St. Catherine University

SOPHIA

Master of Social Work Clinical Research Papers

School of Social Work

5-2014

Risk and Protective Factors: Suicide in the Military

Nicole Gauer Patnode Fisher St. Catherine University

Follow this and additional works at: https://sophia.stkate.edu/msw_papers



Part of the Social Work Commons

Recommended Citation

Patnode Fisher, Nicole Gauer. (2014). Risk and Protective Factors: Suicide in the Military. Retrieved from Sophia, the St. Catherine University repository website: https://sophia.stkate.edu/msw_papers/371

This Clinical research paper is brought to you for free and open access by the School of Social Work at SOPHIA. It has been accepted for inclusion in Master of Social Work Clinical Research Papers by an authorized administrator of SOPHIA. For more information, please contact amshaw@stkate.edu.

Risk and Protective Factors: Suicide in the Military

by Nicole Gauer Patnode Fisher

MSW Clinical Research Paper
Presented to the Faculty of the
School of Social Work
St. Catherine University and the University of St. Thomas
St. Paul, Minnesota
In Partial fulfillment of the Requirements for the Degree of
Master of Social Work
Committee Members
Kendra Garrett, PhD., MSW (Chair)
Nicole Siegler, MPAS, PA-C
Megan Braith, MS

The Clinical Research Project is a graduation requirement for MSW students at St. Catherine University/University of St. Thomas School of Social Work in St. Paul, Minnesota and is conducted within a nine-month time frame to demonstrate facility with basic social research methods. Students must independently conceptualize a research problem, formulate a research design that is approved by a research committee and the university Institutional Review Board, implement the project, and publicly present the findings of the study. This project is neither a Master's thesis nor a dissertation.

Acknowledgments

Dr. Kendra Garrett, thank you does not do justice to the countless hours you have put towards guiding me through this process. You have been encouraging and supportive and I cannot thank you enough for being my chair. I have truly enjoyed having you as a professor and mentor.

To my committee members, Megan Braith and Nicole Siegler, thank you for taking time out of your schedules to help me through this process. Your suggestions, support and encouragement have meant the world to me.

My parents, Steve and Mary Patnode, have spent my lifetime rooting me on and believing in me. You taught me to follow my dreams. You have given me the opportunity to fulfil my dream by giving up your time to watch my baby girl so I could work on papers and go to my internships. Faith has loved having you be such a huge part of her life and I am so proud that she has grandparents like you to look up to. Thank you for everything you have done for me (us).

To my family: Thank you all for being patient with me. Mitchell, you have been such an inspiration. I see how hard you work and how responsible you are. You motivate me to drive on even when things get difficult. I am so proud of you. Ryan, thank you for making me smile. You are kind and thoughtful and you have helped me in more ways than you know. Faith. My little love bug. Your entire 16 months you have had to share your mom with school. I am so grateful for you; you have made all the hard work and nights away from home worth it. To my husband, Doug, I don't know how you to thank you for all of the love and support and encouragement you have given me over the past three years. I honestly could not have done this without you. You have shown me nothing but love and that has carried me through this program. I am eternally thankful. I am the luckiest woman in the world because of the four of you. I love you all with all my heart.

Abstract

Suicide rates in the military are on the decline, yet on the rise in the National Guard and Reserve components. Training programs to educate and raise awareness about suicide have been implemented in all branches of the military. There is a lot of research about suicide risk and protective factors in the general population and Active Duty military population, but there is not research that identifies service members' perceptions on what those risk and protective factors may be. Nor is there research that explores the perceptions of stigma in the military regarding suicide. Knowing how service members perceive suicide risk and protective factors and stigma in the military may give some insight into how well the training programs are working. This study compared the perception of suicide risk and protective factors of new members to the service and veterans. The research showed that the two groups have similar perceptions regarding risk and protective factors, yet have fairly differing perceptions about stigma in the military. The veteran sample believes that service members are uncomfortable reporting mental health concerns to the military; the veterans also believe that the military discriminates against service members with mental health issues. The new service member sample believes that it is safe to ask for help regarding suicide in the military; they also believe that the military wants to help those with mental health issues. The research also shows that unit cohesion and family support are strong protective factors for suicide. Based on the findings I recommend improving family involvement in the military. I also recommend creating more unity within Guard and Reserve units. The research also shows there is a lack of resources for Guard and Reserve members; I recommend further research studies identify where the greatest needs for resources are.

Table of Contents

Introduction	6
Literature Review	9
Methods	22
Findings	25
Discussion	31
Implications	36
Conclusion	40
References	41
Appendix A	47
Appendix B	54

Risk and Protective Factors: Suicide in the Military

Suicide has been a topic of much discussion throughout the branches of the Armed Forces since the start of the Global War on Terror. There has been research conducted in order to identify and analyze the risk and protective factors of military suicides. While there is conjecture as to what red flags look like, there is little research about what service members themselves consider risk or protective factors. Therefore this research will ask the question: what are the perceptions of suicide risk and protective factors among new service members and seasoned veterans?

Throughout the Armed Forces there are five branches: Air Force, Army, Coast Guard, Marines and Navy. These five branches have both Active Duty and Reserve units. The Army and Air Force host National Guard units as well. While National Guard and Reserve units are similar in that they are part-time forces, they differ in their funding sources. The National Guard is funded by the State and Federal governments, while the Reserves are strictly federally funded. There are many differences between Active Duty military and the National Guard or Reserve Component. Additionally, the branches offer Reserve Officers' Training Corp (ROTC), which is a college scholarship program that incorporates military service and academia. The ROTC candidates, or cadets, are full-time college students that are typically new to the Armed Forces. They attend college courses while training part-time to become leaders in the military. Upon graduation, cadets may become officers in either Reserve, National Guard or Active Duty units.

