for mental health symptoms (Vogel & Wester, 2003; Vogel, Wester, Wei & Boysen, 2005; Vogel, Wade, Wester, Larson & Hackler, 2007). Vogel et al. (2006) concluded that solely focusing on "getting people to walk through the door" is insufficient to reach underserved populations. Practitioners within the field of mental health have been encouraged to start providing education and support at community, family, and societal levels to empower individuals with the knowledge and tools to make good decisions when mental health symptoms arise. It is therefore imperative that the field of mental health focus interventions on certain components of information processing dependent on the needs of specific populations.

The first step in the help seeking decision making process is encoding and interpreting. One of the main components in this step is analyzing how the person experiencing the symptoms

defines the meaning and significance of those symptoms in their life (Vogel et al., 2006).

Research indicates that those who assigned situational explanations as major factors in symptoms were less likely to seek professional support (Heppner & Krauskopf, 1987). There are internal and external factors that help to develop these concepts. Internal factors are what you notice about yourself, while external factors are what those in your social network notice in you. Conversely, those that viewed their challenges as a legitimate illness are more likely to access professional support (Cameron et al., 1993).

The next step is the concept of shortcutting, the process by which one responds to stimuli similarly as they would in previous instances (Vogel et al., 2006). By reacting from an instinctive stance, one employs the same maladaptive behaviors previously used instead of seeking out adaptive behaviors due to their lack of knowledge and experience doing things differently (Anderson, 1995). Military culture dictates that Veterans minimize symptoms, focus on situational aims, “the mission,” and shortcut or compartmentalize debilitating symptoms to maintain functioning toward “the mission.” Even after military service, when “the mission” is not predominant, Veterans continue to minimize symptoms and compartmentalize in order to maintain functioning in their social and family roles. A peer social network support could help to identify the severity of symptoms and be a catalyst for interpreting and validating symptoms as serious.

In both instances, barriers to help seeking can be mitigated with educational interventions (Vogel et al., 2006). Identifying the problem and interpreting the problem internally will aid in early detection before symptoms escalate. When symptoms impede life’s daily functioning, the next step in the model is to generate options that relieve the acknowledged psychological distress. Externally, screening at medical services could assist in help seeking behaviors. It is

common for people to seek help initially from their primary care doctor to report lethargy, sleep, stomach, and irregular heart palpitations, which are often symptoms of depression and anxiety. Vogel et al. (2006) suggests utilizing peers to provide external observations about symptoms and education around mental illness. Research indicates that self-stigma contributes to the lack of understanding around legitimate mental illness; therefore, peer networks help to identify severity of symptoms.

Once it is established that symptoms are impeding life's daily functioning, the next step in the model is generating options to relieve the acknowledged psychological distress. Goal setting is the process by which varying options are broken down to more manageable tasks. There is a significant gap in the literature when looking at identifying how options are generated around help seeking; therefore, the model addresses some implications. Because the general public has limited knowledge of the effectiveness of mental health services, overcoming the obstacles of perceived risks and highlighting the potential benefits can be an effective tool to increasing help seeking behaviors (Cozy et al., 2013). It is highly recommended to address this barrier at a group level. The model recommends that therapists consider outreach efforts that include community peers who can discuss their personal experiences with therapy. Using peers to educate individuals from underserved populations is one way to highlight the benefits of utilizing mental health services (Vogel et al., 2006). Veterans are often quick to minimize the benefits of professional mental health care believing that it is a waste of time, especially if they had a poor outcome with mental health providers in the past (Meyer et al., 2016). In addition, Veteran peer role models can provide greater impact than other educational interventions because they can discuss their positive, personal experiences with mental health treatment.

The third step is cost-benefit analysis. A Veteran decides on a course of action and implements that action. Obstacles such as racial, cultural, and gender role influences sometimes impede implementing the action. These barriers can be overcome with education on the benefits of seeking professional help. Stigma impacts treatment adherence, generates negative attitudes about seeking help and subliminally encourages discontinuation of services (Corrigan, 2004; Green et al., 2010; Hoge et al., 2004). The model posits that breaking down barriers around what occurs within a therapy setting will lessen fear of disclosing difficult subjects and the roles of each participant. Vogel et al. (2006) suggests that normalizing the therapeutic process will concomitantly normalize seeking support. Furthermore, individuals are more likely to seek treatment when the issue is a more common one within their specific group or culture (Akustu et al., 1996). When traditional support is reframed into more nontraditional methods, it is perceived as evoking lower risks and can be an effective way to support underserved populations. Innovative methods are required to reach beyond the comfort of status quo services to reach specific populations that would not ordinarily seek treatment. Vogel et al. (2006) found that self-stigma carried more weight among Veterans who were seeking help. This hypothesis results in Veterans with a high degree of self-stigma being less likely to formulate a course of action to seek help and will perceive more barriers to seeking care.

The final step included in the model is evaluation. Evaluation helps the individual to reflect on the outcomes of their decision to seek mental health support, even before the individual has completed therapy. It is important to compare previous attempts to manage symptoms without therapy with therapy to determine which method is more useful. Desensitizing clients to concerns around expectations and effectiveness of therapy even after

they are through the doors may increase service utilization and decrease early treatment termination (Vogel et al., 2006).

Veterans are a very specific population composing less than one percent of the entire US population (DeGraff et al., 2016). The military meets the definition of a culture by all accounts. Military service members hold a distinctive set of belief systems, norms of behavior, code of manners, language, dress and rituals (Meyer et al., 2016). The Information Processing Model emphasizes the need for early detection, educational and outreach at a group level and the use of nontraditional methods to guide specialized populations into sound choices regarding addressing their mental health symptoms (Vogel et al., 2006).

Using a social network's power of social influence may provide the external support needed throughout the decision-making process, not just in the encoding and interpreting phase as suggested. Those cultural variables impact heavily on a Veteran's decisions and views of mental health support. As Vogel et al. (2006) states:

These information-processing steps suggest that individuals (a) encode and interpret internal and external cues, (b) generate and evaluate behavioral options, (c) decide on and enact a selected response, and finally (d) respond to personal and peer evaluations of selected behavior (p. 399).

Each decision making point involved predominately internal actions except peer evaluations; however, empirical research on peer support with Veterans suggests that social networks facilitated help seeking behavior (Stana et al., 2017; DeVita et al., 2016). Veterans with strong social support networks experience less mental health symptoms. Therefore, peer support utilized as a mitigating factor can be an asset to the decision-making process when deciding to address mental health issues with professional help.

Statement of the Problem

Active duty military members are heavily dissuaded from seeking mental health support directly or indirectly. This practice impacts members after service and contributes to the Veteran culture of help seeking avoidance (Meyer et al., 2016). The Veteran population is at a higher risk of suicide than their civilian counterparts (DeBeer et al., 2019). Veterans are far less likely to seek professional mental health services due to the cultural beliefs that promote stigma (Stana et al., 2017). Veterans continue to resist formal services for fear of public stigma and the impact of self-stigma (Seidman et al., 2018). Veterans also report resisting services out of fear that non-Veterans are not equipped to deal with Veteran-specific struggles (Hall, 2011). Therapists are not well versed in specific Veteran needs resulting in less than adequate care and less trust in mental health providers. The U.S. Department of Veteran Affairs (VA), has been the main provider for Veterans for decades. Several new initiatives have been implemented, some of which include providing training to community-based clinicians and nonprofits to bring non-VA providers up to speed with this underserved population, but this takes time. While training of therapists is increasing, it is not yet sufficient to offset the reality that 22 Veterans die each day by suicide. Most Veterans who die by suicide do not access or qualify for VA services (U.S. Department of Veteran Affairs, 2019). No one strategy in isolation has been shown to be effective in reducing/preventing suicide. A public health approach will help save lives by reaching Veterans, their loved ones, their communities and the greater population in an effort to combat the stigma surrounding seeking formal treatment (U.S. Department of Veteran Affairs, 2018).

Relational protective factors are key in the prevention of suicide (U.S. Department of Veteran Affairs, 2018). Veterans inherently trust other Veterans. Veterans commonly seek out

Veteran therapists. However, that is not a feasible option for all Veterans as a result of barriers including eligibility for VA care, ease of access, and stigma of help seeking (Hundt et al., 2015). Peer mentoring helps build social networks within one's own community and is a function of natural community-based supports (Drebing et al., 2018). Providing training to Veterans who have successfully managed their transition to civilian life and overcome their own mental health challenges is the best method in overcoming the stigma of utilizing mental health services and building protective factors. The application of this research-based intervention is one way communities can address the statistics of failed or nonexistent preventative care.

Peer mentoring as a conduit of social network building within the Veteran community is twofold. Veterans will be trained on mental health challenges, stigma and resources. Peer mentoring builds a natural support system similar to active duty, focusing on the cultural aspect of comradery (Van Voorhees et al., 2019). Veterans state they would encourage other Veterans to seek professional mental health, but also that they would not seek it out themselves (Sayer et al., 2009). In-group psychoeducation can help to overcome this type of situation (Vogel et al., 2006).

When Veterans do access mental health services, it is typically the result of consultation and encouragement from other Veterans (Sayer et al., 2009). In that respect, Veteran-specific peer mentoring programs implement formal, peer-to-peer mentorships, or informal group-mentoring programs for those not already maintaining close relationships with other Veterans. Accounting for internalizing disorders, this study will measure the impact of a Veteran's social network's role in positive help seeking behavior or if having that support would encourage Veterans to seek professional mental health services.

Research Questions

Little is known about the influence of Veteran peer social networks on promoting help seeking behavior. Eleven studies on Veteran peer to peer support show it helps them get to treatment. However, these studies used clinical populations already receiving VA services. Most Veterans who die by suicide do not access or qualify for VA services (U.S. Department of Veteran Affairs, 2019). Therefore, this study will obtain a non-clinical sample to assess the relative influence of four predictor variables, which include stigma about talking with a counselor, stigma about talking with a Veteran, and the impact of civilian social network and Veteran social network on the outcome variable of help seeking.

Justification for the Study

Of the 20 million men and women who have served their country, fewer than half receive Veterans Affairs benefits or services. Approximately 6 million (around 30 percent) receive Veterans Affairs health care and 9.6 million Veterans use at least one Veterans Affairs benefit or service (U.S. Department of Veteran Affairs, 2019). The result is that 10.2 million Veterans are either not being served through the Veterans Affairs system, are not being served at all, or are receiving community-based services. “Veterans are at a disproportionately high risk for suicide compared to the rate of U.S. civilian adults,” said Michael J. Missal, Inspector General, U.S. Department of Veterans Affairs, Office of Inspector General (U.S. Department of Veteran Affairs, 2017, p. 1). The 18 million men and 2 million women who have served in the armed forces will account for 20 percent of U.S. deaths from suicide (National Violent Death Reporting System) this year according to statistics. This is staggering considering the Veteran population represents one in ten adult civilians of the overall U.S. population (U.S. Department of Veteran Affairs, 2018).

Most Veterans who die by suicide do not access or qualify for VA services (U.S. Department of Veteran Affairs, 2019). In 2017, among those Veterans who died by suicide, 38% had a VHA service rendered in 2016 or 2017 (6.3 suicide deaths per day), while 62% did not (10.5 per day) (U.S. Department of Veteran Affairs, 2019). Little is known about the percentage of Veterans utilizing mental health care through the VA, as this researcher has not found any data delineating mental health care from overall health care.

Exploring the problem in this way allows the mental health profession to further pursue the priorities of engaging high-risk Veterans into the mental health system. As a research-based intervention, peer support effects important health-related behavior changes (Drebing et al., 2018). Developing evidence to confirm the effectiveness of this intervention will strengthen the proposition that peer support encourages help seeking behaviors (Wade et al., 2015). Some systems thinkers suggest that in order to survive, the Marriage and Family Therapist field must expand beyond focusing solely on families and develop interventions uniquely relevant to other systems (Terry, 2002). The development of peer support falls directly in the MFT paradigm of systems work. The MFT role can be utilized to elucidate and expand within the systems of business, the military, medicine, and educational institutions.

This research will contribute to the knowledge base of help seeking behaviors and peer support intervention research within the Veteran community. With application to the MFT field, professional mental health providers, and the VA, this outcome study is multidisciplinary in that it applies principals traditionally relevant to the family and broader systems. It also emphasizes the relevance of MFTs' expertise to the context of Veteran populations. This project takes a small but important step towards multidisciplinary collaboration and the expansion of systems thinking beyond the family.

Chapter II- Review of the Literature

The National Strategy for Preventing Veteran Suicide report examined more than 55 million records from 1979 to 2014 from every state in the nation (U.S. Department of Veteran Affairs, 2017). This updated data report represents the largest analysis of Veteran suicide in our nation's history. It represents a comprehensive examination of more than 55 million death certificates from 1979 to 2014 to assess the differences in the rates of suicide among Veterans who use and those who do not use VHA services and compares Veterans with non-Veterans. The data report examines suicide rates for three groups: non-Veteran adults, all Veterans, and Veterans who use VHA care. The research document reports an average of 22 Veterans die by suicide each day, with 67 percent of all Veteran deaths by suicide the result of firearm injuries. The report does not indicate if a mental health diagnosis was present. Four areas of prevention were identified: these included Healthy and Empowered Veterans, Families and Communities; Clinical and Community Preventive Services; Treatment and Support Services; and Surveillance, Research, and Evaluation. The public health approach illustrates that the VA cannot end Veteran suicide alone, and community participation is vital in the prevention and protection of Veterans nationwide. The need for innovative, research-based strategies with a population that is not regularly served by the community in the area of mental health is evident. Providing peer support and strengthening social networks are research-based interventions that will increase help seeking and treatment utilization by overcoming cultural and stigma barriers within civilian populations. However, little is known about the impact on Veteran communities.

