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The Effects of Military Leadership and its Implication on Mental Health Stigma and Treatment Seeking Behaviors of Veterans in Garrison and Noncombat Deployment Environments

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The Effects of Military Leadership and its Implication on Mental Health Stigma and Treatment

Seeking Behaviors of Veterans in Garrison and Noncombat Deployment Environments

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A Clinical Research Project submitted to the Faculty of the Florida School of Professional Psychology at National Louis University in partial fulfillment of the requirements for the degree of Doctor of Psychology in Clinical Psychology.

Tampa, Florida
April, 2020

The Doctorate Program in Clinical Psychology
Florida School of Professional Psychology
at National Louis University

CERTIFICATE OF APPROVAL

Clinical Research Project

This is to certify that the Clinical Research Project of

Alexis May Charrys

has been approved by the
CRP Committee on April 27, 2020
as satisfactory for the CRP requirement
for the Doctorate of Psychology degree
with a major in Clinical Psychology

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Abstract

Military service members are more likely to endure a significant amount of stress and experience multiple traumatic events than civilians due to the nature of their job. Many studies have focused on the traumatic stressors encountered during combat despite the fact that many service members encounter stressors related to serving in the military. A study conducted by Dursa, Reinhard, Barth, and Schniderman (2014) found that 10.9% of nondeployed veterans screened positive for posttraumatic stress disorder (PTSD) with the highest prevalence of PTSD (13.8%) amongst nondeployed soldiers. Military mental health stigma is rampant due to the need to be ready for battle, although a minority of service members seek mental health treatment. Service members' resistance to seeking treatment may be due to perceived stigma from their peers and anticipated stigma from their leaders (Hoge et al., 2004; Vogt, Fox, & DiLeone, 2014). Perception of stigma is a common barrier to care reported by Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) veterans and can be more pronounced due to a more recent service in the military. Tsai, Whealin, and Pietrzak (2014) discussed that personal support from military leaders may help normalize treatment seeking. The military focuses on leadership development because leaders have the ability to influence and motivate their subordinates (Thomas et al., 2010). It is important to understand the impact that leadership behaviors have on subordinates because the military exposes their personnel to numerous stressors, including physical hardship, psychological distress, and physical danger. Considering the number of stressors and traumas associated with the military, it is likely that leaders may indirectly or directly influence their subordinates' perception of mental health stigma and treatment seeking. Due to these factors, it is hypothesized that leadership behaviors affect mental health stigma and treatment-seeking behaviors.

**THE EFFECTS OF MILITARY LEADERSHIP AND ITS IMPLICATION ON MENTAL
HEALTH STIGMA AND TREATMENT SEEKING BEHAVIORS OF VETERANS IN
GARRISON AND NONCOMBAT DEPLOYMENT ENVIRONMENTS**

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DEDICATION

I dedicate my clinical research project work to my daughter, Kaylee, who has been my number one cheerleader, my inspiration, and my motivation for completing my goals and attaining my dreams. I hope that I have instilled the values of hard work, dedication, and resilience to guide you throughout life.

I also dedicate this dissertation to my mother, Lennie, whose words of encouragement and push for tenacity aided me in this journey. As a mother you have been a beacon of light, hope, and encouragement. There was never a moment that you doubted my abilities and because of this, I have surpassed the original goals that I have set for myself. Thank you for being my role model of a strong and independent woman who does not set limits on capabilities.

Finally, I dedicate this dissertation to all of my brothers and sisters in arms because without all of the military service members in the United States, this dissertation would not have been possible. I have a great sense of hope that even after our service ends, we can continue to serve one another because as the Army warrior ethos state, "I will never leave a fallen comrade."

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CHAPTER I: INTRODUCTION

Pensions, Bonuses, and Veterans' Relief (2011a) defines a *service member* as a member of the uniformed services who has served in the Army, Navy, Marine Corps, Air Force, or reserve components. The term *military service member* is frequently used to refer to a service member who has entered the Armed Forces and excludes those who have served in the Public Health Service or the National Oceanic and Atmospheric Administration. Service members are more likely to endure a significant amount of stress and experience multiple traumatic events than civilians due to the nature of their job and as part of military training and work assignments. Many studies have focused on the traumatic stressors encountered during combat; however, many service members encounter stressors related to serving in the military. Dursa, Reinhard, Barth, and Schniderman (2014) found that 10.9% of nondeployed veterans screened positive for posttraumatic stress disorder (PTSD), with the highest prevalence of PTSD, 13.8%, amongst nondeployed soldiers. Gorman, Blow, Ames, and Reed (2011) found that 40% of National Guard (NG) members met the screening criteria for at least one mental health problem.

Despite the differences across the active duty, reserve, and NG components, servicemembers can experience the same stressors. These stressors may include: change in responsibilities at work, varying hours, difficult or unsafe conditions, change in line of work, trouble with supervisors, being bypassed for promotion, military disciplinary action, temporary duty away from home, involuntary assignment, marital separation due to orders, noncombat deployment, deployment to a war zone, temporary duty away from home, reduction in rank, remote tours, retirement, voluntary separation from military, and dishonorable discharge (Pflanz, 2002). However, stressors can vary from active duty to NG and reserve components. Active duty service members may experience stressors such as permanent change of station, predeployment

work ups, and work schedule uncertainty. For the NG and reserve component, stressors can be related to their civilian occupations (i.e., being fired at work, increased workload after attending drill, getting time off to attend drill, etc.) and their intermittent training schedule with the military. Service members of the NG and reserve component may feel as if they have less preparation for combat, which may increase stress during times of an impending deployment (Seal et al., 2009). Trauma in the military is usually highlighted by combat and often related to deployment. However, service members who experienced noncombat deployments or who have remained in garrison can experience trauma in the form of military sexual assault, interpersonal trauma, and through training accidents where there is a threat to life, such as vehicle accidents, aircraft accidents, and range misfires. *Garrison* refers to a military outpost or military community that provides many of the same types of services as small cities, where military service members are stationed. The term garrison is frequently used to distinguish from deployment settings.

Pensions, Bonuses, and Veterans' Relief (2011b) defines a *veteran* as "a person who served in the active military, naval, or air service and who was discharged or released under conditions other than dishonorable." A veteran of any war is a person who served in the active military, naval, or air service during a period of war, including the Indian War, Spanish American War, World War I, World War II, Korean conflict, Vietnam era, Mexican border period, Persian Gulf War, Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), and Operation Inherent Resolve (Pensions, Bonuses, and Veterans' Relief, 2011b). The term veteran is often misused as many studies do not clarify whether the population used are veterans or veterans of war. This study will refer to both veterans and veterans of war. In 2010, Basu (2013) found that over 22 veterans commit suicide every day. Kemp and Bossarte (2013)

reported that 30% of all veterans surveyed have considered suicide, and veterans who experience symptoms of mental disorders are 8 times more likely than the general population to commit suicide (Zivin, 2007).

Problem Statement

Mental health stigma within the military is rampant due to the need to be ready for battle. Since September 11, 2001, nearly 2.7 million American military service members have deployed to Iraq or Afghanistan, leading to exposure to traumatic events. However, a minority of service members seek mental health treatment. In accordance with military ethos, military service members should pride themselves on being strong, resilient, and courageous. Mental toughness, inner strength, and self-reliance are considered a cultural norm (Nash, Silva, & Litz, 2009). Therefore, this belief can cause stigma to be more pronounced within the military population (Bryan & Morrow, 2011; Greene-Shortridge, Britt, & Castro, 2007; Vogt, Fox, & DiLeone, 2014; Wieland, Hursey, & Delagado, 2010).

Mental health stigma has significant effects on service members' decisions to seek treatment (Wright et al., 2009). There are unique factors that contribute to service members' resistance to seek treatment, which include perceived stigma from their peers and anticipated stigma from their leaders (Hoge et al., 2004; Vogt, Fox, et al., 2014). Previous studies have shown that service members and veterans are less likely to seek mental health treatment, which is likely due to mental health stigma within the military culture (Coleman et al. 2017; Ghahramanlou-Holloway et al., 2018; Kim et al., 2011). Perception of stigma and the need for self-reliance are common barriers to care reported by Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) veterans. Garcia et al. (2014) found that OIF/OEF veterans were significantly more likely to dislike talking in groups, feel that coming to treatment makes

them weak, and believe that treatment will make them go crazy when compared to Vietnam and Persian Gulf War veterans. In comparison to Vietnam and Persian Gulf War veterans, OIF/OEF veterans were also significantly more likely to agree that they should be able to handle problems on their own. This can be more pronounced for OIF/OEF veterans due to recency of service in the military and furthermore may imply that this group has a more powerful connection to military norms and values, which may impact attitudes toward treatment.

Tsai, Whealin, and Pietrzak (2014) discussed that personal accounts from veterans, public support, and personal support from military leaders may help normalize treatment seeking. It is hypothesized that the exposure to positive attitudes and actions will counter condition the effects of mental health stigma. In order to provide a positive and affirming environment, it would be a top-down procedure where those in leadership roles promote these behaviors through modeling and exposure. Because many individuals entering the service are between the ages of 18–25, it is likely that they are still developing or reaffirming their sense of identity and building close interpersonal relationships, which may impact their beliefs and attitudes.

In 1994, almost 70% of the Marine Corps enlisted forces consisted of junior enlisted personnel, pay grades E1-E4, while the Army, Navy, and Air Force had 50% of their junior enlisted personnel in pay grades E1-E4 (Kirby & Thie, 1996). Within the military, there are two predominant levels of leadership: noncommissioned officers (NCOs) and commissioned officers (officers). NCOs serve in a position that has more interactions with subordinates, as they are front-line supervisors tasked with the duties of oversight, giving feedback, and authorizing absences, resulting in their actions having a more direct impact on military personnel (Britt, Wright, & Moore, 2012). The military focuses on leadership development to aid in organizational effectiveness because leaders have the ability to influence and motivate their

subordinates (Thomas et al., 2010). It is likely that because NCOs serve in a position that has more interactions with junior enlisted personnel, they are more likely to have influence on their subordinates due to the modeling of their behaviors. Military leaders also have the ability to influence their subordinates' health and adaptation to stressful events as they are the individuals who authorize their personnel to attend appointments or allow time off (Thomas et al., 2010). It is important to understand the impact that leadership behaviors have on subordinates because the military exposes their personnel to numerous stressors, including physical hardship, psychological distress, and physical danger. Considering the number of stressors and traumas associated with the military, it is likely that leaders may indirectly or directly influence their subordinates' perception of mental health stigma and treatment-seeking behavior. Chronic exposure to stressors has been shown to negatively impact the immune system and psychological well-being (Bliese & Halverson, 2009; Britt, Davidson, Bliese, & Castro, 2009; Sharma & Pearsall, 2016; Thomas et al., 2010). Britt et al. (2012) suggested that the well-being of military personnel should be considered a leadership responsibility. Due to these factors, it is hypothesized that leadership behaviors impact mental health stigma and treatment-seeking behaviors.