Active Duty personnel are employed year round by their branch of service (Air Force, Army, Navy, Marines, Coast Guard) while National Guardsmen and Reservists are required to actively participate one weekend a month and two weeks during the

summer. The Global War on Terror marked the first deployments for National Guard units since WWII (Garamone, 2004). Between September 11, 2001 and May 31, 2007 nearly 600,000 National Guard Soldiers deployed in support of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) (Defense Science Board, 2007).

Suicide rates in the US Army have doubled since 2004 (Ursano, 2013). Rates in the Army National Guard (ARNG) began increasing in 2006 and surpassed the rates of both the Active Component and Army Reserve (Griffith, 2012). In 2008 the suicide rates in the US Army rose above the general population; there are 19 deaths by suicide per 10,000 people in the US and 20 deaths by suicide per 10,000 in the US Army (Trofimovich, 2013).

While the rate of suicide is lower in the general population, the rates of civilian suicide have been rising since 2004 as well. Suicide deaths have increased 128% in ten years making it the leading cause of injury death in the US (Ursano, 2013). In 2008 suicide was the 10th leading cause of death in the US with over 33,000 lives lost (Kaplan, 2012). There are over 80 deaths by suicide per day in the US and those deaths account for half of the violence-related deaths in the United States (Martin, 2009). Suicide is a national crisis.

MN suicides currently follow the trends of National suicides. There are over 600 suicides per year in MN making suicide the 10th leading cause of death (Loop, 2013). Approximately half of these suicides involve a firearm. Three-fourths of firearm deaths in MN are due to suicide (Loop, 2013). More than three times as many Minnesotans die from suicide than homicide (Loop, 2013).

According to Sundararaman (2008) it is essential to study the suicide statistics of the general population as well as the military population because military suicides are included in the statistics of the general population. Additionally, it is important to look into the risk factors within the civilian community as well as the at-risk behaviors of the military population because those who have served, or are beginning their service, are towing the line between civilian and military life. ROTC cadets are new to the service and are balancing a college life with a military life. Veterans who are no longer serving are submerged in a civilian culture, but have their military culture engrained in their history. Guardsmen and Reservists are "Citizen Soldiers" meaning they spend 28 days of the month immersed in "civilian" life and two days a month with their respective drilling units. There are also Guardsmen and Reservists who deploy taking the shape of an Active Duty Soldier but are expected to integrate back into their civilian lives upon their return. Since a large portion of service members and veterans are civilians most of the time, it is essential to take into account the risk and protective factors of the general population as well as those of the Active Duty suicide deaths in order to determine risk and protective factors for those that serve.

There are many studies that explore the risk and protective factors of the Active military as well as the general population. There are limited studies on the perceptions of service members regarding suicide risk and protective factors. With the rates of suicide continuing to rise throughout the branches it is important to gain a perspective from the service members. This study will strive to answer the following question, what are the perceptions of suicide risk and protective factors among new service members and seasoned veterans?

Literature Review

Suicide is an outcome that requires several things to go wrong at once (Hueser, 2013). Risk factors seen in the general population (which includes Service Members) include previous attempts, substance abuse, mental illness, recent loss, family history of suicide, history of abuse, and hopelessness (Loop, 2013). More specific risk factors that can be seen in Service Members include frequent deployments, exposure to extreme stress and death, physical and/or sexual assault in the military, service-related injury, and lack of social support (Loop, 2013). In this literature review factors related to suicide through a conceptual lens of risk and resilience will be explored. Using Nock's (2013) model, vulnerabilities, risks and protective factors of suicide will be reviewed in the general population, Active Duty population and the National Guard.

Conceptual Framework

Martin (2009) states that suicide cannot be attributed to one factor due to the complexity of the situation, and suicide behavior is often due to a variety of factors. These factors include both risk and protective (or resilience) factors. In this literature review, both risk and protective factors will be explored. Using the risk and resilience model it is important to note that risk factors can be looked at retroactively as causes to suicide (Fraser, 1999). Risk as defined by Fraser (1999) means that a certain group of people with a common trait or issue are more likely than the rest of the population to attempt or complete suicide. According to Nock et al. (2013), there are proximal-distal factors that heighten one's risk for suicide. These factors are demographics, family history, mental illness, life stressors and prior suicide attempts (Nock, 2013). Each of

these risk factors will be explored in the general population as well as the military populations. According to Nock (2013) risk factors differ between suicide ideation, suicide plans, suicide attempts and suicide death. In Nock's (2013) conceptual model there are vulnerabilities and stressors—or proximal-distal factors—that guide suicidal thinking. Both attempts and deaths by suicide vary immensely based on these various factors. Though these individual risk factors cannot alone predict suicide, the risk for an attempt or death increases with a multitude of risk factors (O'Connor, 2013). Co-occurring risk, especially history of child abuse, peer rejection, poverty and discrimination, can elevate risk (Fraser, 1999).

Nock organized risks and protective factors into vulnerabilities, life events and supports, or protective factors (Nock, 2013). Some at-risk vulnerabilities as defined by Nock's (2013) model include family history, psychiatric factors, psychological factors and suicidal behavior. Some particularly important family information to explore is a history of mental disorders, criminal history, aggressive behaviors, and prior suicide attempts or deaths by suicide in the family (Nock, 2013). Psychiatric factors to be aware of include depression, anxiety, substance-related disorders, and other mental disorders (Nock, 2013). Impulsivity, aggression and neurocognitive deficits are psychological risk factors (Nock, 2013). Finally, it is important to note that prior suicidal behavior, to include suicide ideation, plan, and attempt are vulnerabilities as described by Nock (2013).