Mental Health

Although many people battle mental health challenges, less than 40% seek professional help and even less seek formal psychological help within a year of experiencing psychological

distress (Vogel, Wester & Larson, 2007). Research indicates that attitudes towards counseling and an intention to seek therapy are impacted by public and self-stigma. Few studies measure actual help seeking, even though mental health professionals have long sought strategies to reduce barriers to help seeking (Vogel et al., 2005, Vogel, Wade, & Hackler, 2007).

Hankin et al. (1999) interviewed 2,160 Veterans at the Boston VA. Of that number, 856 participants satisfied the study criteria for a targeted mental disorder. Screening rates were 31% for depression, and 20% for PTSD. Of those who met the screening criteria for any of the targeted mental disorders, 68% reported receiving mental health treatment. Among the 32% who reported never accessing mental health treatment, 76% met the screening criteria for one targeted disorder, 18% met the criteria for two disorders, and 5% met the criteria for three disorders.

Milanaket al. (2013) conducted research with 844 Veterans engaged in primary care clinics in four Veteran Affairs Medical Centers. Using interviews and self-report questionnaires, a chart review was conducted to assess VHA healthcare utilization. Twelve percent of Veterans met diagnostic criteria for Generalized Anxiety Disorder (GAD). Veterans battling GAD symptoms reported physical and psychological health concerns. Forty percent of Veterans with GAD were also found to meet criteria for PTSD, resulting in more severe symptoms than in patients with GAD alone. These findings provide evidence of high prevalence of GAD in Veterans confirming the need for innovative interventions for both VHA and non-VHA Veterans struggling with mental illness.

Morgan et al. (2017) conducted a study at Ft. Bragg that collected quantitative data from active duty soldiers assigned to the 82nd Airborne (n=891). According to results, half of the soldiers reported probable depression, 14.7% reported possible anxiety and 13% indicated probable PTSD despite more than half of the population reporting never being deployed. The

research also revealed that only one in six soldiers (n=155) reported seeing any mental health professional in the last year indicating severe underutilization of resources and support.

Primack et al. (2017) conducted a study of Operation Iraqi Freedom/Operation Enduring Freedom National Guard and Reserve troops over a 12-month period following their homecoming from deployment. Thirty percent of participants met criteria for at least one mental health diagnosis and 60% fit into at least one of three categories indicating the need for mental health treatment, only half of which reported receiving treatment. Of those reporting seeking mental health treatment, 75% reported fewer than three treatment contacts over 12 months suggesting low engagement. Additionally, unit support and post deployment support did not predict mental health services usage. This was an unexpected finding because some research has suggested that the impact of social support is linked to positive help seeking behaviors. National Guard and Reserve personnel straddle both military and civilian lives which may account for this finding.

Stigma

Stigma hinders Veterans with mental illness from seeking or following through with treatment (Kulesza et al., 2015; Heath et al., 2017). Early research discovered many Veterans who screen positive for mental health issues did not access care (Kulesza et al., 2015). Of the Veterans that do seek mental health services, many do not pursue follow up care or attend a limited amount of sessions (Britt et al., 2015). Some evidence suggests that stigma associated with receiving mental health services is more prominent in Veteran populations compared to the general community population (Kulesza et al., 2015). Less than half of Veterans and as few as 23 percent of military personnel experiencing mental health symptoms seek care (Heath et al., 2015; Kulesza et al., 2015). Much of the previous research focused on Veterans already enrolled and

receiving care from the VA. This limits generalizability to the larger pool of all Veterans, predominately Veterans who are not accessing or ineligible for VA care. It also limits the understanding of the relationship between stigma and future help seeking behavior (Sideman et al., 2018). Few studies of stigma as a barrier to care have focused on the Veteran population.

Heath et al. (2017) examined 271 men in the military to further understand how distress and restrictive emotionality related to help seeking. Restrictive emotionality is defined as the restriction and fears about expressing one's feelings. Researchers report a lack of research examining restrictive emotionality and stigma in a sample of military personnel. Results of this study concluded that distress and restrictive emotionality were greatly associated with higher levels of stigma. Additionally, this research brings attention to the connection between military men's masculinity and treatment avoidance. The conclusion is that both gender and military culture influence stigma.

Westphal (2007) interviewed 19 Navy leaders on the topic of mental health pertaining to their role as leaders and their beliefs around mental illness. Stigma was an expected theme; however, the leaders spoke explicitly around fitness for duty, mission readiness, and career impact which can be summarized as fleet mental health. Fleet mental health refers to the overall team's mental readiness. Malingering was also discussed as leaders spoke about how sailors learn how to use statements of self-harm to manipulate and improperly consume limited resources. This perspective serves as a direct conduit to lower ranked individuals' perception of stigma.

Hernandez et al. (2016) reviewed 30 articles pertaining to stigma of service members with seeking health services. Military members across branches identified fears of negative impacts on their careers for seeking help. Cultural norms, values and expectations weigh heavily

on a military member's decision to seek help. Potential impact on their military career adds to the continuation of stigma among military populations.

Britt et al. (2015) determined that stigma impacts treatment seeking and dropout. This study examined 1,652 active duty soldiers to investigate help seeking behaviors. Four types of stigma were measured, including stigma for career, public stigma, self-stigma and stigma of other soldiers who seek treatment. Results indicated those who reported mental health symptoms scored higher on all four stigma scales than those who did not indicate mental health concerns. Additionally, self-stigma was the only correlation to treatment dropout despite all four types of stigma proving to be correlated to decreased treatment seeking and increased treatment dropout. More significantly, this research concluded that soldiers' perceptions of others who seek treatment can impact them greatly when they encounter a mental health challenge of their own. This finding solidifies Vogel's model assertion that in-group normalization of help seeking can be beneficial for help seeking behavior (Vogel et al., 2006).

Seidman et al. (2018) explored the impact of self and public stigma on behavioral health utilization by 84 active duty Army soldiers with a history of concussions. Public stigma is defined as perceptions of public attitudes toward those who seek psychological help while self-stigma is defined as negative self judgements for seeking mental health care. While the sample included members who previously sought care, the findings suggest that self-stigma is the primary barrier to help seeking behaviors in Veterans. This finding is consistent with previous military research. Efforts have persisted to reduce public stigma; however, this study suggests that public stigma is unrelated to help seeking behaviors, and that addressing self-stigma is the key to unlocking stigma-related barriers in help seeking.

Culture

The military is a diverse group of people whose culture is uniquely different from the civilian population (Hall, 2010). As Reger et al. (2008) state, “to the extent that a culture includes a language, a code of manners, norms of behavior, belief systems, dress, and rituals ...” it is clear that the military is a culture in its own right (p. 5). Military culture promotes inner strength, self-reliance, and the ability to shake off injury, all of which contribute heavily to stigma surrounding mental health issues. Military members are asked to thrive in a world where the importance of the mission is held to higher importance than the wellness of the individual. The importance of relying on one’s own ability to handle mental health problems has been reported as a deterrent to treatment seeking in Veterans. It also contributes to the belief that others will react in a negative manner for seeking help from mental health professionals. While this is true for the general population as well, a review by Vogt (2011) suggests that these factors may serve as more powerful deterrents among Veterans. The authoritarian structure, isolation, and alienation components of military life create a perfect storm for the silent suffering of mental health disorders.

Low military cultural competence among health providers poses a significant disadvantage to military help seekers (Meyer et al., 2016). National surveys indicated a need for improvement resulting in increased curriculum regarding military culture in medical schools and training programs. As a new concept and in an effort to overturn historically poor treatment outcomes, military cultural competence training is on the increase. Research has shown that the lack of cultural competence contributes to poor outcomes. While this realization, research, and subsequent efforts are promising, getting a whole country of providers up to speed on military

culture will take time that we do not have based on the daunting rise of mental health concerns among the Veteran population.

DeGraff et al. (2016) conducted a study of 273 military families to learn more about military culture and life satisfaction as it relates to military life. Military families report higher levels of social network support result in higher levels of life satisfaction. Overall, the relationship between support and life satisfaction highlights the significance and importance of support networks and systems. Informal networks as well as formal systems related to military life and leadership impact not only the military member's life satisfaction, but the family as well.

Mary Wertsch (2011) interviewed 80 adults raised in military families. Three qualities emerged: these included secrecy, stoicism, and denial, all of which were highlighted as the most significant challenges to military life. Secrecy is an engrained cultural component of military life because of the high importance of keeping the intricacies of the military mission and home life separate due to operational security. There is a requirement to emotionally and psychologically disconnect which is beneficial for the mission but not for the individual, spouse or family. Additionally, stoicism contributes to the lack of communication that takes place in military families. Stoicism is defined as the importance of keeping up the appearance of the ability to handle stress within the family system, independently or otherwise, known as military bearing. Deployments, constant moving, and separation from communities and relationships both in and outside of military life create high stress. Avoidance of any dialogue in relation to military family stress precludes the family from taking the first step in acknowledging constant emotional chaos that is part of their everyday life. Families and military members are often apprehensive about seeking help because of the cultural expectations to manage mental health, family discord, and overall stress autonomously. Denial, or the need to keep all the feelings, fears, and family

stressors to oneself is another cultural component that hinders help seeking. These three factors give great insight to the military culture that impacts the entire family.

Social Networks

Veterans with strong social support networks experience less mental health symptoms (Keane et al., 1985). Social support can be measured by the amount of people in the network and by the diversity of the people in the support network (Laffaye et al., 2017). Low social support and small social network size have been associated with a variety of negative mental health outcomes. However, the impact on mental health utilization for symptoms is unclear (Sripada et al., 2015). Previous research indicates that not only does social support serve as a buffer to mental health symptoms, but Veterans with PTSD often experience a decrease in network size (Keane et al., 1985). Building social support for those with low or dwindling social support is imperative to Veterans' mental wellness.

Vogel et al.'s (2006) model of help seeking (summarized in Chapter 1) postulates that social networks should be utilized in outreach efforts to familiarize specific populations with when it is appropriate to obtain treatment, what types of therapy are conducted, what types of issues and symptoms are effectively addressed in therapy, and where one can find the services. The only test of this model of the influence of social network on help seeking used a college student sample (Vogel et al., 2006). Results indicated that of those who sought help, 20% had someone prompt them to seek help and 59% knew someone who had sought help. This number is staggering considering 13% reported seeking help while 79% reported recent or current psychological issues. A follow up study was completed with similar results. Social network diversity was examined; however, not linked directly with homogeneous peers. While family and friends were included in the assessment, little is known about whether the specific person who

suggested seeking help matters. The current study seeks to replicate and extend the Vogel et al. (2007) study to a military Veteran sample. Sripada et al. (2015) discovered that large social network size, high social network diversity, and overall social support decreased the presence of mental health conditions. This study looked at depression, PTSD, anxiety, and suicide risk in OIF Veterans. This study is unique because it analyzed the types of relationships in a Veteran's support network including fellow Guard and unit members.

As described in Keane et al. (1985), Veterans experience a significant decrease in social support immediately upon separation from the military. However, Veterans with PTSD symptoms who sought professional help experienced a lack of social support for a longer period of time. Veterans with combat exposure and a stronger support system do not report PTSD symptoms or help seeking behaviors for professional services. This study looked at 45 Vietnam Veterans in three groups to determine the impact of social support on Veterans with PTSD. Group 1 consisted of Veterans enrolled in the Vietnam Stress Management program for PTSD. Group 2 (WAV) were considered well-adjusted Veterans who were current employees of the VA and did not report any PTSD symptoms despite combat experience. Group 2 also reported never seeking treatment for combat related challenges. Group 3 (MSV) Veterans were inpatients at the VA without any combat exposure. Material, physical, emotional, advice and positive social engagement types of support were measured. Most of these findings failed to attain any statistical significance or consider social network diversity to account for the success of adjustment of Veterans with combat exposure.

Sayer et al. (2009) conducted a study that found a multitude of barriers to help seeking that could be overcome with the presence of positive social networks among Veterans. This study interviewed 44 US military Veterans from the Vietnam and Afghanistan/Iraq wars. Half of

the study's population was engaged in treatment and half was not engaged in treatment for PTSD. Seven barriers to treatment were identified, including avoidance of trauma related memories, conflicting values and priorities, discouraging treatment beliefs, health care system concerns, mental health knowledge barriers, access barriers and cultural concerns. Most notably, the study indicated that one's social network has a great impact on the decision to seek treatment. Conversely, several factors were determined to facilitate treatment. Three out of four of the themes centered around a public health approach to the reduction of mental health stigma and help seeking stigma. Utilizing key players in the system, natural supports, and the development of treatment encouraging beliefs all attribute to help seeking behaviors. Lastly, psychoeducation around PTSD is a facilitating factor. Because this study's participants were Veterans already in the process of applying for PTSD benefits, it limits the generalizability to Veterans who do not yet recognize symptoms as a manifestation of PTSD. Additionally, further research needs to be conducted for other diagnoses, not just PTSD. While the study identified that Vietnam Veterans were instrumental in promoting help seeking for current war Veterans, there was a lack of follow up to confirm that a Veteran peer garnered more willingness to seek treatment than other social support network types.

Stana et al. (2017) conducted a review of online PTSD social support forums that discovered three broad themes of support: stigma, group identification and embracing conflict. Thematic saturation was utilized to review 466 posts. The most prevalent concern reported in the posts was admitting to mental illness and the feared consequences. Group identification was established by highlighting the differences between military and civilian cultures. Confrontation frequently arose between members with very few systems in place to mitigate aggressive communication. Because group members were more likely to offer informational support

opposed to emotional support, further research is needed to assess the value of peers on emotional support. While this study replicated themes similar to previous research, only one online group was evaluated.

