Military Suicide: The Influence of Chain of Command/Leadership on Military Personnel's Psychopathology and Suicide Rates

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Abstract

Military suicide is a national problem, but scholars and policymakers still do not understand it. In the past few years, suicide rates have increased. SurveyMonkey, a recruiting tool, was used to gather information. Participants from all backgrounds and socioeconomic classes were welcome to participate. For this study, I analyzed data from more than 100 active-duty U.S. military members and veterans from different backgrounds. I examined the participants' responses to see if the high rate of suicide in the military might be directly correlated with the chain of command/leadership. I utilized the Moral Injury Symptom Scale - Military Version Short Form (MISS-M-SF), the Endorsed and Anticipated Stigma Survey (EASI), Unit Cohesion, Deployment Risk and Resilience Inventory-2 (DRRI-2), and the Walter Reed Army Institute of Research-Leadership Scale (WRAIR-LS), short form. I examined the results to see if there was a direct link between the chain of command/leader and military suicides. Does the chain of command affect military mental health? Is the chain of command why many military people don't seek treatment for suicidal thoughts or attempts? After running a separate Pearson correlation, results show a strong positive correlation between the chain of command/leadership and military psychopathology, and military suicide. It would be advantageous to conduct more research on how military leadership, military psychopathy, and suicide are all linked.

Keywords: military suicide, psychopathology, military leaders, toxic leaders.

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The death by suicide of an individual impacts the lives of those around them, personally and professionally. Suicide and mental illness may affect people of all ages and socioeconomic backgrounds. Using mental health services in the military, such as the suicide hotline, counseling, psychotherapy, etc., has a negative stigma that permeates the military culture. In 2020-21, US military personnel are estimated to total 1,333,822, and veterans are estimated to total 19 million (Duffin, 2021; Schaeffer, 2021). Suicide is the tenth leading cause of death in the United States (NIH, n.d.; CDC, n.d.; America's Health Rankings, n.d.). Veterans accounted for 6,261 of the 45,861 adult suicides, according to the Office of Mental Health and Suicide Prevention (2021). Figures from the National Institutes of Mental Health (n.d.) reported that there have been over two and a half times more suicides than homicides in the United States in 2019.

Approximately 344 active-component service members died because of suicide, according to the Department of Defense Suicide Report (DoDSER) Calendar Year 2019 (CY19) (DoD, 2021). The DoDSER is the official reporting system for deaths by suicide and suicide attempts among service members, which also includes data from the National Defense Authorization Act (NDAA) for the Fiscal Year 2020 (FY20). Their data also reveals that, in CY19, suicides involved the use of a firearm, attributed to a drug or alcohol overdose, and those who had a mental health condition recorded. The Military Health System (MHS) consulted with 52.4 percent of those who died by suicide within 90 days before their death. There were 541 service personnel who died by suicide in the military's active and reserve components in the calendar year 2018 (CY2018), according to Lopez (2019). According to the author, there were

24.8 percent active-duty personnel, 22.9 percent reservists, and 30.6 percent National Guard members for every 100,000 persons in the above total.

With the increased research efforts to improve the prevention and treatment of suicidal behavior, the rate of suicide among military personnel and veterans has been increasing (Martin et al., 2020). With all the federal programs implemented to decrease suicide, the numbers should be decreasing. Suicide prevention and treatment are not adequately adopted, or military command/leaders are not implementing them, as seen by the rise in cases. Military suicide is a nationwide problem, and experts and politicians are still perplexed on why it occurs, despite all the money and resources devoted to the cause. More research on military leadership and its influence on Military personnel's psychopathology and suicide rates would be advantageous.

Literature Review

In relation to suicide, Gratz et al. (2020) and Van Orden et al. (2012) claim that perceived burdensomeness (PB) appears when the demand for social competence is unfulfilled, which is postulated by frameworks such as Self-Determination Theory (Ryan & Deci, 2000). Additionally, Gratz et al. (2020) states this theory postulates that family discord, unemployment, and functional impairment are all closely linked with suicide across the lifespan because these factors are likely to induce perceptions of burdensomeness in others, a finding supported by Duberstein et al. (2004), Brown et al. (2000), and Conwell et al. (2010). Thwarted belongingness (TB) is a psychologically distressing mental state that evolves when the underlying urge for connection is unsatisfied (see Baumeister & Leary, 1995; Cacioppo & Patrick, 1996). Van Orden et al. (2012) based their findings on supported research by Heikkinen et al. (1994), Koivumaa-Honkanen et al. (2001), Sourander et al. (2009), the theory proposes that the various indicators of social isolation associated with suicide across the lifespan, such as living alone, loneliness, and

low social support, are associated with suicide because they are predictors that the need to belong has been thwarted or prevented.

Furthermore, Van Orden et al. (2012), reported that TB and PB are the most proximal mental states preceding the development of suicidal thoughts—stressful life events, mental disorders, and other risk factors for suicide are relatively more distal in the risk factor causal chain. Additionally, the author asserts that TB and PB are dynamic and open to therapeutic transformation. Although TB overlaps with loneliness, Gratz et al. (2020) posit that it is a larger concept that encompasses the kind and amount of supportive and reciprocal interpersonal interactions. The authors uncovered a recent meta-analysis by Chu et al. (2017) that lends empirical support to this hypothesis and the postulated links between PB, TB, and suicidal desire.

Military Suicide

Although the suicide rate among National Guard troops is higher than that of the general population, research reveals that many of the suicide risk factors for military people are similar to those for civilians, according to Martin et al. (2020). The authors expanded on prior research by studying whether an individual's tendency for impulsive behavior may modify the relationship between trait anger and hostility and thwarted belongingness and perceived burdensomeness when disturbed. They hypothesized that negative urgency might exacerbate this link by increasing the frequency of poor judgments in which persons with a typical level of anger engage.

Martin et al. (2020) discovered that many of the well-known military-specific experiences, such as the number of deployments, do not explain the heightened rates of suicide thoughts and conduct among military personnel, which has been founded on previous studies.

Depressive disorders, bipolar spectrum disorders, and alcoholism are all associated with an increased risk of suicide among veterans. Also, suicidal ideation is connected to feelings of TB and perceived burden. Individuals' aggressive dispositions, particularly anger and hatred, may be a key component of TB's thoughts and burdensomeness. Anger, hatred, and a sense of TB are all related to a person's mind of burdensomeness, but the authors expect that negative urgency will diminish these associations in the military (Study 1) and civilian samples (Study 2).

Martin et al.'s (2020) first study surveyed 441 members of the Army National Guard. The 69-75 participants in research two came from a pool of people who had attempted suicide and were used to test for various manifestations of violence. The measures used were Buss Perry Aggression Questionnaire (BPAQ), the Urgency Premeditation Perseverance Sensation Seeking Impulsive Behavior Scale-Negative Urgency (UPPS-P), The Interpersonal Needs Questionnaire-15 (INQ-15), and the Beck Scale for Suicidal Ideation (BSS). The authors included 69-75 adults from the general population in the second study, building on Ammerman et al.'s (2015) study. Participants in this study filled out demographic questionnaires and the same tests as those in Study 1.

Negative urgency and internal forms of hostility combine to impact various suicide-related characteristics, claims Martin et al. (2020). This interaction varied depending on the demographic. Moreover, these findings reflect specific links for how hostility and anger affect perceived burdensomeness and might give more precise targets for lowering suicidal thoughts and the sense of unnecessary strain on others. Their findings suggest that suicidal desire is a distinct entity from suicidal thoughts.

To see if perceived burdensomeness and lack of belongingness may operate as a buffer between workplace bullying and suicidal ideation in military personnel, Cromwell-Williamson et

al. (2019) conducted a study with 470 active-duty service members. They analyzed these individuals using the Scale for Suicide Ideation-Current (SSI-C), the Bullying Survey, and the Interpersonal Needs Questionnaire (INQ). The authors also claim that suicide is now the second leading cause of death in the US Armed Forces, even after the protocol of prospective military recruits being tested for significant mental illness before enlistment via a general psychiatric assessment.

Crowell-Williams et al. (2019) also found that many military groups have a lengthy history of hazing. As to the data report provided by the US Department of Defense (2017), the authors found 415 hazing complaints involving 824 accused perpetrators and 733 complainants across all military branches between the end of April 2016 to September 2017. Given the ubiquity of hazing in the military and the blurred border between hazing and bullying, it is evident from this study that the military has a high level of bullying. Researchers have researched the psychological effects of bullying. Researchers have also studied bullying's psychological impacts. They discovered that bullying has several psychological severe consequences, including the development of anxiety disorders, depression, suicide thoughts and attempts, deterioration of health issues, and even negative economic futures.

Crowell-Williamson et al. (2019) concluded that 57% of bullied individuals had symptoms of post-traumatic stress disorder (PTSD). In addition, the authors found suicidal thoughts and PTSD were linked, as was bullying victimization. This is contributed by a lack of social support, communication, and trust among coworkers is related to workplace bullying. Researchers observed that those who had suicidal thoughts were more likely to have been bullied or harassed at work and had little job control and high job instability. Agreeable to other studies, the authors also found that perceived burdensomeness may be a precursor to suicidality and may

be a therapeutic target for change. Researchers believe that they are almost always maladaptive misunderstandings when it comes to onerous cognitions. The military has deliberately implemented suicide prevention programs after realizing how common it is among its members. The author's findings concluded that bullying is commonplace in military culture. Additionally, the authors determined that there is evidence that certain forms of bullying may have a more significant negative impact on mental health than others.

Ammerman et al. (2021) researched whether responses to disclosure of a suicide attempt (SA) had any impact on whether people sought treatment. In the study, 37 veterans underwent inpatient psychiatric treatment for a prior SA. Those who have served in recent wars and were at high risk for suicide conduct may be more vulnerable to unfavorable reactions to SA disclosures since they already face high levels of mental health stigma. As the first analysis of SA disclosures among veterans, the authors aimed to build on previous work in the field. Results showed that positive emotions, even in a negative disclosure experience, were the only ones that led to beneficial effects. Only the positive reactions to a valuable disclosure experience were linked to an enhanced chance of a future disclosure when a veteran's total disclosure experience. Veterans reported revealing their SA to seven or eight people on average, with less than half of those people being non-providers, e.g., immediate family, significant other. Among the community samples, disclosure beneficiaries were more frequently informal supports, e.g., friends, family (see also Encrenaz et al., 2012). As a result, veterans may find it challenging to open up about their feelings because of the stigma associated with suicide.

Further, Ammerman et al. (2021) argue that variables that influence the interpretation of emotions, rather than the reactions themselves, may play a more significant role in determining whether a disclosure experience is beneficial or harmful. Two examples are a person's

confidence in the availability of further social support or an erroneous fear of the consequences of sharing information. A veteran's perception of their experience may be influenced more by favorable replies than negative ones, according to the results of the authors.

Ravindran et al. (2020) studied the frequency, trends, and related variables of post-military suicide death among US service personnel. They were the first to analyze specific suicide risk variables by time since active status change. They examined demographics and military service to help the VA avoid veteran suicide. The researcher's cohort included those who served in the US military between January 1, 2010, and December 31, 2017. Analyzed data was from September 9, 2019, to April 1, 2020.

Ravindran et al.'s (2020) study included 1,868,970 veterans and a total of 7,047,300 person-years of follow-up. With a mean separation age of 30.9 years, their study included 1,572,523 men and 296,447 women. This cohort included most Whites (1,352,598) and 889,688 U.S. Army veterans. They found that male veterans had a greater risk of suicide within six years of separation than female veterans. Hazard rates were around four and a half times higher for older and more educated individuals who transitioned. The biggest risk group is non-high school graduates. Those who were never married, divorced, separated, or widowed had a greater risk than those who were married. Black soldiers were less at risk than White soldiers. Hispanics were less at risk than non-Hispanic veterans. The authors also discovered that those who had served in the active component for less than two years had the highest rate of suicide. The pattern rose three to six months after leaving the Army, Marine Corps, or Air Force. The Marine Corps had the highest suicide rate every year following the transition. In light of the information, the authors concluded that the service branch is a military suicide risk factor. Furthermore, suicide rates peaked a year after the separation, according to their research, and remained high for years.

Lawrence (2021) evaluated the Feres concept on military suicide. As per the author, military suicide rates had increased to their highest level since 2012, when military suicides exceeded combat deaths. And the figure continues to grow. Based on their study, active-duty personnel commit suicide every twenty-seven hours. Since the coronavirus pandemic began, military suicide rates have risen by close to 20%. Military suicide rates should be declining, not increasing, given the resources invested in this issue by the Departments of Defense (DoD) and Veteran Affairs (VA) over the last decade and their in-depth understanding of military personnel concerns. It further indicates that the military culture does not accept the changes. Hence, Congress approved the Federal Tort Claims Act (FTCA) and the National Mental Health Act (NMHA) in 1946. Between 1950 and 1987, Feres covered "incident to service," such as sexual assault, rape, murder, suicide, and medical malpractice (per the fiscal 2020 National Defense Authorization Act). The author further claims that the FTCA allows some claims against the government for employee carelessness, but there are 12 exceptions, one of which is the Feres doctrine, which prevents compensation for injuries to active-duty military personnel caused by other service members' negligence, including active-duty military suicides.

To avoid a breakdown in military order and discipline, judges tend to avoid interfering with military activities, according to Lawrence (2021). However, in military suicide instances, the decision-making involved has not been military in the traditional sense of the term, just that the people engaged are members of the armed services. In addition, military personnel is more likely than civilians to be screened for suicidal tendencies. Military members who are on active service are also under the jurisdiction of the military. Suicide victims who are active-duty military are always under military oversight. Under Feres, a court will never hold a third party

accountable for the suicide of a military service member, no matter how foreseeable or in control they were.