Another form of risk factors is described as stressful life events (Nock, 2013).

Stressful life events as characterized by Nock (2013) include early stressors and negative life events. Early stressors are events in a person's childhood such as childhood abuse,

household dysfunction or parental divorce (Nock, 2013). Negative life events are more current stressors such as grief and loss, employment or relationship stressors, trauma, and chronic pain (Nock, 2013).

Similar to risk factors, protective factors can change or influence outcomes (Fraser, 1999). According to Nock's model (2013) protective factors can include familial support, children, social supports, religious participation, psychological factors, mental health treatment, and resilience. Resilience is a form of protection; resilience enables a person to overcome at-risk behaviors or situations (Fraser, 1999).

Suicide Risk Factors in the general population

Age, gender and race can be three determining factors for suicide. While one cannot predict suicide based solely on these demographics, there are certain populations that experience death by suicide at a greater rate than the rest of the population. Specific age groups, for example, are at heightened risk for suicide due to a variety of factors. Younger adults are some of the most at-risk. Suicide was the second leading cause of death for those aged 25 to 34 years (5,735 deaths) and the third leading cause for the 15 to 24 year age group with 4,600 deaths in the United States (Caine, 2013).

Unlike the complexities of the risk factors associated with age, the disparities between male and female deaths by suicide are a little more concrete. Males are four times more likely than females to complete suicide (Martin, 2009). Suicide is the seventh leading cause of death for men and the 15th leading cause of death for women ("Suicide in the US: Statistics and prevention," 2013). Men are presumed to have a higher rate of death due to the lethality of means used (Martin, 2009).

The three most common means for suicide deaths are firearms, suffocation and poisoning. (Martin, 2009; "Suicide in the US: Statistics and prevention," 2013). Males and females differ in methods used. Firearms are used in 56% of male deaths by suicide and 30% of female deaths; suffocation is used 24% of the time by males and 20% by females; poisoning is used in 13% of male deaths by suicide and 40% of female deaths ("Suicide in the US: Statistics and prevention," 2013).

Like age and gender, there are variations in risk factors among ethnic groups or races. According to Martin (2009) White, American Indian and Alaska Native males and females had the highest rates of suicide between 1950 and 2005. In a study by the National Institute of Mental Health ("Suicide in the US: Statistics and prevention," 2013) the rates for American Indians and Alaska Natives were 14.3 per 100,000 and 13.5 per 100,000 for Caucasians. The lowest rates were among Hispanics, African Americans, and Pacific Islanders between 5.1 and 6.2 per 100,000 ("Suicide in the US: Statistics and prevention," 2013).

In addition to age, gender and race, family history of suicide plays a role in vulnerabilities associated with suicide risk. A family history of suicide is an unpreventable risk factor for suicide and one of the strongest predictors of suicide (Martin, 2009). The rate of suicide is twice as high in those with a family history of suicide (Martin, 2009). Aguirre and Slater (2010) explore the risk factors of survivors of suicide. Those who have lost someone to suicide are at a height risk of suicide themselves because they deal with issues including grief, self-blame, shame, and increased risk for depression or Posttraumatic Stress Disorder (PTSD) (Aguirre, 2010).

Suicide attempters with a family history of suicide make a greater number attempts than those with no family history (Lizardi, 2009).

In addition to a familial history of suicide, a family history of childhood trauma or abuse is also a risk factor. Gradus (2013) stated that one of the risk factors of the general population was early childhood trauma. Easton (2013) found that one-third of boys who reported childhood sexual trauma suffered from suicidal ideation. Men who suffered from childhood sexual trauma are ten times more likely to report suicidal ideation or suicide attempts than those who never experienced sexual trauma as a child (Easton, 2013). In a study by Zapata (2013) physical abuse was a greater risk factor for females and sexual abuse was a greater risk factor for males. Additionally, in a study of illicit drug users, over 49% of participants reporting suicide attempts also reported "severe to extreme levels" of physical, emotional or sexual abuse as a child (Marshall, 2013). Childhood trauma, especially sexual abuse, has implications of impacting relationships in adulthood, which heightens the risk for suicidal ideation and attempts (Easton, 2013).

While a family history of suicide and a history of childhood trauma are severe risk factors, the most predictive factor is a prior suicide attempt (Martin, 2009; Ursano, 2013). After one attempt, 10-20% of attempters will make another attempt within one year. Of those, 1-2% will die by suicide in that year. Eventually, 10-15% of attempters will die by suicide (Risk Assessment Guide, 2013).

Approximately 90% of persons who die by suicide have a diagnosable mental illness, substance abuse disorder, or both (Loop, 2013; ("Suicide in the US: Statistics and prevention," 2013). The largest occurrence is major depressive disorder, which is

present in 30-90% of all suicide deaths (Martin, 2009). More specifically, hopelessness is a cognitive component of depression that is a significant risk factor of suicide (Martin, 2009). Suicide risk has been associated with a decrease in the chemical serotonin which is found in the brain ("Suicide in the US: Statistics and prevention," 2013). Studies have found decreased levels of serotonin in the brains of those affected by depression, impulsive behaviors, history of depression and those who have died by suicide ("Suicide in the US: Statistics and prevention," 2013). The second most common mental disorder present in 26-55% of suicide deaths is substance-related disorders (Martin, 2009). Drug users' rate of suicide can range between 15-20% (Everen, 2013). Those with alcohol dependence range between 25-38% (Everen, 2013).