Pierrzak et al. (2009) discovered that lower unit support and post deployment social support in OIF and OEF Veterans resulted in increased PTSD and depressive symptoms. Surveys were sent to home addresses after review of discharge paperwork with facilitation of the Connecticut Department of Veterans Affairs alphabetically until 1,000 possible respondents were obtained. Through the various self-report scales, mental health was assessed as well as combat exposure. The unit Support Scale and Deployment Risk and Resilience Inventory assessed the quality of relationships and degree of cohesion within the unit they belonged to (Vogt et al., 2012). The post deployment social support scale measures the extent to which a Veteran's supports and community provide emotional and instrumental support. Guard and Reservist Veterans of Caucasian decent were the primary respondents. Results are generalized to this demographic. It is important to note that this population of Veterans faces unique challenges while straddling the military and civilian worlds more frequently than full time active duty Veterans.

Hatch et al. (2013) found that separated military members presented with smaller social networks and have higher rates of PTSD and mental health disorders. Overall, being in a relationship of any kind decreased mental health symptoms in Veterans. A total of 8,264 participants filled out self-report questionnaires regarding social network size and mental health symptoms. While this study looked at relationship size, it failed to look at social network diversity apart from military members that were still in the military.

In 579 participants from the San Francisco VA, Dinenberg et al. (2014) identified higher social support as a protective factor against PTSD. This study followed Veterans that did not have PTSD and then followed up five years later to examine the differences between Veterans that did and did not develop PTSD. Social support was measured using the Interpersonal Support Evaluation List (ISEL) looking at three major domains of social support, with these being tangible, appraisal, and belonging (Cohen & Hoberman, 1983). “Tangible” is material aid; “appraisal” is emotional support; and “belonging” is having someone with whom to engage in activities. While this is encouraging, it was not a controlled trial and lacked a significant female population.

A study conducted by King et al. (2006) in Fort Devens, Massachusetts found that PTSD impacts social relationship quality and quantity. King et al. surveyed 2,249 male US Army personnel at two separate points in time. The first period was 18-24 months after returning to the US from the Gulf War. The second period was five years after the first period. After assessing PTSD and social support, the study concluded that PTSD erodes social support networks rather than low levels of social support preventing recovery. This conclusion supports the hypothesis that interventions should cultivate and develop interpersonal skills among Veterans suffering from PTSD. While this study did bring forward a new perspective, it failed to evaluate any female Veterans who are not adequately represented in Veteran research.

Peer Support

The peer support model complements and extends formal health care services by expanding one’s social network and enhancing the quality of health care services by providing emotional, social, and practical assistance and support (Bizub & Davidson, 2011; Jain et al., 2012; McCorkel et al., 2008; Sacca & Ryan, 2011). The goal of the intervention is to empower

members of the system and improve the collaboration between Veterans and professional mental health care providers. According to pilot studies conducted from 2010 to 2019, peer mentoring contributes to improved social and emotional wellbeing, decreased stigma, increased service utilization, and improved help seeking (Dinenber et al., 2014; Resnik et al., 2017).

Many pilot studies have been conducted on peer support interventions with Veterans, each with slightly different emphases and measures. The intervention has been applied to courtrooms, VA settings, National Guard members, and Veterans facing a myriad of challenges, while using both quantitative and qualitative data collection methods. Overall, Veterans reported that the positive example of a peer provider in recovery would instill hope and help minimize beliefs that they would never recover from PTSD and other mental health symptoms (Hundt et al., 2015; Van Voorhees et al., 2019).

While research is limited on a Veteran's perspective on the benefits of peer support, Resnik et al. (2016) drew from a parent study that looked at 102 homeless Veterans enrolled in primary care. Twenty-three participants received the intervention for 12 months and were included in the subset of data and the focus group. Researchers determined that there were positive changes in Veterans' perceptions and attitudes towards receiving support from a peer. Sixty-five percent of the subsample and 83 percent of the full sample reported benefits from having a peer mentor, including social support, improved self-confidence, more positive attitudes, and hopefulness. Veterans reported increased service utilization because peer support helped to remove barriers and obtain benefits while facilitating connections to services like housing, free clothing, and public transportation. Navigation of the VA system including completing paperwork, assisting with transportation, resume writing, and job hunting were also

mentioned as benefits of peer support. The study recommended follow up research to explore the effect of PTSD treatment on the receptiveness to peer mentoring.

As described in Greden et al. (2010), peer support was used as an innovative approach to counter unique barriers of stigma and promote service utilization and adherence to treatment for National Guard and Reserves soldiers in Michigan. Survey data collected from 926 returning soldiers and spouses showed that 40% of the sample screened positive for some mental health problems and 8% screened positive for suicidal thoughts. Alarmingly, a mere 47% indicated seeking help. Table 1 describes the barriers for help seeking reported from this survey. In an attempt to deliver an innovative intervention, a peer support program was put into place. More than 20% of participants were referred to formal treatment programs highlighting unmet clinical needs. According to the researchers, the Buddy-to-Buddy program has a strong potential to augment suicide prevention programs using positive aspects of military culture to change the culture of treatment avoidance. Strategies identified in this program emphasize early identification of self-injurious or self-harm behaviors, resource identification and longer-term support of adherence to treatment. The mission of the Buddy-to-Buddy program is to overcome stigma around help seeking and link those who are facing challenges with the appropriate resources. The program purports that the value of peer support is higher utilization of these effective and cost-effective approaches.

Douds and Hummer (2019) conducted a pilot study of peer support with 13 Veterans enrolled in Veteran Treatment Court (VTC) and 12 Veteran peer support mentors in a Pennsylvania-based program. Researchers followed the participants in 2019 over a five-month period by attending court sessions to gather information. Through formal interviews, the researchers found that mentees identified cultural components against relapses, sense of

belonging, and accountability that is imperative for successful completion. Alabama, Florida, Hawaii, Kentucky, Louisiana, New Jersey, Oklahoma, and Wisconsin have state level programs pertaining to mentoring in VTCs. Despite Buffalo, New York being the first VTC, there is yet to exist a state level program in New York. Further development and research needs to be done on VTC mentoring programs in relation to mental health and treatment adherence.

Van Voorhees et al. (2019) conducted a mixed methods study that collected qualitative data from Veteran focus groups (n=22). Quantitative data was used to validate thematic comparisons between Veterans with and without self-reported PTSD diagnosis and between those that did (and did not) benefit from peer support. Four 90-minute focus groups of five to eight participants were conducted to gather data from homeless Veterans who are currently engaged in services through the VA. According to focus group results, the Veterans had positive experiences in the peer support program where they received support over a six-month time span. Veterans who reported feeling like outsiders were most likely to benefit from the peer mentoring program.

Of 196 articles written on one to one peer mentorship interventions between 1980 and 2012, 18 articles were reviewed that met full criteria for the analysis completed by Williams et al. (2012). The scoping study aimed to summarize the data on one to one peer mentoring interventions. Criteria to be included in the study required interventions be a formal one to one peer mentoring support involving a voluntary participant matched with a mentor who has a common disability, impairment or condition that work to meet a common goal of increased social support. Most studies used a quasi-experimental design that included pre and post assessments (n = 3), postintervention evaluations only (n = 6), or evaluations at several points during the intervention (n = 2). Interviews and questionnaires were used to collect self-report

data. Four studies successfully employed a randomized controlled trial (RCT) design, and one study required the mentors to complete ongoing assessments of the mentees. The most commonly reported outcome measures assessed were program satisfaction and program helpfulness. All programs that assessed satisfaction reported positive results and that the programs were helpful and/or the participants were highly satisfied. Other common outcome measures included depression (n = 3), self-efficacy (n = 3), and some element of social support (n = 3). Some studies reported reduced hospitalizations among individuals with chronic mental illness.

DeBeer et al. (2019) looked at expanding the U.S. Department of Veteran Affairs standard safety planning procedure to suicide risk mitigation, to include a concerned significant other (CSO). Interviews conducted with 29 Veterans revealed that 71% of Veterans reported having a friend or family member in their safety plan would be helpful. While the VA's standard safety planning procedure focuses on utilization of various coping skills, few evidence-based suicide prevention methods directly involve family members or friends, particularly in adult populations. Veterans in the study endorsed friends as the most desired source of support who understand what they are going through. Emotional and tangible support is linked with increased well-being, particularly in those with chronic mental or physical illnesses or conditions (Oxman et al., 1992; Schaefer et al., 1981). Reciprocally, low emotional and tangible support are linked to depression, negative affect, and higher mortality rates (Lyyra & Heikkinen, 2006; Schaefer et al., 1981). Perceived social support has been identified as a protective factor against suicide risk, particularly among those with PTSD and depression (DeBeer et al., 2019; Kleiman & Liu, 2013). These data support the need for adequate levels of emotional and tangible support for Veterans who face suicidal ideation and mental health challenges. This study revealed that many Veterans

who had created a safety plan with their primary care provider did not remember it (Debeer et al., 2019). This finding further reinforces the notion of incorporating peer support into the safety plan as a means of reinforcing that plan once the Veteran is out in the community. Doing so could create an intervention that would provide social support as a suicide prevention tool.

Hundt et al. (2015) explored Veterans' perspectives of peer support for PTSD. A sample of 23 Veterans with extensive treatment experience were assessed in a one-time qualitative interview. This study highlighted Veteran-identified themes as social support, purpose and meaning, normalization of symptoms, hope, link to care and therapeutic benefits as areas identified for possible potential positive outcomes from peer support. Veterans report that peer support would be a useful adjunct to therapy by instilling new skills outside of therapy. Other findings highlighted that peer support increased help seeking behavior vis-a-vis the initiation of therapeutic services and staying in treatment longer. Peer support interventions counteract the culture of resistance and mental health stigma that prevent some Veterans from initiating treatment.

Yoon et al. (2017) looked at homeless patients at four Department of Veterans Affairs clinics randomly assigned to a peer mentor (N=195) or to usual care (N=180). Administrative data on utilization and costs over a six-month follow-up were combined with peer mentors' reports of patient contacts to ascertain the fit of the intervention with this population and its impact on cost of care. This study found that not only did the population engage, but Veterans who received peer support intervention exhibited higher service utilization of outpatient care but no difference in number of ED visits, inpatient care and/or prescription drugs. Peer mentors serve as a conduit to care, help seeking behaviors and engagement with health care providers

Eisen et al. (2012) studied 240 Veterans who participated in a peer-led recovery group, a clinician-led recovery group, and usual treatment to examine the effect of group attendance on outcomes. As the first randomized study of the Vet to Vet intervention in the VA, there was little difference shown in outcomes among the randomized groups; however, this study used a brief three-month intervention period.

Joseph et al. (2015) hypothesized that peer support providers could be utilized through outreach telephone services to Veterans with PTSD who were not currently engaged in mental health services. As noted previously, this population of Veterans has one of the highest rates of suicide attempts and completions. The goal of the mentors was to use appropriate self-disclosure regarding personal experiences with PTSD as a vehicle to build rapport while focusing on skills, strengths, supports, and resources used in their own recovery. Peer mentors were also tasked with addressing stigma around mental health treatment. The success of the intervention was determined by attendance in peer groups led by the mentors. Twenty-three percent of Veterans contacted ultimately engaged in the peer support groups with a significant number attending more than eight sessions. Eight or more sessions was the desired attendance number to be considered successful treatment. Veterans reported that peer support over the phone was helpful. It is important to note that while this number may appear low, this subpopulation of Veterans was receiving no other mental health care.

Jain et al. (2012) purports that peer support interventions can make mental health treatment more acceptable to Veterans, easier to engage in, and comply with, all of which closely align with the findings of Hundt's research (Hundt et al., 2015). Focus groups were conducted at the VA Palo Alto Health Care System, Trauma Recovery Programs, a PTSD Residential Rehabilitation Program, and a Women's Trauma Recovery Program. Six females, nine males and

seven staff were interviewed to gather themes related to perceptions regarding the peer support intervention used in the 60-90 day program. The study reports that

based on the social ecology of PTSD framework maintenance of PTSD and, more crucially, it is within such social bonds that individuals develop the sense of safety necessary for improvement of PTSD symptoms. Second, research specifically examining the role of Veteran-to-Veteran mutual support in improvement in PTSD outcome has identified Veterans as an important and highly valued component of Veteran PTSD patients' social networks (p. 481).

Results of the focus group concluded four main themes; social connectedness, feelings of empowerment, destigmatizing the decision to seek mental health treatment and increasing engagement and adherence to treatment, all of which lend evidence to the fact that peer support can be used as a bridge to increased help seeking behavior and decreased mental health stigma. The report stated that overall, the peer support program instilled an active "culture broker" that assisted Veterans in accessing mental health care.

Chapter III- Research Methods

This study is modeled after Vogel, Wester, Larson, and Hackler (2007) which sought to understand the impact of a social network on the propensity of help seeking behaviors for mental health challenges in college students. While applying this to a Veteran population, this study aims to understand the impact of a Veteran-to-Veteran peer social network on help seeking behaviors. This study will examine the influence of stigma and social network on Veterans' help seeking behavior among Veterans not receiving VA care. Anticipation of risks and benefits of talking to a counselor will assess stigma; then a modified stigma scale will assess anticipated risks and benefits of talking to another Veteran about problems. A widely used social network scale will be modified to include assessment of a Veteran network, so that Veterans' social network will be assessed for size and diversity.