Lawrence's (2021) study also shows that while medical incompetence commonly leads to active-duty military suicides, there are instances where superior officer wrongdoing is probably greater than medical carelessness. Protecting wrongdoers does not defend the military; it causes it to decay from the inside. Military suicide rates have risen, indicating that efforts to change mental health attitudes and prevent suicides have little effect. If the courts continue to rely on Feres, military loved ones cannot seek compensation for their injuries. Additionally, the author concludes that surviving benefactors are forbidden from suing third parties who negligently cause the suicides of their loved ones, a system that needs to be re-evaluated and corrected.

As per Prazak and Herbel (2022), there has been an epidemic of mental health problems among service personnel, mainly suicide. Compared to matched civilians, 25% of non-deployed Army soldiers had an estimated mental health problem (MHD), but only 50% of military respondents with an MHD said that they had been present before enlisting. Pre-enlistment rates for panic disorder and PTSD were substantially higher in the military than in civilians. The authors further state that the lifetime prevalence of MHDs in recruits and civilians was found to be similar.

Prazak and Herbel (2022) claim that deployments dramatically increase military personnel's mental health risks. They discovered that 13.9% of military members had suicidal thoughts; 5.3 percent have made plans to commit themselves, and 2.4 percent have attempted suicide. Moreover, these rates cannot be explained by pre-existing mental health issues because each of these rates is lower than civilians' before recruitment, yet rates restricted to after enlistment were considerably higher than civilians' for both suicidal ideations (SI) and plans.

There is no denying that Deployments substantially impact military troops' mental health. Additionally, soldiers and Marines who served in Iraq or Afghanistan reported suffering from more than one form of traumatic stress. Based on a second Department of Defense investigation, the authors found that both deployed and non-deployed members of the military saw a significant increase in suicide rates between 2004 and 2009 (see Schoenbaum et al., 2014; Pruitt et al., 2016). Deployment, demotion, and being a woman (if deployed) are all associated with an increased risk of suicide ideation. The researchers claim that suicidal thoughts and behavior are related to traumatic stressors/disorders, and these statistics imply that one must take quick action to address this connection.

Prazak and Herbel (2022) also claim that the dread of humiliation and ostracization is rooted in military culture. Additionally, the authors report that cultural norms, such as respect for authority, a lack of emotion, and a focus on the greater good overshadow service members' concerns. Furthermore, the military is grappling with an increase in suicides, yet stigma and hurdles to receiving mental health care are still prevalent. To avoid seeking help, the authors found that psychological barriers include traumatic symptoms and the prospect of severe negative emotional experiences—secondly, social obstacles related to potential isolation. Lastly, vocational difficulties arise from DoD policies to discharge those with mental health difficulties. In their review, the authors found that military personnel are renowned for having low rates of seeking professional treatment and that these obstacles remain.

When hazing or other forms of bullying are widespread among service members, it can seriously impact their emotional well-being. Suicide risk may indeed be among military personnel who feel a burden or rejected belonging, consistent with a previous study. Prazak and Herbel’s (2022) conclusion is consistent with Silva et al.’s (2017) finding that TB was related to

a higher likelihood of suicide ideation among US Army recruits with an increased feeling of burdensomeness. The findings underline the critical need to investigate suicide in the military, a particularly suicidal community.

Military Chain of Command/Leadership

Toxic leadership is a newer topic, originating in US military research. Winn and Dykes (2019) performed a peer-reviewed study on toxic leadership. Leadership is assumed to be supportive of and in favor of necessary reforms. Army researchers studying PTSD and suicide have adopted a novel approach by looking at leadership (externally) rather than just mental illness or difficulties with subordinates (internally). Despite the difficulty of being away from loved ones and the stress of war, suicide rates were high owing to an unknown stressor. A toxic leader has self-centered attitudes, motives, and behaviors that negatively impact subordinates, the company, and mission outcomes.

Suicidal behavior may result from a toxic command environment in already-difficult settings, as believed by Winn and Dykes (2019). These pressures build up over time, manifesting as psychological or physiological impacts or both, depending on the work and the job environment. Overbearing, self-centered, egotistical leaders can demoralize troops. When a toxic leader creates a hostile workplace, there are frequently no outward symptoms, but the ramifications are widespread. This creates a stressful climate that negatively impacts the subordinate's work and personal life. They also contend that the US Army's top-down evaluation system contributes to toxic leadership. Toxic commanders/leaders can control their subordinates and obtain favor with superiors in a military chain of command. Thus, toxic leaders are kept in place and even promoted. Based on their research, the repercussions of toxic leadership are subtle, long-lasting, and crippling. The authors assert that the researchers observed that toxic

leaders demonstrate morale-damaging actions but have even greater resilience when they are in a favorable setting and have tolerant followers.

Trachik et al. (2020) indicate that the Department of Defense (DoD) financed five-year longitudinal research to analyze determinants of risk and resilience in soldiers before, during, and after service in attempts to improve suicide prevention programs. Accordingly, research shows that unit cohesion, leadership, and health outcomes are all closely related in the military. They also discovered that increased unit cohesion is linked to lower rates of psychological disorders like depression and PTSD and a longer time spent in the military and better military performance. Leaders have demonstrated to affect both the psychological well-being of their subordinates and the cohesiveness of their units.

Military personnel stationed in Korea were studied by Trachik et al. in 2020. The researchers effectively coordinated the recruitment of participants. Soldiers completed a survey of 1,613, and of them, 1,096 agreed to allow their personal information to be used for future research projects. Soldiers in rotating units accounted for 200 of the consented sample. Social and military characteristics inquiries, such as the participants' ages and education levels and their ranks and deployment histories, were asked of them. The Composite International Diagnostic Interview (CIDI) depression module (Seifu et al., 2021), the Interpersonal Needs Questionnaire (INQ), the Combat Operational Stress Control (COSC) concept, and four questions derived from Podsakoff and MacKenzie (1994) were used to evaluate the individuals. The authors assessed a wide range of leadership, and only one was linked to a reduction in thwarted belongingness and a sense of burdensomeness in the previous year. Previous studies conducted both inside and outside the military have shown that the PB-SI relationship is much stronger than the TB-SI relationship. The researchers used active-duty Soldiers to investigate the association between

leadership behaviors and unit cohesiveness, TB, PB, and SI. Based upon their findings, SI-related mechanisms might be connected to military-relevant variables, such as leadership and cohesiveness.

Trachik et al. (2021) discovered that a feeling of purpose and meaning in life are two elements that are linked to a leader's capacity to inspire subordinates. Increasing one's awareness of the importance of having a sense of direction and meaning in life has been linked to a lower risk of suicide. Cohesion and leadership purpose are examined as correlates of suicidal ideation/death ideation (SI/DI) in a longitudinal context, building on previous findings from Tachik et al. (2020). In this high-risk work environment, the researchers set out to find three possible intervention points that could delay the onset of SI/DI.

At the beginning of the study, Trachik et al. (2021) surveyed 2,181 troops anonymously at time 1 (T1). Among these troops, 1,184 completed the survey at time two (T2), and 59 finished the survey at time three (T3). These 559 troops were the final analytic sample. The Patient Health Questionnaire-9 (P HQ-9) was used to determine the frequency of SI/DI symptoms encountered in the preceding two weeks. The WRAIR Leadership Scale (WRAIR-LS) was used to evaluate general leadership. This study only looked at enlisted troops rather than officers to better understand the link between leadership style and health in the ranks. The authors also restricted the number of enlisted troops working in leadership roles without daily interaction with a supervisor to those with fewer than 17 years of experience.

In keeping with Trachik et al.’s (2021) findings, unit cohesion, leader-provided purpose, and leader-provided meaning are protective against depression symptoms and SI/DI in soldiers. Having a strong sense of belonging in a military unit has been linked to a lower risk of mental health issues such as PTSD, drug use disorder, depression, and anxiety. Leadership conduct has

been shown to have a protective effect on SI/DI, according to their research. Other studies have indicated that these variables are also connected to resilience and symptoms of suicide-associated psychopathologies, such as PTSD, suggesting that the potential advantages of purpose in life extend beyond suicide. Therefore, at the baseline, the author's concluded that lower levels of SI/DI were associated with leader-provided purpose, leader-provided meaning, and unit cohesion, but the only leader-provided purpose and unit cohesion prospectively predicted changes in SI/DI.

Follmer and Follmer (2021) reported that previous studies had linked workplace issues to suicide, but there has been a lack of management research that has focused on the relationship between employment and suicide. The authors of this study affirm a link between suicidal ideation (SI) and disengagement from crucial duties, such as employment obligations. Their research examines suicidal ideation as a mediator between workplace mistreatment and engagement based on the job-demands resources theory and the interpersonal theory of suicide. Moreover, workplace mistreatments are a stressor that raises employee strain, such as SI, which ultimately decreases their capacity to participate in their job thoroughly.

Employees are affected both positively and negatively by their work environments, according to Follmer and Follmer (2021). Mistreatment at work can come in various forms, each with varying substance and severity, and each is subject to distinct laws. Non-aggressive kinds of abuse, such as incivility, undermining, and ostracism, are fundamentally separate from aggressive forms of mistreatment. Additionally, an employee's legal recourse is limited if they are subjected to certain sorts of abuse. In addition, the authors note that workplace abuse can negatively impact an employee's health and productivity. Moreover, the authors argue that workplace mistreatment, such as rudeness, ignoring, or exclusion, is a stressful interaction that

can negatively impact employees' work-related well-being outcomes. To back up this claim, the authors cite several meta-analytic studies (Halbesleben 2010; Harter et al., 2009) showing the importance of employee engagement in terms of both individual worker performance and company profitability.

Follmer and and Follmer (2021) indicates that SI shows that a person is suffering from severe psychological discomfort and, thus, may be regarded as a sort of psychological distress. Suicide and SI deaths are more likely to occur if the patient has a mental health problem. Interpersonal Theory of Suicide (IPTS) states that two factors influence suicidal thoughts, PB and the frustrating sense of TB. Based on several studies, people with mental health problems are more likely than healthy people to develop TB. Suicidal thoughts and actions may be an attempt to get away from unpleasant emotional states or situations, according to theories of suicide as an escape route. Individuals who exhibit significant suicidal thoughts should consequently expect to leave the workplace and their accompanying obligations. Employees who withdraw from their roles and deliver passive, incomplete performances in the workplace engage in disengagement. Based on the authors' findings, workplace abuse is likely to increase suicidal thoughts, which lowers motivation at work.

Follmer and Follmer (2021) included 279 individuals with mood disorders who completed the three measures of workplace abuse, suicide thoughts, and job engagement at each of the three data collection phases. Researchers used the Workplace Incivility Scale, the Duffy and Colleagues (2002) social undermining scale, the Workplace Ostracism scale, the Negative Suicide Ideation measure, and Rich et al.'s (2010) 18-item work engagement scale gather data. Thus, the authors offered evidence for the relationship between occupational harassment and participation via suicidal thoughts due to their research. As a result, their data confirm the IPTS,

which states that workplace factors that contribute to TB are associated with suicidal thoughts over time. Furthermore, the writers also found that suicidal thoughts harm individuals' ability to commit to their jobs altogether.

Consequently, suicidal thoughts are not just a worry from a health and well-being standpoint but also a performance standpoint, says Follmer and Follmer (2021). When it comes to the impacts of workplace harassment, the authors discovered employees with mental disorders had not sought treatment for their diseases. Findings from their study show that while therapy may reduce employees' suicidal thoughts, it does not appear to have a significant impact on employee engagement.

Cohesion relates to reduced levels of PTSD, depression, anxiety, and less suicidal thoughts, according to recent studies in this area. Decreased depressive symptoms and increased self-assurance when dealing with military stress are connected to solid unit cohesion. As a result, a promising area of research analyzes military-specific elements such as unit cohesiveness and leadership.

Psychopathology of Suicide

Veterans are more likely to suffer from mental health issues because of the traumatic events that occurred during their military service. PTSD, severe depression, generalized anxiety, and substance abuse are common among returning war veterans. Veterans with PTSD and severe depression are more likely than the general population to suffer from comorbid mental health conditions, including PTSD and severe depression.

Diagnostic and Statistical Manual of Mental Disorders (DSM-5)

The American Psychological Association (APA) defines psychopathology as the study of mental illness in clinical terms, including the onset, progression, symptoms, diagnosis, and

treatment of mental illness (APA, n.d.). To be considered clinically significant in the treatment of mind-fuel mental diseases, the DSM-5 (2013) states that a person's ability to think, feel, or act in a way that indicates psychological, biological, or developmental dysfunction is impaired (Miller & Lovler, 2020). According to Craighead et al. (2017), psychiatric diagnoses are crucial to mental disease understanding. The authors say that psychopathology's research, assessment, and treatment would be in shambles without clearly defined diagnostic criteria. The most frequently addressed in the above literature review are antisocial personalities disorder (ASPD), bipolar disorder (BD), posttraumatic stress disorders (PTSD), severe alcohol use disorders (AUD), and major depressive disorders (MDD).

Antisocial Personality Disorder (ASPD) 301.7 (F60.2). DSM-5 (2013) and Maidman (2016) defines an antisocial personality disorder as a long-term pattern of contempt for and violation of the rights of others that begins in childhood or early adolescence and continues into adulthood; this is the core characteristic of the disease. When it comes to socially exploitative, delinquent, or criminal behavior, ASPD is an individuals' inability to feel remorse for their actions, according to Fisher & Hany (2021). The DSM-5 (2013) classifies ASPD among narcissistic, borderline, and histrionic personality disorders in its cluster-B. ASPD sufferers usually lack empathy and tend to be cruel, cynical, and disdainful of other people's feelings, rights, and suffering. They may have an exaggerated sense of self-importance, be overconfident, or be cocky. Somatic symptom disorder (SSD), gambling disorder (GAD), and other impulse control disorders may all be present in people with ASPD.