Those who die by suicide typically experience an adverse life event that they perceive as stressful beyond coping that serves as a breaking point (Martin, 2009). Aguirre and Slater (2010) discussed that some people "use suicide as an escape." The escape is theorized to be from a variety of stressors like relationship issues, loss of a loved one, employment or unemployment issues, or any other perceived loss (Aguirre, 2010).

Protective factors of the general population

Protective factors are means by which a person is able to control suicide ideation or attempts. Being a part of the at-risk population or having a multitude of risk factors does not fully predict a person's capability for suicidal behavior or thinking. It is nearly impossible to make these predictions because of the vast amount of risk factors as well as protective factors. According to Martin (2009) one protective factor in the general population is feeling connected. This could mean having the support of others through

school, church, family or friends. Cultural and religious beliefs are a form of protection because those beliefs can lead a person away from suicidal thinking ("Injury prevention and control," 2013). A person's ability to problem-solve and cope are internal protective factors ("Injury prevention and control," 2013). Familial support and emotional attachment are protective factors against suicidal ideation in men with childhood sexual abuse (Easton, 2013). Additionally, perceived parental care and positive responses to the disclosure of childhood abuse have shown to be protective factors among women who were abused or neglected as children (Easton, 2013). Another protective factor is not having the means to attempt or complete suicide (Martin, 2009). According to the Center for Disease Control (CDC) having effective clinical care for mental health is a protective factor ("Injury prevention and control," 2013). Additionally, having access to clinical interventions and ongoing medical and mental health care relationships are protective factors as well ("Injury prevention and control," 2013). Unfortunately, protective factors have not been studied nearly as much as risk factors ("Injury prevention and control," 2013).

Suicide Risk Factors in the military

Like the general population, the military has similar trends in risk factors associated with suicide. These trends include age, gender, race, mental health and family history, prior attempts and life stressors. Younger adults in both the military and general population are at a heightened risk. Within the Active Duty component of the Army, Air Force, Marines, Navy and Coast Guard, those at the greatest risk for suicide are men 25 years and younger (Trofimovich, 2013). Martin (2009) found that 50% of the deaths in the Active component of the branches were 17-26 year old males. In this age group,

suicide is the third leading cause of death. This age group is correlated with junior enlisted service members. Bush's (2013) study found that 55% of suicides in the military are junior enlisted (rank of E4 and below). Black (2011) also found that 33% were senior enlisted, 5.8% were junior officers and 3.6% were senior officers. Over 85% of service members are enlisted. Of those enlisted members, over 50% are in the junior enlisted ranks (E1-E4) (Martin, 2000).

The age of at-risk service members mirror the general population as do the risk factors associated with gender. As in the general population, men are at greater risk of death by suicide. In the military 96% of suicides were male (Bush, 2013). Men who serve in the military are twice as likely, though, as the general population to complete suicide (Kaplan, 2012). Women who serve are three times as likely as women in the general population to die by suicide (Kaplan, 2012).

Racial risk factors in the military are similar to the general population, as well.

Nearly 70% of suicide deaths are Caucasian service members (Bush, 2013). The major difference in racial risk factors is that Hispanic/Latina females in the United States Air Force are at a heightened risk for suicide (Gradus, 2013).

Like the general population, military personnel are susceptible to the pressures and stress of life circumstances. A family history of suicide, childhood trauma, a history of suicide attempts as well as mental health history are all risk factors to which service members are susceptible to (Nock, 2013). Other risk factors include broken relationships, substance abuse, access to firearms, and legal concerns. There is debate as to whether or not the men and women of the Armed Forces are at higher risk because they have the means to firearms. While firearms are the most used means of suicide in

the general population (50-60% of cases), approximately 61% of military suicides use firearms (Bush, 2013). Of these 500 military suicides by firearm, 72% used a personal firearm and only 17% used a military-issued firearm (Bush, 2013). Bush (2013) conducted a data analysis of military suicides and the risk factors associated with these suicides. Bush (2013) found that 49% of the suicide victims were married, 51% had relationship issues, 22% had recently suffered a loss of a job, 21% had a mood disorder, 15% had a history of self-injury or anxiety diagnosis, and one-third had premeditation. While many of the risk factors found in the military are similar to those in the civilian population, in the military culture these risk factors can have severe consequences. Legal issues can hinder promotions or eligibility for re-enlistment and relationships can become fractured due to deployments or moving every two years (Martin, 2009).

Mental health issues among military suicides are comparable to mental health issues among suicides in the United States population. Particular diagnoses with increased suicide risk in the military are major depression, bipolar disorder, anxiety, PTSD, schizophrenia and paranoid disorders. Adjustment disorder is a major risk factor among the Army population (Black, 2011).

While the risk factors are similar, military personnel are at an increased risk for suicide. According to Gradus (2013) military samples showed risk associated with major depression, anxiety, PTSD and substance abuse disorders at a higher rate than the general population. Martin (2009) found that life stressors of military personnel are exacerbated by their service in potentially dangerous places and this puts them at an even higher risk than the general population. Gradus (2013) conducted a study comparing the risk factors of the Canadian population with the Canadian Army. This

study showed that 80% of the risk factors included personal stressors to include relationship issues or job stress. Another study by Gradus (2013) showed that 50% of US Marines who died by suicide had "significant life stressors" prior to joining.