Research Design

This study will use a correlational survey design to allow assessment of the relative influence of stigma and social networks on Veterans' help seeking behaviors. This will develop our understanding of factors that influence help seeking behaviors in Veterans.

Research Questions

The fundamental question guiding this research is, what is the role of Veteran peer social networks in promoting help seeking for Veterans? This study seeks to discover the impact of Veteran peer support on other Veterans to seek help for mental health symptoms. Specific research questions in this study are:

1. Will Veterans perceive greater stigma in talking to a counselor or other mental health professional about mental health symptoms than in talking to another Veteran?
 - a. It is expected that stigma of counselor will be greater than stigma of Veteran.

2. Will the size of a Veteran's social network of Veteran peers be greater than that of their civilian social network?
 - a. It is expected that Veteran peer network of other Veterans will be greater than that of their civilian network.
3. What is the relative influence of stigma, civilian social network, and Veteran social network on a Veteran's help seeking behavior?
 - a. It is expected that diversity of a Veteran's social network influences help seeking.

Participants

Participants will be selected randomly from open Facebook Veteran groups. The researcher has identified 36 open Facebook Veteran groups with a combined population of 25,000. The demographic makeup of the country's Veterans in 2018 was approximately 90.3% male, 9.7% female; and 81.3% White, 12.5% Black, 7.5% Non-White Hispanic, 1.6% Asian, 0.7% American Indian and Native Alaskan, and 0.2% Pacific Islander (National Center for Veterans Analysis and Statistics, 2020). Based on sample size tables of Israel (1992), it is estimated that, assuming a population of 25,000 Veterans in social media platforms, precision level of 0.05, and a 95% confidence level, a sample of 394 will be adequate to test the research questions.

Social media was chosen to recruit participants because most research on Veteran suicide and peer support interventions has been conducted with Veterans currently in VA care. The population of Veterans not receiving VA health care has been identified as being at a higher risk for suicidal ideation and behaviors (U.S. Department of Veteran Affairs, 2018). This study will

use social media solicitation to access a population of Veterans not receiving VA health care as these Veterans are most at risk.

Measuring Instruments

This study will assess the relationship between the independent variables of stigma and social network on the dependent variable of seeking help. Measures of stigma and social network will be modified to examine the role of Veteran peers on stigma and social network to assess the influence of Veteran peers in help seeking behaviors.

Demographics

To verify inclusion of Veterans in the study, participants will be asked to indicate the branch of service and service era in which they served. Participants who indicate no service will be excluded from the survey. Participants then will be asked to indicate their sex, ethnic/racial data, age, combat service status, and marital status. Veterans will be asked their current VA enrollment and utilization status of medical or mental health care in the VA or community-based systems. Veterans will indicate if they received services within the last year, received services in the past six months or more, or never received services.

Disclosure Expectations Scale (DES)

The anticipated risk of seeking help from a counselor will be measured with the Disclosure Expectations Scale (DES; Vogel & Wester, 2003). The DES is an 8-item questionnaire designed to assess expectations about the utility and the risks associated with talking about an emotional or mental health concern with a counselor or therapist. The two identified subscales each consist of four items rated on a 5-point Likert-type scale ranging from 1 (not at all) to 5 (very). Responses are summed for each subscale such that lower scores reflect less anticipated utility and less anticipated risk. A sample item for Anticipated Utility is “How

worried about what the other person is thinking would you be if you disclosed negative emotions to a counselor?” A sample item for Anticipated Risk is “How risky would it feel to disclose your hidden feelings to a counselor?” Vogel et al. (2005) presented validity evidence for the subscales by showing that expectations of the risks and benefits at one time point can predict help seeking usage 2 to 3 months later. In the same study, the DES correlated with comfort with self-disclosure, mental health stigma, and intentions to seek therapy. The internal consistency for the subscales was previously found to be .74 for Anticipated Risks and .83 for Anticipated Benefits (Vogel & Wester, 2003). Similarly, test–retest reliability over a 2-week period has been reported (.77 for Anticipated Risks and .75 for Anticipated Benefits; Shaffer, Vogel, & Wei, 2006). Further internal consistency for the subscales were reported as .81 for Anticipated Risks and .84 for Anticipated Benefits in Vogel’s 2007 study, (Vogel et al., 2007).

Disclosure Expectations Scale-Veteran (DES-V)

To determine the anticipated utility and risk of seeking help from a Veterans peer to peer modality, the DES was adapted by placing the word “Veteran” where the word “Counselor” occurs. Participants will be asked all the same questions on the original DES with the Veteran adaptation. The two subscales, Anticipated Utility and Anticipated Risk, will be rated on a 5-point Likert-type scale ranging from 1 (not at all) to 5 (very). Responses are summed for each subscale such that lower scores reflect less anticipated utility and less anticipated risk. A sample item for Anticipated Utility is “How worried about what the other person is thinking would you be if you disclosed negative emotions to a Veteran?” A sample item for Anticipated Risk is “How risky would it feel to disclose your hidden feelings to a Veteran?”

The psychometric properties of the modified DES-V will be assessed prior to the analysis. Cronbach’s alpha of new items will be compared to existing items. Correlation of

Veteran items with other relationships will be explored. Principal components factor analysis of all items in the scale will be conducted to examine if the items correspond to the scoring procedure.

Social Network Index (SNI)

Social network will be assessed using the Social Network Index (SNI; Cohen, 1997). The SNI consists of 12 items assessing 12 different types of social relationships: spouse, parents, parents-in-law, children, other close family members, close neighbors, friends, workmates, schoolmates, fellow volunteers, and members of groups with and without religious affiliations. For each type of relationship, the participant is asked how many people he or she knows and talks to at least once every two weeks. These questions can be answered with a number between 0 to 6 or '7 or more,' except for parents and parents-in-law, who are naturally restricted to 2, and for the items on romantic partnership, where only a yes or no answer is permitted.

The Social Network Index (Cohen, 1997) will be expanded to include Veteran groups and Veteran peer relationships. To assess the Veteran social network, three questions were added to the SNI. The psychometric properties of the three new questions will be assessed prior to the analysis. Cronbach's alpha of new items will be compared to existing items. Correlation of Veteran items with other relationships will be explored. Principal components factor analysis of all items in the scale will be conducted to examine if the items correspond to the scoring procedure. The additional questions will investigate engagement with Veteran related groups, Veterans in their natural social network as well as their utilization of connecting with Veterans through the tool of social media.

As social network characteristics, the SNI quantifies the size (SNI size) and the diversity (SNI-diversity) of social networks as well as the number of embedded subnetworks (SNI-EN)

within three subscales (Liebke et al., 2017). The size of the social network is defined as the total number of people with whom the respondent speaks to at least once every two weeks and serves as a measure of social isolation/being alone. Social network diversity quantifies the number of social roles. It is calculated as the number of domains of social relationships in which the respondent has regular contact with at least one person. The number of embedded networks is a measurement reflecting the number of different network domains in which the participant is active. Activity in the different domains is defined by having at least four high-contact people within each domain. High scores indicate large size, diversity, or high number of embedded networks.

Help Seeking

Participants will be asked a yes or no question to indicate whether they had ever sought help from a counselor or mental health professional. Participants will be asked a yes or no question to indicate whether they had ever had someone (i.e., Veteran, friend or relative) prompt them to seek therapy, and whether they knew someone who had sought help from a mental health professional. If someone prompted them to seek help, they will also be asked who prompted them (fellow Veteran, friend, sibling, mother, father, other family member, co-worker, general medical doctor, other).

Procedure

In order to recruit participants to the study, the researcher has identified 36 open Facebook groups with a combined membership of approximately 25,000 members. The Qualtrics link will be posted in the groups that do not explicitly state that there can be no solicitation. Participants will complete the assessment using Qualtrics online survey application. Participants will complete demographic questions, then social network questions, stigma, and

finally mental health symptoms. Following the last question of the survey, participants will be invited to request further information: “If you wish to talk to someone about your mental health symptoms, please call the Veteran Crisis Line at 800- 823- 8255 extension 1 or go to their web page at <https://www.Veteranscrisisline.net/>.”

Participants will complete the assessment using Qualtrics online survey application. Participants will complete demographic questions, then social network questions, stigma, and finally mental health symptoms. Following the last question of the survey, participants will be invited to request further information: “If you wish to talk to someone about your mental health symptoms, please call the Veteran Crisis Line at 800- 823- 8255 extension 1 or go to their web page at <https://www.Veteranscrisisline.net/>.”

No identifying information will be requested from participants. All participation will be strictly voluntary. Data, documents, and research materials associated with the study will be retained in a secure file, using a password protected storage device.

Statistics

This study will utilize the following statistical analysis to understand the role of Veteran peer networks in seeking help for mental health symptoms. The initial analysis will be descriptive statistics of the major variables in the analysis to assess variables for normal distribution, skew and kurtosis. The analysis will then assess the psychometric properties of the two measures adapted for this study, the Disclosure Expectations Scale-Veteran (DES-V) and the modification of the Social Network Index (SNI) to include Veteran social networks. Cronbach’s alpha will evaluate the reliability of both modified instruments. Principal components factor analysis will assess if the modified Disclosure Expectations Scale-Veteran (DES-V) has the same

factor structure as the original and can be scored by the same subscales for comparison with the original.

Statistical Analysis

The statistical analysis of the major research questions will then proceed:

- Will Veterans perceive greater stigma in talking to a counselor or other mental health professional about mental health symptoms than in talking to another Veteran?

Scores on the Disclosure Expectations Scale (DES) and the Disclosure Expectations Scale-Veteran (DES-V) will be compared using paired t-tests.

- Will the size of a Veteran's social network of Veteran peers be greater than that of their civilian social network?

Scores on the size subscale of the Social Network Index (SNI) will be compared to the size item that assesses the size of the Veteran peer social network using paired t-tests.

- What is the relative influence of stigma, civilian social network, and Veteran social network on a Veteran's help seeking behavior?

Perceived anticipated benefits and risks of professional counseling, perceived anticipated benefits and risks of Veteran peer support (stigma); size and diversity of social network; on help seeking behavior.

Chapter IV- Results

Demographic and Background Characteristics

The study included 1,338 Veteran survey respondents. As shown in Table 1, the sample was mostly female (64.3%), White (69.8%), 35 and older (87.7%), married or cohabitating (69%), and have 2 or fewer children (68.5%). As shown in Table 2, Army (43.7%) and Air Force (32.6%) Veterans were the most represented in the sample. The vast majority served during the Persian Gulf War era (77.9%). Lastly, Table 2 shows that over half of the participants (53.2%) had combat experience.

Table 3 indicates that close to 70% received VA healthcare before, with 70% receiving care six months ago or less. Regarding the type of VA healthcare the participants reported receiving: 35% received mental health care, 57% received physical health care, and 23% received only VA benefits.

Table 1

Demographic Characteristics of Study Sample

Gender	<i>n</i>	<i>%</i>
Male	451	35.3
Female	821	64.3
Prefer not to say	5	0.4
Total	1277	100.0
Missing	61	
Race	<i>n</i>	<i>%</i>
White	904	69.8
Black or African American	217	16.8
American Indian or Alaska Native	25	1.9
Asian	32	2.5
Hispanic/Latino	107	8.3
Native Hawaiian or Pacific Islander	10	0.8
Total	1295	100.0
Missing	43	

Age	<i>n</i>	%
18 - 24	11	0.8
25 - 34	150	11.5
35 - 44	375	28.8
45 - 54	349	26.8
55 - 64	281	21.6
65 - 74	113	8.7
75 - 84	18	1.4
85 or older	3	0.2
Total	1300	100.0
Missing	38	
Marital Status	<i>n</i>	%
currently married & living together, or living with someone in marital-like relationship	865	69.0
never married & never lived with someone in a marital-like relationship	87	6.9
separated	32	2.6
divorced or formerly lived with someone in a marital-like relationship	244	19.5
widowed	26	2.1
Total	1254	100.0
Missing	84	
Number of Children	<i>n</i>	%
0	250	19.9
1	216	17.2
2	407	32.4
3	226	18.0
4	82	6.5
5	47	3.7
6	19	1.5
7 or more	11	0.9
Total	1258	100.0
Missing	80	

Table 2*Military Experience of Study Participants*

Branch of Military	<i>n</i>	%
Army	582	43.7
Navy	190	14.3
Coast Guard	11	0.8
Air Force	434	32.6
Coast Guard	5	0.4
I am not a Veteran	13	1.0
Marine	98	7.4
Total	1333	100.0
Missing	5	
Era of Service		
Korean War: 1950-1955	4	0.3
Vietnam Era: 1961-1975	86	6.6
Post-Vietnam Era 1976-1990	196	15.1
Persian Gulf War: 1990- Present Year	1011	77.9
Total	1297	100.0
Missing	41	
Ever in Combat		
Yes	691	53.2
No	607	46.8
Total	1298	100.0
Missing	40	

Table 3*VA Healthcare Experience of Study Participants*

Ever Received VA Health Care	<i>f</i>	<i>%</i>
Yes	878	67.7
No	419	32.3
Total	1297	100
Missing	41	
Last time you received VA Care	<i>f</i>	<i>%</i>
6 months or less	616	70.7
One year or less	60	6.9
Greater than one year	195	22.4
Total	871	100
Missing	467	
Received Mental Health Care from VA	<i>f</i>	<i>%</i>
Yes	467	35
No	871	65
Total	1338	100
Received Physical Health Care from VA	<i>f</i>	<i>%</i>
Yes	760	57
No	578	43
Total	1338	100
Received VA Benefits only	<i>f</i>	<i>%</i>
Other/ VA Benefits only	310	23
No	1028	77
Total	1338	100

Social Support

Participants were asked to indicate their social networks by responding to the 12-item Social Network Index. The internal consistency reliability was strong as the Cronbach α was 0.83. Table 4 presents the sources of the Veterans' social support networks and the extent to which each source is representative of the participants' social support networks. As shown in Table 4, the Veterans' children (71%), other Veterans or military friends (61%), and general

friends (59%) are the most common sources of the participants' social support networks. The least common sources of social support are their colleagues in the volunteer work they do (17%), individuals in church or religious groups (14%), and their fellow students or teachers (9%). Table 5 shows that on average, the Veterans have close to five of the 12 high contact roles represented in their social support networks ($M = 4.89, SD = 2.49$), which averages 13 people overall ($M = 13.01, SD = 9.30$). The Veterans have an average of 11 civilian people in their social support networks ($M = 10.52, SD = 7.39$), and they have an average of three fellow Veterans within their social networks ($M = 2.49, SD = 3.23$). Three of the four social support variables displayed in Table 5 are slightly positively skewed. The number of high contact roles was slightly negatively skewed. Three of the four variables fell within the ranges of normality according to the skewness (-1.00 to 1.00) and kurtosis values (-3.00 to 3.00). The notable exception was the number of Veterans in the participants' social support networks, which has a skewness value (1.75) that exceed the range for normality.