Despite the increase in interventions geared toward decreasing mental health stigma and increasing treatment-seeking behaviors within recent years, the suicide rate remains at an alarming high. A majority of studies have focused on military service members who have served in combat. However, there is a lack of research on those who have remained in garrison or who have experienced a noncombat deployment. The effects of war and its impact on mental health have been studied thoroughly. The effects of training exercises, incidents in everyday service, task force deployments, and field operations on mental health has limited research. It would be

important to study those who have remained in garrison and have experienced noncombat deployments to provide information about the underlying prevalence of PTSD, among other mental health disorders, in absence of combat deployment related exposures (Dursa et al., 2014). Research has shown that leaders may impact stressors and influence treatment-seeking behaviors, which may reflect a top-down problem (Britt et al., 2012). Military leaders are a consistent variable amongst those who have served in combat and those who have not. There is a lack of research on how military leadership affects mental health stigma and treatment-seeking behaviors of veterans who have remained in garrison or have experienced noncombat deployments, as many studies have focused on combat veterans. It is notable that many service members and veterans who might benefit from treatment do not make use of available mental health services despite the relatively high availability of free or low-cost mental health services in both military and Veteran Affairs health care settings (U.S. Congress, 2008).

Significance of the Study

The intention of this project was to better understand the effects of military leadership behaviors in the development of stigma and treatment-seeking behaviors within military service members who have remained in garrison or have experienced noncombat deployments. This study will contribute by enhancing the knowledge of the effects of military leadership behaviors and their relation to mental health stigma and treatment-seeking behaviors. Furthermore, this study will provide more information for veterans who have remained in garrison or who have experienced noncombat deployments.

Research Question and Hypotheses

Research question. Can mental health stigma be predicted as a function of leadership behaviors for service members who have remained in garrison or experienced a noncombat deployment?

Hypothesis 1. Destructive leadership behaviors will have a positive correlation with mental health stigma and a negative correlation with treatment-seeking behaviors for veterans who have remained in garrison or experienced a noncombat deployment.

Hypothesis 2. Constructive leadership behaviors will have a negative correlation with mental health stigma and a positive correlation with treatment-seeking behaviors for veterans who have remained in garrison or experienced a noncombat deployment.

Hypothesis 3. When considering the already known predictors of mental health stigma, constructive leadership will have a lower level of mental health stigma amongst service members who have remained in garrison or experienced a noncombat deployment when a regression analysis is conducted.

CHAPTER II: LITERATURE REVIEW

Stressors Associated with Military Service

Stressors are defined as demands associated with parts of the work environment that may lead to strains. Strains are at least two stressors that are multidirectional and are more impactful on an individual's psychological well-being, resulting in potential outcomes of stressors (Britt et al., 2009; Zhang et al., 2014). Service members are more likely to endure a significant amount of stress and experience multiple traumatic events due to the nature of their job, such as part of military training and assignments. As a result, service members may be exposed to a wide variety of hazards, potentially harmful substances, and strenuous physical demands. In addition, there are several categories of stressors, which include work, interpersonal, family, self-identity, psychological, cultural, and physical (Campbell & Nobel, 2009). Stressors that may be similar across active duty and reserve components include: change in responsibilities at work; hours, conditions, or line of work; inadequate staffing; work overload; trouble with supervisors; being bypassed for promotion; military disciplinary action; temporary duty away from home; involuntary assignment; marital separation due to orders; noncombat deployment; deployment to a war zone; being shot at; intimidation; terrorist threat; overseas tour; reduction in ranks; remote tours; retirement; voluntary separation from military; being placed in harm's way; being placed under stressful and demanding conditions; and dishonorable discharge (Delahaij & Van Dam, 2017; Pflanz, 2002; Pflanz & Ogle, 2006; Yammarino, Munford, Connelly, & Dionne, 2010).

Stressors can also vary from active duty to NG and reserve components. For the NG and reserve components, stressors can be related to their civilian occupations and their intermittent training schedule with the military. In addition, service member of the NG and reserve components may feel as if they have less preparation for combat due to the significant difference

in the amount of training exercise experienced in comparison to active duty service members, which may increase stress during times of an impending deployment (Seal et al., 2009). Active duty service members may experience stressors such as permanent change of station, predeployment work ups, and work schedule uncertainty. For the NG and reserve components, stressors can be related to their civilian occupations (i.e., being fired at work, increased workload after attending drill, getting time off to attend drill, etc.) and their intermittent training schedule with the military. NG units also respond to state emergencies, which may result in short notice or unexpected extended leave of absences with civilian employers and uncertainties associated with related activation and deactivation (Lane, Hourani, Bray, & Williams, 2012). As part of their duties, today's service members are more readily involved in providing humanitarian aid, offering natural disaster relief, peacekeeping, and nation building. While some of these acts can be associated with combat deployments, these duties can be standalone noncombat deployments. However, these events are not readily studied despite the variety of stressors that can be experienced during the service member's tour. Campbell and Noble (2009) conducted an international review of occupational stressors in the military and identified several categories of nondeployment stressors, which include work stressors, interpersonal stressors, and family-related stressors. Thus, nondeployment stressors are important to consider.

Those within noncombat deployed environments experience stressors associated with being in garrison. While in garrison some of the stressors that can be experienced are related to work, time, physical demands, excessive demands, strong hierarchical views which limit autonomy, organizational constraints such as obsolete equipment, insufficient logistical planning, inadequate coordination, lack of communication, lack of support, role ambiguity, role responsibilities, career stressors such as retention, harassment, lack of public support, family

separation, return-date uncertainty, risk of injury, fear of loss of life, fear of physical safety, friendly fire, and so forth (Campbell & Nobel, 2009). Garrison environments are noncombat environments that can be relatable to civilian work environments and can include additional stressors that service members encounter due to potential expatriate work, additional responsibilities, and other stressors associated with deployments such as family separation, uncertainty of return, and so forth (Pflanz, 2001). In addition, peacekeeping missions and humanitarian efforts require the service member to have knowledge of the civilian, cultural, and political affairs associated with the area, which can be seen as an additional stressor (Yammarino et al., 2010). Amongst stressors associated with garrison and deployments are stressors associated with the organization such as role conflict, lack of control, or abusive supervision. These stressors and strains can impact the service member's perception of mental health (Britt, Greene-Shortridge, Brink, Nguyen, & Rath, 2008). Pflanz and Ogle (2006) found that 27.4% service members reported experiencing significant work stress, which is positively correlated with depression and is related to conflict with supervisors. Additional stressors that impact service members include knowing individuals who have been seriously injured or killed, having a member of the unit become a casualty, seeing dead bodies or human remains, receiving small arms fire, seeing seriously injured individuals, experiencing hostile reactions from civilians, clearing/searching, seeing destroyed homes/villages, and being in threatening situations where the service member is unable to respond due to rules of engagement (MHAT, 2008).

Trauma Associated with Military Service

Research regarding trauma in the military has often been related to deployment and highlighted by combat. However, it has often overlooked that service members in garrison can experience trauma in the form of military sexual assault, interpersonal trauma, and through

training accidents where there is a threat to life such as vehicle accidents, aircraft accidents, and range misfires. Military sexual trauma (MST) refers to any instance of experiencing sexual assault or threatening sexual harassment during the duration of the service member's service period (United States Department of Veterans Affairs, 2016) and is associated with increased odds of a mental health diagnosis (Kimerling et al., 2010). A study conducted by Katz et al. (2012) found that 43% of all female service members and 12.5% of all male service members have reported an incident of MST. War is a significant stressor that service members endure. During combat there are a number of stressors that can occur, including multiple deployments, high intensity guerilla warfare, heightened exposure to traumatic events, direct fire, witnessed violence, physical injury, roadside bombs, length of deployment, handling human remains, killing an enemy, seeing dead or injured individuals, and being unable to stop a violent situation (Hoge et al., 2004; Zinzow, Britt, McFadde, Burnette, & Gillispie, 2012). The invisible wounds of cognitive and psychological trauma among service members are considered a major health outcome concern (Kelly, Kleykamp, & Segal, 2010). A study conducted by Dursa et al. (2014) found that 10.9% of nondeployed veterans screened positive for PTSD, with the highest prevalence of PTSD, 13.8%, amongst nondeployed soldiers.

Mental Health Stigma and Military Service Members

In 2010, Basu (2013) found that over 22 veterans commit suicide every day, and a study conducted by the Iraq and Afghanistan Veterans of America (2013) reported that 30% of all veterans surveyed have considered suicide. It is likely that suicidal ideations may be due to mental health stigma leading service members to not seek treatment. Stigma within the military culture is systemic and is directly related to military traditions, which may influence the attitudes and beliefs that service members hold, thereby preventing them from seeking help (Momen,

Strychacz, & Virre, 2012). Individual beliefs shape the perspective that service members may have about seeking treatment. When negative beliefs about mental health, treatment, and the impact of having a mental health disorder is within an individual's personal belief system, it increases mental health stigma and decreases treatment-seeking behavior (Greene-Shortridge et al., 2007; Vogt, 2011; Vogt, Fox, et al., 2014). Stigma can manifest in a variety of ways and is associated with a negative belief system that discredits a person from being whole or belonging to the large fraction of society (Ahmedani, 2011). There are two main types of mental health stigma: self-stigma and public stigma. These main types of stigma can be further broken down into subcategories. Self-stigma is internalized by the individual, which causes automatic thoughts and negative emotional reactions leading to the secondary symptom of feeling guilty and inadequate (Abdullah & Brown, 2011). The internalized stigma can create an unconscious negative predisposition towards treatment seeking and can mediate the relationship between public stigma and treatment seeking (Drapliski et al., 2013; Wade, Vogel, Armistead-Jehle, Meit, & Strass, 2015). Self-stigma may also include endorsed stigma, anticipated stigma, and label avoidance. Endorsed stigma is a key component of self-stigma and is the extent to which an individual has incorporated negative beliefs about the stigmatizing attribute into their belief system (Vogt, Di Leone, et al., 2014). Anticipated stigma is the extent to which an individual anticipates that they will be devalued or discredited by others in the community for having the stigmatized attribute (Andresen & Blais, 2018; Vogt, Di Leone, et al., 2014). Label avoidance refers to when individuals purposely negate and deny symptoms of mental health disorders and actively disengage in treatment-seeking behaviors to prevent being associated with a mental health diagnosis to avoid stigma and other negative consequences (Ben-Zeev, Corrigan, Britt, & Lanford, 2012). Self-stigma can cause severe impact as individuals experiencing psychological

problems may doubt their own coping abilities to deal with daily life, thereby developing low self-esteem, low self-efficacy, social isolation, and low social confidence (Britt et al., 2008).