Based on DSM-5 (2013), the most severe samples of males with alcohol use disorders and from drug addiction clinics, jails, or other forensic settings had the most significant frequency of antisocial personality disorder (APSD). Due to the aggressive and dishonest

character of the acts prompted in ASPD, Fisher and Hany (2021) claim that persons with ASPD are in danger of imprisonment. Furthermore, the authors claim that mental health comorbidities, related addiction illnesses, and more excellent death rates from suicides and homicides add to this burden.

Bipolar Disorder (BD). There are several types of BD, according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (2013). According to Truschel (2016), the most prevalent subtypes of BD are bipolar I (296.53 (F31.4), bipolar II (296.89 (F31.81), and cyclothymia (301.13 (F34.01). It is possible to have psychotic symptoms in bipolar one disorder (BD I), a manic-depressive condition. It consists of periods of depression and mania that alternate, are less severe, and do not interfere with everyday life. Additionally, the authors states that hypomania and depression occur in brief bursts throughout the year in people with cyclothymic disorder.

Truschel (2016) further states that there are times of extreme joy and exuberance and moments of delusion and euphoria or insanity. Several young people are diagnosed with depression for the first time. About 2.5 percent of the population has BD; however, it is substantially more frequent among first-degree relatives of bipolar disease and schizophrenia. To be diagnosed with BD, they must have experienced mania or hypomania at least once. The author claims that irritability must last for at least a week and be present regularly. Hurried speech, extreme restlessness and excitability, and an elevated mood or self-esteem are all hallmarks of euphoric or thrilling times (Perez, 2021). As stated by Truschel (2016), if hypomania lasts at least four days and is present nearly every day, it is considered a disorder. The symptoms of hypomania are similar to those of mania; however, they are less severe. The intensity of the symptoms is not always a factor in a patient's need for hospitalization.

Perez (2021) asserts that intensified emotions are not harmful to anyone, and people with BD do not experience a daily cycle of mania and depression. Nevid et al. (2021) claim that neither social nor professional difficulties accompany these less severe manic episodes. According to DM-5 (2013), reductions in sleep requirements are accompanied by feelings of joy and exuberance and an increase in confidence and inventiveness. Bruce (2020) argues that hypomania is unique from mania since it lacks psychosis, such as delusions or hallucinations.

Posttraumatic Stress Disorder (PTSD) 309.81 (F43.10). PTSD, according to Craighead et al. (2017), is a nonrecovery illness, unlike most other disorders. PTSD is one of the only illnesses in our current classification system that necessitates the existence of an external event. All PTSD symptoms must have started or increased after such a traumatic event. A delayed diagnosis of PTSD occurs when the diagnostic criteria have not been met or exceeded for at least six months after the traumatic event. The authors further state that cases of delayed onset are sporadic. According to Bhandari (2020), because of an imbalance of neurotransmitters, people with PTSD interpret 'threats' differently in their brains. They have an easily triggered fight or flight response, making one nervous and uncomfortable. Attempting to shut it off all the time might leave a person feeling cold and detached. Medications may help the individual avoid nightmares and flashbacks by preventing them from thinking about and reacting to what happened. The writer also states that they may help one recover a more positive outlook on life and a sense of 'normalcy'.

Alcohol Use Disorder (AUD) 303.90 (F10.20). When people who have a history of drinking issues and continue to consume alcohol, they develop AUD. AUD is a chronic, recurrent disease that puts a person in a bad/pessimistic mood when not consuming alcohol. A person with AUD has a strong need for alcohol, has difficulty regulating it, and proceeds to use it

despite significant pain and impairment. The person emphasizes drinking despite his life's events and responsibilities, even with severe consequences. As one drinks more alcohol, one's tolerance for it grows. The severity of the illness is determined by the number of symptoms a person has when they are diagnosed with AUD (Lenora, 2017). Bergland (2015) defines a mild diagnosis as the presence of two to three symptoms, a moderate diagnosis as four to five symptoms, and a severe diagnosis as the presence of six or more symptoms. From the viewpoints of experts, AUD is a combination of genes, environment, and mental symptoms (low self-esteem, impulsiveness) says Lenora (2017). The author also states that chemical changes in the brain occur when a person drinks heavily, enhancing the pleasure they feel from drinking alcohol and making them want to drink more frequently, even if it is harmful. The author further states that when the pleasurable benefits of alcohol wear off, the AUD sufferer will drink to avoid withdrawal symptoms. As determined by recent research, Bergland (2015) states that alcohol use disorder (AUD) is an epidemic that is frequently overlooked in the United States.

Major Depressive Disorder (MDD) 296.23 (F32.2). The World Health Organization (WHO) have placed major depressive disorder (MDD) as the third leading cause of disease globally in 2008 and has predicted that this disease would be the leading cause of disease worldwide by 2030, says Bains and Abdijadid (2021). Depressive symptoms, such as low mood, diminished interests, impaired cognition, and even vegetative symptoms like sleep disturbances or hunger, are all hallmarks of major depressive disorder (MDD), as per Otte et al. (2016). An estimated one in six people will have MDD at some time in their lives; women are impacted twice as high as the male prevalence rate. With heritability estimates ranging from 35 to almost 80 percent, MDD has a complicated etiology. In addition to these genetic predispositions, MDD has been linked to environmental stressors such as sexual, physical, or emotional maltreatment

throughout childhood. An explanation for all aspects of the condition has yet to be discovered. Regarding the cognitive control system and the affective–salience platform, the author's also state that MDD is associated with alterations in regional brain sizing, most notably within the hippocampus, and functional abnormalities in neural connections. Moreover, the author contends that MDD also affects the hypothalamus-pituitary axis and the immune system, two crucial stress-responsive neurobiological systems.

Psychopathology Literature Review

Tillman et al. (2021) interviewed 11 individuals who had recently attempted near-lethal suicide (NLS) to recreate their state of mind in the preceding up to their attempt. There were eight females and three males in the study's sample. The average age of the interviewees was 29 years old. All the research subjects had a personality disorder classified by their therapist in the DSM-5 (2013). Ultimately, the authors hoped to gain a better understanding of what can lead someone to consider suicide, as well as the mental paths that could lead them there. Additionally, the closest surrogates for understanding the characteristics of persons who have taken their own lives are those who have attempted suicide. For the past 50 years, research on suicide risk factors has failed to yield therapeutically valuable information that accurately predicts suicidal behavior at the individual level, which is consistent with Franklin et al.'s (2017) findings. Using a mixed-methods strategy allowed the researchers to understand both social and personal processes better and better comprehend the complexity of suicide.

Additionally, Tillman et al. (2021) found a psychological factor that influenced the road to suicide. Their participants' descriptions of their immediate or proximate state of mind had a paradoxical quality. In addition to the rapid emergence of suicidal ideas and fantasies, suicide attempts may be planned and fantasized about for days, weeks, or even years in advance.

Individuals reported these efforts as being both premeditated and spontaneous. Suicide is considered an impulsive act; however, most of those who took part in the study also talked of long-standing dreams, preparatory activities, and thought about taking one's own life to deal with intolerable mental suffering. The authors concluded that suicide prevention may be more accessible if developmental psychopathology is recognized as a factor in suicidal ideation and conduct.

Edwards et al. (2021) found a disproportionately high suicide rate among U.S. military veterans compared to the general population. To fill in this knowledge gap, researchers studied a group of U.S. military veterans at the James J. Peters VA Medical Center who had been identified as having a high risk of suicide and were receiving treatment there. The researchers evaluated a sample of 286 suicide-risk veterans with a suicide attempt, suicidal ideation, and psychopathology. Other studies have looked at the link between psychopathology and suicide attempt, suicidal ideation, or criminal arrest history in this high-risk sample of people. To study and test their hypothesis, the authors assessed participants' history of arrest, suicide attempt(s), suicidal thoughts, psychiatric diagnosis, and psychopathological symptom severity. Addiction Severity Index (ASI), Columbia Suicide Severity Rating Scale (C-SSRS), Structured Clinical Interview for DSM-IV (SCID-IV), Structured Interview for DSM-IV Personality Disorders (SIDP-IV), Beck Depression Inventory (BDI-II), Beck Anxiety Inventory (BAI), and the Clinician-Administered PTSD Scale (CAPS) were among the tests used by the authors.

As claimed by Edwards et al. (2021), the suicide rate among veterans is 58% higher than the suicide rate among nonveterans. Veterans in prison are more likely to have attempted suicide in the past. Just 5% of veterans in the general community had attempted suicide in the past. In a study of nearly 15,000 veterans, the authors state that those recently incarcerated had a 4.45-fold

higher risk of suicide attempt and a 1.75-fold higher risk of a suicide death. Based on the authors' findings, psychosocial needs for veterans at risk of suicide include legal issues, homelessness, drug abuse, and mental health issues.

An analysis by Edwards et al. (2020) found that over half of the veterans classified as being at risk of suicide also had a history of arrests, and these veterans were more likely to have antisocial personalities and drug use problems than veterans at risk who had no such legal history. Moreover, results show that veterans at risk for suicide had a high prevalence of arrest history. Working with veterans at risk of suicide may need to consider their legal status and history of engagement in the court system. Past studies show that ASPD, drug use disorders, and criminal conduct all have strong links. Additionally, the author's results conclude that working with veterans at risk of suicide necessitates considering their legal position and experience.

Azadi et al. (2019) affirms that behavior activation system (BAS) and behavioral inhibition system (BIS) are two different neuropsychological systems that have been demonstrated to connect with psychopathology. Neuropsychological systems, including BAS and BIS, have been shown to, directly and indirectly, impact psychopathologies, such as depression and present suicide thoughts, through adaptive and non-adaptive cognitive emotion regulation (CERSs) mechanisms. Two different brain systems regulate how an individual responds to signals and hints, which writers contend impacts one's behavior and emotions. Suppression of punishment or reward activates the cerebral anatomical basis of BAS, which is linked to the dopaminergic brain pathway and the corticostriatal-pallido-thalamic (CSPT) circuits. The BAS plays a vital role in the impulsive personality characteristic of seeking out and acting on one's emotions. BIS is more vulnerable to punitive and frightening stimuli and relates to inhibition and avoidance responses linked to serotonergic and noradrenergic systems in the

hippocampus. Based on the authors' findings, arousal, and levels of attention increase, as well as negative emotions, anxiety, and rumination. In addition, the authors found that BIS and BAS systems should be in harmony, and any polarization in any of these systems raises the possibility of mental illness.

In keeping with DSM-5 (2013) diagnostic criteria, Azadi et al.'s (2019) study included 300 people who had previously attempted suicide and satisfied the inclusion requirement. The authors recruited from multiple institutions. Participants completed a self-report scale that included the Persian versions of the BIS/BAS measures, the CERQ-Short, and the Beck Depression Inventory-II (BDI-II). The authors found in their study that BAS and BIS influenced current suicidal ideation, but not on depression. According to the findings, BIS with high nonadaptive CERS usage and low adaptive CERS use may be related to depression. Low adaptive CERS use showed to be related to depression, as was a significant reliance on nonadaptive CERS for treatment. Additionally, nonadaptive CERSs in BIS had an indirect influence on present suicidal thoughts. BIS and nonadaptive CERSs may also be linked to suicidal thoughts. As a result, the authors claim that studying CERSs in suicide attempters with high BIS and low BAS can help us better understand the psychopathology of depression and suicidal thoughts.

Using a sample of 315 post-9/11 veterans, Nieuwsma et al. (2021) investigated the screening potentials of the Brief Moral Injury Screen (BMIS) and compared the moral (MIEs) and the Moral Injury Questionnaire - Military Version (MIQ-M; Currier, et al., 2015; Braitman et al., 2018) to psychiatric diagnoses and the severity of mental illness symptoms. As a new concept, moral injury is still evolving considering recent empirical, clinical, and conceptual literature about what moral injury is (and is not), who can experience it, and under what

conditions, as well as the level and type of distress required to distinguish moral injury from other mental health issues like PTSD or depression. The authors have defined moral harm as combining two concepts that share a primary feature but differ in emphasis. Betraying or violating what a person holds to be just and decent is at the heart of the matter. The authors conclude that when someone breaks the trust of others (i.e., a leader who betrays their people in a high-stakes scenario), then the wrongdoing is also committed by someone unable or unwilling to intervene to stop it.

Nieuwsma et al.'s (2021) study employed the DSM-Structured IV's Clinical Interview for DSM-IV in the Post-Deployment Mental Health (PDMH) study, the PDMH and moral injury symptom measures, and an estimate of moral harm exclusively in the honest injury study. Additionally, the authors used the Davidson Trauma Scale (DTS), the Beck Depression Inventory-2 (BDI-2), the Beck Scale for Suicide Ideation (BSI), the Alcohol Use Disorders Identification Test (AUDIT), the Drug Abuse Screening Test-20 (DAST-28), the Brief Moral Injury Screen Event Subscale (BMIS-E), and the BMIS Sequela Subscale (BMIS-S). Mental illness symptoms had a substantial correlation with higher ratings on all scales of moral damage.