Table 4*Social Support Networks of Veteran Study Participants (N=1338)*

	<i>f</i>	<i>%</i>
Children	951	71
Veteran or Military Friends	813	61
Friends	790	59
Relatives	779	58
Parents	738	55
Colleagues	738	55
Neighbors	564	42
Non-Veteran Groups	332	25
Support from Veteran Groups	301	22
People in Volunteer Work	233	17
Church or Religious Groups	182	14
Fellow Students or Teachers	126	9

Table 5*Descriptive Statistics for the Social Support Variables (N=1338)*

	<i>M</i>	<i>Mdn</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>	<i>Minimum</i>	<i>Maximum</i>
Number of High Contact Roles	4.89	5	2.49	-0.11	-0.32	0	12
Number of People in Social Support Network	13.01	12	9.3	1	1.32	0	55
Number of Civilians in Social Support Network	10.52	10	7.39	0.91	1.09	0	45
Number of Veterans in Social Support Network	2.49	1	3.23	1.75	2.83	0	14

Mental Health Experience

Approximately 45% of the sample reported being prompted by someone within their network to seek help for mental health (See Table 6). Medical doctors (16.9%), friends (14.8%),

and fellow Veterans (13.7%) were the sources within the participants' networks that were most likely to prompt the participants to seek care. More than half of the participants (66.6%) sought help for mental health on their own, witnessed fellow Veterans who sought help (87.2%), and witnessed family or friends who sought help (86.1%).

Table 6

Veteran Participants' Mental Health Experience

Have you ever had someone prompt you to seek help from a mental health professional?	<i>f</i>	<i>%</i>
Yes	568	44.7
No	704	55.3
Total	1272	100.0
Missing	66	
Person Who Prompted Past Mental Health Help seeking	<i>f</i>	<i>%</i>
Sibling	51	3.8
Friend	198	14.8
Other Family Member	181	13.5
Colleague	61	4.6
Supervisor	37	2.8
General Medical Doctor	226	16.9
Fellow Veteran	183	13.7
Sought Mental Health Help	<i>f</i>	<i>%</i>
No	421	33.4
Yes	839	66.6
Total	1260	100.0
Missing	78	
Fellow Veteran Ever Sought Mental Health Help	<i>f</i>	<i>%</i>
Yes	1099	87.2
No	161	12.8
Total	1260	100.0
System	78	
Friend or Family Ever Sought Mental Health Help	<i>f</i>	<i>%</i>
Yes	1083	86.1
No	175	13.9
Total	1258	100.0
System	80	

Mental Health Help Seeking Stigma

Participants were asked to respond to the eight-item Disclosure Expectations Scale, which assessed their expectations about the utility and risks associated with talking about an emotional or mental health concern with a counselor or therapist. It is divided into two subscales, *perceived risks* ($\alpha = 0.87$) and *perceived benefits* ($\alpha = 0.81$) that both had strong internal reliability as shown in Table 7. The remaining items assessed the utility and risks associated with reaching out to Veterans. It had an internal consistency of 0.66.

As shown in Table 7, the Veterans perceived some stigma related to talking to a counselor ($M = 3.07$; $SD = 1.17$) and a fellow Veteran ($M = 2.90$; $SD = 0.68$). They also perceived some benefit to talking to a counselor ($M = 3.15$; $SD = 1.01$). The distributions for all three variables were negatively skewed but fell within the normal range for normality. The kurtosis values also fell within the normal ranges for normality (i.e., between -3 and +3).

Table 7

Descriptive Statistics for the Mental Health Stigma Questions Variables

	<i>N</i>	<i>M</i>	<i>Mdn</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>	<i>Min</i>	<i>Max</i>	<i>Cronbach α</i>
Anticipated Risks of Talking to A Counselor	1160	3.07	3.00	1.17	-0.13	-1.04	1	5	0.87
Anticipated Benefits of Talking to A Counselor	1142	3.15	3.00	1.01	-0.03	-0.58	1	5	0.81
Stigma Related to Talking to Another Veteran	1140	2.90	2.88	0.68	-0.27	0.20	1	5	0.66

Research Question 1

A paired-samples *t* test was used to determine whether Veterans perceive greater stigma in talking to a counselor or other mental health professional about mental health symptoms than

in talking to another Veteran. Due to missing data, only 1138 participants were included in this analysis. The normality assumption that is required to perform a paired samples t-test was met as the skewness values of -0.13 and -0.27 fell within the normal range of -1 to +1. The results showed that Veterans perceive greater stigma talking to mental health professionals ($M = 3.08$, $SD = 1.17$) than talking to their fellow Veterans ($M = 2.90$, $SD = 0.68$) about mental health symptoms, $t(1137) = -5.86$, $p < .001$. Thus, Hypothesis I is statistically supported.

Research Question 2

A paired-samples t test was used to determine whether the size of Veteran's social networks of Veteran peers is greater than that of their civilian social network. The variables met the assumption of normality as the skewness and kurtosis values for both variables fell within the normal ranges. The results showed that among the full sample of participants ($n = 1338$) that were included in the analysis, the size of the Veterans' network of Veteran peers ($M = 2.49$, $SD = 3.23$) is significantly *smaller* than that of their civilian peers ($M = 10.52$, $SD = 7.39$), $t(1337) = 44.37$, $p < .001$. Thus, Hypothesis II is *not* statistically supported.

Research Question 3

Multiple logistic regression is the appropriate statistical test to use to determine the relative influence of perceived anticipated benefits and risks of professional counseling, perceived benefits and risks of Veteran peer support, and size and diversity of social networks on help seeking, which is a dichotomous dependent variable (Tabachnick & Fidell, 2013). One advantage of logistic regression is that it is able to mix different types of predictors (e.g., scaled and categorical) simultaneously, which is applicable to the current study that will examine multiple predictors (Tabachnick & Fidell, 2013). While there are minimal assumptions of the logistic regression, correlations were used to assess whether there was a multicollinearity threat

to logistic regression. Multicollinearity exists when the correlation among the predictors in the regression model are too high ($r = 0.80$) and can weaken the analysis by inflating the size of the error terms in the model (Tabachnick & Fidell, 2013). As shown in Table 8, there was no threat of multicollinearity as the correlations among the predictor variables did not exceed 0.80.

The linear part of the logistic regression equation is referred to as a logit (Tabachnick & Fidell, 2013), which is then used to find the odds ratio (i.e., the odds of experiencing infidelity or not).

Binary logistic regression was selected as the statistical test to answer Research Question 3 in SPSS version 26. Help seeking experience (yes or no) was added as the dependent variable and perceived anticipated benefits and risks of professional counseling, perceived benefits and risks of Veteran peer support, and size and diversity of social networks on help seeking were added as the independent variables. Outliers will be identified as having residuals that are 3 standard deviations from the average residual. There were no outliers identified.

A classification plot was run to determine the accuracy of the prediction model by comparing the percent of accurate classification of individuals in each of the two help seeking categories based on model predictions. The higher the classification rate, the stronger the model (Tabachnick & Fidell, 2013). The classification table results provided the percentage of cases that were accurately predicted to be in the yes help seeking category (i.e., sensitivity) and those that were accurately predicted to be in the no help seeking category (i.e., specificity). The prediction model yielded a sensitivity rate of 92%, a specificity rate of 17%, and an overall prediction accuracy of 67.4%. This compares to a sensitivity rate of 100%, a specificity rate of 0%, and an overall prediction accuracy of 67.2% that was yielded by the constant (i.e., no predictors) model.

All independent variables were entered into the logistic regression model to assess whether they are significant predictors of whether or not the Veterans sought help in mental health. The statistically significant χ^2 statistic, $\chi^2 (5) = 79.38, p < .0001$ for the omnibus test of model fit, shows that the combined effect of all five predictors does a good job in predicting whether a Veteran sought help or not. The model explained about 9% (Nagelkerke $R^2 = 0.09$) of the variance in determining whether a Veteran sought help or not.

Table 9 indicates the relative contribution of each of the independent variables in their ability to determine whether or not a Veteran sought help. The logistic coefficients (B s) are the natural logs of the odds ratio (e^B). SPSS provides the $\text{Exp}(B)$ results for each predictor which indicates how a change in each predictor (e.g., stigma related to talking to another Veteran) by 1 unit multiplies the odds of an individual seeking help for their mental health (Tabachnick & Fidell, 2013). The Wald test is the squared logistic coefficient (B) divided by the squared standard errors (Tabachnick & Fidell 2013). It was used to determine whether the individual contributions of each independent variable on the prediction of whether or not someone sought help is statistically significant or not at the 0.05 significance level. As shown in Table 9, the anticipated benefits of talking to a counselor ($B = 0.09, Wald = 21.47, p < .001$), the number of civilians in the Veterans' social support networks ($B = -0.05, Wald = 20.57, p < .001$), and the number of fellow Veterans in the Veterans' social support network ($B = 0.04, Wald = 3.94, p < .05$) were the most important predictors of a Veteran's help seeking behavior. Specifically, Veterans are 1.10 times more likely to seek help for every 1 unit increase in their perceptions of the benefits for talking to a counselor. They are 0.96 times less likely to seek help for every 1 person increase in the number of civilians in their social support networks. Lastly, Veterans are

1.05 times more likely to seek help for every 1 person increase in the number of Veterans they include in their social support networks.

Table 8

Correlations Among Predictors

	1	2	3	4	5
1. Stigma Related to Talking to Another Veteran	1.00	-0.62	-0.55	0.03	0.00
2. Anticipated Risks of Talking to A Counselor		1.00	0.42	0.13	0.03
3. Anticipated Benefits of Talking to A Counselor			1.00	-0.06	0.01
4. Number of Civilians in Social Support Network				1.00	-0.39
5. Number of Veterans in Social Support Network					1.00

Table 9

Logistic Regression Results (N=1338)

	B	SE	Wald	df	p	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Stigma Related to Talking to Another Veteran	0.03	0.02	3.41	1	0.060	1.03	1.00	1.07
Anticipated Risks of Talking to a Counselor	0.01	0.02	0.50	1	0.480	1.01	0.98	1.05
Anticipated Benefits of Talking to a Counselor	0.09	0.02	21.47	1	0.001	1.10	1.06	1.14
Number of Civilians in Social Support Network	-0.05	0.01	20.57	1	0.001	0.95	0.94	0.97
Number of Veterans in Social Support Network	0.04	0.02	3.94	1	0.050	1.04	1.00	1.09
Constant	-0.90	0.34	6.81	1	0.010	0.41		

Chapter V - Discussion, Conclusion, and Recommendations

Introduction and Summary of the Findings

Veterans are far less likely to seek professional mental health services due to the cultural beliefs that promote stigma (Stana et al., 2017). Veterans continue to resist formal services for fear of public stigma and the impact of self-stigma (Seidman et al., 2018). Veterans often avoid seeking professional mental health services due to cultural factors associated with stigma. This behavior has put this population at a higher risk of suicide than their civilian counterparts (DeBeer et al., 2019). Veterans also report resisting services out of fear that non-Veterans are not equipped to deal with their struggles (Hall, 2011). The gap in the literature that was identified in previous studies is the lack of understanding about the influence of Veteran peer social networks in promoting help seeking behavior (Clafferty et al., 2019). Although several studies have shown that Veteran peer-to-peer support helps them get to treatment, all those studies used clinical populations already receiving VA services (Seidman et al., 2018). This means that millions of non-clinical Veterans are in need of mental health care. Furthermore, most Veterans who die by suicide do not access or qualify for VA services, and are not engaged in clinical treatment (U.S. Department of Veteran Affairs, 2019). The present study used a non-clinical sample to assess the relative influence of Veteran social networks on predictor variables of help seeking behaviors, stigma surrounding talking with a counselor, stigma surrounding talking with a Veteran, civilian social network, and Veteran social network.