Public stigma is structural in society, places individuals into groups based on endorsed stereotypes, and is usually linked with the experience and anticipation of social rejection (Xu, Rusch, Huang, & Kusters, 2017). It includes concerns about stigma from others such as loved ones, peers, and coworkers, which may create barriers for individuals suffering from mental disorders. It encompasses perceived stigma and structural stigma. Perceived stigma is related to individuals avoiding seeking help due to the expectation of others devaluating and discriminating the service member (Pattyn, Verhaeghe, Sercu, & Bracke, 2014). Structural stigma is related to organizational policies that intentionally restrict opportunities or options for those with mental health diagnosis (Corrigan & Kosyluk, 2014). Public and self-stigma often interact with one another and influence treatment-seeking behavior (Momen et al., 2012; Wade et al., 2015). Due to public stigma, it is likely that those who endorse stigma against themselves are more likely to internalize it (Fung, Tsang, & Cheung, 2011). In accordance with military ethos, military service members should pride themselves in being strong, resilient, and courageous. Mental toughness, inner strength, and self-reliance is considered a cultural norm and seeking help would be considered a deviation from the norm, which would imply weakness. Therefore, this belief can cause stigma to be more pronounced within the military population (Bryan & Morrow, 2011; Greene-Shortridge et al., 2007; Mohatt, Boeckmann, Winkel, Mohatt, & Shore, 2017; Momen et al., 2012; Vogt, Fox, et al., 2014; Wieland et al., 2010).

Mental health stigma within the military is rampant due to the need to be ready for battle. Since September 11, 2001, nearly 2.7 million American military service members have deployed to Iraq or Afghanistan, leading to exposure to traumatic events. However, a minority of service

members seek mental health treatment. For individuals within the military, public stigma may lead to discriminatory actions due to the annotation of a mental health diagnosis on their military records, which may include differential treatment from leadership, being unable to perform certain duties, or being passed over for promotion (Vogt, 2011). Service members are more likely to experience multiple traumatic events and endure a significant amount of stress due to the nature of their job but are less likely to utilize mental health services. Previous studies have shown that service members and veterans are less likely to seek mental health treatment, which is likely due to mental health stigma within the military culture (Andresen & Blais, 2018; Britt, Jennings, Cheung, Pury, & Zinzow, 2015; Coleman et al. 2017; Ghahramanlou-Holloway et al., 2018; Kim et al., 2018; Kim, Britt, Klocko, Riviere, & Adler, 2011). The perception of stigma and the need for self-reliance are common barriers to care reported by OIF/OEF veterans and can be more pronounced due to more recent service in the military. Up to 30% of military personnel returning from OIF/OEF report psychological problems (Hoge et al., 2004). However, only 38%–45% of veterans who met diagnostic criteria for a mental health disorder indicated interest in receiving help, while 23%–40% reported receiving help in the previous year (Hoge et al., 2004). It is notable that many service members endorse mental health stigma, as evidenced by numerous previous studies. In a study conducted by Britt (2000), 61% of soldiers agreed that admitting to a psychological problem would harm their career and 45% of soldiers believed that admitting to a psychological problem would cause their coworkers to have less confidence in them. Vogt, Fox, et al. (2014) found that 44% of OIF/OEF veterans with mental health problems indicated that seeking mental health treatment would make them feel bad about themselves and should be sought as a last resort. Additionally, stigma associated with admitting a psychological problem was significantly higher than stigma associated with admitting a medical problem (Britt,

2000). A study conducted by Strecker, Forney, Hamilton, and Ajzen (2007) found that 70% of service members had concerns about being labeled as having a mental disorder. Several studies have explored the impact that mental health stigma may have on one's military career. It is probable that service members fear having a mental health diagnosis would cause them to lose their security clearance and decrease their chances of promotion (Vogt, Fox, et al., 2014; Wieland et al., 2010). Wieland et al. (2010) found that negative beliefs about psychotherapy and decreased unit support were predictors of increased stigma. Demographic factors such as younger age, male sex, and non-White race have been shown to be related to increased stigma and barriers to care (Pietrzak, Johnson, Goldstein, Malley, & Southwick, 2009).

In a review of the literature conducted by Nash et al. (2009) found that service members are afraid that they will be labeled as weak or lose the respect of their peers and leaders if they seek treatment for mental health disorders. Furthermore, service members may also lose respect for themselves for not meeting expectations, which may lead to shame and increase the rates of treatment noncompliance and dropout. A study conducted by Yamawaki, Kelly, Dresden, Busath, and Riley (2016) found that satisfaction with leaders and coworkers, pay grade, sex, and job satisfaction were all significantly associated with stigma and treatment seeking, which may indicate that social support in the workplace can influence one's beliefs towards treatment seeking. Bryan and Morrow (2011) found that service members felt more understood and sought services when a psychologist was integrated within the unit. However, despite perceived public stigma, treatment-seeking behaviors increase if the symptoms are severe enough (Kulesza, Pederson, Corrigan, & Marshall, 2015).

Military Service Members' Treatment-Seeking Behaviors

Veterans of war may be eligible to receive care through the United States Department of Veteran Affairs (VA) dependent on what military campaign in which they have served and if the medical or psychological concern was directly related to that time in service (Department of Veteran Affairs, 2008). In January 2008, Congress extended the combat veteran health care benefit for those who have served in OIF and OEF from two years to five years of free military service-related health care dating from service separation (U.S. Congress, 2008). Veterans then become eligible to retain care after this time period for an income-based copayment or for free. (Seal et al., 2009). Despite the availability of free or low-cost mental health services for veterans, many do not utilize them (Vogt, Di Leon, et al., 2014).

Smith, Weisenbach, and Jones (2018) found that a significant proportion of OEF/OIF/OND veterans struggle with mental health and interpersonal dysfunction. However, less than half of OEF/OIF/OND veterans experiencing mental health difficulties seek treatment and are the least likely era to begin and/or complete treatment (Mott et al., 2014). Momen et al. (2012) found that the most common beliefs that affect treatment seeking included a preference to solve their own problem, fear of being treated differently, fear of the unit losing trust in them, fear of lack of confidentiality, and fear of harming their career. Service members often feel that mental health providers are untrustworthy or will not understand them and that treatment is not helpful or is only for extreme problems, which decreases treatment-seeking behavior (Tsai et al., 2014; Vogt, Fox, et al., 2014; Zinzow et al., 2012). Kim et al. (2011) found that negative attitudes about treatment inversely predicted treatment seeking and that there are frequent concerns about repercussions from leadership. It has been estimated that up to 30% of military personnel returning from combat in Iraq and Afghanistan report suffering from psychological

problems (Britt et al., 2012). Garcia et al. (2014) found that compared to Vietnam or Persian Gulf War veterans, OIF/OEF veterans were more likely to endorse negative treatment-related attitudes such as disliking talking in groups, viewing coming to treatment as making them weak, and being able to handle problems on their own.

When comparing OIF/OEF veterans to Vietnam veterans, only 10% of Vietnam veterans are enrolled in the VA (Kulka, Schlenger, & Fiarbank, 1990). Erbes, Curry, and Leskela (2009) found that Vietnam veterans were less likely to miss mental health appointments and drop out from treatment than OIF/OEF veterans. Other research found that OIF/OEF veterans were more likely to miss appointments and drop out of therapy before completion than Vietnam veterans (Garcia et al., 2014). The variance in treatment compliance may be related to age. Research has also shown that the younger age of OIF/OEF veterans can account for some of the differences in PTSD treatment utilization as younger veterans may hold more negative attitudes towards mental health treatments (Garcia et al., 2014). Corrigan and Kosyluk (2012) proposed that in order to address stigma, the negative beliefs and attitudes must be replaced with positive and affirming attitudes and actions. Tsai et al. (2014) discussed that personal accounts from veterans and public and personal support from military leaders may help normalize treatment seeking. It is hypothesized that the exposure to positive attitudes and actions would counter condition the effects of stigma. In order to provide a positive and affirming environment, a top-down procedure would need to be established where those in leadership roles promote these behaviors through modeling and exposure. Because many individuals entering the service are between the ages of 18–25, it is likely that they are still developing or reaffirming their sense of identity and building close interpersonal relationships, which may impact their beliefs and attitudes.

Effects of Military Service on Young Military Service Members

The transition to adulthood while in the military can influence personal relationships, careers, education, and potentially physical independence (Kelty, Kleykamp, & Segal, 2010). The military allows for young adults to facilitate economic independence from parents and promotes responsible membership in society through intimate relationships and membership in communities (Kelty et al., 2010). Due to the physical rigors of the military and age limitation on service contracts, the military often appeals to younger individuals. However, it is notable that the Marine Corps has an emphasis on maintaining a young, noncareer force (Kelty et al., 2010). Developmentally, a substantial number of individuals within the military are in the emerging adulthood developmental stage, with 50.3% of active duty enlisted personnel being 25 years of age or younger and 43.8% of the entire military force falling within that age bracket (Department of Defense, 2015). Emerging adulthood is a stage that is important for later development due to the multifaceted issues that are present during this time and the patterns of adaptation that follow (Mobbs & Bonanno, 2018). Military service affects young service members' transition into adulthood as it provides a substantial amount of structure over their world, offers an extensive support system that can assist in transition, and has unique risks and stressors that otherwise may not be experienced (Kelty et al., 2010).