Deployments are considered stressful life events in and of themselves, but upon returning to the US, troops are being diagnosed with additional mental health issues, Traumatic Brain Injuries and Posttraumatic Stress. There is conflicting data on the role of deployments in the uptick in military suicides. On one hand, the rate of suicides increased for the military in 2004, but on the other hand, less than half of military personnel who died by suicide had deployed (Black, 2011). Bush (2013) found 53% of service members who died by suicide had never deployed. Posttraumatic Stress Disorder (PTSD) and Traumatic Brain Injury (TBI) are the signature invisible wounds of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). That being said, sustaining a TBI or suffering from PTSD are in fact correlated with increased suicide rates. Those who have suffered a TBI are four times more likely to attempt suicide (Buck, 2011). Additionally, TBI and PTSD can lead to major depression and substance abuse issues, which are also risk factors (Martin, 2009). In an analysis of suicide deaths in the military from 2001-2008, LeardMann (2013), however, found there was not a significant correlation between deployment and death by suicide.

In contrast, a data analysis of recently deployed service members showed that the acquired capability for suicide was significantly higher than those of civilian participants. Bryan (2010) conducted a study of Army and Air Force Service Members who deployed during Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). A group surveyed suffered TBI, another group were on the "front lines" and the

last group deployed, but had not been injured. The groups answered questions from the Combat Experience Scale, Behavioral Health Measure, PTSD Checklist-military version and Suicidal Behaviors Questionnaire-Revised. While combat experience does contribute to becoming more capable of suicidal tendency, Bryan's (2010) study uncovered that those most susceptible are Service Members who believe they are a burden on others and isolate themselves socially.

Mitchell's (2012) study of 1663 Active Duty Soldiers with one prior deployment showed 4.1% admitted to suicidal ideation. Per the Post Deployment Health Assessment (PDHA) 19% of troops showed signs of mental health concerns, 10% had PTSD symptoms, and just over 1% reported suicidal ideations. These numbers are believed to be extremely underestimated due to the fact that troops are forced to take the assessment before they are allowed to return home. If clinicians find any concerns on the PDHA the service member is held for further testing before returning home. It is believed that, in order to be released to home in the quickest manner, full disclosure is not met (Martin, 2009).

In addition to not fully disclosing due to risks of being held from returning home, the stigma in the military surrounding mental health issues and suicide is still a viable concern. Stigma in the military about mental health is a belief that someone seeking help is weak or damaged (Martin, 2009).

Protective factors in the military

Some current protective factors in the military include unit cohesion (Mitchell, 2012), social supports, mental health treatment and resilience (Nock, 2013). Bah (2011) is developing a model focusing on protective factors; these include family function,

religious behavior and the organizational culture of the military. The military is working towards raising awareness and lowering the stigma associated with suicide. As a protective factor, the services are incorporating suicide intervention training, raising awareness and lowering the stigma associated with mental health and suicide.

Additionally, Active Duty service members have access to mental health care (Martin, 2009). Suicide rates for the Active Duty components of the service dropped 15% in 2013 (Baldor, 2014). This drop is being attributed to the increase in training and access to care (Baldor, 2014).

Suicide Risk Factors in the National Guard and Reserve Component

In 2013 the rate of suicide decreased for the Active Duty components, yet rose for National Guard and Reserve component service members (Baldor, 2014). This increase is likely linked to the lack of resources available to Guard and Reserve service members (Baldor, 2014).

The Defense Science Board (DSB) (2007) conducted an analysis of the strain of the war on Guard and Reserve units. DSB (2007) stated, "The task force was impressed with the dedication and professionalism of the members of the National Guard and reserves. They are performing to a very high standard under great strain. The task force is very concerned for their future if the strain is not relieved."

The task force reports that there is not substantial evidence to show Guard members are less mentally stable than Active Duty Soldiers, but Guardsmen report higher rates of concern about their mental health (DSB, 2007). This is attributed to the following information: "Active component soldiers continue to work full time with their units, whereas reserve soldiers demobilize and lose the day-to- day support from unit

peers. Active component soldiers have steady access to the Army's health facilities, while reserve component personnel often live far from Veterans Administration (VA) facilities, and may face legal barriers to receiving care if they fail to report problems soon after return from active service. Reserve component soldiers face other stressors, such as sudden change after long deployment back to a full time civilian job" (DSB, 2007).

While many of the risk factors remain the same between civilian and military populations, the National Guard has seen an even larger uptick in suicides than the Active component (Griffith, 2012). In a data analysis conducted by Griffith (2012) the suicide investigative reports (Department of the Army (DA) Form 15-6) were assessed as to what risk factors were present in National Guard suicides. He found that the majority of these suicides, like those of the Active component, were White males aged 17-24, and single. The largest difference was that this sample was largely made up of non-prior service Soldiers and M-day Soldiers (M-day refers to traditional National Guard Soldiers who are on duty one weekend a month) (Griffith, 2012). Non-prior service means they were new to the National Guard and had not served Active Duty time. Between 2007 and 2010 over 80% of the National Guard suicides happened while the service member was in a civilian status (Griffith, 2012). Griffith's (2012) study showed a negative correlation between higher ranks and suicide and a negligible correlation with deployment factors and combat related jobs. However, due to the lack of resources available to the National Guard that are available to Active Duty, National Guard Soldiers have experienced higher rates of PTSD (Griffith, 2012).