The purpose of the current study was to investigate the impact of social networks on stigma and help seeking behaviors in a non-clinical sample. The researcher sought to understand the value of peer support in a social network on Veterans' decisions to seek professional mental health care. Studies have demonstrated that peer support with Veterans reduces stigma and

facilitates help seeking behavior for their mental health symptoms (Drebing et al., 2018). This behavior is anchored on the fact that Veterans inherently trust other Veterans, resulting in a tendency to prefer Veteran therapists as opposed to public health care facilities. Peer mentoring helps build social networks within one's community and can be a function of natural community-based supports (Drebing et al., 2018). The results of the current study sought to improve understanding of help seeking behaviors of Veterans outside the VA health care network. The sample for the present study comprised 1,338 subjects from membership rolls of 36 Facebook Veteran groups. The research findings indicated that the Veterans perceived greater stigma related to talking to a counselor ($M = 3.07$; $SD = 1.17$) than [talking to] a fellow Veteran ($M = 2.90$; $SD = 0.68$). Also, the researcher established that the size of the Veterans' network of Veteran peers ($M = 2.49$, $SD = 3.23$) was significantly smaller than that of their civilian network of peers ($M = 10.52$, $SD = 7.39$). The research found that the size of the Veterans social network show that all five predictors were significant predictors of help seeking behavior. Anticipated benefits of talking with CN and size of veteran network were the most important factors in predicting of health-seeking behaviors among the Veterans.

Implications of Findings

The present study's findings are summarized and interpreted to affirm whether they are consistent or inconsistent with past literature focusing on help seeking behaviors for a Veteran on their mental health symptoms. Previous studies related to Veterans' help seeking behaviors and mental health have been extensively presented in the literature review. This interpretation provides an opportunity to link the present research findings by connecting with the past literature. Therefore, the discussion section focuses on the consistency and inconsistency of the

present study results with previous studies and also explains inconsistencies with previous empirical work on Veterans' help seeking behaviors concerning health problems.

RQ1. Will Veterans perceive greater stigma in talking to a counselor or other mental health professional about mental health symptoms than in talking to another Veteran?

The first research question examined whether Veterans perceive greater stigma in talking to a counselor or other mental health professional about mental health symptoms than in talking to fellow Veterans. As expected, the researcher determined that Veterans perceive greater stigma in talking to a counselor or other mental health professionals about mental health symptoms than in talking to another Veteran. There are multiple reasons for this effect, including perceived risks and benefits, the military culture, and trust levels they have between themselves and between Veterans and civilians.

The Veteran population is considered an underserved and vulnerable populations encountering considerable barriers to seeking mental health care. As noted in the literature, Veterans perceive greater risks talking about and disclosing some military encounters such as sexual trauma to aid their mental health treatment (Murray-Swank et al., 2018). Accordingly, there is a low level of perceived risks disclosing these encounters to a Veteran counselor than to a civilian counselor. Similarly, the perceived benefits of disclosing to fellow Veterans are also higher than civilians. In light of this argument, Veterans report resisting health care services out of fear that non-Veterans have limited knowledge to address their health concerns (Hall, 2011). Furthermore, the civilian therapists lack mastery of specific Veteran needs resulting in less than adequate care, higher perceived risks, and less trust in mental health providers. The findings of the present study and the past literature indicate that the anticipated risks and benefits also influence Veterans to prefer talking to fellow Veterans rather than civilians about their mental

health care status. Specifically, the high anticipated benefit of talking to a Veteran counselor has a significant influence on their preference to talk to Veterans rather than civilian counselors.

Secondly, a high level of stigma associated with a Veteran's preference to talk to fellow Veterans rather than to civilians is the military culture (Kulesza et al., 2015). As concluded by Myer et al. (2016), an active-duty military officer is heavily dissuaded from seeking mental health support either directly or indirectly, and this practice impacts an officer after service and contributes to the Veteran culture of avoiding seeking help from civilians. A similar study by Hernandez et al. (2016) also found that military cultural norms, values, and expectations weigh heavily on military members' decisions to interact with civilian therapists to seek treatment. As such, the Veterans are not willing to disclose some issues of mental status to civilian therapists. Seidman et al. (2018) also observed that in comparison to civilians, Veterans have more barriers to seeking care. As found by Kulesza et al. (2015) and Heath et al. (2017), the impacts of a military career add to the continuation of stigma among military populations.

The third aspect relates to trust and confidence existing between Veteran peers compared to civilians. Several studies demonstrated the importance of building and sustaining trust in eliciting health social support. For instance, Haro et al. (2019) found that a high level of trust has a positive impact on the perception of care and support gained from health care. In the context of this research, it is evident that Veterans have greater trust in fellow Veterans than in civilian counselors. This is confirmed by Hundt et al.'s (2015) findings that Veterans inherently trust other Veterans. Further, Drebing et al. (2018) also supported the significance of peer trust and confidences, noting that Veterans' peer mentoring and support helps to build social networks within one's community. This is the reason they commonly prefer Veteran therapists because they can comfortably talk to them closely and disclose their mental status and previous military

experiences as opposed to civilian therapists. However, this is not a feasible option for all Veterans due to various barriers such as eligibility of VA care, access barriers, and stigma associated with help seeking as a Veteran (Hundt et al., 2015). Thus, trust is a critical factor influencing Veterans' stigma, especially on talking to Veterans rather than civilians.

Veterans are far less likely to seek professional mental health services due to the cultural beliefs that promote stigma (Stana et al., 2017). The high level of public stigma explains why Veterans continue to resist formal services. It is also noted that civilian counselors and therapists are not well versed in specific Veteran needs resulting in less than adequate care and less trust in mental health providers (Drebing et al., 2018). However, some studies have emphasized that self-stigma rather than public stigma influences help seeking behaviors. For instance, a study by Seidman et al. (2018) explored the impact of self and public stigma on behavioral health utilization in active-duty military members. The findings from the study affirmed that self-stigma may be the primary barrier to help seeking behaviors. Also, Vogel et al. (2006) found that self-stigma mattered more in Veterans' help seeking habits therefore, Veterans with a high degree of self-stigma are likely to formulate a course of action to seek help and will detect more barriers to seeking care. Therefore, whereas more efforts have focused on reducing public stigma, the present study suggests that this behavior may be unrelated to help seeking behaviors among Veterans. Therefore, Veterans perceive a higher stigma talking to a counselor than talking to fellow Veterans.

RQ2: Will the size of a Veteran's social network of Veteran peers be greater than that of their civilian social network?

In the present study, the researcher assessed whether the size of Veterans' social networks of Veteran peers is greater than a civilian social network. On the impact of the social

network, the results of the present study indicated that the size of the Veterans' network of Veteran peers was significantly smaller in size than civilian social network size. The researcher also noted that greater Veteran peer size had a significantly greater influence on Veterans' help seeking behaviors on mental health treatment. Thus, the size of social networks had a significant positive effect on promoting the help seeking behaviors of Veterans. The findings of the present study established a significant influence of professional counseling, peer support, and the size and diversity of social networks on the help seeking of Veterans. However, Hatch et al. (2013) found that separated military members were more likely to have smaller social networks, participate in fewer social activities, and have higher rates of PTSD and mental health disorders. Overall, being in a relationship of any kind decreased mental health symptoms in Veterans.

The present study's findings demonstrated that Veterans, in general, were prompted by people within their network to seek help for mental health. The researcher found that the most influential groups in the social network were medical doctors (16.9%), followed by friends (14.8%), and fellow Veterans (13.7%). These results further indicated that social networks had a great influence on the help seeking behaviors of Veterans. The findings of the present study established a significant influence of professional counseling and Veteran peer support on social networks on the help seeking of Veterans regarding their mental health problems. Additionally, the researcher assessed the expectations of Veterans regarding the benefits and risks associated with chatting about their emotional or mental health concern with a counselor or therapist, civilian, and fellow Veterans or military personnel. The results indicated that anticipated risks and benefits of talking to these predictors influenced Veterans' help seeking behaviors for mental health care. Also, the findings of the present study indicated that Veterans anticipate higher benefits than risks talking to counselors and fellow Veterans than talking to civilians.

Previous studies have demonstrated that Veterans with social support networks experience fewer mental health symptoms (Van Voorhee et al., 2019). Consistent with earlier studies, the results of the present study indicated that social networks had a greater influence on help seeking behaviors of Veterans. Also, the findings of the present study demonstrated that Veterans, in general, were prompted by people within their network to seek help for mental health. The most influential groups in the social network included medical doctors, friends, and fellow Veterans. The researcher also found a significant influence of professional counseling and Veteran peer support on social networks on the help seeking of Veterans regarding their mental health problems. This finding supported Vogel's second step model assertion that group normalization of help seeking is beneficial for help seeking behavior (Vogel et al., 2006). The model indicated that people seeking mental health treatment are prompted by others in their social network. On the same perspective, Sayer et al. (2009) found that positive social networks resolve a multitude of barriers to help seeking behaviors among Veterans.

The findings of the previous studies noted above indicate that barriers to treatment included avoidance of trauma-related memories, conflicting values and priorities, discouraging treatment beliefs, health care system concerns, mental health knowledge barriers, access barriers, and cultural concerns. Also, Sayer et al. (2009) observed that Vietnam Veterans were instrumental in promoting help seeking for current war Veterans, implying the importance of peer influence on the social network. Further analysis by Hatch et al. (2013) focused on the role of social networks in creating a relationship that influences people into help seeking behaviors. The researcher found that separated military members had smaller social networks, participated in fewer social activities and had higher chances of having mental health disorders. The findings of the present study suggest that social networks create and improve relationship, trust, and

confidence between users needed to influence them into engaging in help seeking behaviors for mental health treatment in Veterans.

The influence of the social network on help seeking behaviors is closely linked to the peer support achieved from members of the social network community. The model of peer support works to complement and extend formal health care services by expanding one's social network. Peers' support also enhances the quality of health care services by providing emotional, social, and practical assistance and support (Bizub & Davidson, 2011; Jain et al., 2012). Social networks were also found to help empower members of the system and improve the collaboration and relationship of Veterans with counselors, fellow Veterans, and military officers. The benefits of peer support have been demonstrated by Resnik et al. (2017) indicating mentoring contributes to improved social and emotional wellbeing, decreased stigma, increased service utilization, and improved help seeking. Resnik et al. (2016) identified the benefits of peer networking as social support and improved confidence, attitudes, and hopefulness of Veterans. The researchers also reported increased service utilization as peer support help to remove obstacles hindering Veterans from seeking mental health treatment. Resnik et al. (2016) noted positive changes in Veterans' perceptions and attitudes upon receiving support from peers in the social network. As noted by Greden et al. (2010), peer support in these networks is used as an innovative approach to counter unique barriers of overcoming stigma and foster help seeking behaviors for utilization and adherence to treatment. From past research and the present study, it is plausible to affirm that the impact of social networks on help seeking behaviors for Veterans with mental disorders can be attributed to the support gained from peers.

On the size and diversity impact of the social network, the results of the present study indicated that the size of the Veterans' peer network was significantly smaller in size than the

civilian social network. A greater Veteran peer size had a significantly greater influence on Veterans' help seeking behaviors on mental health counseling. The findings of the present study also indicated that help seeking behaviors were closely connected with decreased mental health. These findings are consistent with Sripada et al. (2015) affirmation that low social support and small social network size may be associated with a variety of negative mental health outcomes. Also, Sripada et al. (2015) discovered that large social network size, high social network diversity, and overall social support decreased mental health conditions due to enhanced help seeking behaviors. Based on the present study's findings and past literature, it is evident that the larger size of social network and diversity promote the help seeking behaviors of Veterans.

RQ3: What is the relative influence of stigma, and Veteran social network diversity on a Veteran's help seeking behavior?

The third research question examined whether the stigma and social network of the Veterans and civilians influence help seeking behaviors of Veterans with mental health symptoms. Accordingly, the perceived anticipated benefits and risks of professional counseling were expected to influence help seeking behaviors. This also applies to perceived anticipated benefits and risks of Veteran peer support (stigma) as well as the size and diversity of social networks. Regarding the influence of stigma on help seeking behaviors, the study found that perceived stigma had a significant impact on the help seeking behaviors of Veterans. In support of this assertion, Seidman et al. (2018) affirmed that both self and public stigma had adverse effects on behavioral health utilization among military officers. However, self-stigma mattered more than public stigma in Veterans' help seeking behaviors thus Veterans with a high degree of self-stigma were less likely to formulate a course of action to seek help on their mental health symptoms. Self-stigma hinders Veterans with mental illness from seeking or following through

with treatment (Heath et al., 2017; Kulesza et al., 2015). A significant number of Veterans with mental health issues fail to access formal care, and those seeing mental health services do not pursue follow-up care (Britt et al., 2015; Kulesza et al., 2015). Therefore, both the present and previous studies confirm that stigma is a key aspect influencing the behavior of Veterans to seek help on their mental health symptoms.

On the impact of the civilian and social networks, the study's finding indicated that the number of civilians in the Veterans' social support networks and the number of Veterans in their Veterans' social support network were the most important predictors of Veteran help seeking behavior. Specifically, the researcher found that Veterans were 1.10 times more likely to seek help for every 1 unit increase in their perceptions of the benefits of talking to a counselor. Also, the research findings showed that Veterans were 0.96 times less likely to seek help for every 1 person increase in the number of civilians in their social support networks. Lastly, the researcher found that Veterans were 1.05 times more likely to seek help for every 1 person increase in the number of Veterans they include in their social support networks. Based on the finding, it is plausible to conclude that Veterans in social networks had the most influence on Veteran's help seeking behaviors followed by the Veterans, and finally the civilians.