Morin (2011) found that 93% of veterans indicated that the military fostered personal maturation, with 90% stating that they learned about collaboration, and 90% indicating that the military improved their confidence. Pivar and Field (2004) found that relationships formed in the military are often described as some of the closest relationships formed in life. Garcia et al. (2014) found that in comparison to Vietnam and Persian Gulf War veterans, OIF/OEF veterans were significantly more likely to dislike taking in groups, feel that coming to treatment makes

them weak, and believe that treatment will make them go crazy. In comparison to Vietnam and Persian Gulf War veterans, OIF/OEF veterans were also significantly more likely to agree that they should be able to handle problems on their own. This may be due to the fact that recent veterans are closer to military service and may have a more powerful connection to military norms and values which may impact treatment attitudes. Sripada et al.'s (2015) findings suggested that the relationships formed within the military can have a long-lasting effect on mental health and can impact service members attitude towards treatment seeking. Sripada and colleagues also found that college-educated Marines were more likely to be embarrassed about mental health problems, worried about losing the trust of their unit, and concerned about being treated differently by leadership. The fear of mental health stigma can influence a service member's beliefs about mental health treatment seeking. Vogt (2011) discussed how young men are susceptible to negative beliefs about mental health treatment seeking and suggested that because the military and veteran population consists of a considerable amount of young men, this can impact their desire to seek services.

Treatment seeking may also be avoided due to misconceptions and lack of information. Momen et al. (2012) found that younger Marines had more misconceptions about mental health and were more likely to be unsure about available resources for treatment. In order to combat mental health stigma, it may be beneficial to provide support for the service member's unit. Studies have found that unit support, which includes the interaction that the service member has with other service members and their leadership, has a strong effect on service initiation in veterans (Sripada et al., 2015). Larsson, Fors Brandebo, and Nilsson (2012) found that within the military setting, age and rank are closely connected, with younger and lower-level officers working in the field and older and higher level officers working in the office environment, which

may suggest that lower-level officers can begin to impact and shape younger and junior service members' beliefs about mental health stigma.

Leadership Overview

Leaders can influence the motivation and performance of their subordinates. Leadership is not only important for motivation and performance, but leadership can impact the health and well-being of subordinates. This may include their adaptation to stressors, how they handle and navigate stressors or problems that occurs, and their views on mental health and treatment seeking (Bliese & Halverson, 2009; Britt et al., 2009; Sharma & Pearsall, 2016; Thomas et al., 2010). Specific leadership behaviors can be modeled and taught by focusing on how to positively influence subordinates through adaptive leader behaviors (Castro et al., 2006; Dupre & Day, 2007). Adaptive leader behaviors include contact with subordinates, recognition of performance, and so forth. These adaptive leader behaviors can foster motivation, well-being, and job satisfaction of subordinates, which can impact the stressor-strain relationship and be influenced by leadership behaviors due to the shared sense of social reality and their ability to provide structure for their subordinates (Britt et al., 2009; Sharma & Pearsall, 2016). An effective and responsible leader should ensure effective early intervention for those who are in need (Greenburg & Jones, 2011). Einarsen, Aasland, and Skogstad (2007) proposed that there are two main types of leadership behaviors: constructive and destructive. Destructive and constructive leadership are both predictive of stigma (Britt et al., 2012).

Constructive leadership. This type of leadership is defined as an individual in a leadership position who engages in behaviors that are consistent with the interest of the organization, supports and enhances the goal attainment of the organization, makes optimal use of organizational resources, and enhances the motivation, well-being, and job satisfaction of

subordinates (Aasland, Skogstad, Notelaers, Nielsen, & Einarsen, 2010). These positive leadership behaviors can be reinforced through contact with subordinates and recognition of performance. Transformational and transactional leadership are two types of leadership styles that are frequently mentioned in the literature that is associated with constructive leadership. Transformational leadership is associated with building trust, loyalty, and respect from the subordinates to encourage the motivation to complete tasks (Brandebo, Nilsson, & Larsson, 2015). Transactional leadership is a managerial relationship that focuses on supervision, organization, and group performance. This leadership style is known for utilizing rewards and punishments to shape the behaviors of the subordinates, which includes often giving something in return for following them (Odumeru & Ogbonna, 2013).

Constructive leadership behaviors can serve as a potential buffer against the negative side effects of stress (Barroso Castro, Villegas Perinan, & Casillas Bueno, 2008). Brandebo et al. (2015) found that constructive leadership behaviors were related to feelings of trust within their immediate supervisor, which is important in increasing the desire for military subordinates to follow orders. Sharma and Pearsall (2016) discussed that supportive behaviors include a leader being approachable, considerate, and sensitive towards followers' needs, and promoting harmonious working relationships amongst group members. Supportive leadership allows leaders to provide emotional, informational, or instrumental support to subordinates through feedback, information, and advice to aid in their future endeavors such as promotion (McGurk et al., 2014).

Destructive leadership. This type of leadership is defined as an individual in a leadership position who engages in systematic and repetitive behavior that violates the interest of the organization by sabotaging the organization's goals, tasks, resources, effectiveness, and/or motivation, well-being, or job satisfaction of subordinates (Aasland et al., 2010; Throughgood et

al., 2012). These behaviors are seen as direct or indirect active or passive, physical, verbal, or nonverbal actions toward the subordinate with perceived hostility. Behaviors may include, but are not limited to, belittling subordinates, humiliating subordinates, intimidating subordinates, exposing subordinates to verbal aggression, sabotaging subordinates task execution, working on alternative goals, encouraging subordinates to engage in activities that consume time or resources of the company, and so forth (Schyns & Schilling, 2013). Schilling (2009) discussed seven forms of destructive leadership, which include insincere leadership, despotic leadership, exploitive leadership, restrictive leadership, failed leadership, avoiding leadership active and passive, and laissez-faire leadership. Insincere leadership occurs when leaders attempt to save face but treat their followers unfairly and do not provide them with support. Despotic leadership is similar to authoritarian behavior and leaders are often seen as unapproachable. Exploitive leadership occurs when leaders exert pressures on followers to address the subordinates' extrinsic motivation. Restrictive leadership occurs when the leader continues to push the goals of the organization but does not include their subordinates, leading to limiting the empowerment for their subordinates. Failed leadership occurs when a leader involves themselves too much in the daily work of their subordinates. The active avoiding leadership occurs when leaders comply with their subordinates. The passive avoiding leadership occurs when leaders are inconsistent, do not take responsibility, and are inauthentic with their subordinates. Laissez-faire leadership occurs when there is a lack of communication, direction, and the leader does not encourage motivation to achieve tasks.

Einaresen et al. (2007) discussed three forms of destructive leadership, which include tyrannical leadership, derailed leadership, and supportive-disloyal leadership. Tyrannical leadership is manipulative, has an emphasis on task completion, isolates individuals into groups,

and utilizes scapegoating. Derailed leadership is based on deception and may include aspects of harassment. Leaders who exhibit this type of leadership are often absent, unable to adapt to new situations, and insensitive to others. Supportive-disloyal leadership often appears supportive due to empty promises made to subordinates and stealing company resources, but often actively prevents goal attainment. Skogstad, Einarsen, Torsheim, Aasland, and Hetland (2007) discussed laissez-faire leadership, which is similar to Shilling's (2009) laissez-faire leadership but differs in that the leader actively avoids making decisions. This leadership style is associated with role conflict and ambiguity (Brandebo et al., 2015). Tepper (2000) discussed abusive supervision, which is when the leader demeans the subordinate to feel as if they are incompetent and always at fault.

Destructive leadership behaviors can contribute to or exacerbate mental health symptoms experienced due to the effects of stress from emotional exhaustion on overall mental fitness. This was found to be very common, with 33.5%–60% of immediate supervisors exhibiting these behaviors in the past six months (Aasland et al., 2010; Brandebo et al., 2015; Johansen & Platek, 2017). Organizational effectiveness is impacted by service members who have abusive supervisors as it decreased organizational citizenship behaviors (Pflanz & Ogle, 2006). Brandebo et al. (2015) found that the strongest effects of destructive leadership behaviors were related to their perception of the leader.

Military Leadership

The military prides itself on structure and organizational effectiveness. It devotes a considerable amount of resources to leadership development to aid in promoting effective leadership (Brooks & Greenburg, 2018). The organizational culture within the military cultivates an environment that has a strong emphasis on respect for authority and can influence service

members (Campbell & Nobel, 2009). Service members are exposed to numerous hardships ranging from minor hardships to significant danger. When exposure to these hardships are chronic, it can begin to affect immune system functioning and mental health status (Britt et al., 2009). Leaders are able to buffer these stressors by providing subordinates with structure and support (Bliese & Halverson, 2002; Britt et al., 2009). Thus, it is the responsibility of leadership to aid in buffering the effects of stressors. Due to the size of the military, it is likely that leaders often command large numbers of subordinates, which can implicate that leaders have a substantial impact on their subordinates as leadership duties include defining tasks, setting goals, and monitoring progress (Wong, Bliese, & McGurk, 2003). Unit-based factors, which include leadership, play a critical role for the well-being of service members (Brooks & Greenburg, 2018). Military forces heavily rely on colleagues and leaders for support and can relate to the assistance needed for those experiencing mental health issues (Greenburg & Jones, 2011).

Good leadership can aid in maintaining and reinforcing psychological robustness (Johansen & Platek, 2017). Because leaders have the ability to influence and motivate their subordinates, the military focuses on leadership development to aid in organizational effectiveness (Britt et al., 2009; Greenburg & Jones, 2011; Thomas et al., 2010). Pietrzak et al. (2009) discussed the importance of teaching military leaders about unit support and its relation to optimal performance to encourage them to enhance support for their subordinates. Brooks and Greenburg (2018) identified certain aspects of leadership, such as trustworthiness, skills, knowledge, concern for morale and success, being involved, providing information, stimulation, clear expectations, recognition, and providing regular feedback, as beneficial. Ben-Zeev et al. (2012) found that young soldiers may benefit from direct contact with accomplished leaders who would speak candidly about their experiences coping with mental health challenges.

Empowerment and supportive comments from military leaders can be useful in normalizing treatment-seeking behaviors (Dickstein, Vogt, Handa, & Litz, 2010). Greenburg and Jones (2011) found that senior leaders are highly dismissive of mental health issues, which can influence internal and external stigma. Johansen and Platek (2017) found that abusive supervisors at the platoon level were the best predictor of average disciplinary actions and reprimands received.