Nieuwsma et al. (2021) found prior studies that have shown that PTSD, depression, suicidal thoughts, and alcohol and drug usage are moral harm. Moral harm measures were substantially greater in participants with lifetime DSM-5 diagnoses of PTSD, MDD, and alcohol abuse/dependence, except for MIES scores for those with alcohol abuse/dependence. According to current research data, the authors saw that moral damage might increase the likelihood of PTSD, sadness, and suicidal thoughts. In addition, failure to avoid or do something viewed as more wrong raises despair and PTSD symptoms even more while also significantly raising the risk for drug use disorders. In terms of symptoms, those who admitted to doing something wrong

(commission) had higher BMIS-S scores than those who admitted to failing to prevent something (omission). Moreover, the author's evidence shows that many veterans suffer from moral injury, harming their mental health.

Individuals who have served in the military are at an increased risk of developing mental health disorders, particularly after transitioning to civilian life. Combat veterans are more likely to suffer from PTSD, severe depression, generalized anxiety, and substance dependence. Veterans with PTSD and severe depression are more likely to commit suicide or murder than the general population.

Summary and Research Question

Everyday experiences do not explain a rise in military suicide rates like the frequency of deployments or other well-known military characteristics. Suicidal thoughts are common among those who feel excluded from social groups and have a high self-perceived load. Suicide desire and suicidal thoughts may not be the same thing (Martin et al., 2020). While bullying occurs in the military in various ways, some types of it have a more significant harmful impact on mental health than others. Several aspects might influence how people perceive a suicide attempt (SA) disclosure experience as helpful or harmful, not simply the emotions themselves (Cromwell-Williamson et al., 2019). A veteran's perception of one's interpretation of emotions, rather than the reactions themselves, may play a significant role in determining whether a disclosure experience is beneficial or harmful (Ammerman et al., 2021). Ravindran et al. (2020) says there was a higher suicide rate among those who had served in the active component for less than two years, as well as the service branch itself might be a suicidal risk factor.

There is common knowledge that the military has a low incidence of seeking professional treatment and that these same barriers remain (Prazak & Herbel, 2022). A higher risk of suicidal

ideation (SI) among US Army recruits with a greater sense of load was shown to be associated with TB. Toxicity in military leadership may harm a subordinate's life both professionally and psychologically, as well as amplify an already unpleasant circumstance, such as a hostile work environment that has wide-reaching consequences (Winn & Dykes, 2019). There is a strong correlation between factors such as cohesiveness, leadership, and health in the military. For example, soldiers with a history of depression or SI/DI benefit from a sense of unity within the unit and a sense of direction and purpose from their commander (Trachik et al. 2020; Trachik et al., 2021). In the workplace, a link has been observed between TB and SI over time (Follmer and Follmer, 2021). Under Feres, Lawrence (2021) states that military service members' suicides will never be held accountable by a third party, no matter how foreseeable and controllable they may have been. Attempts to modify mental health attitudes and prevent suicides in the military have minimal effect. The author further alleges that using the Feres idea to defend the military against wrongdoers who irresponsibly cause the suicide of a loved one does not support and protect the military; it causes it to deteriorate from the inside and must be re-evaluated and fixed.

However, although society believes suicide is frequently thought of by participants to be an impulsive act, Tillman et al. (2021) mention that many individuals have several long-standing dreams about ending their lives as a solution to their intolerable psychological agony. Edwards et al. (2021) suggest that each suicide may have a unique combination of characteristics weighted differently. There were more antisocial personalities and drug use issues in the veterans at risk who had criminal records than in the other half of those identified as at risk of suicide (Edwards et al., 2020). Studying cognitive emotion regulation (CERSs) in suicide attempters with a high behavioral inhibition system (BIS) and low behavior activation system (BAS) will help scholars and researchers better understand the psychopathology of depression and suicidal ideation.

CERSs are cognitive emotion regulation systems (Azadi, 2019). If leaders fail their people in an elevated crisis, they are also guilty of performing an act of wrongdoing if they are unable or unwilling to intervene. According to studies, Nieuwsma et al. (2021) claims that many veterans' mental health is affected by moral damage.

Research on military leaders and military suicide is expanding, but more studies are needed to determine a direct correlation between the two. Thousands of dollars have been dedicated specifically for the study and development of prevention strategies and instruments for military suicide. With the amount of time and money spent on this ever-growing epidemic, the suicide rate should be decreasing. While much military personnel enlists with pre-existing MHD, and deployments can exacerbate MHD, there are still additional variables that lawmakers, researchers, mental health professionals, and military command should consider as significant factors that are non-deployment factors (Brooks & Greenberg, 2018), such as workplace violence, bullying, harassment, moral harm, and hazing for individuals with MHD and who report MHD (Thomas et al., 2021).

Although there is growing research on military leaders and its effect on military suicide, more studies need to be done to see if there is an actual connection. The treatment the military personnel experienced, and the mental health stigma instilled in them while enlisted may be a factor in the high prevalence of veteran suicide. The chain of command and leadership facilitates such bad experiences, whether directly or indirectly. Inaction on hazing, bullying, and toxic leaders magnifies this problem. This inaction does not originate with direct command/leaders but rather begins at the top and trickles down. Increased study on military leaders, specifically leadership and their role regarding the ongoing stigma associated with MHD and the apparent association between MHD and military and veteran suicide, would be beneficial.

Therefore, what is the direct role of the chain of command/leader in the suicide of military personnel? Is the chain of command a direct factor in military personnel's mental health? Is the chain of command a direct factor in why many military members do not seek counseling when experiencing or have experienced suicidal thoughts or suicide attempts?

Method

The current research, with Purdue Global IRB approval (Appendix A), examined whether there was a direct correlation between the military's chain of command/leadership and the suicide rates among its active-duty members. Participants in this mixed-methods study were to describe encounters with their leaders, including how the leaders dealt with individuals suffering from mental illnesses and how they handled people who had suicidal ideation or attempted suicide. As a result, these findings might help focus future study efforts to prevent deaths by suicide.

Participants

SurveyMonkey (http://www.surveymonkey.com/) is a tool used to recruit participants. The survey included screening questions to target a specific group of people. There was no particular target demographic for the participants' sex, gender, ethnic origin, race, educational background, economic background, or current geographic locality. All were encouraged to participate in creating a more diverse participant pool. Participants in the research, who were included were both U.S. active-duty military personnel and U.S. veterans, who were as young as 18 or as old as 99 years old. These participants must not have held a position of definite leadership (Enlisted - E1 to Enlisted - E7) while serving in the U.S. Military (e.g., U.S. Marine Corps, U.S. Coast Guard, U.S. Air Force, U.S. Army, U.S. Navy, or U.S. Space Force). Participants diagnosed with mental health disorder(s) were highly encouraged to participate. The U.S. military branch of service was not a requirement when determining who would participate.

Participants answered screening questions to ensure they fulfilled the study's eligibility requirements.

Participants were enrolled utilizing the survey platform SurveyMonkey. SurveyMonkey (2021) may access a population of more than 144 million individuals worldwide, which updates its data regularly to ensure accuracy. Therefore, the survey from any country will be eligible if they served in the U.S. Armed Forces or are a Veteran of the U.S. Military, regardless of the U.S. Military branch.

Furthermore, SurveyMonkey employs bot and fraud detection to maintain consistent answer quality while enlisting participants. The participants first reviewed and signed the Informed Consent; see Appendix C for the content of the Informed Consent. Those who agreed to the survey's Informed Consent would have immediate access to the survey's online form. The participants who did not agree to the Informed Consent was directed to a “thank you” page and terminated participation. Participants completed a screening process by answering a few questions. If the participants did not meet the study's criteria, they went to a “thank you” page and terminated participation.

SurveyMonkey Audience charged a fee based on the size of the sample, the duration of the survey, and the targeting parameters. I asked a series of pre-screening questions to ensure the necessary sample size. To guarantee a diverse group of participants, I requested 100 replies. If the individuals hold or have held leadership positions, they would automatically be routed to a “thank you” page and terminate participation. The cost per answer for 100 replies on a 46-item questionnaire with targeting criteria projects to achieve a 35-49 percent qualifying rate was USD 6.80. For completing the survey, SurveyMonkey donated 50 cents to the charity of the participant's choosing.

SurveyMonkey (2021) enlists topics by SurveyMonkey Audience via SurveyMonkey Contribute, the SurveyMonkey Rewards app, and a worldwide panel. They further claim that students, researchers, and academics frequently utilize SurveyMonkey Audience to gather research data. SurveyMonkey Audience will perform a customer survey as long as it complies with the following guidelines, located at https://help.surveymonkey.com/articles/en_US/kb/SurveyMonkey-Audience-Guidelines-and-Policies. For more information, read https://www.surveymonkey.com/mp/legal/terms-of-use for the terms of use for the SurveyMonkey service. The survey was delivered to potential participants via SurveyMonkey until at least individuals have completed it. Although improbable, participants can contact the Emotional Distress Hotline, a national mental health hotline available 24/7 for free at 1-800-LIFENET, if they have suffered any emotional distress because of taking the survey. When I received at least 100 eligible responses from SurveyMonkey, I downloaded and evaluated the data.

Measures

I examined the direct relationship between the chain of command/leadership with the individual's psychopathology and military suicide. The electronic questionnaire contained 10 questions from the Moral Injury Symptom Scale – Military Version Short Form (MISS-M-SF), Endorsed and Anticipated Stigma Survey (EASI), Unit Cohesion (Deployment Risk and Resilience Inventory-2 (DRRI-2), and The Walter Reed Army Institute of Research-Leadership Scale (WRAIR-LS). A total of nine questions were asked, three of which were specific to their military service, and six of which were purely demographic in nature. Appendix E contained the survey questions, which should have taken between 15 and 20 minutes to complete.

Demographics Questionnaire

I used a six-item demographic survey to learn more about the individuals. The information gathered from this portion of the questionnaire was to show factors that influenced participants' replies that were not directly related to the variables under investigation. Content included age, race/ethnicity, gender identity, educational level, and relationship status. Information obtained gave a sense of who participated in the survey and showed patterns in the collected data. If the demographics were skewed in any manner or did not include anyone from a given community, I used this to show the study's limits. The participants completed the rest of the survey without responding to any survey questions. It could take the participants approximately one minute to answer the eight questions on the survey. Appendix E contains a complete copy of the questionnaire.

Moral Injury Symptoms Scale - Military Version Short Form (MISS-M-SF)

As claimed by Koenig et al. (2018), to screen for moral damage and evaluate treatment response in veterans and active-duty military with PTSD, a short form (SF) of the 45-item multidimensional Moral Injury Symptom Scale – Military Version (MISS-M) was created. The authors state that this study assessed the validity of the entire sample in terms of convergent, discriminant, and concurrent validity, as well as internal reliability, test-retest reliability, and concurrent validity. The authors concluded that a reliable and accurate assessment of MI symptoms, the MISS-M-SF, can be used to screen for moral injury (MI) in veterans and active-duty soldiers with PTSD and evaluate treatment response. The authors further state that the ten-item MISS-M-SF has a Cronbach's alpha of .73 (95 percent CI 0.69-0.76), while the test-retest reliability is moderately high (r = .87) (95 percent CI 0.79-0.92). The 45-item MISS-M has a convergent validity of r = .92. Additionally, the authors state that the low correlations with

social, religious, and physical health components (r = .21- .35) reveal discriminant validity, whereas the high correlations with PTSD, depression, and anxiety symptoms (r = .54 - .58) suggest concurrent validity.

Additionally, Koenig et al. (2018) state that there are high associations between PTSD, depression, and anxiety symptoms and social, religious, and physical health categories, revealing discriminant validity. Additionally, the authors state that the MISS-M-SF fills an essential need when assessing MI symptoms in clinical and research settings. There is substantial convergent validity with the original 45-item MISS-M on the MISS-M-SF, which is internally reliable and stable. The MISS-M-SF and the MISS-M have the same strong correlations to significant mental and social outcomes as the former. Furthermore, the authors claim that the 10-item MISS-M-SF has been shown to properly evaluate psychological and spiritual/religious symptoms of moral injury. Moreover, the authors conclude that MISS-M-SF is a screening tool that is easy to use, brief, and accurate. They suggest it is critical in helping physicians better understand the link between moral harm and suicide risk and lead veterans and active-duty military (ADM) to appropriate therapies.

Endorsed and Anticipated Stigma Survey (EASI)

As reported by Vogt et al. (2014), the EASI examines stigma-related attitudes toward mental health in the military and veteran population. There are 40 questions on the full EASI, and it takes less than 10 minutes to complete. There are eight questions in "Concerns About Stigma in the Workplace," which will be the sole portion used to evaluate the military unit and mental health stigma (see Appendix E). On a scale from 1 (strongly disagree) to 5 (strongly agree), military members rate their degree of agreement (strongly agree). Instead of using products with a negative meaning, EASI used items with a positive connotation to lessen

negativity bias. These items include statements like, "If I had a mental health problem and people at work knew about it, my coworkers would think I am not capable of doing my job." The authors state that the higher the ratings on the scales, the more stigmatized each domain is. The authors further state that with alpha coefficients exceeding .80 for all scales and item-total correlation values of at least .40 for all items within each scale, the EASI has strong internal consistency reliability for 33 estimations of its 33 items. As per Williston and Vogt (2021), the expected stigma from coworkers' scale reveals excellent internal consistency reliability with a Cronbach's alpha of .94.

Unit Cohesion (Deployment Risk and Resilience Inventory-2 (DRRI-2)

The Deployment Social Support scale from the Deployment Risk and Resilience Inventory (DRRI; King et al, 2003; King et al, 2006) consists of 12 items and can assess unit cohesion. As reported by Vogt et al. (2013), the recent wars in Afghanistan and Iraq have highlighted the importance of understanding how war-zone deployments impact the health of war veterans. The DRRI (King et al, 2006) was created to assess psychological aspects affecting returning war veterans' health. The DRRI's theoretical approach is primarily based on the idea that a complete understanding of why certain combat veterans experience negative mental health consequences after deployment necessitates considering several elements from various stages of the deployment cycle. Based on Maoz et al. (2016), the DRRI is a widely used questionnaire, and its successor, the DRRI-2, both have been validated and utilized among veterans deployed for overseas military missions.