National Guard Protective Factors

Though the National Guard does not have as many resources as the Active Duty component, there are steps being taken to mitigate the risk of suicide. An Army-wide initiative to have trained suicide intervention officers in each unit is also being followed by the National Guard. A program to help build the resilience of the troops called Comprehensive Soldier Fitness trains unit members on resilience. There are requirements for the National Guard to provide four hours of suicide training per month and two hours of resilience training per quarter. Also, every unit in the National Guard is required to have a unit victim advocate who is trained to assist any members who have experienced sexual assault or harassment. These steps are all being taken to raise awareness and provide assistance to those in need (Army Regulation [AR] 600-63).

While efforts are being made to raise awareness and reduce suicides in the military, the numbers are still rising. The risk factors in the general population and the military are similar, yet service members are at an increased risk, specifically Guard and Reserve members. Job and combat stress of the military can exacerbate already existing life stressors (Martin, 2009). The military is making efforts to reduce stigma and educate service members on identifying risk factors in their comrades.

Methods

Research Design

This research asked the question: what are the perceptions of suicide risk and protective factors among new service members and seasoned veterans? In order to answer the research question a quantitative analysis of data obtained from two different groups was conducted. A variety of questions were asked to seasoned Veterans as well

as newer members of the Armed Forces. These questions included likert scale questions, open-ended questions, multiple-choice questions and scaling questions.

Samples

In order to compare and contrast data between new and former members of the Armed Forces a group of veterans and a group of cadets were surveyed. A sample of ROTC Cadets from a university in the upper Midwest was anonymously surveyed to represent service members who are new to the Armed Forces. A total of 18 Cadets responded to the survey. Of the Cadets, 16 identified as male; two as female. Sixteen identified as Caucasian and two identified as "other." All of the Cadets are full-time students and five work part- or full-time. The average age of the cadets was 22 years. Additionally, a group of college students who identify as military Veterans were surveyed in order to represent the population of service members who have more experience in the Armed Forces. Twelve veterans responded to the survey. Of these veterans six identified as male and six as female. Eleven veterans identified as Caucasian and one as African American. Ten of the veterans are employed either partor full-time and nine are enrolled in school. The average age of the veteran sample was 33 years. This is a small sample and not necessarily representative of all new or experienced service members.

Protection of Human rights

Prior to the study, the researcher obtained a consent form from leaders of the ROTC group as well as the Veteran Association group. Links to the survey were emailed to the academic leaders of these groups and then distributed to the group members from there. At no point did the researcher know who received the surveys, nor did she know

who participated. Service members participating in this study were informed of the anonymity of the survey. Additionally, resources for suicide prevention were provided. The researcher is HIPAA certified through the Minnesota Army National Guard (MNARNG) as well as the Department of Veterans Affairs.

Data Collection

Instrument development

The researcher created a survey that best addressed the perception of suicide risk and protective factors by new members as well as Veterans of the Armed Forces. In using Nock's (2013) framework the analysis consisted of vulnerabilities, protective factors and life events. The vulnerability data was coded based on demographic information, military occupation, rank, military sexual trauma, sexual trauma, mental health diagnoses, and familial history. Life event data was coded as time in service, time in grade, deployments, relationships, civilian occupation, financial issues, legal issues, substance use. Questions regarding perception on protective factors was also addressed (Appendix A).

Data Analysis

This is a descriptive study. The responses of the two groups were analyzed separately and compared using tests of chi squares. The responses have been summarized using frequency tables and descriptive statistics.

Strengths and limitations

The sample population comes from a Midwestern University that might not be representative of the population as a whole. Additionally, the sample size is small. The researcher was not present to answer any questions the participants may have had.

Findings

Risk Factors

Participants were asked if they strongly agreed, agreed, neither agreed nor disagreed, disagreed or strongly disagreed that certain situations could be risk factors for suicide (Table 1). In analyzing the data strongly agree and agree were combined and strongly disagree and disagree were combined. "Neither agree nor disagree" responses were left out of the analysis. In a comparison of veterans and cadets, of the 16 examples only two were found to have statistical significance in the difference of perception between the two groups—sexual assault and sexual identity issues. Nearly 80% of veterans thought sexual identity issues could be risk factors for suicide while only 27% of cadets viewed this as a risk factor. The difference in perception of sexual identity issues as a risk factor was statistically significant between the two groups. The difference in perception of sexual assault as a risk factor was statistically significant between the groups with 90% of veterans and 77% of cadets viewing sexual assault as a risk factor. Between 70-80% of cadets and veterans agree that financial difficulties, childhood sexual assault, military sexual trauma and abuse and neglect are risk factors of suicide. The loss of a job is considered a risk factor by nearly 65% of both veterans and cadets. Between 80-90% of veterans and cadets view the loss of a relationship due to divorce or breakup to be a potential risk factor. Substance abuse, the death of a loved one, mental illness, prior suicide attempts, and suicide death of a family member are all factors that 70-90% of cadets and veterans agreed could be a potential risk factor. Approximately 50% of veterans and cadets viewed legal issues as a potential indicator of risk; the difference in perception between the two groups is not statistically significant.

The difference of opinions as to the importance of a loss of a pet as a risk factor was not statistically significant with 30% of veterans and cadets viewing this as a potential risk factor. The difference in perception of deployments as a risk factor was not statistically significant. Fifty percent of cadets and veterans agreed that deployments could be considered a risk factor.