NCOs are enlisted personnel in pay grades E-4/E-5 to E-9, who have obtained their position through the enlisted ranks and have not earned a commission. These individuals are appointed to their position by commissioned officers whom they report to. Officers are individuals whose rank has been confirmed by a government document, also known as a commission. These individuals hold a college degree and have completed either a military college, a reserve officer training corps program, or officer candidate school. NCOs and lower grade (O-1 to O-4) officers are usually the first point of contact for junior military service members within the military organization, as they are their supervisors within their unit. These leaders also play a pertinent role when determining fitness for duty for subordinates. Britt (2000) found that there was a stronger correlation between NCOs and perceived stigma than officer level leadership.

Within the military, there are two types of leaders: officers and NCOs. Within the military hierarchy, NCOs report to officers. Officers are senior leaders who are in charge of setting and executing mission priorities and higher-level orders, providing role-clarifying directions, and ensuring the welfare of their NCOs and junior enlisted service members (Sharma & Pearsall, 2016; Wong et al., 2003). Wright et al. (2009) and Momen et al. (2012) found officer leadership and unit cohesion to be predictors of stigma and determinants of treatment seeking,

indicating that more positive officer behaviors and unit cohesion were associated with lower reports of mental health stigma. Therefore, officer leadership may influence the buffering effects of stress management through their NCOs (Wood, Foran, Britt, & Wright, 2012)

NCOs are senior enlisted service members serving as midlevel leaders within the military's rank structure (Sharma & Pearsall, 2016). They are commonly immediate front-line supervisors for junior enlisted personnel. NCOs have more of an impact on subordinates than officers due to them assessing the subordinate's performance and discussing their promotion trajectory (Britt et al., 2012; Dondanville, Borah, Bottera, & Molino, 2018). Within active duty and reserve components of the U.S. Army, NCOs make up nearly 38% of enlisted personnel (Office of Deputy Under Secretary of Defense, 2010). NCOs are direct leaders who are responsible for executing orders from higher elements that contribute to achieving the goals and missions of the larger organization to carry out very specific tasks in support of higher-level objectives (Wong et al., 2003). NCOs serve in a position that has more interactions with subordinates, as they are front-line supervisors tasked with the duties of providing direct oversight, reprimanding, correcting, responding to incidents, and authorizing the absences of their subordinates, resulting in their actions having more a direct impact on military personnel (Britt et al., 2012; Dondanville et al., 2018). Additional, NCOs' responsibilities include training junior enlisted personnel, ensuring their welfare, and leading in the execution of combat and noncombat issues (Sharma & Pearsall, 2016). NCOs are responsible for developing and maintaining soldier skills, which include military schooling, finances, physical fitness, legal issues, and family concerns (Wong et al., 2003).

Because NCOs serve in a position that has more interactions with junior enlisted personnel, they are more likely to have influence on their subordinates due to the modeling of

their behaviors. Military leaders also have the ability to influence their subordinates' health and adaptation to stressful events, as they are the individuals who authorize their personnel to attend appointments or allow time off (Thomas et al., 2010).

Due to the NCO's immediate supervisory role, it is likely that they have the greatest influence on military personnel (Knapp et al., 2004), and as a result, it has been suggested that the well-being of the service member should be a leadership responsibility (Castro & Alder, 2011; Greenburg & Jones, 2011). NCOs and officers often influence the behaviors, attitudes, and opinions of those who serve under them. The behaviors of leaders can influence the impact that stressors have on their subordinates. Research has suggested that leaders can both positively and negatively affect the well-being of their subordinates through positive and negative leadership behaviors. Positive leadership behaviors can serve as a buffer against the negative effects of stress while negative leadership behaviors can contribute to mental health symptoms following stress exposure (Barroso Castro et al., 2008; Bliese & Halverson, 2009). Wright et al. (2009) found significant but relatively small relationships between unit factors such as leadership and determinates of treatment seeking. Reports of lower stigma were associated with ratings of more positive officer behaviors and high levels of unit cohesion. In a sample of OIF/OEF National Guard/Reserve veterans, higher levels of social support were associated with lower stigma (Pietrzak et al., 2009). Advocacy behaviors by NCOs were associated with fewer symptoms of anxiety, major depression, and medical issues such as headache, joint and back pain (Dezsofl & Sinclair, 2006). Bliese and Halverson (2002) found that positive NCO behaviors was able to negate the effects of psychological strain from a high workload.

It is well documented that service members' mental health is impacted by the stress associated with humanitarian, wartime, and disaster missions. Despite 27.4% of service members

having reported suffering from significant work stress, there are limited studies of military personnel in garrison or who experienced a noncombat deployment. It is important to understand the impact that leadership behaviors have on subordinates because the military exposes their personnel to numerous stressors, including physical hardship, psychological distress, and physical danger. Considering the number of stressors and traumas associated with the military, it is likely that leaders may indirectly or directly influence their subordinates' perception of mental health stigma and treatment seeking. Chronic exposure to stressors has been shown to negatively impact the immune system and psychological well-being (Dupre & Day, 2007). Britt et al. (2012) suggested that the well-being of military personnel should be considered a leadership responsibility. If there is persistent tension or disagreements between supervisors and subordinates, especially if conflict is usually resolved in the supervisor's favor, this can impact the subordinate's ability to manage stressors, as they do not have options such as quitting available to them. With the withdrawal of troops in Afghanistan underway, it is imperative to study military service members in garrison and those who have experienced a noncombat deployment, as leadership in garrison can be an antecedent to preventing military mental health stigma in the future and noncombat deployments will become more prevalent.

It is hypothesized that the destructive leadership behaviors will have a positive correlation with mental health stigma and a negative correlation with treatment-seeking behaviors for veterans who have remained in garrison or experienced a noncombat deployment. It is also hypothesized that constructive leadership behaviors will have a negative correlation with mental health stigma and a positive correlation with treatment-seeking behaviors for veterans who have remained in garrison or experienced a noncombat deployment.

CHAPTER III: METHODS

Participants

Participants were recruited through word of mouth and social media platforms such as Facebook. Permission was obtained from the administrators of two Facebook groups (Alabama Veteran and U.S. Veterans Foundation) prior to posting the advertisement for the study. The advertisement for an online survey of veterans' health and risk behaviors was targeted towards English-speaking U.S. veterans of all ages (see Appendix A). The response rate was undeterminable due to the recruitment approach. The number of potential respondents who saw the advertisement but did not participate was unknown and potentially contributed to self-selection bias.

Inclusion and Exclusion Criteria

Participants included all veterans, active duty service members, and service members in the reserves and NG. Eligibility criteria included age between 18–99; completed all training requirements and have served in the military for at least six months or are currently serving in active duty or Guard/Reserve service in the Air Force, Army, Marine Corps, Navy or Coast Guard; and all genders, ages, ranks, socioeconomic status, and levels of education who have served during a campaign as defined by C.F.R. 38 § 3.2; service members who are, have remained in garrison, or have experienced a noncombat deployment or mobilizations (i.e., peacekeeping missions, humanitarian aid, nation building natural disaster relief, etc.); have access to a computer/smartphone with Internet; and have the ability to read at an eighth grade reading level. Military service members who did not complete training and were unable to enter the fleet, military service members who have served less than two months after duty assignment while in the fleet, individuals who do not identify as serving in the military, and Department of

Defense civilian and contractors who have not served in the Armed Forces were excluded from this study, as these individuals have not served long enough to have had significant exposure to unit leadership.

A total of 95 participants (55 males, 28 females, and 12 undisclosed) initiated the survey with final completion at $n = 66$ resulting in a 61% completion rate of the survey. Of the 83 participants who completed the demographic questionnaire, 59% identified as Caucasian ($n = 49$), 12% identified as Black ($n = 10$), 4.8% identified as Asian ($n = 4$), 10.8% identified as Latinx ($n = 9$), and 13.2% identified as multiracial ($n = 11$). The participants' ages ranged from 19 years to 68 years ($M = 36.09$, $SD = 10.37$; see Table 1). There were 78% identified as enlisted ($n = 65$), which consisted of 37% junior enlisted ranks E-2 to E-4 ($n = 24$) and 63% senior enlisted service members rank E-5 to E-8 ($n = 41$). Additionally, 20.5% identified as commissioned officers ranks O-2 to O-6 ($n = 16$) and Chief Warrant Officer ($n = 1$). The highest level of education was graduate degree and the lowest was high school diploma. There were 25.3% who endorsed serving in the Army ($n = 21$), 15.7% Navy ($n = 13$), 22.9% Air Force ($n = 19$), 34.9% Marine Corps ($n = 29$), and 1.2% Coast Guard ($n = 1$). There were 77.1% of participants who endorsed being active duty ($n = 64$), 14.5% reserves ($n = 12$), 4.8% reserves with active orders ($n = 4$), and 3.6% NG ($n = 3$). Of those separated from the service, all have been honorably discharged. As shown in Table 1, the participants varied in time in service, length of time within a unit, number of combat deployments, and number of noncombat deployments.

Table 1

Means and Standard Deviations

Variable	<i>N</i>	<i>M</i>	<i>SD</i>
Ethnicity			
Caucasian	49		
Black	10		
Asian	4		
Latinx	9		
Multiracial	11		
Age		36.09	10.379
Time in Service		9.54	6.918
Length in Unit		3.35	2.444
Number of Combat Deployments		1.29	1.544
Number of Non-Combat Deployments		1.94	3.3379

Procedure

Institutional review board approval was obtained for this study. The participants ($N = 95$) completed a screening via Survey Monkey via the link in the advertisement. A letter of information about the study and an informed consent form were given electronically to which the participants agreed to the terms of the study before completing the surveys. After the screening was completed and eligibility criteria were met, the participants completed a demographic questionnaire, which addressed the domains of sex, age, ethnicity, education level, military pay grade, time in service, military occupational specialty, time in current unit, number of combat deployments, number of noncombat deployments, and discharge status. The participants were then directed to an online survey that included the constructs discussed in the following section. Permission from the authors of each construct was obtained prior to the start of the study. If a participant experienced distress while completing the study, they were able to contact the principal investigator.

Measures

Screening questionnaire. A screening questionnaire was developed for the current study (see Appendix A). The participants were asked about their age, military status, and history of remaining in garrison to ensure the inclusion criteria were met. The questionnaire included four questions that were answered by yes or no. This questionnaire took approximately 1 min to complete.