The DRRI-2 (Vogt et al, 2013) is a psychometrically sound and efficient suite of scales capable of capturing pre-, during, and post-deployment risk and resilience characteristics with implications for service members' and veterans' post-deployment mental health and functioning.

This inventory provides a broader assessment of the warfare experiences and family-related factors than was available. Notably, the DRRI-2 measures are discrete scales that address diverse but related elements that contribute to post-deployment health rather than combined subscales to give a total deployment experience score. The DRRI-2 is reliable and accurate in assessing non-clinical samples after military service. Maoz et al. (2016) assessed participants' physical and mental health and indicators of melancholy, anxiety, and PTSD. The authors claim that DRRI-2 risk traits are linked to poorer self-reported mental health, whereas resilience traits are linked to better self-reported mental health. Latent variables in the inventory showed Cronbach's s ranging from .47 to.95. Additionally, Pearson correlations were all between .61 and .94, with all *p* values less than .01. According to Vogt et al. (2013), depending on the assessment aims, the DRRI 2 are sometimes administered separately or collectively. The authors verified that DRRI 2 scales that represent latent variables show high internal consistency reliability.

The Walter Reed Army Institute of Research-Leadership Scale (WRAIR-LS), Short Form.

The WRAIR-LS Short Form (Lopez et al., 2018) is a leadership scale that will be used to assess military leadership. As per the authors, WRAIR-LS has been commonly used in more than 100,000 surveys for military studies to assess small-unit leadership (Castro et al., 1998; Lopez et al., 2018; McGurk et al., 2014), which will be the same use for the researcher. It was originally developed using soldiers who served in Iraq and Afghanistan but was later used in a large-scale garrison study. A garrison study involves a group of troops stationed in a fortified area or post. The WRAIR-LS, Short Form rates both NCOs and officers constructive and destructive behaviors (see Appendix E). 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 perform different behaviors, such as “Tell service members

when they have done a good job" or "Embarrass service member in front of other service members." Lopez et al. (2018) found that scores for both noncommissioned officers (NCOs) and officers correlate 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). Based on prior research (McGurk et al., 2014; Adler et al., 2017; Sipos et al., 2014; Wood et al., 2012), internal consistency estimates are moderate for this measure, with Cronbach's alpha ranging between .76 and .83.

Procedures

Through SurveyMonkey, participants completed the survey. SurveyMonkey allowed participants to read the permission form in its entirety before confirming that they had done so and agreed to participate in the research. To proceed to the questionnaires, participants had to first complete the three screening questions and the six self-administered questionnaire questions. Their responses led them either to the "thank you" page or the study's progress page. Participants had the option of donating to a charity of their choosing after completing the three questions. Finally, after four to five weeks, all the data was retrieved from SurveyMonkey and imported into SPSS for further investigation. A breakdown of demographics and both surveys was studied when the data was imported into SPSS to identify trends. An analysis of the responses revealed any patterns in what participants identified as factors significantly impacting their decisions and actions.

Data Management

To ensure the anonymity of the survey participants, in using SurveyMonkey, I did not collect IP addresses. For this study, I transferred the data from Survey Monkey into an SPSS

database for analysis. I presented all the results in an aggregate form to protect participants' identities. I had access to the data only in the form of completed surveys that I will maintain on an encrypted flash drive, kept in a locked file cabinet in my home. The thesis advisor and I will be the only parties with access to the strong password that protects the SPSS dataset. The dataset will contain no coded identifiers and, as such, will be completely anonymous.

I will store all electronic data on an encrypted flash drive and not on any computer hard drive. I will retain the data set and related files for a minimum of five years after the study completion, in case questions arise about the analyses. After five years, I will destroy the data using the current DoD data destruction standards. The researcher will likely choose an affordable technique, such as encryption, pending technology at the time.

Statistical Analysis

IBM's SPSS statistical software, version 28 was used to conduct statistical analysis on the data for the within-subjects experimental design. Descriptive statistics was performed on the demographic data for classification purposes. I performed separate Pearson correlations using the independent variable (the impact of the chain of command) and each dependent variable (psychopathology and suicide rates among military members). The Pearson analysis determined if the independent and the dependent variables had a correlational relationship. A Pearson correlation with a significance level of .05, a power of .80, and a medium effect size requires a minimum of 85 participants. It is possible that doing this analysis again on the two dependent variables will yield valuable findings.

The MISS-M-SF scale (Koenig et al., 2018) required reverse-scoring on items number five, six, seven, nine, and ten. As the last step, I calculated a total score to indicate the severity of moral harm. Ten through 100 are conceivable ranges (Koenig et al, 2018). The total score for the

EASI is not affected by reverse-scoring on any of the items, and the higher scores on the scale suggest stigma (Vogt et al., 2014). I summed the item scores to arrive at a final DRRI-2 score, anywhere from 12 to 60. The higher a person's DRRI-2 score, the more likely they felt supported by their coworkers and unit leaders (Vogt et al., 2012). As part of computing the overall mean score, negative items were reversed scored for the WRAIR-LS Short Form when scoring (Lopez et al., 2018). I presented the findings at an item level when summarizing the results.

Data Analysis

Once the 48-hour period passed, SurveyMonkey sent an email informing me that the data gathering procedure was complete. After reviewing the data in SurveyMonkey, I exported it to a text file using tab delimiters. The data in this file was statistically analyzed using SPSS.

Results

Data for the within-subjects experimental design were statistically analyzed using IBM's SPSS statistical software, version 28. I applied descriptive statistics to classify the demographic information applied descriptive statistics. I conducted separate Pearson correlations utilizing the dependent variable (the impact of the chain of command) and each independent variable (psychopathology and suicide rates among military members). I used the Pearson analysis to evaluate whether there was a correlation between the independent and dependent variables. At the level of 0.01 (r =.249, n = 129, p =.004), there was a significant positive correlation between the two variables, MISS-M-SF (suicide among military personnel) and WRAIR-LS (chain of command/leadership). At the 0.01 level, r =.315, n - 130, p =.001; there was a substantial positive correlation between the two variables, EASI (psychopathology) and WRAIR-LS (chain of command/leadership). There was also a significant connection between the two variables,

DRRI-2 (psychopathology) and WRAIR-LS (chain of command/leadership), at the 0.01 level, r =.521, n = 129, and p =.001.

Participant and Demographic Characteristics

Over five weeks, a total of 199 people agreed to participate in the study. Only 69 of the 199 people who agreed to participate in the research were ineligible. Age was a factor in the rejection of four participants, rank was a factor in the rejection of 35 individuals, 29 participants withdrew before the completion of the study, and a research test run was a factor in the rejection of one participant. A total of 130 participants participated in the study, the majority of whom were primarily White (60.51%; *n* = 60.51%), male (49.74%; *n* = 97), age 45-60 (35.81%; *n* = 53), married (53.33%; *n* = 104), residing in South Atlantic area (20.42%; *n* = 29), holding a bachelor's degree (23.08%; *n* = 23.08%), who held or currently hold active duty status (47.31%; *n* = 79), and who was the rank of Enlisted – E1 (22.16%; *n* = 37). See Appendix F, Table 1, for full demographic characteristics.

Variable One (Moral Injury Symptom Scale Short Form (MISS-M-SF)

The measure used for suicide among military members was based on the Likert Scale for MISS-M-SF. The MISS-M-SF includes ten items and is scored along the following scale: "Strongly disagree" = 1 to "Strongly agree" = 10. The MISS-M-SF scale (Koenig et al., 2018) required reverse scoring on items five, six, seven, nine, and 10. As the last step, I calculated a total score to indicate the severity of moral harm. Ten through 100 are conceivable ranges (Koenig et al., 2018). The actual scores in my dataset are 10 through 99. The standard deviation (SD) ranges from 2.21 to 3.10, which falls between the values of no greater than plus or minus three SD; therefore, 99.7% of the values are within three standard deviations of the mean (5.23). The standard error of skewness is .212. The skewness of the scores ranged from -0.04 to 0.65,

which indicates a moderately skewed distribution and, therefore, reasonably symmetrical. The standard error of kurtosis is 0.42. The kurtosis ranges from -1.20 to -.27, whereby shows that the distribution is shorter, as well as showing that the data has a lack of outliers. Refer to the table in Appendix F, Table 2, to see all the variables' findings: Table 2 summarizes participants' scores on MISS-M-SF.

Variable Two (Endorsed and Anticipated Stigma Survey (EASI)

The measure used for psychopathology among military members were based on the Likert Scale for EASI. The EASI scored along the following scale: "Never" = 1, "Rarely" = 2, "Sometimes" = 3, "Often" = 4, and "Always" = 5. Since reverse scoring has no impact on the EASI scale, I added the scores to obtain a final score (Vogt et al., 2014). The scale's higher score indicates stigma (Vogt et al., 2014). The actual scores in my dataset are 8 through 40. The standard deviation (SD) ranges from 1.23 to 1.33, which falls between the values of no greater than plus or minus two SD, therefore 95% of the values are within two standard deviations of the mean (2.80). The standard error of skewness is .21. The skewness of the scores ranged from -0.18 to 0.32, which indicates the distribution is fairly symmetrical and, therefore, the data is fairly symmetrical. The standard error of kurtosis is 0.41. The Kurtosis ranges from -0.93 to -1.14, whereby shows that the distribution is shorter, as well as showing that the data has a lack of outliers. Refer to the table in the Appendix F, Table 3, to see all the variables' findings: Table 3 summarizes participants' scores on EASI.

Variable Three (Unit Cohesion, Deployment Risk and Resilience Inventory-2 (DRRI-2)

The DRRI-2 is a Deployment Social Support scale from the DRRI (King et al., 2003; King et al., 2006). The DRRI-2 is a validated questionnaire (Maoz et al., 2016) and required to sum item the scores (Vogt et al., 2013). A higher score indicates a greater perception of social

support from unit members and leaders (Vogt et al., 2013). The measures used were based on the Likert Scale for the DRRI-2. The DRRI-2 includes twelve items and is scored along the following scale: “Strongly disagree” = 1, “Somewhat disagree” = 2, “Neither Agree nor disagree” = 3, “Somewhat disagree” = 4, and “Strongly agree” = 5. The DRRI-2 score is determined by adding the item scores (Vogt et al., 2014). The scores range from 12-60, and the higher a person’s DRRI-2 score, the more likely they feel supported by their coworkers and unit leader (Vogt et al., 2012). The actual scores in my dataset are 12 through 60. The standard deviation (SD) ranges from 1.11 to 1.29, which falls between the values of no greater than plus or minus three SD; therefore, 99.7% of the values are within three standard deviations of the mean (3.50). The standard error of skewness is .21. The skewness of the scores ranged from -0.32 to -0.79, which indicates a moderately skewed distribution and, therefore, reasonably symmetrical. The standard error of kurtosis is 0.42. The kurtosis ranges from -0.10 to -0.61, whereby shows that the distribution is shorter, as well as showing that the data has a lack of outliers. Refer to the table in Appendix F, Table 4, to see all the variables’ findings: Table 4 summarizes participants’ scores on DRRI-2.

Variable Four (The Walter Reed Army Institute of Research-Leadership Scale, Short Form (WRAIR-LS)

The WRAIR-LS, Short Form (Lopez et al., 2018) is a military leadership assessment scale. The measures used were based on the Likert Scale for the WRAIR-LS. The WRAIR-LS scored along the following scale: “Never” = 1, “Rarely” = 2, “Sometimes” = 3, “Often” = 4, and “Always” = 5. Negative items were reversed scored in determining the overall mean score (McGurk et al., 2014). The actual scores in my dataset are 8 through 40. The standard deviation (SD) ranges from 0.89 to 1.08, which falls between the values of no greater than plus or minus

two SD, therefore 95% of the values are within two standard deviations of the mean (2.9.). The standard error of skewness is .212. The skewness of the scores ranged from -0.08 to -0.79, which indicates a moderately skewed distribution and, therefore, reasonably symmetrical. The standard error of kurtosis is 0.42. Kurtosis ranges from -0.36 to 0.65, whereby shows that the distribution is shorter, as well as showing that the data has a lack of outliers. Refer to the table in the Appendix F, Table 5, to see all the variables' findings: Table 5 summarizes participants' scores on WRAIR-LS assessment.

Correlational Analyses

Pearson correlation coefficient was performed separately using the independent variable (impact of the chain of command) and each dependent variable (psychopathology and suicide rates among military members). There was a significant positive correlation between the two variables, MISS-M-SF (suicide among military members) and WRAIR-LS (chain of command/leadership), at the ($r(127) = .25, p = .004$). A scatterplot summarizes the results (Appendix F, Table 6). There was a significant positive correlation between the two variables, EASI (psychopathology) and WRAIR-LS (chain of command/leadership), at the ($r(128) = .32, p = <.001$). A scatterplot summarizes the results (Appendix F, Table 7). There was a significant positive correlation between the two variables, DRRI-2 (psychopathology) and WRAIR-LS (chain of command/leadership) at the ($r(127) = .52, p = <.001$). A scatterplot summarizes the results (Appendix F, Table 8). Overall, there was a strong, positive correlation between the independent variable (impact of the chain of command) and each dependent variable (psychopathology and suicide rates among members). The increase impact of the chain of command correlated with the increase in psychopathology and suicide rates.