Participants were asked if they believed there were any other reasons service members may consider suicide as an option. Nine veterans chose to include text responses. Two respondents reported that an early discharge for medical or other reasons may be a risk factor. On the flip side, one respondent said not being able to retire when the service member wishes could be a risk factor. Another respondent said, "Survivor's guilt associated with having survived combat" could likely be a risk factor. One veteran noted that some people join the military with a specific idea in their minds as to what it service will be like and when the reality of service differs from the perception those members could be at risk. One service member shared the lack of community for service members in the National Guard coupled with a shortage of local resources add to risk factors:

I feel demographics and access to resources increase the risk for suicide. Within Minnesota many members are part of the National Guard which meets monthly. Members may feel a strong level of unit cohesion but if traveling a great distance to their unit this resource is unavailable for face to face contact the rest of the month. After a deployment this distance can leave a member feeling very alone and disconnected as the family and friends they are with do not understand their thinking and those in their unit are not easy to access. They go from seeing their unit daily to once a month which is dramatic change after a deployment when stress is high. Access to resources is very poor in rural communities. I live an hour from a VA where I go for medical services. It is inconvenient to take time off work to go there and, for some, costly to drive back and forth.

In addition to feelings of disconnect after months of camaraderie some participants shared that a lack of social support and social isolation are risk factors.

Table 1	Agreed percentage of risk factors		
Risk Factors	% of Veterans	% of Cadets	p-value
Sexual assault	91	78	0.004
Sexual identity issues	75	28	0.035
Financial difficulties	75	67	0.623
Childhood sexual assault	83	67	0.14
Military sexual trauma	83	77	0.177
Abuse/Neglect	75	84	0.097
Deployments	50	56	0.293
Loss of job	67	68	0.704
Loss of relationship	92	83	0.439
Death of a loved one	67	56	0.434
Legal issues	58	56	0.357
Death/loss of pet	25	11	0.279
Substance use/abuse	84	72	0.078
Mental illness	92	77	0.492
Prior suicide attempt	83	82	0.471
Suicide death of a family member	55	66	0.513

Protective Factors

Participants were asked "what do you think service members consider protective factors?" (Table 2). The participants were then given nine examples of potential protective factors. They then selected whether they viewed it as a non-protective factor, protective factor in select situations, protective factor most of the time or a protective factor all of the time. In order to analyze the data, the responses for most of the time and all of the time were merged. Family as a protective factor was the first question. In a comparison of veterans and cadets, the difference in perception of family as a protective factor between the two groups is statistically significant with a p-value of .017. Just over 85% of veterans classified family as a protective factor as compared to 94% of cadets.

The difference in the perception of friends as a protective factor between the groups was not statistically significant. Both cadets and veterans viewed friends as a protective factor; 83% of veterans and 100% of cadets believed friends are a protective factor most or all of the time. The difference in perception of unit cohesion as a protective factor between the cadets and veterans was not statistically significant, however only 18% of veterans viewed unit cohesion as a protective factor all of the time as compared to 44.4% of cadets. The difference in perception of education as a protective factor between these two groups was not statistically significant; 75% of veterans and 39% of cadets viewed education as a protective factor. The difference in perception of age as a protective factor between the cadets and veterans was not statistically significant with 92% of veterans and 66% of cadets agreeing that age is a protective factor most or all of the time. The difference in perception of race as a protective factor most or all of the time between the two groups was not statistically significant; 16% of veterans and 11% of cadets believed race to be a protective factor. The difference in perception of religious beliefs as a protective factor between the two groups was not statistically significant with 41% of veterans and 84% of cadets viewing religion as a protective factor. The difference in perception of employment as a protective factor was not statistically significant; 58% of veterans and 61% of cadets viewed employment as a protective factor. The difference in perception of sense of purpose as a protective factor between the two groups was not statistically significant with 92% of veterans and 79% of cadets viewing a sense of purpose as a protective factor.

Table 2	Agreed percentage of protective factor		
Protective Factors	% of Veterans	% of Cadets	p-value
Family	83	95	0.017
Sense of purpose	92	89	0.093
Friends	83	100	0.196
Unit cohesion	73	94	0.155
Education	75	39	0.209
Age	93	67	0.281
Race	16	11	0.642
Religious beliefs	42	83	0.100
Employment	58	61	0.680

Stigma

Participants were asked if they strongly agreed, agreed, neither agreed nor disagreed, disagreed or strongly disagreed with a series of statements regarding suicide and mental health concerns in the military (Table 3). In analyzing the data strongly agree and agree were combined and strongly disagree and disagree were combined. "Neither agree nor disagree" responses were left out of the analysis. When asked to agree or disagree with this statement: "I think service members are uncomfortable disclosing mental health concerns to the military" the difference of perception between the cadets and veterans were on the border of being statistically significant; 100% of veterans agreed that they believed service members are uncomfortable disclosing mental health concerns in the military while 70% of cadets agreed. When asked to agree or disagree with this statement: "I think the military discriminates against service members with mental illnesses" 84% of veterans agreed while only 27% of cadets agreed. The difference in perception of stigma in the military between the two groups is statistically significant. "I think a person's career would be over if he/she sought mental health

care." The difference in responses between the groups was not statistically significant; 50% of veterans agreed while 38% of cadets agreed. "I think it is safe to ask for help from the chain of command if you are struggling with thoughts of suicide." The difference in responses from the two groups is not statistically significant. Only 59% of veterans and 83% of cadets agree that service members feel safe disclosing suicidal ideation to the chain of command. When asked to agree or disagree with this statement: "I think suicide is preventable" 80% of cadets and 100% of veterans agreed. The difference in perception between the two groups regarding the prevention of suicide is not statistically significant. When asked to agree or disagree with this statement: "I think the military wants to help people with mental health issues/suicidal ideation" only 66% of veterans agree with this statement as compared to 90% of cadets. The difference in responses between the two groups is not statistically significant. When asked to agree or disagree with this statement: "I think the military sweeps mental health issues 'under the rug" none of the cadets agree with this statement while 50% of veterans did. The difference of perception between the two groups is statistically significant.