Demographic questionnaire. A demographic questionnaire was developed for the current study (see Appendix A). The participants were asked their sex, age, ethnicity, education level, branch of service, military pay grade, time in service, military occupational specialty, time in current or last unit, number of combat deployments, number of noncombat deployments, and discharge status. The questionnaire contained 12 questions and took approximately 1 min to complete.

Endorsed and Anticipated Stigma Survey (EASI). The EASI (Vogt, Di Leone, et al., 2014) was designed to assess different dimensions of stigma-related beliefs about mental health among the military and veteran population. The EASI is a 40-item Likert-type questionnaire that takes less than 10 min to complete (see Appendix B). Ratings are based on the service members level of agreement, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). No reverse-scored items are included, but positively phrased filler items (e.g., “If I had a mental health problem and family/friends knew about it, they would be supportive of me”) were used to decrease negativity bias. The EASI has five subscales: beliefs about mental illness, beliefs about mental health treatment, beliefs about treatment seeking, concerns about stigma from loved ones, and concerns about stigma in the workplace. Higher scores on the scales indicate greater stigma in each of the domains (Vogt, Di Leone, et al., 2014). The EASI has good internal consistency reliability

estimates with alpha coefficients exceeding .80 for all scales and item-total correlation had values of at least .40 for all items within each scale.

Life Events Checklist for DSM-5 (LEC-5). The LEC-5 (Gray, Litz, Hsu, & Lombardo, 2004) inquires about exposure to potentially traumatic events and allows for endorsement of multiple types of exposure. LEC-5 was originally developed at the National Center for Posttraumatic Stress Disorder concurrently with the Clinician Administered PTSD Scale and then later modified to reflect the criteria of the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., *DSM-5*; American Psychiatric Association, 2013) to assess for PTSD (Gray et al., 2004; see Appendix B). Respondents rate their experience of that event on a 5-point nominal scale (1 = *happened to me*, 2 = *witnessed it*, 3 = *learned about it*, 4 = *not sure*, and 5 = *does not apply*). This measure is commonly used in clinical settings and with various populations to include military personnel and college students. As a potential traumatic events screening measure, the LEC-5 has a strong test-retest reliability and strong convergence with psychopathology that are commonly associated with traumatic events (Gray et al., 2004). Because the LEC-5 represents a distinct episode which is not necessarily correlated within a construct, the internal consistency is not relevant (Gray et al., 2004). For the present study, the instructions were modified to ask if these events occurred from the initiation of their military contract until military contractual separation and included an exclusion criterion for breaks in service.

Walter Reed Army Institute of Research Leadership Scale, Short Form (WRAIR-LS, Short Form). The WRAIR-LS, Short Form (Lopez, Adler, Cabrera, & Thomas, 2018) is a leadership scale that has been commonly used in more than 100,000 surveys for military studies to assess small-unit leadership (Castro, Adler, & Bienvenu, 1998; Lopez et al., 2018; McGurk et

al, 2014; Wright et al, 2009). It was originally developed using soldiers who served in Iraq and Afghanistan but was later used in a large-scale garrison study. The WRAIR-LS, Short Form rates both NCOs and officers constructive and destructive behaviors (see Appendix A). The perceptions of general leadership behaviors are assessed by service members with four items rated in terms of the frequency, ranging from 1 (*never*) to 5 (*always*), that the NCOs and officers performed different behaviors, such as “Tell service members when they have done a good job” or “Embarrass service member in front of other service members.” When calculating an overall mean score, negative items were reversed scored. Previous studies have documented acceptable reliability with studies reporting Cronbach’s alpha of .76–.77 (McGurk et al., 2014), .77–.78 (Alder et al., 2017), .83 (Sipros et al., 2014), and .82–.83 (Wood et al., 2012). Lopez et al. (2018) found that scores for both NCOs and officers correlated with established measures of leadership and that the WRAIR-LS, Short Form is an ecologically valid measure of global leadership that can be effectively used in studies with service members as is it geared to the military environment in various context (e.g., garrison, combat deployments).

Analysis

Data were analyzed using IBM’s Statistical Package for the Social Sciences (version 25). Descriptive statistics were used to evaluate sample characteristics and demographics. A power analysis was conducted. For all analyses, statistical significance was set at $p < 0.05$. A correlational analysis was conducted with the continuous score on the five scales of the EASI and the mean score from the WRAIR-LS, Short Form. The research question addressed in this study was: Can mental health stigma be predicted as a function of leadership behaviors for service members who have remained in garrison or experienced a noncombat deployment?

Hypothesis 1. A correlational analysis was conducted on the mean score of the constructive behaviors identified on the WRAIR-LS, Short Form and the total scores on the beliefs about mental health treatment and beliefs about treatment seeking subscales on the EASI. A regression equation with the already known predictors of mental health stigma was created to conduct a regression analysis on the two leadership styles to predict higher or lower levels of mental health stigma of service members who have remained in garrison or experienced a noncombat deployment.

Hypothesis 2. It is hypothesized that the destructive leadership behaviors will have a positive correlation with mental health stigma and a negative correlation with treatment-seeking behaviors for veterans who have remained in garrison or experienced a noncombat deployment. It is also hypothesized that constructive leadership behaviors will have a negative correlation with mental health stigma and a positive correlation with treatment-seeking behaviors for veterans who have remained in garrison or experienced a noncombat deployment. Multiple regression was performed to understand whether rates of mental health stigma can be predicted based on the potential variables. An a priori power analysis was run to estimate the necessary sample size to achieve a power of .80. Based upon past research, it was expected that the following predictors would account for a medium effect size when predicting variation in levels of mental health stigma. Using G*Power software, in order to achieve a projected level of power of 0.80, the study required 84 participants. In addition, prior to analysis, the assumptions of multiple linear regression were performed to ensure analysis is reliable and valid.

Hypothesis 3. It is hypothesized that considering the already known predictors of mental health stigma, constructive leadership will have a lower level of mental health stigma amongst service members who have remained in garrison or experienced a noncombat deployment.

CHAPTER IV: RESULTS

Preliminary analysis was performed on all analyses to ensure no violation of assumptions of normality, linearity, and homoscedasticity. For the correlation and partial correlation analyses, information about the sample was verified via a visual inspection of the table. For the regression analyses, the sample size was found to be sufficient to complete a linear regression and multiple linear regression. Multicollinearity and singularity were assessed and were not found to impact the data. A visual inspection of the data showed no outliers. The residuals were normally distributed about the predicted mental health stigma scores showing normality. The residual had a straight-line relationship with the mental health stigma scores showing linearity. The variance of the residuals about the mental health stigma scores were the same for all predicted scores showing homoscedasticity.

Relationship Between Mental Health Stigma and Leadership Behaviors

A correlational analysis was conducted with the continuous score on the five scales of the EASI and the mean score from the WRAIR-LS, Short Form. A Pearson's product-moment correlation was run to assess the relationship between mental health stigma as measured by EASI and constructive leadership behaviors as measured by WRAIR. Preliminary analyses showed the relationship to be linear with both variables normally distributed, as assessed by a Shapiro-Wilk's test ($p > .05$). There was a no statistically significant correlation between mental health stigma and leadership behaviors, $r(63) = -.10$, $p = .436$, with leadership behaviors explaining 1% of the variation in mental health stigma scores.

A Pearson's product-moment correlation was run to assess the relationship between mental health stigma as measured by EASI and constructive leadership behaviors as measured by WRAIR while controlling for those who have not experienced noncombat deployments or

mobilizations. Preliminary analyses showed the relationship to be linear with both variables normally distributed, as assessed by a Shapiro-Wilk's test ($p > .05$). There was a small, negative partial statistically significant correlation between mental health stigma and leadership behaviors, $r(63) = -.183$, $p = .151$, with leadership behaviors explaining 3.35% of the variation in mental health stigma scores (See Table 2).

Table 2

Pearson Correlation Among Mental Health Stigma and Leadership Behaviors Controlling for Noncombat Deployments

Variable	1	2
Total EASI		-.183*
Total WRAIR	-.183*	

* $p < 0.01$ level (2-tailed)

Relationship Between Constructive Leadership Behaviors and Treatment-Seeking Beliefs

A correlational analysis was conducted on the mean score of the constructive behaviors identified on the WRAIR-LS, Short Form and the total scores on the beliefs about mental health treatment and beliefs about treatment seeking subscales on the EASI. A Pearson's product-moment correlation was run to assess the relationship between leadership behaviors measured by the total score on the WRAIR and treatment-seeking beliefs measured by the total beliefs about mental health treatment and total beliefs about treatment seeking scales on the EASI. Preliminary analyses showed the relationship to be linear with both variables normally distributed, as assessed by a Shapiro-Wilk's test ($p > .05$). There was a large, positive statistically significant correlation between mental health stigma and leadership behaviors, $r(66) = .541$, $p = < .00001$, with leadership behaviors explaining 29.16% of the variation in mental health stigma scores (see Table 3).

Table 3

Pearson Correlation Among Constructive Leadership Behaviors and Treatment-Seeking Beliefs

Variable	1	2	3
Total WRAIR		-.040	-.014
Total Treatment-Seeking Beliefs	-.040		.541*
Total Mental Health Treatment Beliefs	-.014	.541*	

* $p < 0.01$ level (2-tailed)

Partial correlation was used to explore the relationship between leadership behaviors (as measured by WRAIR) and treatment-seeking beliefs (as measured by the total beliefs of mental health treatment and total beliefs of treatment seeking scales on the EASI) while controlling for those who have not experienced noncombat deployments or mobilizations using a Pearson's product-moment correlation coefficient. A Pearson's product-moment correlation was run to assess the relationship between leadership behaviors measured by WRAIR and treatment-seeking beliefs measured by the total beliefs of mental health treatment and total beliefs of treatment seeking scales on the EASI while controlling for those who have been not experienced noncombat deployments or mobilizations. Preliminary analyses showed the relationship to be linear with both variables normally distributed, as assessed by a Shapiro-Wilk's test ($p > .05$). There was no statistically significant correlation between mental health stigma and leadership behaviors, $r(66) = -.088$, $p = .482$, with leadership behaviors explaining 0.774% of the variation in mental health stigma scores (see Table 4).