These results are consistent with multiple studies such as the Sayer et al. (2009) observations that a multitude of barriers to help seeking could be overcome with positive social networks among Veterans. However, the impact of the social network, whether Veterans or civilians, is influenced by anticipated perceived risks and benefits of talking to others in the social network. As noted in this research, a high anticipated perceived risk of talking to others in social support networks reduced the help seeking behaviors of Veterans. Similarly, help seeking behaviors of Veterans are positively impacted by perceived professional benefits. Thus, the

higher level of perceived benefits fostered help seeking habits for mental health care among this population. As observed by Cozy et al. (2013), since the general public had limited knowledge of the effectiveness of mental health services, overcoming the obstacles of perceived risks and highlighting the potential benefits can be an effective tool to increasing help seeking behaviors. Furthermore, individuals are more likely to seek treatment when the issue appears to be a more common concern among their specific group or culture (Cozy et al., 2013). This behavior explains why Veterans are more comfortable talking to peers rather than civilians regarding their mental status. As observed by Hundt et al. (2015), the lower perceived risk is closely linked to trust and confidence that provides an insight into why Veterans tend to prefer Veteran therapists as opposed to public health care facilities. However, seeking health care from Veteran therapists is hindered by various factors, including accessibility and availability of professionals.

Recommendations

Contribution to Social Change

The research findings of the present study may have a positive contribution to society, the academic, and general practice. The potential social change benefits are connected to the improved health and well-being of Veterans in the community. These findings may be used by public health policymakers to improve the public health approach towards Veterans to combat the stigma around seeking treatment (Frey et al., 2016). The second benefit is connected to a safer community in terms of increasing the number of Veterans who engage in help seeking behaviors. It is well-established that persons with mental health problems are at a higher risk for suicide (U.S. Department of Veteran Affairs, 2019). Based on these findings, the policy formulation should implement the use of Veteran peer social networks to reduce public and self-stigma to address mental health problems for a safer and healthier Veteran community. The

study shows that having a diverse social network that includes peer Veterans will encourage Veterans to seek help. Thus, peers increase help seeking behavior and may help Veterans who do not seek care, seek care and lessen the suicide rate. Society benefits from the reduced cost of crisis care to the Veterans suffering from mental illness. Early help seeking will reduce the costs incurred by family and government to treat severe cases of mental illness for Veterans and allow them to proactively seek care before it gets to a crisis level (Kulesza et al., 2015).

Contribution to Research

The research findings of the present study may also benefit scholars and researchers as it fills an empirical gap and improves existing literature on the impact of stigma and peer support on help seeking behaviors of Veterans. Considering that online social network is a new phenomenon, researching improving mental health and wellbeing of Veterans is useful to scholars and researchers in the field of social work and psychology (DeGraff et al., 2016). Primarily, most studies on help seeking behaviors for the mental health of Veterans are based on qualitative methods (Primack et al., 2017). The current research demonstrated that the quantitative method can provide objective results on the impact of social networks and public stigma on help seeking behaviors. The correlational survey design effectively assessed the relative influence of stigma and social networks on Veterans' help seeking behaviors. The research approach generated descriptive and regression analysis to determine the effects of independent variables on the dependent variable. The study supported the Information Processing Model regarding the decision to seek professional health. The results indicated that help seeking behaviors of Veterans and overcoming barriers to seek and receive mental health care can be influenced by social network support (Vogel et al., 2007). Thus, the model is relevant in guiding studies of similar nature. To conclude, the research makes a positive contribution to

the use of methodology, theory improvement, and empirical research in managing mental health through help seeking behaviors.

Contribution to Practice

In practice, the present study provided data and information to various stakeholders involved in managing the health affairs of Veterans, particularly the government through Veterans Affairs and community based agencies. Mental health challenges are prevalent among Veterans, and this has been attributed to the poor help seeking behaviors of this population (Kulesza et al., 2015). By identifying the impact of stigma and social network support, these findings help VA and policymakers formulate public policies and approaches for managing the problem of mental health and the elevated suicide rates in Veterans. The policy would improve help seeking behaviors of this population to enhance utilization of treatment options. Because not all veterans qualify for VA care, this study shows that community-based and nonprofit agencies can employ peer support to bolster social network size and diversity as a community-based intervention against suicide.

Limitations

Although the present research attained its purpose and objectives, the findings could have been affected by some limitations in methodology regarding the sampling, instruments of measurement, and procedures. Accordingly, 1277 Veterans took part in the study. Even though the sample size is relatively large as preferred in quantitative studies to yield credible results, it is skewed towards female Veterans and against male Veterans (Walliman, 2017). Because participants were mostly women, it cannot be generalized to a military population which is predominately male.

Social media was chosen to obtain and access a population of Veterans, but this left out Veterans who do not access or utilize social media platforms. Besides social media, other sources should be considered in future similar studies. This would potentially include older eras of Veterans as this population was predominantly from the Persian Gulf War. There was also a significant amount of missing data which could be attributed to using the online platform only.

The use of the quantitative method alone did not allow the researcher to get insightful information on the subject and explain any emerging issues of importance that could not have been captured in the questionnaires. A mixed study would be appropriate in eliciting rich insights and explanations from the participants' points of view. Hence, the researcher could have gained additional data and information of significance to improve the credibility of the findings.

Recommendations for Future Research

Taking note of the limitations in the present study, the following considerations are necessary for future similar research: First, future similar studies ought to recruit Veterans from both online and physical sources to capture Veterans who may not engage in social media. This makes the findings generalizable to the entire population. A future similar study should consider using a mixed research methodology to mitigate the limitation of using the quantitative method. This allows the researcher to obtain rich information from the study subjects to complement data from the quantitative method.

Conclusion

The purpose of this quantitative correlation survey was to investigate the impact of stigma, social network size and diversity on help seeking behaviors in a non-clinical sample. Accordingly, the findings indicated that Veterans perceive greater stigma talking to a counselor or other mental health professional about mental health symptoms than talking to Veteran peers.

The study's findings further established that the size of a Veteran's social network of Veteran peers is less than that of their civilian social network. Consistent with previous studies, the stigma, civilian social network, and Veteran social networks influence a Veteran's help seeking behavior. These findings were expected and consistent with previous research. This consistency was an indication that correlation research design was suitable in assessing the impact of social network and stigma in Veterans' help seeking behaviors. The guiding theoretical framework was the Information Processing Model regarding a decision to seek professional health.

The findings of this study indicated that help seeking behaviors of Veterans can be influenced by social network supports. Also, the study's findings depicted that overcoming barriers to seek health care among Veterans is also influenced by the size and diversity of social networks as well as the perceived benefits and risks of talking to others in this network.

Consistent with previous studies, the present research confirmed a positive link between stigma and negative help seeking behaviors among Veterans. As expected, the study's finding indicated that perceived stigma had a significant impact on the health-seeking behavior of Veterans. However, self-stigma mattered more than public stigma in fostering help seeking behaviors. Veterans with a high degree of self-stigma were less likely to formulate a course of action to seek help and will detect more barriers to seeking care. The results of the present study indicated that Veterans in a social network have a greater influence on help seeking behaviors than that of civilian networks. The influence of the social network on help seeking behaviors was closely linked to the peer support achieved from members of the Veteran social network community. The findings suggested that the diversity of the social network was a significant factor. These results were expected and imply that peer social network support is key in promoting Veterans' help seeking behaviors for mental health care thereby combating self-

stigma that often hinders help seeking behavior. Therefore, any intervention towards improving the mental health of Veterans must focus on combating self-stigma through peer social network support. This finding had a positive contribution to society, the academic, and practice in general.

References

- Akutsu, P. D., Snowden, L. R., & Organista, K. C. (1996). Referral patterns in ethnic-specific and mainstream programs for ethnic minorities and Whites. *Journal of Counseling Psychology, 43*(1), 56–64. <https://doi.org/10.1037/0022-0167.43.1.56>
- Anderson, J. R. (1995). *The Architecture of Cognition* (1st ed.). Psychology Press.
- Bizub, A. L., & Davidson, L. (2011). Stigma-busting, compeer, and the psychology student: A pilot study on the impact of contact with a person who has a mental illness. *The Humanistic Psychologist, 39*(4), 312–323. <https://doi.org/10.1080/08873267.2011.618039>
- Britt, T. W., Jennings, K. S., Cheung, J. H., Pury, C. L. S., & Zinzow, H. M. (2015). The role of different stigma perceptions in treatment seeking and dropout among active duty military personnel: Correction to Britt et al. (2015). *Psychiatric Rehabilitation Journal, 38*(4), 379. <https://doi.org/10.1037/prj0000170>
- Cameron, L., Leventhal, E. A., & Leventhal, H. (1993). Symptom representations and affect as determinants of care seeking in a community-dwelling, adult sample population. *Health Psychology, 12*(3), 171–179. <https://doi.org/10.1037/0278-6133.12.3.171>
- Cohen, S. (1997). Social ties and susceptibility to the common cold. *JAMA: The Journal of the American Medical Association, 277*(24), 1940–1944. <https://doi.org/10.1001/jama.277.24.1940>
- Cohen, S., & Hoberman, H. (1983). Positive events and social supports as buffers of life change stress. *Journal of Applied Social Psychology, 13*, 99-125
- Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist, 59*(7), 614–625. <https://doi.org/10.1037/0003-066x.59.7.614>

- Coyz, E. K., Horwitz, A. G., Eisenberg, D., Kramer, A., & King, C. A. (2013). Self-reported barriers to professional help seeking among college students at elevated risk for suicide. *Journal of American College Health, 61*(7), 398–406.
<https://doi.org/10.1080/07448481.2013.820731>
- DeBeer, B. B., Matthieu, M. M., Kittel, J. A., Degutis, L. C., Clafferty, S., Qualls, N., & Morissette, S. B. (2019). Quality improvement evaluation of the feasibility and acceptability of adding a concerned significant other to safety planning for suicide prevention with veterans. *Journal of Mental Health Counseling, 41*(1), 4–20.
<https://doi.org/10.17744/mehc.41.1.02>
- DeGraff, A. N., O’Neal, C. W., & Mancini, J. A. (2016). The significance of military contexts and culture for understanding family well-being: Parent life satisfaction and adolescent outcomes. *Journal of Child and Family Studies, 25*(10), 3022–3033.
<https://doi.org/10.1007/s10826-016-0471-0>
- DeViva, J. C., Sheerin, C. M., Southwick, S. M., Roy, A. M., Pietrzak, R. H., & Harpaz-Rotem, I. (2016). Correlates of VA mental health treatment utilization among OEF/OIF/OND Veterans: Resilience, stigma, social support, personality, and beliefs about treatment. *Psychological Trauma: Theory, Research, Practice, and Policy, 8*(3), 310–318.
<https://doi.org/10.1037/tra0000075>
- Dinenberg, R. E., McCaslin, S. E., Bates, M. N., & Cohen, B. E. (2014). Social support may protect against development of posttraumatic stress disorder: Findings from the heart and soul study. *American Journal of Health Promotion, 28*(5), 294–297.
<https://doi.org/10.4278/ajhp.121023-quant-511>

- Douds, A. S., & Hummer, D. (2019). When a veterans' treatment court fails: Lessons learned from a qualitative evaluation. *Victims & Offenders, 14*(3), 322–343.
<https://doi.org/10.1080/15564886.2019.1595248>
- Drebing, C. E., Reilly, E., Henze, K. T., Kelly, M., Russo, A., Smolinsky, J., Gorman, J., & Penk, W. E. (2018). Using peer support groups to enhance community integration of Veterans in transition. *Psychological Services, 15*(2), 135–145.
<https://doi.org/10.1037/ser0000178>
- Eisen, S. V., Schultz, M. R., Mueller, L. N., Degenhart, C., Clark, J. A., Resnick, S. G., Christiansen, C. L., Armstrong, M., Bottonari, K. A., Rosenheck, R. A., & Sadow, D. (2012). Outcome of a randomized study of a mental health peer education and support group in the VA. *Psychiatric Services, 63*(12), 1243–1246.
<https://doi.org/10.1176/appi.ps.201100348>
- Frey, L. M., Hans, J. D., & Cerel, J. (2016). Perceptions of suicide stigma. *Crisis, 37*(2), 95–103.
<https://doi.org/10.1027/0227-5910/a000358>
- Greden, J. F., Valenstein, M., Spinner, J., Blow, A., Gorman, L. A., Dalack, G. W., Marcus, S., & Kees, M. (2010). Buddy-to-Buddy, a citizen soldier peer support program to counteract stigma, PTSD, depression, and suicide. *Annals of the New York Academy of Sciences, 1208*(1), 90–97. <https://doi.org/10.1111/j.1749-6632.2010.05719.x>
- Hall, L. (2011). The importance of understanding military culture. *Social Work in Health Care, 50*(1), 4–18. <https://doi.org/10.1080/00981389.2010.513914>

- Hankin, C., Spiro, A., Miller, D., & Kazis, L. (1999). Mental disorders and mental health treatment among U.S. Department of Veterans Affairs Outpatients: The Veterans Health Study. *American Journal of Psychiatry*, *156*(12), 1924–1930. <https://doi.org/10.1176/ajp.156.12.1924>
- Hatch, S. L., Harvey, S. B., Dandeker, C., Burdett, H., Greenberg, N., Fear, N. T., & Wessely, S. (2013). Life in and after the Armed Forces: social networks and mental health in the UK military. *Sociology of Health & Illness*, *35*(7), 1045–1064. <https://doi.org/10.1111/1467-9566.12022>
- Heath, P. J., Seidman, A. J., Vogel, D. L., Cornish, M. A., & Wade, N. G. (2017). Help seeking stigma among men in the military: The interaction of restrictive emotionality and distress. *Psychology of Men & Masculinity*, *18*(3), 193–197. <https://doi.org/10.1037/men0000111>
- Heppner, P. P., & Krauskopf, C. J. (1987). An information-processing approach to personal problem solving. *The Counseling Psychologist*, *15*(3), 371–447. <https://doi.org/10.1177/0011000087153001>
- Hernandez, S. H. A., Morgan, B. J., & Parshall, M. B. (2016). Resilience, stress, stigma, and barriers to mental healthcare in U.S. Air Force nursing personnel. *Nursing Research*, *65*(6), 481–486. <https://doi.org/10.1097/nnr.0000000000000182>
- Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine*, *351*(1), 13–22. <https://doi.org/10.1056/nejmoa040603>