Discussion

In 2020, Ravindran et al. studied the prevalence, trends, and associated factors of post-military suicide mortality among US service members. They were the first to investigate certain suicide risk factors according to the interval since an active status change. They looked at demographics and military service to assist the VA in preventing veteran suicide. For their 2019 peer-reviewed study, Winn and Dykes (2019) investigated the newer issue of toxic leadership, which has its roots in US military research. This study's goal was to understand better how toxic leadership in the chain of command relates to suicide among military members.

The findings of this study confirm my claim that there is a clear association between the military suicide epidemic and the chain of command/leadership. The results of this study also corroborate my hypothesis that the chain of command actively contributes to and directly correlates with the psychopathology of military members. It exacerbates their position and contributes to the lack of concern for leadership subordinates when an active-duty member does not receive the proper mental health treatment and duration of care needed. Without receiving the necessary treatment and rehabilitation, returning to civilian life might create a dangerous precedent. The results of my study show that the chain of command/leadership must be considered a factor in the rising rate of suicides among military members. The chain of command/leadership must also be considered a factor in military members' psychopathology and mental health.

Similarities and Differences

The results' trend is consistent with earlier work (Martin et al., 2020; Cromwell-Williams et al., 2019; Lawrence, 2021; Prazak & Herbel, 2022; Winn & Dykes, 2019; Trachik et al., 2020; Follmer & Follmer, 2021). The findings support the assumption that the chain of

command/leadership is a significant factor in deciding why military personnel commit suicide. The current results align with the requirement for more laws to be passed, such as the Brandon Act (S.300 - 116th Congress, 2021–2022), which ensures the secrecy of mental health treatment for service personnel even inside their own military rank system. When a service member admits to having psychopathology, which interferes with their ability to carry out duty-related tasks, they are deemed unsuitable for full duty and, in some instances, are discharged from the military. For fear of repercussions on their careers, DoDI 6490.08 discourages military personnel from seeking therapy or disclosing psychopathology. According to the study's findings, this directive needs to be changed (Schafer et al., 2022). The outcomes also support the necessity to change the Feres Doctrine.

Limitations

Although the current findings unequivocally support the theory that the chain of command and leadership significantly influences a military member's decision to commit suicide, it is important to acknowledge several potential limitations. The findings of this study have at least three limitations. Firstly, the active-duty military population largely comprises people under 30 (Bush & Smolenski, 2022), making them a highly high-risk group. People who enlist may already have mental health issues, which can/may if placed under a toxic chain of command/leadership, can be exacerbated. Given this potential, further study may determine whether there is a direct link between the chain of command and leadership and military personnel suicide and psychopathology. This study should place a higher priority on current mental health statistics.

Second, the results of the direct connection between the variables may be influenced by a small number of unmeasured direct factors, such as self-stigma, perceived burdensomeness, and

lack of belonging. Given this potential, an additional study should also incorporate evaluations of thwarted belonging and perceived burdensomeness. Finally, service-era characteristics, such as warfare, peacetime, and political atmosphere, may impact older veterans' and active military members' responses compared to younger military populations. Given this potential, an additional study should involve a longer, more in-depth questionnaire addressing service-era elements. Despite these drawbacks, the current research has improved our knowledge of the connection between leadership/chain of command, psychopathology, and suicide among military personnel. The question of why the suicide rate of military personnel is so high and keeps rising, despite all the federal programs and funds that are devoted to combating military suicide, may be answered, in my opinion, by further research examining the direct correlation and relationship between the chain of command/leadership and military personnel suicide and psychopathology.

Conclusions

Upon conducting separate Pearson correlations for the dependent variable and each independent variable, the study’s results shows that there is a significant positive correlation between the variables (MISS-M-SF AND WRAIR-LS; EASI and WRAIR-LS; and DRRI-2 and WRAIR-LS). To better evaluate and treat and reduce suicide fatalities, more study is needed to understand the complexity of suicide and how one's psychopathology relates to their chain of command or leadership. The current study, therefore, adds to the growing body of data that indicates a clear link between military personnel suicide and the chain of command or leadership. Future studies will be necessary to determine how broadly applicable the current findings are, but the present study has demonstrated the need to take the chain of command and leadership into account when addressing suicide. The recent results, in my opinion, should encourage more study in this crucial field.

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Appendix A

Purdue University Global
IRB Expedited Review – Final Approval
"*Military Suicide: The Influence of Chain of Command/Leadership on Military Personnel's Psychopathology and Suicide Rates*"

PURDUE UNIVERSITY GLOBAL

Institutional Review Board
550 West Van Buren
Chicago, Illinois 60607

Expedited Review – Final Approval

May 12, 2022

Ms. Joy Kremer
Purdue University Global
joykremer1@student.purdueglobal.edu

Re: Protocol #22-29 – **"Military Suicide: The Influence of Chain of Command/Leadership on Military Personnel's Psychopathology and Suicide Rates."**

Dear Ms. Kremer:

Your proposed project was reviewed by the Purdue University Global Institutional Review Board (IRB) for the protection of human subjects under an Expedited Category. It was determined that your project activity meets the expedited criteria as defined by the DHHS Regulations for the Protection of Human Subjects (45 CFR 46), and is in compliance with this institution's Federal Wide Assurance 00010056.

Please notify the IRB immediately of any proposed changes that may affect the expedited status of your project. You should report any unanticipated problems involving risks to human subjects or others to the IRB.

If you have any questions or need additional information, please contact feel free to contact me at spettine@purdueglobal.edu. I wish you well with your project!

Sincerely,

Susan B. Pettine

Susan B. Pettine, Ph.D., CBM
IRB Chair
Purdue University Global

cc: Dr. Gabrielle Blackman

Appendix C1

Purdue University Global
Consent for Participation in Research
"*Military Suicide: The Influence of Chain of Command/Leadership on Military Personnel's Psychopathology and Suicide Rates*"

CONCISE SUMMARY

I am seeking individuals to participate in a study investigating the link between the military's high suicide rate and the chain of command/leadership. To better understand the high risk of suicide among active-duty military personnel, I would like you to participate in the survey. You are eligible to participate in this study if you are now serving or have previously served in a non-leadership post in a US military branch on active duty.

After reading, signing, and timestamping the study's Informed Consent Form, participants will begin the survey. Survey will take approximately 20 minutes. Participants who agree to the informed consent, are at least 18 years of age, currently serving or have served on active duty in the U.S. Military are eligible to participate. Participants can freely opt out of the survey at any time. Participants are expected not to experience any risks, discomforts and/or inconveniences during the duration of this study. Additionally, there are no direct benefits to participants for taking part of this research. Furthermore, there is no reimbursement available for participation. You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you do not want to answer and remain in the study.

Why am I being asked?

You are being asked to be a participant in a research study about the chain of command being a factor into the equation when addressing the high suicide rate among active-duty personnel. If a person has suicidal psychopathology, the type of leadership that supports mental health as a taboo issue is toxic or fails to recognize suicide signs has a significant impact on that person's life. When an active-duty member does not receive the correct mental health treatment and duration of care needed, it not only accentuates their situation but contributes to the carelessness of care for leadership subordinates, which is the case. Returning to civilian life without the appropriate care and therapy may set a dangerous precedent. This research study is being conducted by Joy L. Kremer, a Master's of Science in Psychology student at Purdue University Global. You have been asked to participate in the research because you are serving or have served in an active-duty component that was not an actual leadership position and may be eligible to participate. We ask that you read this form and ask any questions you may have before agreeing to be in the research.

Your participation in this research is voluntary. Your decision on whether to participate will not affect your current or future relations with Purdue University Global. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

What is the purpose of this research?

The purpose of this research is to determine if there is a direct correlation between the chain of command/leader and suicide of military personnel. More specifically, is the chain of command a direct factor in military personnel's mental health? As well as, is the chain of command a direct factor in why many military members do not seek counseling when they are experiencing or have experienced suicidal thoughts or suicide attempts?

What procedures are involved?

If you agree to be in this research, we would ask you to do the following things:

After reading, signing, and timestamping the study's Informed Consent Form, participants will begin the survey. After completing the survey, participants will be allowed to donate 50 cents to a charity of their choice. Participants can freely opt out of the survey at any time. Individuals may be able to take this survey any time during the day and in the privacy of their homes.

Approximately 200 participants may be involved in this research at Purdue University Global.

What are the potential risks and discomforts?

Participants may possiby experience psychological risks, emotional discomfort and/or inconveniences during the duration of this study, e.g., embarrassment, fear or guilt, post-traumatic stress disorder (PTSD), anxiety, or depression. At any time, the participants are freely able to withdraw from the survey.

Although improbable, if participants are experiencing or suffering any emotional distress or psychological risks because of taking the survey, participants can contact the Emotional Distress Hotline, a national mental health hotline available 24/7 for free at 1-800-LIFENET.

Are there benefits to taking part in the research?

There are no direct benefits to participants for taking part of this research

What about privacy and confidentiality?

The only people who will know that you are a research subject are members of the research team. No information about you, or provided by you during the research, will be disclosed to others without your written permission. When the results of the research are published or discussed in conferences, no information will be included that would reveal your identity.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law.

SurveyMonkey does not collect IP addresses to protect survey takers' privacy and anonymity. The researcher will keep all of the electronic data on an encrypted flash drive. If there are any concerns regarding the analysis, the researcher will keep the data and supporting files for at least five years after completing the research. After five years, the researcher will remove the data following existing Department of Defense data destruction regulations.

Will I be reimbursed for any of my expenses or paid for my participation in this research?
At this time, no reimbursement is available for participation in this research.

Can I withdraw from the study?
You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you do not want to answer and still remain in the study.

Whom should I contact if I have questions?
The researcher conducting this study is Joy L. Kremer. You may ask any questions you have now. If you have questions later, you may contact the researchers at: Phone: 252-723-3537. You may also contact the researcher's thesis adviser, Dr. Gabrielle Blackman PhD, at gblackman@purdueglobal.edu.

What are my rights as a research subject?
If you feel you have not been treated according to the descriptions in this form, or you have any questions about your rights as a research subject, you may contact the Institutional Review Board (IRB) at Purdue University Global through the following representative:

Susan Pettine, IRB Chair
Email: spettine@purdueglobal.edu

Remember: Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future relations with Purdue University Global. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

You may keep a copy of this form for your information and your records.

Signature of Subject
I have read (or someone has read to me) the above information. I have been given an opportunity to ask questions and my questions have been answered to my satisfaction. I agree to participate in this research. I have been given a copy of this form.

Signature	Date
Printed Name	
Signature of Researcher	Date (must be same as subject's)

Appendix E

A Copy of All Measures

Demographic Information:

1. Enter your age: _____

2. What is your gender identity?

    a. Woman

    b. Man

    c. Transgender

    d. Non-binary/non-conforming

    e. Other (please specify): _____

    f. Prefer Not to Answer

3. What is your race/ethnicity?

    a. American Indian or Alaskan Native

    b. Asian/Pacific Islander

    c. Black or African American

    d. Hispanic

    e. White/Caucasian

f. Multiple Ethnicity/Other

4. What is your relationship status?

a. Single, never married

b. In a relationship (not married)

c. Married

d. Separated/Divorced

e. Widowed

f. Other (please specify): _____

g. Prefer Not to Answer

5. What is the highest level of education you have attained?

a. Less than a high school degree

b. High School degree or equivalent (GED)

c. Some college, but no degree

d. Associate degree

e. Bachelor's degree

f. Master's degree

g. Doctoral degree

h. Other (please specify): _____

6. In what branch of service did you/do you serve (Check all that apply):

a. United States Air Force

b. United States Army

b. United States Coast Guard

c. United States Marine Corps

d. United States Navy

e. United States Space Force

Screening Questionnaire

Please answer the following questions.

1. Are you over the age of 18? Yes / No

2. When you served in the military, were/are you (Check all that apply)

a. Active duty

b. Reserve

c. National Guard

3. what is/was your current military rank?

O Officer O 1

O Enlisted	O 2
	O 3
	O 4
	O 5
	O 6
	O 7
	O 8
	O 9

Measure 1.

Moral Injury Symptom Scale – Military Version Short Form

(https://sites.duke.edu/csth/files/2021/03/CSTH_Moral_Injury_Resources.pdf)

Instructions: Please circle the number that most accurately indicates how you are feeling now.

1. **I feel betrayed by leaders who I once trusted.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Mildly disagree		Neutral		Mildly agree			Strongly agree

2. **I feel guilt over failing to save the life of someone in war.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Mildly disagree		Neutral		Mildly agree			Strongly agree

3. **I feel ashamed about what I did or did not do during this time.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Mildly disagree		Neutral		Mildly agree			Strongly agree

4. **I am troubled by having acted in ways that violated my own morals or values.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Mildly disagree		Neutral		Mildly agree			Strongly agree

5. **Most people are trustworthy.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Disagree		Neutral		Agree			Strongly agree

6. **I have a good sense of what makes my life meaningful.**

1	2	3	4	5	6	7	8	9	10
Absolutely untrue	Mostly untrue		Somewhat untrue	Can't say true or false		Somewhat true	Mostly true		Absolutely true

7. **I have forgiven myself for what happened to me or others during combat.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Disagree		Neutral		Agree			Strongly agree

8. **All in all, I am inclined to feel that I am a failure.**

1	2	3	4	5	6	7	8	9	10
Strongly disagree		Disagree		Neutral		Agree			Strongly agree

9. **I wondered what I did for God to punish me.**

1	2	3	4	5	6	7	8	9	10
A great deal (very true)		Quite a bit				Somewhat			Not at all (very untrue)

10. ***Compared to when you first went into the military*** **has your religious faith since then...**

1	2	3	4	5	6	7	8	9	10
Weakened a lot		Weakened a little			Strengthened a little				Strengthened a lot

Measure 2.