Table 4

*Pearson Correlation Among Constructive Leadership Behaviors and Treatment-Seeking Beliefs
Leadership Behaviors Controlling for Noncombat Deployments*

Variable	1	2	3
Total WRAIR		-.088	-.085
Total EASI	-.088		.519*
Total Mental Health Treatment Beliefs	-.085	.519*	

* $p < 0.01$ level (2-tailed)

Regression Analysis of Leadership Styles and Mental Health Stigma

A linear regression was run to understand the effect of leadership styles (Total WRAIR) to predict mental health stigma (Total EASI). The prediction equation was: leadership styles = $111.026 - .563$ (Total WRAIR)* Total EASI. Leadership styles did not statistically significantly predict mental health stigma, $F(1, 62) = .601, p < .441$, accounting for 1% of the variation in mental health stigma with adjusted $R^2 = .010$ (see Table 5).

Table 5

Regression Analysis Summary for Leadership Styles and Mental Health Stigma

Variable	<i>F</i>	<i>B</i>	β	<i>t</i>	95% <i>CI</i>	R^2	<i>p</i>
Total WRAIR	.601	5.563	-.99	6.088	-2.014 - .889	.010	.441

Relationship Between Mental Health Stigma and Known Variables

A multiple linear regression was used to understand the effect of three known variables (age, sex, ethnicity) to predict mental health stigma (Total EASI). The prediction equation was: $99.678 - .095$ (Age) - 2.618 (Sex) + 1.832 (Ethnicity). Age did not statistically significantly predict mental health stigma, $F(3, 58) = .441, p < .770$, accounting for 1% of the variation in mental health stigma with adjusted $R^2 = .022$ (see Table 6). Sex did not statistically significantly predict mental health stigma, $F(3, 58) = .441, p < .717$, accounting for 1% of the variation in

mental health stigma with adjusted $R^2 = .022$. Ethnicity did not statistically significantly predict mental health stigma, $F(3, 58) = .441, p < .314$, accounting for 1% of the variation in mental health stigma with adjusted $R^2 = .022$. Age part correlation coefficient was $-.038$ equaling $.00144$ when squared, which indicated a unique contribution of $.144\%$ to the explanation of variance in mental health stigma. Sex part correlation coefficient was $-.047$ equaling $.0022$ when squared, which indicated a unique contribution of $.22\%$ to the explanation of variance in mental health stigma. Ethnicity part correlation coefficient was $.132$ equaling $.0174$ when squared, which indicated a unique contribution of 1.74% to the explanation of variance in mental health stigma.

Table 6

Results of Multiple Regression Analysis by Known Variables

Known variables	<i>B</i>	β	<i>t</i>	95% <i>CI</i>	<i>p</i>
Age	-.095	-.039	-.293	-.743 - .553	.770
Sex	-2.618	-.049	-.364	-17.022 – 11.785	.717
Ethnicity	1.832	.136	1.015	-1.781 – 5.445	.314

CHAPTER V: DISCUSSION

Summary of Findings

Dursa et al. (2014) found that 10.9% of nondeployed veterans screened positive for PTSD, with the highest prevalence of PTSD (13.8%) amongst nondeployed soldiers, indicating that veterans who have not been deployed experience PTSD. When assessing for factors of treatment-seeking behaviors, Tsai et al. (2014) found that personal support from military leaders may help normalize treatment seeking as leaders have the ability to influence and motivate their subordinates (Thomas et al., 2010). The purpose of the present research was to thoroughly investigate the relationships between exposure to certain leadership styles and factors that determine treatment seeking and mental health stigma.

The first hypothesis was that destructive leadership behaviors will have a positive correlation with mental health stigma and a negative correlation with treatment-seeking behaviors for veterans who have remained in garrison or experienced a noncombat deployment. In the combined combat and noncombat group, a negative correlation was found, suggesting that with higher levels of perceived mental health stigma, there are lower levels of constructive leadership behaviors. In the noncombat group, a small negative partial correlation was found between mental health stigma and constructive leadership behaviors, suggesting that with higher levels of perceived mental health stigma, there are lower levels of constructive leadership behaviors for service members who remained in garrison or experienced noncombat deployments. These results can lead to the clinical implication of the service member having negative viewpoints about destructive leadership. It is likely that service members may continue to perceive future leaders as negative after having experienced a leader who engages in destructive leadership behaviors. It is likely that if the service member has experienced

destructive leadership behaviors, the service member is likely to not trust authority figures. The lack of trust in authority figures can result in not abiding rules, resistance to following guidance, negative beliefs about authority figures, and skewed perception of reality that leads to feelings of persecution or discrimination. While in the military, this may look like service members having multiple disciplinary actions, being passed for promotion, or receiving a dishonorable discharge. Due to the size of the sample, the nonsignificant results could have been influenced by the power of the analyses, which is supported by the results of Hypothesis 1 having a small effect size without statistically significant results in the noncombat group.

The second hypothesis was that constructive leadership behaviors will have a negative correlation with mental health stigma and a positive correlation with treatment-seeking behaviors for veterans who have remained in garrison and noncombat deployments. In the combined combat and noncombat group, there was no correlation between leadership behaviors and treatment-seeking beliefs. However, there was a large, positive correlation between total beliefs and treatment-seeking variables, suggesting that with higher levels of mental health treatment beliefs, there are higher levels of treatment seeking. This implies that if service members are spoken to in a constructive way about mental health treatment, they are more likely to utilize mental health services in the future. With growing mental health resources for service members to access, it is important for leaders to discuss the resources that are available to the service member while they are in the service (i.e., Chaplains, Military One Source, etc.) and when they separate from the service (i.e., VA, Vet Centers, etc.). In the noncombat group, no correlation was found between constructive leadership behaviors and treatment-seeking beliefs.

The third hypothesis was that when considering the already known predictors of mental health stigma, constructive leadership behaviors will have a lower level of mental health stigma

amongst service members who have remained in garrison or experienced a noncombat deployment when a regression analysis is conducted. The regression analysis between leadership styles and mental health stigma showed that leadership styles explained 1% of the variance in mental health stigma. The multiple linear regression analysis between mental health stigma and known variables showed that 2.2% of the variance of mental health stigma was explained by the model. Age, sex, and ethnicity were not significant contributors to the prediction of beliefs of mental health stigma. This shows that males and females of all ages and ethnicities are susceptible to constructive and destructive leadership behaviors and their impact on mental health stigma. The findings revealed across the three hypotheses that the null hypothesis was retained for the last two. The first hypothesis was retained, showing that with higher levels of perceived mental health stigma, there are lower levels of leadership behaviors. However, due to the size of the sample, the nonsignificant results could have been influenced by the power of the analyses.

The purpose of the present research was to thoroughly investigate the relationships between exposure to certain leadership styles and factors that determine treatment seeking and mental health stigma amongst military service members and veterans who have remained in garrison or have experienced a noncombat deployment. The intent of the study was to help researchers develop a deeper understanding of military mental health stigma and contribute to the body of military literature. This study suggested that leadership behaviors may impact mental health stigma in service members who have remained in garrison or experienced a noncombat deployment.

Limitations

There were several limitations to this study. The method of recruiting that was used for this study can serve as a limitation as it was used for convenience due to accessibility. Limitations with this method of recruiting include sampling bias and a sample that is not representative of the entire population, which can include: the majority of participants may be from certain geographic regions, participants may be part of the same unit, the study will not be as widely spread as studies conducted in conjunction with the Department of Defense, and the study may only reach certain populations (e.g., OIF/OEF veterans, younger service members and veterans, etc.). This study had a rather low completion rate, which could be indicative of internalized mental health stigma that was encountered while attempting to complete the study. Due to the size of the sample, the nonsignificant results could have been influenced by the power of the analyses, which is supported by the results of Hypothesis 1 having a small effect size without statistically significant results. An important factor to consider is that there is very little research on military service members who have either remained in garrison or have served in a noncombat deployment. This lack of research limits this study's ability to have comparison. However, the lack of research highlights the importance of this study and the need for additional research to broaden the knowledge of the relationship between leadership behaviors and emotional health in the military.

An important factor to consider is that there were several groups within this study that were underrepresented, which serves as a limitation. This study underrepresented the Army, NG, Blacks, and Latinx. This can be impactful as the Army is the largest force within the United States, 40% of National Guard members met screening criteria for at least one mental health diagnosis, and the Black and Latinx population are commonly understudied yet have high rates

of mental health stigma. This study also overrepresented the Marine Corps when considering the total number of service members per branch. A limitation that occurred during this study was that the majority of participants were senior enlisted service members. It is likely that due to the high rank of the participants, the perception of leadership styles may have been skewed as individuals with that rank tend to be the leaders.

The greatest limitation of the present research was the use of self-report as the only measurement strategy for assessing the variables that were examined. As a result, it is likely that same-source measurement bias influenced the strength of the relationship examined. In addition, the ordering of assessments could have been presented in a manner that would have allowed for more robust data due to the rate of incompleteness. Another limitation of the present research is that this research was correlational, which prevents any causal conclusions regarding the role of leader behaviors. It should be taken into consideration that biases may have occurred throughout the study where participants may have only considered one leader when completing the WRAIR-LS. The term NCO is broad and can incorporate newly appointed NCOs, which may lead to poor management decisions, actions, and behaviors that can impact workplace environment, soldier morale, and mission success. It was also identified that the EASI does not include reverse-scored questions, which may have skewed the perception of the survey.

Recommendations for Future Research

With the withdrawal of troops in Afghanistan underway, it is imperative to study military service members in garrison and those who have experienced a noncombat deployment, as leadership in garrison can be an antecedent to preventing military mental health stigma in the future and noncombat deployments will become more prevalent. By gathering more data on the effects of leadership behaviors and emotional health in the military, interventions can be planned

to mitigate the effects of destructive leadership behaviors. These interventions can be expected to lead to both improved health and satisfaction of the military service member, improved mission readiness, and decreased military health care costs. Future studies should include a larger number of participants and focus on junior enlisted service members. In 1997, between 50%–70% of the nation's forces were junior enlisted, and this study did not accurately represent the general makeup of the armed forces as more senior enlisted personnel and officers completed the study. It may also be helpful to limit the age range to 18–40 year olds, as this study did not capture the age range it originally intended to, which limits the impact of assessing how leadership behaviors have impacted the development of mental health stigma.

An important area for future research is to assess organizational stress on a unit level as this variable may influence the answers that the participants may give regarding stigma and other barriers to treatment. This can be done by separating NCO leadership behaviors from officer leadership behaviors to gain a better understand of each level of leadership's impact on the unit level. Future studies should add a statement instructing participants to consider all of the leaders they have had while in the service versus leaving the ability to fixate on one leader. Future studies should be conducted in an inferential manner so that written data can be assessed to look for biases. Future studies should delineate from NCOs to senior NCOs (E-7) when assessing for leadership behaviors as well as implementing a minimum time in position as an NCO to ensure the study is not addressing transitional periods.