- Hundt, N. E., Robinson, A., Arney, J., Stanley, M. A., & Cully, J. A. (2015). Veterans' perspectives on benefits and drawbacks of peer support for Posttraumatic Stress Disorder. *Military Medicine, 180*(8), 851–856. <https://doi.org/10.7205/milmed-d-14-00536>
- Jain, S., McLean, C., & Rosen, C. S. (2012). Is there a role for peer support delivered interventions in the treatment of veterans with Post-Traumatic Stress Disorder? *Military Medicine, 177*(5), 481–483. <https://doi.org/10.7205/milmed-d-11-00401>
- Joseph, K. M., Hernandez, J. M., & Jain, S. (2015). Peer support telephone outreach intervention for veterans with PTSD. *Psychiatric Services, 66*(9), 1001. <https://doi.org/10.1176/appi.ps.660903>
- Keane, T. M., Scott, W. O., Chavoya, G. A., Lamparski, D. M., & Fairbank, J. A. (1985). Social support in Vietnam Veterans with posttraumatic stress disorder: A comparative analysis. *Journal of Consulting and Clinical Psychology, 53*(1), 95–102. <https://doi.org/10.1037/0022-006x.53.1.95>
- King, D. W., Taft, C., King, L. A., Hammond, C., & Stone, E. R. (2006). Directionality of the association between social support and Posttraumatic Stress Disorder: A longitudinal investigation. *Journal of Applied Social Psychology, 36*(12), 2980–2992. <https://doi.org/10.1111/j.0021-9029.2006.00138.x>
- Kleiman, E. M., & Liu, R. T. (2013). Social support as a protective factor in suicide: Findings from two nationally representative samples. *Journal of Affective Disorders, 150*(2), 540–545. <https://doi.org/10.1016/j.jad.2013.01.033>

- Kulesza, M., Pedersen, E. R., Corrigan, P. W., & Marshall, G. N. (2015). Help seeking stigma and mental health treatment seeking among young adult veterans. *Military Behavioral Health, 3*(4), 230–239. <https://doi.org/10.1080/21635781.2015.1055866>
- Laffaye, C., Cavella, S., Drescher, K., & Rosen, C. (2008). Relationships among PTSD symptoms, social support, and support source in veterans with chronic PTSD. *Journal of Traumatic Stress, 21*(4), 394–401. <https://doi.org/10.1002/jts.20348>
- Liebke, L., Bungert, M., Thome, J., Hauschild, S., Gescher, D. M., Schmahl, C., Bohus, M., & Lis, S. (2017). Loneliness, social networks, and social functioning in borderline personality disorder. *Personality Disorders: Theory, Research, and Treatment, 8*(4), 349–356. <https://doi.org/10.1037/per0000208>
- Lyyra, T.-M., & Heikkinen, R.-L. (2006). Perceived social support and mortality in older people. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 61*(3), S147–S152. <https://doi.org/10.1093/geronb/61.3.s147>
- McCorkle, B. H., Rogers, E. S., Dunn, E. C., Lyass, A., & Wan, Y. M. (2008). Increasing social support for individuals with serious mental illness: Evaluating the compeer model of intentional friendship. *Community Mental Health Journal, 44*(5), 359–366. <https://doi.org/10.1007/s10597-008-9137-8>
- Meyer, E. G., Writer, B. W., & Brim, W. (2016). The importance of military cultural competence. *Current Psychiatry Reports, 18*(3), 2–8. <https://doi.org/10.1007/s11920-016-0662-9>

- Milanak, M. E., Gros, D. F., Magruder, K. M., Brawman-Mintzer, O., & Frueh, B. C. (2013). Prevalence and features of generalized anxiety disorder in Department of Veteran Affairs primary care settings. *Psychiatry Research*, *209*(2), 173–179. <https://doi.org/10.1016/j.psychres.2013.03.031>
- Morgan JK, Hourani L, Lane ME, Tueller S. Help-seeking behaviors among active-duty military personnel: Utilization of chaplains and other mental health service providers. *Journal of Health Care Chaplaincy*, *22*(3), 102-117. DOI: 10.1080/08854726.2016.1171598.
- Oxman, T. E., Berkman, L. F., Kasl, S., Freeman, D. H., & Barrett, J. (1992). Social support and depressive symptoms in the elderly. *American Journal of Epidemiology*, *135*(4), 356–368. <https://doi.org/10.1093/oxfordjournals.aje.a116297>
- Pietrzak, R. H., Johnson, D. C., Goldstein, M. B., Malley, J. C., & Southwick, S. M. (2009). Psychological resilience and postdeployment social support protect against traumatic stress and depressive symptoms in soldiers returning from Operations Enduring Freedom and Iraqi Freedom. *Depression and Anxiety*, *26*(8), 745–751. <https://doi.org/10.1002/da.20558>
- Primack, J. M., Borsari, B., Benz, M. B., Reddy, M. K., & Shea, M. T. (2017). Mental health treatment utilization in OIF/OEF National Guard and Reserve troops with and without DSM diagnoses. *American Journal of Orthopsychiatry*, *87*(2), 157–165. <https://doi.org/10.1037/ort0000226>
- Reger, M. A., Etherage, J. R., Reger, G. M., & Gahm, G. A. (2008). Civilian psychologists in an Army culture: the ethical challenge of cultural competence. *Military Psychology*, *20*(1), 21–35. <https://doi.org/10.1080/08995600701753144>

- Resnik, L., Ekerholm, S., Johnson, E. E., Ellison, M. L., & O'Toole, T. P. (2016). Which homeless veterans benefit from a peer mentor and how? *Journal of Clinical Psychology, 73*(9), 1027–1047. <https://doi.org/10.1002/jclp.22407>
- Sacca, R., & Ryan, C. (2011). Relationships between interpersonal contact as a volunteer companion and stigma. *Australasian Psychiatry, 19*(5), 439–443. <https://doi.org/10.3109/10398562.2011.603325>
- Sayer, N. A., Friedemann-Sanchez, G., Spont, M., Murdoch, M., Parker, L. E., Chiros, C., & Rosenheck, R. (2009). A qualitative study of determinants of PTSD treatment initiation in veterans. *Psychiatry: Interpersonal and Biological Processes, 72*(3), 238–255. <https://doi.org/10.1521/psyc.2009.72.3.238>
- Schaefer, C., Coyne, J. C., & Lazarus, R. S. (1981). The health-related functions of social support. *Journal of Behavioral Medicine, 4*(4), 381–406. <https://doi.org/10.1007/bf00846149>
- Seidman, A. J., Wade, N. G., Vogel, D. L., & Armistead-Jehle, P. (2018). The impact of stigma on behavioral health care utilization among active duty service members. *Military Psychology, 31*(1), 11–17. <https://doi.org/10.1080/08995605.2018.1522927>
- Sripada, R. K., Bohnert, A. S. B., Teo, A. R., Levine, D. S., Pfeiffer, P. N., Bowersox, N. W., Mizruchi, M. S., Chermack, S. T., Ganoczy, D., Walters, H., & Valenstein, M. (2015). Social networks, mental health problems, and mental health service utilization in OEF/OIF National Guard Veterans. *Social Psychiatry and Psychiatric Epidemiology, 50*(9), 1367–1378. <https://doi.org/10.1007/s00127-015-1078-2>

- Stana, A., Flynn, M., & Almeida, E. (2017). Battling the stigma: combat veterans' use of social support in an online PTSD forum. *International Journal of Mental Health, 16*(1), 20–36. <https://doi.org/10.3149/jmh.1601.20>
- Terry, L. L. (2002). Family counseling in the schools: A graduate course. *The Family Journal, 10*(4), 419–428. <https://doi.org/10.1177/106648002236762>
- U.S. Department of Veteran Affairs. (2017, April 27). *Statement of Michael J. Missal Inspector General Department of Veteran Affairs Before the Subcommittee on Military Construction, Veteran Affairs, and Related Agencies Committee on Appropriations United States Senate Hearing on Preventing Veteran Suicide*. <https://www.va.gov/Vetdata/Report.Asp>. <https://www.va.gov/oig/pubs/statements/VAOIG-Statement-20170427-missal.pdf>
- U.S. Department of Veteran Affairs. (2018). *National Strategy for Preventing Veteran Suicide*. http://www.sprc.org/sites/default/files/resource-program/VA_National-Strategy-for-Preventing-Veterans-Suicide2018.pdf
- U.S. Department of Veterans Affairs. (2019). *National Veteran Suicide Prevention Annual Report*. https://www.mentalhealth.va.gov/docs/data-sheets/2019/2019_National_Veteran_Suicide_Prevention_Annual_Report_508.pdf
- Van Voorhees, B. W., Gollan, J., & Fogel, J. (2012). Pilot study of Internet-based early intervention for combat-related mental distress. *The Journal of Rehabilitation Research and Development, 49*(8), 1175. <https://doi.org/10.1682/jrrd.2011.05.0095>

- Van Voorhees, E. E., Resnik, L., Johnson, E., & O'Toole, T. (2019). Posttraumatic stress disorder and interpersonal process in homeless Veterans participating in a peer mentoring intervention: Associations with program benefit. *Psychological Services, 16*(3), 463–474. <https://doi.org/10.1037/ser0000231>
- Vogel, D.L., Wade, N.G. and Hackler, A.H. (2007). Perceived public stigma and the willingness to seek counseling: The mediating roles of self-stigma and attitudes toward counselling. *Journal of Counselling Psychology, 54*, 40-50. <http://dx.doi.org/10.1037/0022-0167.54.1.40>
- Vogel, D. L., Wade, N. G., Wester, S. R., Larson, L., & Hackler, A. H. (2007). Seeking help from a mental health professional: The influence of one's social network. *Journal of Clinical Psychology, 63*(3), 233–245. <https://doi.org/10.1002/jclp.20345>
- Vogel, D. L., & Wester, S. R. (2003). To seek help or not to seek help: The risks of self-disclosure. *Journal of Counseling Psychology, 50*(3), 351–361. <https://doi.org/10.1037/0022-0167.50.3.351>
- Vogel, D. L., Wester, S. R., & Larson, L. M. (2007). Avoidance of counseling: Psychological factors that inhibit seeking help. *Journal of Counseling & Development, 85*(4), 410–422. <https://doi.org/10.1002/j.1556-6678.2007.tb00609.x>
- Vogel, D. L., Wester, S. R., Larson, L. M., & Wade, N. G. (2006). An information-processing model of the decision to seek professional help. *Professional Psychology: Research and Practice, 37*(4), 398–406. <https://doi.org/10.1037/0735-7028.37.4.398>
- Vogel, D. L., Wester, S. R., Wei, M., & Boysen, G. A. (2005). The role of outcome expectations and attitudes on decisions to seek professional help. *Journal of Counseling Psychology, 52*, 459–470.

- Vogt, D. (2011). Mental health-related beliefs as a barrier to service use for military personnel and veterans: A review. *Psychiatric Services, 62*(2), 135–142.
https://doi.org/10.1176/ps.62.2.pss6202_0135
- Vogt, D., Smith, B. N., King, D. W., & King, L. A. (2012). The Deployment Risk and Resilience Inventory-2 (DRRI-2) [Measurement instrument]. Available from <http://www.ptsd.va.gov>
- Wade, N. G., Vogel, D. L., Armistead-Jehle, P., Meit, S. S., Heath, P. J., & Strass, H. A. (2015). Modeling stigma, help seeking attitudes, and intentions to seek behavioral healthcare in a clinical military sample. *Psychiatric Rehabilitation Journal, 38*(2), 135–141.
<https://doi.org/10.1037/prj0000131>
- Wertsch, M. E. (2011). *Military Brats: Legacies of Childhood Inside the Fortress*. Brightwell Publishing, LLC.
- Westphal, R. J. (2007). Fleet leaders' attitudes about subordinates' use of mental health services. *Military Medicine, 172*(11), 1138–1143. <https://doi.org/10.7205/milmed.172.11.1138>
- Williams, R. M., Bambara, J., & Turner, A. P. (2012). A scoping study of one-to-one peer mentorship interventions and recommendations for application with veterans with postdeployment syndrome. *Journal of Head Trauma Rehabilitation, 27*(4), 261–273.
<https://doi.org/10.1097/htr.0b013e3182585cb6>
- Yoon, J., Lo, J., Gehlert, E., Johnson, E. E., & O'Toole, T. P. (2017). Homeless veterans' use of peer mentors and effects on costs and utilization in VA Clinics. *Psychiatric Services, 68*(6), 628–631. <https://doi.org/10.1176/appi.ps.201600290>

Vita

Stacy Harris is a Licensed professional counselor (LPC) and a Marriage and Family Therapist Associate (MFT-A) in Texas, and a Nationally Certified Play Therapist and School Psychologist. Stacy is passionate about serving underserved populations to include students with special needs and Veterans. She strives to be an advocate for social justice and mental health. Before her career at the Veteran's Health Administration, Stacy served in the US Air Force and was awarded the Iraq Campaign Medal for her tour in Balad, Iraq. While transitioning from her combat tour, Stacy helped design and implement a peer support program with Compeer and the Veteran's Outreach Center that has been disseminated throughout New York state. She is currently a board member with OASIS adaptive sports program that seeks to provide outdoor activities for Veterans with varying disabilities. Stacy holds a B.S in Psychology and a M.S. in School Psychology. Stacy plans to continue impacting the mental health field with the Veteran's Health Administration, private practice and the SUNY college system.

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