Endorsed and Anticipated Stigma Survey (EASI)

(https://www.academia.edu/29732983/Endorsed_and_Anticipated_Stigma_Inventory_EASI_a_tool_for_assessing_beliefs_about_mental_illness_and_mental_health_treatment_among_military_personnel_and_veterans)

Circle the one that you agree with the most. All items are scored along the following scale:

"Never" = 1, "Rarely" = 2, "Sometimes" = 3, "Often" = 4, "Always" = 5

Concerns About Stigma in the Workplace

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.

a. Strongly disagree

b. Disagree

c. Neither

d. Agree

e. Strongly agree

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

a. Strongly disagree

b. Disagree

c. Neither

d. Agree

e. Strongly agree

44. My career/job options would be limited.

a. Strongly disagree

b. Disagree

c. Neither

d. Agree

e. Strongly agree

45. Coworkers would feel uncomfortable around me.

a. Strongly disagree

b. Disagree

c. Neither

d. Agree

e. Strongly agree

46. A Supervisor might give me less desirable work.

a. Strongly disagree

b. Disagree

c. Neither

d. Agree

e. Strongly agree

47. A Supervisor might treat me unfairly.

a. Strongly disagree

b. Disagree

c. Neither

d. Agree

e. Strongly agree

48. People at work would think I was faking.

a. Strongly disagree

b. Disagree

c. Neither

d. Agree

e. Strongly agree

49. Co-workers would avoid talking to me

a. Strongly disagree

b. Disagree

c. Neither

d. Agree

e. Strongly agree

Measure 3.

Unit Cohesion

(Vogt, et al, 2012).

https://www.ptsd.va.gov/professional/assessment/documents/DRRI2scales.pdf)

People sometimes look to others for companionship, assistance, or other types of support. How often is each of the following kinds of support available to you if you need it? Choose one number from each line. Please read each statement and describe how much you agree or disagree

by circling the number that best fits your answer. All items are scored along the following scale: "Strongly disagree" = 1, "Somewhat disagree" = 2, "Neither Agree nor disagree" = 3, "Somewhat agree" = 4, "Strongly agree" = 5

Unit Support

1. My unit was like family to me.

1 2 3 4 5

2. People in my unit were trustworthy.

1 2 3 4 5

3. My fellow unit members appreciated my efforts.

1 2 3 4 5

4. I felt valued by my fellow unit members.

1 2 3 4 5

5. Members of my unit were interested in my well-being.

1 2 3 4 5

6. My fellow unit members were interested in what I thought and how I felt about things.

1 2 3 4 5

7. My unit leader(s) were interested in what I thought and I felt about things.

1 2 3 4 5

8. I felt like my efforts really counted to the leaders in my unit.

1 2 3 4 5

9. My service was appreciated by the leaders in my unit.

1 2 3 4 5

10. I could go to unit leaders for help if I had a problem or concern.

1 2 3 4 5

11. The leaders of my unit were interested in my personal welfare.

1 2 3 4 5

12. I felt valued by the leaders of my unit.

1 2 3 4 5

Measure 4

WRAIR-LS (Short Form)

(https://digitalcommons.nl.edu/cgi/viewcontent.cgi?article=1569&context=diss)

Circle how often each statement occurs within your unit. All items are scored along the following scale: “Never” = 1, “Rarely” = 2, “Sometimes” = 3, “Often” = 4, “Always” = 5

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

1 2 3 4 5

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

1 2 3 4 5

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

1 2 3 4 5

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

1 2 3 4 5

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

1 2 3 4 5

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

1 2 3 4 5

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

1 2 3 4 5

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

1 2 3 4 5

Appendix F

Table 1

Respondents' Sociodemographic Characteristics (N=130)

Participants	
Total - Agreed to Consent	199
Qualified - Age (18-99)	195
Qualified - Ranks	160
100% Completion	130
Total - Disqualified (Age/one test-run/rank/skipped)	69
Gender Identity (Answered: 195 Skipped: 4)	
Woman (88)	45.13%
Men (97)	49.74%
Tansgender (5)	2.56%
Nono-binary/non-conforming (3)	1.54%
Prefer not to answer (2)	1.03%
Relationship Status (Answered: 195 Skipped: 4)	
Single, Never Married (42)	21.54%
In a relationship (not married) (24)	12.31%
Married (104)	53.33%
Divorced/Separated (15)	7.69%
Widowed (8)	4.10%
Other (specify)	0%
Prefer not to say (2)	1.03%

Age (Answered: 148 Skipped: 51)	
< 18	0%
18-29 (38)	25.68%
30-44 (34)	22.97%
45-60 (53)	35.81%
> 60 (23)	15.54%
Race/ethnicity (Answered: 195 Skipped: 4)	
American Indian or Alaskan Native (9)	4.62%
Asian/Pacific Islander (20)	10.26%
Black or African American (18)	9.23%
Hispanic (21)	10.77%
White/Caucasian (118)	60.51%
Multiple ethnicity/other (9)	4.62%
Region (Answered: 142 Skipped:57)	
East North Central (19)	13.38%
East South Central (12)	8.45%
Middle Atlantic (23)	16.20%
Mountain (10)	7.04%
New England (3)	2.11%
Pacific (24)	16.90%
South Atlantic (29)	20.42%
West North Central (9)	6.34%
West South Central (13)	9.15%

Highest Level of Education (Answered: 195 Skipped: 4)	
Less than a high school degree (7)	3.59%
High School degree of equivalent (GED) (34)	17.44%
Some college, but no degree (39)	20.00%
Associate degree (25)	12.82%
Bachelor degree (45)	23.08%
Master degree (32)	16.41%
Doctoral degree (12)	6.15%
Other (please specify) (1)	0.51%
Military Service (Answered: 167 Skipped: 32)	
Active duty (79)	47.31%
Reserve (67)	40.12%
National Guard (34)	20.36%
Military Rank (Answered: 167 Skipped: 32)	
Enlisted - E1 (37)	22.16%
Enlisted - E2 (15)	8.98%
Enlisted - E3 (33)	19.75%
Enlisted - E4 (26)	15.57%
Enlisted - E5 (12)	7.19%
Enlisted - E6 (9)	5.39%
Enlisted - E7 (5)	2.99%
Enlisted - E8 (2)	1.20%
Enlisted - E9 (7)	4.19%

Officer - O1 (8)	4.79%
Officer - O2 (1)	0.60%
Officer - O3 (3)	1.80%
Officer - O4 (4)	2.40%
Officer - O5 (5)	2.99%

Table 2

Suicide Among Military Members (MISS-M-SF) (N=130)

Statistics

		What is your gender identity?	What is your race/ethnicity?	What is your relationship status?	What is/was your current military rank?	Age	I feel betrayed by leaders who I once trusted	I feel guilty over failing to save the life of someone in war.	I feel ashamed about what I did or did not do during this time.	I am troubled by having acted in ways that violated my own morals or values	All in all, I am inclined to feel that I am a failure.	q0015r	q0016r	q0017r	q0019r	q0020r
N	Valid	195	195	195	167	148	131	131	131	131	131	131	131	130	131	131
	Missing	4	4	4	32	51	68	68	68	68	68	68	68	69	68	68
Mean		1.6359	4.2615	2.6359	4.4731	3.4122	4.5954	4.0076	4.9237	4.9771	5.8626	6.0916	7.6260	6.5385	7.3282	5.9237
Std. Error of Mean		.05068	.09192	.07817	.27138	.08518	.23983	.23078	.24727	.27124	.26362	.22640	.19335	.21376	.23975	.23832
Median		2.0000	5.0000	3.0000	3.0000	4.0000	4.0000	4.0000	5.0000	4.0000	6.0000	6.0000	8.0000	6.0000	8.0000	6.0000
Mode		2.00	5.00	3.00	1.00	4.00	1.00	1.00	5.00	1.00	10.00	6.00	9.00	6.00	10.00	6.00
Std. Deviation		.70765	1.28364	1.09155	3.50699	1.03627	2.74501	2.64138	2.83011	3.10450	3.01729	2.59126	2.21302	2.43729	2.74406	2.72769
Variance		.501	1.648	1.191	12.299	1.074	7.535	6.977	8.010	9.638	9.104	6.715	4.897	5.940	7.530	7.440
Skewness		1.624	-1.195	.140	1.227	-.041	.459	.645	.474	.369	-.138	-.347	-1.128	-.395	-.776	-.161
Std. Error of Skewness		.174	.174	.174	.188	.199	.212	.212	.212	.212	.212	.212	.212	.212	.212	.212
Kurtosis		5.079	.291	.191	.696	-1.190	-.746	-.666	-.708	-1.115	-1.204	-.558	.999	-.270	-.437	-.831
Std. Error of Kurtosis		.346	.346	.346	.374	.396	.420	.420	.420	.420	.420	.420	.420	.422	.420	.420
Range		4.00	5.00	5.00	13.00	3.00	9.00	8.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00
Minimum		1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Maximum		5.00	6.00	6.00	14.00	5.00	10.00	9.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Sum		319.00	831.00	514.00	747.00	505.00	602.00	525.00	645.00	652.00	768.00	798.00	999.00	850.00	960.00	776.00
Percentiles	25	1.0000	4.0000	2.0000	2.0000	2.0000	2.0000	2.0000	3.0000	2.0000	3.0000	5.0000	6.0000	5.0000	5.0000	4.0000
	50	2.0000	5.0000	3.0000	3.0000	4.0000	4.0000	4.0000	5.0000	4.0000	6.0000	6.0000	8.0000	6.0000	8.0000	6.0000
	75	2.0000	5.0000	3.0000	6.0000	4.0000	6.0000	5.0000	7.0000	8.0000	9.0000	8.0000	9.0000	9.0000	10.0000	8.0000

Table 3

Psychopathology of Suicide (EASI) (N=130)

Statistics

		What is your gender identity?	What is your race/ethnicity?	What is your relationship status?	What is/was your current military rank?	Age	My coworkers would think I am not capable of doing my job.	People at my work would not want to be around me.	My career/job options would be limited.	Coworkers would feel uncomfortable around me.	A supervisor might give me less desirable work.	A supervisor might treat me unfairly.	People at work would think I was faking.	Co-workers would avoid talking to me.
N	Valid	195	195	195	167	148	131	131	131	131	131	131	131	131
	Missing	4	4	4	32	51	68	68	68	68	68	68	68	68
Mean		1.6359	4.2615	2.6359	4.4731	3.4122	2.7099	2.7405	2.9695	2.7557	2.9160	2.9389	2.7786	2.5954
Std. Error of Mean		.05068	.09192	.07817	.27138	.08518	.11595	.11651	.11154	.11319	.11159	.10769	.11535	.11303
Median		2.0000	5.0000	3.0000	3.0000	4.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Mode		2.00	5.00	3.00	1.00	4.00	3.00	1.00[a]	4.00	3.00	3.00	3.00	3.00	3.00
Std. Deviation		.70765	1.28364	1.09155	3.50699	1.03627	1.32716	1.33352	1.27665	1.29550	1.27725	1.23261	1.32020	1.29364
Variance		.501	1.648	1.191	12.299	1.074	1.761	1.778	1.630	1.678	1.631	1.519	1.743	1.674
Skewness		1.624	-1.195	.140	1.227	-.041	.269	.152	-.122	.100	-.111	-.183	.173	.317
Std. Error of Skewness		.174	.174	.174	.188	.199	.212	.212	.212	.212	.212	.212	.212	.212
Kurtosis		5.079	.291	.191	.696	-1.190	-1.012	-1.139	-1.060	-1.027	-1.030	-.925	-1.047	-.943
Std. Error of Kurtosis		.346	.346	.346	.374	.396	.420	.420	.420	.420	.420	.420	.420	.420
Range		4.00	5.00	5.00	13.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Minimum		1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Maximum		5.00	6.00	6.00	14.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Sum		319.00	831.00	514.00	747.00	505.00	355.00	359.00	389.00	361.00	382.00	385.00	364.00	340.00
Percentiles	25	1.0000	4.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	1.0000
	50	2.0000	5.0000	3.0000	3.0000	4.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
	75	2.0000	5.0000	3.0000	6.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	3.0000

a. Multiple modes exist. The smallest value is shown

Table 4

Psychopathology of Suicide (DRRI-2) (N=130)