It should be noted that the demographic questionnaire did not assess for transgender personnel, which should be included in future studies to assess for additional diversity factors. To remediate same-source measurement bias, it would be beneficial to collect peer ratings of leadership behaviors on leaders within a unit, battalion, or command. There should be further

analyses conducted against the data to determine if correlations exist between other variables. For example, mental health treatment seeking and perceived stigma from peers or mental health treatment seeking and anticipated stigma from leaders in relation to leadership styles can be inferred from the current data. Further analysis of results can be completed to determine the correlation between specific job titles and mental health stigma.

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Appendix A

Informed Consent Online Survey

You are being asked to participate in an online survey for a research project being carried out by **Alexis May Charrys**, student, at National Louis University. The study is called “**The Effects of Leadership and its Implication on Mental Health Stigma and Treatment Seeking Behaviors of Veterans in Garrison and Non-combat Deployment Environments**”, and is occurring from **07-2019 to 12-2019**. The purpose of this study is to understand leadership style impact mental health stigma and treatment seeking behaviors in military service members and veterans who have remained in garrison or have experienced a non-combat deployment. This study will help researchers develop a deeper understanding of military mental health stigma and contribute to the body of military literature. This information outlines the purpose of the study and provides a description of your involvement and rights as a participant.

Please understand that the purpose of the study is to explore the process and impact of leadership styles and mental health stigma and treatment seeking behaviors and *not* to evaluate leadership styles. Participation in this study will include:

The following online survey is expected to take approximately 25-45 minutes to complete.

Your participation is voluntary and can be discontinued at any time without penalty or bias. The results of this study may be published or otherwise reported at conferences, but participants’ identities will in no way be revealed (data will be reported anonymously and bear no identifiers that could connect data to individual participants). To ensure confidentiality the researcher(s) the data file of compiled results will be kept in a password protected folder on an internal university workspace. Only the principle investigator will have access to data.

There are no anticipated risks or benefits, no greater than that encountered in daily life. Further, the information gained from this study could be useful to the principle investigator and the military. However, if immediate distress is experienced it is advised to call 9-1-1.

Upon request you may receive summary results from this study and copies of any publications that may occur. Please email the researcher, Alexis May Charrys at acharrys@my.nl.edu to request results from this study.

In the event that you have questions or require additional information, please contact the researcher, Alexis May Charrys, email: acharrys@my.nl.edu, phone: 813-291-4660.

If you have any concerns or questions before or during participation that has not been addressed by the researcher, you may contact Dr. Sierra Iwanicki email: siwanicki@nl.edu, the co-chairs of NLU’s Institutional Research Board: Dr. Shaunti Knauth; email: Shaunti.Knauth@nl.edu;

phone: (312) 261-3526; or Dr. Carol Burg; email: CBurg@nl.edu; phone: (813) 397-2109. Co-chairs are located at National Louis University, 122 South Michigan Avenue, Chicago, IL.

Thank you for your consideration.

Consent: I understand that by checking ‘Yes’ below, I am agreeing to participate in the study *The Effects of Exposure to Constructive and Destructive Military Leadership and its Implication on Mental Health Stigma and Treatment Seeking Behaviors of Veterans in Garrison and Non-combat Deployment Environments*. My participation will consist of the activities below during *06-2019 to 10-2019*:

- Completion of an online survey taking approximately 25-45 minutes to complete.

ELECTRONIC CONSENT: Please select your choice below. You may print a copy of this consent form for your records. Clicking on the ‘‘Agree’’ button indicates that

- You have read the above information
- You voluntarily agree to participate
- You are 18 years of age or older

Agree

Disagree

Screening Questionnaire

Instructions: Please answer yes or no to the following questions.

1. Are you over the age of 18?

Yes	No
-----	----

2. Do you or have you ever served in the military?

Yes	No
-----	----

3. Have you completed all training requirements and have served in the military greater than six months?

Yes	No
-----	----

4. During your military service, was there a time when you were not mobilized or deployed?

Yes	No
-----	----

Demographic Questionnaire

Instructions: Please answer the following questions.

1. How old are you? _____

2. What sex are you?

Male

Female

3. What ethnicity are you?

White

Black

Latin

Asian

Native American

Multiracial

4. What your highest level of education?

High School Diploma

Some College

Associate Degree

Bachelor Degree

Graduate Degree

5. What is your branch of service?

Army

Navy

Air Force

Marine Corps

Coast Guard

6. What is your service status?

Active Duty

Reserve- On Active Orders

Reserve

National Guard

7. What is your paygrade? _____

8. How long is your time in service within the military? ____ Years ____ Months

9. What is your military occupational specialty? _____

10. How long have you been in your current unit? ____ Years ____ Months

11. How many combat deployments have you been on? _____

12. How many non-combat deployments or mobilizations have you been on? _____

13. If separated from the service, did you receive an honorable discharge?

Yes	No	Not Applicable
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WRAIR-LS (Short Form)

Instructions: Circle the how often (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always) each statement occurs within your unit.

1. NCO's tell service members when they have done a good job.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

2. NCO's exhibit clear thinking and reasonable action under stress.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

3. NCO's embarrass service members in front of other service members.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

4. NCO's try to look good to higher-ups by assigning extra missions or details to service members.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

1. Officers tell service members when they have done a good job.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

2. Officers exhibit clear thinking and reasonable action under stress.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

3. Officers embarrass service members in front of other service members.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

4. Officers try to look good to higher-ups by assigning extra missions or details to service members.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

LEC-5

Instructions: Listed below are a number of difficult or stressful things that sometimes happen to people. For each event check one or more of the boxes to indicate that: (a) it happened to you personally while in the military; (b) you witnessed it happen to someone else while serving in the military; (c) you learned about it happening to a close family member or close friend while serving in the military; (d) you were exposed to it as part of your job in the military; (e) you're not sure if it fits; (f) it doesn't apply to you.

Be sure to consider your entire military service from the initiation of your military contract until your contractual separation as you go through the list of events. If you have experienced any of these events during a break in contractual service please do not include them.

1. Natural disaster (for example, flood, hurricane, tornado, earthquake)

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

2. Fire or explosion

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

3. Transportation accident (for example, car accident, boat accident, train wreck, plane crash)

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

4. Serious accident at work, home, or during recreational activity

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

5. Exposure to toxic substance (for example, dangerous chemicals, radiation)

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

6. Physical assault (for example being attacked, hit, slapped, kicked, beaten up)

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

7. Assaulted with a weapon (for example, being shot, stabbed, threatened with a knife, gun, bomb)

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

8. Sexual Assault (rape, attempted rape, made to perform any type of sexual act through force or threat of harm)

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

9. Other unwanted or uncomfortable sexual experience

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

10. Combat or exposure to a war-zone (in the military or as a civilian)

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

11. Captivity (for example, being kidnapped, abducted, held hostage, prisoner of war)

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

12. Life-threatening illness or injury

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

13. Severe human suffering

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

14. Sudden violent death (for example, homicide, suicide)

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

15. Sudden accidental death

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

16. Serious injury, harm, or death you caused to someone else

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

17. Any other stressful event or experience _____

Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't apply
----------------	--------------	------------------	----------------	----------	---------------

EASI

Instructions: Circle the how much you agree (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always) with each statement.

1. People with mental health problems cannot be counted on.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

2. People with mental health problems often use their health problems as an excuse.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

3. Most people with mental health problems are just faking their symptoms.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

4. I don't feel comfortable around people with mental health problems.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

5. It would be difficult to have a normal relationship with someone with mental health problems.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

6. Most people with mental health problems are violent or dangerous.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

7. People with mental health problems require too much attention.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

8. People with mental health problems can't take care of themselves.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

9. Medications for mental health problems are ineffective.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

10. Mental health treatment just make things worse.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

11. Mental health providers don't really care about their patients.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

12. Mental health treatment generally does not work.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

13. Therapy/counseling does not really help for mental health problems.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

14. People who seek mental health treatment are often required to undergo treatments they don't want.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

15. Medications for mental health problems have too many negative side effects.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

16. Mental health providers often make inaccurate assumptions about patients based on their group membership (e.g., race, sex, etc.).

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

17. A problem would have to be really bad for me to be willing to seek mental health care.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

18. I would feel uncomfortable talking about my problems with a mental health provider.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

19. If I had a mental health problem, I would prefer to deal with it myself rather than to seek treatment.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

20. Most mental health problems can be dealt with without seeking professional help.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

21. Seeing a mental health provider would make me feel weak.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

22. I would think less of myself if I were to seek mental health treatment.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

23. If I were to seek mental health treatment, I would feel stupid for not being able to fix the problem on my own.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

24. I wouldn't want to share personal information with a mental health provider.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

If I had a mental health problem and friends and family knew about it, they would...

25. ...think less of me.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

26. ...see me as weak.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

27. ...feel uncomfortable around me

1 2 3 4 5

Strongly Disagree Disagree Neither Agree Strongly Agree

28. ...not want to be around me

1 2 3 4 5

Strongly Disagree Disagree Neither Agree Strongly Agree

29. ...think I was faking.

1 2 3 4 5

Strongly Disagree Disagree Neither Agree Strongly Agree

30. ...be afraid that I might be violent or dangerous

1 2 3 4 5

Strongly Disagree Disagree Neither Agree Strongly Agree

40. ...think that I could not be trusted.

1 2 3 4 5

Strongly Disagree Disagree Neither Agree Strongly Agree

41. ...avoid talking to me.

1 2 3 4 5

Strongly Disagree Disagree Neither Agree Strongly Agree

If I had a mental health problem and people at work knew about it...

42. My coworkers would think I am not capable of doing my job.

1 2 3 4 5

Strongly Disagree Disagree Neither Agree Strongly Agree

43. People at my work would not want to be around me.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

44. My career/job options would be limited.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

45. Coworkers would feel uncomfortable around me.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

46. A Supervisor might give me less desirable work.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

47. A Supervisor might treat me unfairly.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

48. People at work would think I was faking.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree

49. Co-workers would avoid talking to me.

1	2	3	4	5
Strongly Disagree	Disagree	Neither	Agree	Strongly Agree