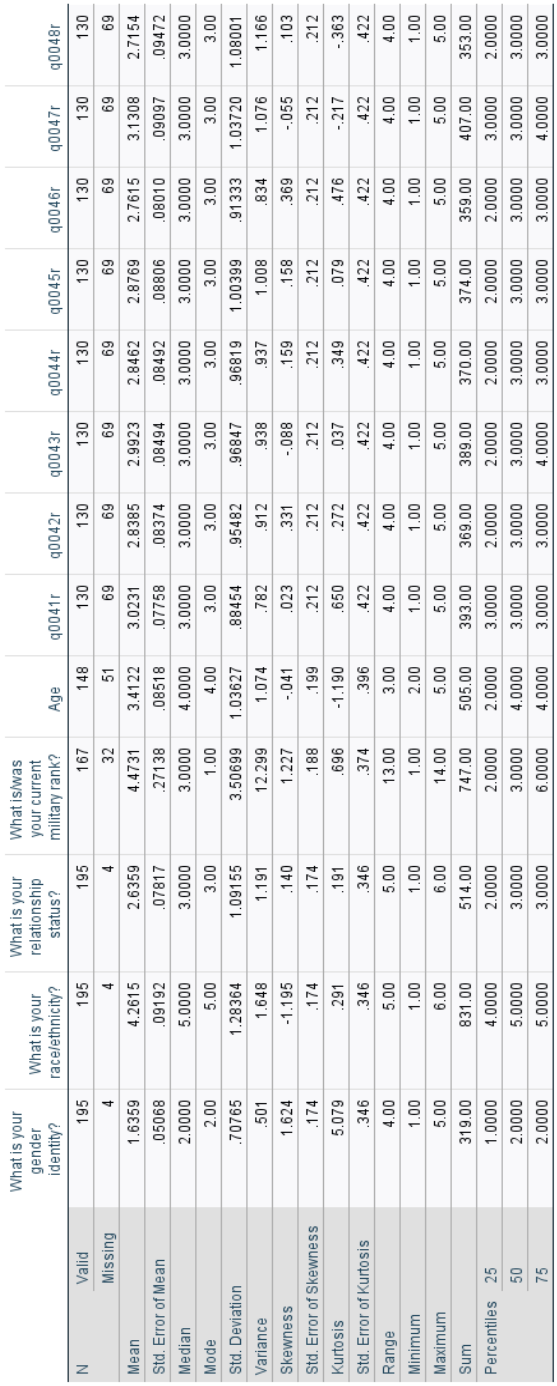
Table 5

Statistics

		What is your gender identity?	What is your race/ethnicity?	What is your relationship status?	What is/was your current military rank?	Age	My unit was like family to me.	People in my unit were trustworthy.	My fellow unit members appreciated my efforts.	I felt valued by my fellow unit members.	Members of my unit were interested in my well-being.	My fellow unit members were interested in what I thought and how I felt about things.	My unit leader (s) were interested in what I thought and I felt about things.	I felt like my efforts really counted to the leaders in my unit.	My service was appreciated by the leaders in my unit.	I could go to unit leaders for help if I had a problem or concern.	The leaders of my unit were interested in my personal welfare.	I felt valued by the leaders of my unit.
N	Valid	195	195	195	167	148	130	129	130	130	130	130	130	130	130	130	130	130
	Missing	4	4	4	32	51	69	70	69	69	69	69	69	69	69	69	69	69
Mean		1.6359	4.2615	2.6359	4.4731	3.4122	3.6615	3.6202	3.7308	3.7231	3.6000	3.4615	3.2846	3.3385	3.4385	3.3923	3.4154	3.3000
Std. Error of Mean		.05068	.09192	.07817	.27138	.08518	.11273	.09794	.09996	.09769	.10789	.10018	.10431	.10392	.10532	.10331	.10290	.10340
Median		2.0000	5.0000	3.0000	3.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Mode		2.00	5.00	3.00	1.00	4.00	5.00	3.00	5.00	3.00	5.00	3.00	3.00	3.00	3.00	3.00[a]	3.00	3.00
Std. Deviation		.70765	1.28364	1.09155	3.50699	1.03627	1.28530	1.11239	1.13976	1.11380	1.23011	1.14224	1.18932	1.18468	1.20080	1.17794	1.17325	1.17895
Variance		.501	1.648	1.191	12.299	1.074	1.652	1.237	1.299	1.241	1.513	1.305	1.414	1.404	1.442	1.388	1.377	1.390
Skewness		1.624	-1.195	.140	1.227	-.041	-.788	-.585	-.633	-.492	-.514	-.411	-.486	-.402	-.385	-.402	-.422	-.317
Std. Error of Skewness		.174	.174	.174	.188	.199	.212	.213	.212	.212	.212	.212	.212	.212	.212	.212	.212	.212
Kurtosis		5.079	.291	.191	.696	-1.190	-.288	-.104	-.245	-.348	-.606	-.330	-.369	-.431	-.508	-.567	-.396	-.531
Std. Error of Kurtosis		.346	.346	.346	.374	.396	.422	.423	.422	.422	.422	.422	.422	.422	.422	.422	.422	.422
Range		4.00	5.00	5.00	13.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Minimum		1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Maximum		5.00	6.00	6.00	14.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Sum		319.00	831.00	514.00	747.00	595.00	476.00	467.00	485.00	484.00	468.00	450.00	427.00	434.00	447.00	441.00	444.00	429.00
Percentiles	25	1.0000	4.0000	2.0000	2.0000	2.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
	50	2.0000	5.0000	3.0000	3.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
	75	2.0000	5.0000	3.0000	6.0000	4.0000	5.0000	4.5000	5.0000	5.0000	5.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000

a. Multiple modes exist. The smallest value is shown

Chain of Command/Leadership (WRAIR-LS, Short Form) (N=130)



Statistics

		What is your gender identity?	What is your race/ethnicity?	What is your relationship status?	What is/was your current military rank?	Age	q0041r	q0042r	q0043r	q0044r	q0045r	q0046r	q0047r	q0048r
N	Valid	195	195	195	167	148	130	130	130	130	130	130	130	130
	Missing	4	4	4	32	51	69	69	69	69	69	69	69	69
Mean		1.6359	4.2615	2.6359	4.4731	3.4122	3.0231	2.8385	2.9923	2.8462	2.8769	2.7615	3.1308	2.7154
Std. Error of Mean		.05068	.09192	.07817	.27138	.08518	.07758	.08374	.08494	.08492	.08806	.08010	.09097	.09472
Median		2.0000	5.0000	3.0000	3.0000	4.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Mode		2.00	5.00	3.00	1.00	4.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Std. Deviation		.70765	1.28364	1.09155	3.50699	1.03627	.88454	.95482	.96847	.96819	1.00399	.91333	1.03720	1.08001
Variance		.501	1.648	1.191	12.299	1.074	.782	.912	.938	.937	1.008	.834	1.076	1.166
Skewness		1.624	-1.195	.140	1.227	-.041	.023	.331	-.088	.159	.158	.369	-.055	.103
Std. Error of Skewness		.174	.174	.174	.188	.199	.212	.212	.212	.212	.212	.212	.212	.212
Kurtosis		5.079	.291	.191	.696	-1.190	.650	.272	.037	.349	.079	.476	-.217	-.363
Std. Error of Kurtosis		.346	.346	.346	.374	.396	.422	.422	.422	.422	.422	.422	.422	.422
Range		4.00	5.00	5.00	13.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Minimum		1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Maximum		5.00	6.00	6.00	14.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Sum		319.00	831.00	514.00	747.00	505.00	393.00	369.00	389.00	370.00	374.00	359.00	407.00	353.00
Percentiles	25	1.0000	4.0000	2.0000	2.0000	2.0000	3.0000	2.0000	2.0000	2.0000	2.0000	2.0000	3.0000	2.0000
	50	2.0000	5.0000	3.0000	3.0000	4.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
	75	2.0000	5.0000	3.0000	6.0000	4.0000	3.0000	3.0000	4.0000	3.0000	3.0000	3.0000	4.0000	3.0000

Table 6

Pearson Correlation (MISS-M-SF) (N = 130)

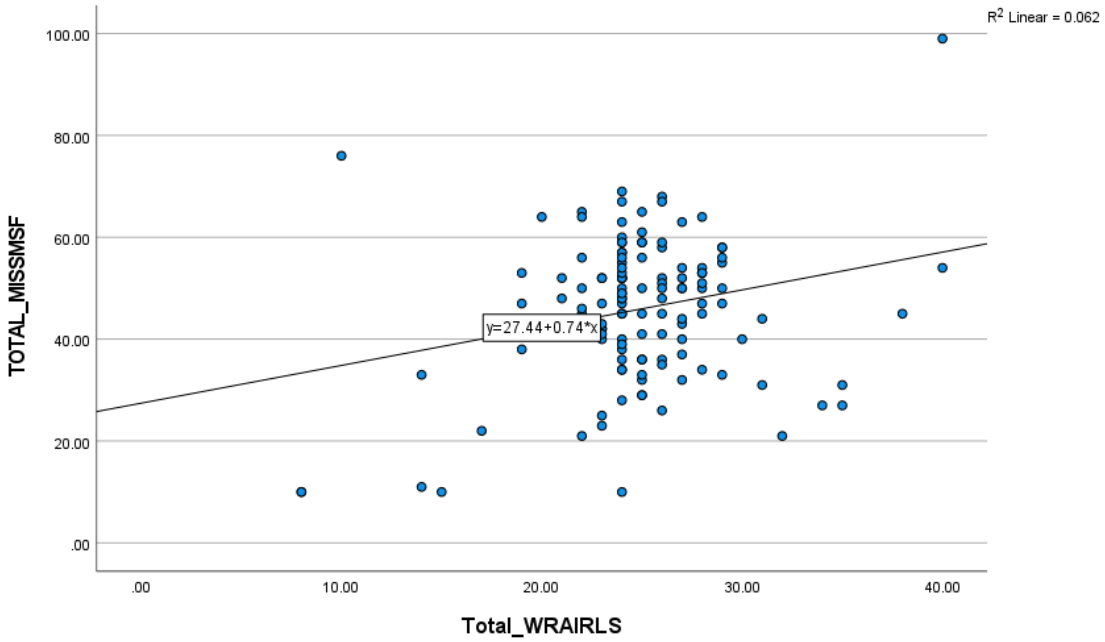


Table 7

Pearson Correlation (EASI) (N = 130)

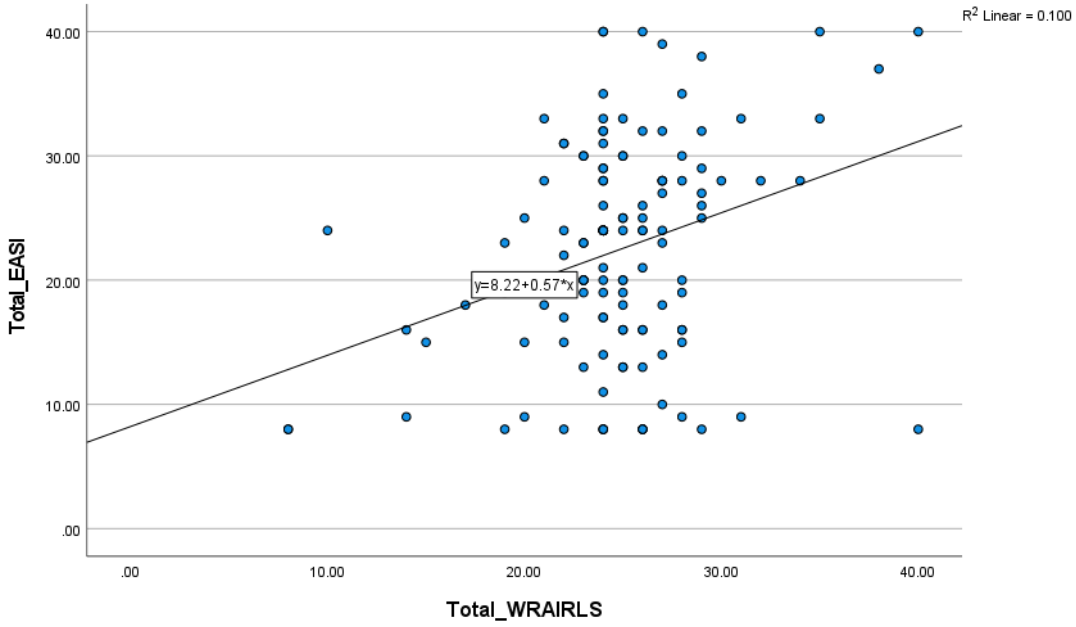
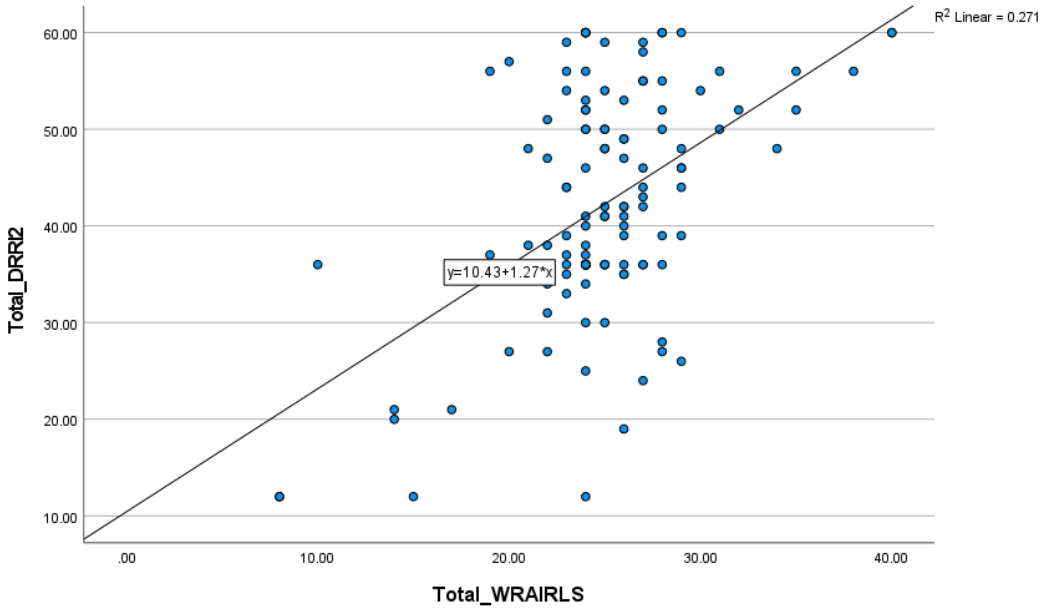


Table 8

Pearson Correlation (DRRI-2) (N = 130)


R² Linear = 0.271
y=10.43+1.27*x
Total_DRRI2
Total_WRAIRLS
60.00
50.00
40.00
30.00
20.00
10.00
.00
10.00
20.00
30.00
40.00