Table 3	Agreed percentage of stigma		
Stigma	% of Veterans	% of Cadets	p-value
SMs are uncomfortable reporting MH concerns to military	100	72	0.057
Military wants to sweep MI/SI under the rug	50	0	0.010
Military discriminates against SMs with MI	84	28	0.026
A person's career would be over if he/she sought MH care	50	39	0.086
It is safe to ask for help regarding suicide	59	83	0.428
Suicide is preventable	100	89	0.343
Military wants to help those with MI or SI	67	94	0.135

Participants were asked how useful they found resilience and suicide awareness training (Table 4). Participants were given the choice of very useless, useless, neutral, useful or very useful. For the purposes of this study very useful and useful were combined and very useless and useless were combined. Neutral answers were discarded. Of the veteran population that received suicide awareness and prevention training, 22% found it useful compared to 73% of cadets. When asked how useful resilience training was 33% of veterans who received the training and 53% of cadets found it useful (p-value of .524).

Table 4	Percent who agreed training was useful		
Training	% of Veterans	% of Cadets	p-value
Suicide Awareness Training	22	73	0.057
Resilience Training	33	53	0.524

Discussion

The purpose of this research is to identify the differences in perceptions of risk and protective factors in the military based on time in service as well as to identify the perceptions of military personnel as to what are risk and protective factors. This study also identified the perceptions of stigma surrounding suicide in the military. In examining the differences in perceptions between members new to the service and service members who have been in the military for longer periods of time it is evident that there are differing opinions on suicide perceptions and perceptions of stigma in the military.

Risk factors

The participants were asked about certain situations and whether or not they agreed or disagreed that these scenarios could be risk factors for suicide for a service

member. There were 16 examples of risk factors. Of these 16 there were only two risk factors that the cadets and veterans shared differing ideas that were statistically significant: sexual assault and sexual identity issues.

Close to 80% of veterans believed sexual identity issues could be a risk factor of suicide in the military population while only 27% of cadets believed so. According to a study by McDuffie (2010) 61% of veterans who identified as transgender reported having one or more suicide attempts. These veterans disclosed joining the military in hopes of "purging" their feelings (McDuffie, 2010). The veteran participants have served in the military during the "don't ask, don't tell" time-period as well as the current time-period where that was repealed. The cadets, on the other hand, have only known a time when gender identity and sexual orientation has been seemingly accepted. For this reason, it is understandable that those who have served during both time-periods see that there may be a discrepancy in the openness and willingness to accept those who are not heterosexual. Over 17,000 service men and women have been discharged due to their sexual orientation (Dean Sinclair, 2009). These service members received an honorable discharge, but "homosexuality" was listed as the reason for the discharge (Dean Sinclair, 2009). With Don't Ask, Don't Tell (DADT) policy implemented by President Clinton in 1993, service members were not able to be discharged for their sexual orientation, but they were also not allowed to discuss their relationships openly (Dean Sinclair, 2009). These rules have created a stigma that has not been completely erased by the repeal of DADT.

The difference in perception of sexual assault as a risk factor was also determined statistically significant. Over 90% of veterans viewed sexual assault as a risk

factor compared to 77% of cadets. In more recent years, units have been assigned Unit Victim Advocates (UVAs) that are trained to work with victims of sexual assault and harassment (AR 600-63). It is probable that veterans who have retired from the service prior to this implementation are not aware of all of the resources available to service members who have experienced sexual assault. Because the cadets have entered service in a time where these policies are already in place, it is possible that fewer cadets view sexual assault as a significant risk factor to suicide because of the support available through the military.

Veterans and cadets viewed the remainder of risk factors fairly similarly which is not surprising based on the amount of training this population has had regarding suicide risk and resilience. Of the veterans, 75% reported receiving suicide intervention training during their time in service; 83% of cadets have received this training. Based on the percentages of veterans and cadets that agree that the life stressors addressed in the survey could be considered risk factors of suicide, it is plausible that the suicide intervention training helped raise awareness to these risk factors. It is also possible that life experience has made this population more aware of what to look for in regards to risk factors.

Deployments have earned a reputation of heightening risk in service members because the exposure to combat may increase the severity of life stressors (Martin, 2009). Participants in this study, both cadets and veterans, share a common agreement (50%) that deployments can be considered a risk factor. Perhaps the fact that the cadets joined knowing there is a potential for deployment, as compared to the veteran participants who may or may not have joined during peace time, has changed the

perception of war and combat trauma. In general, the rate of suicide ideation, attempts and deaths increase with more risk factors (O'Connor, 2013).

Protective Factors

The participants were asked to rate whether they agreed or disagreed with nine protective factors. Of the nine protective factors the difference in perception of only one protective factor (family) was statistically significant. Both groups agreed that family could be a protective factor (83% of veterans and 95% of cadets), but more veterans (16%) believed that family is only a protective factor for a select few service members as compared to 5% of cadets. It is surprising that so many veterans view family as not as significant a protective factor considering 90% of veteran participants view the loss of a relationship due to death, divorce or breakup as a prominent risk factor.

While the other protective factors did not show a statistical significance in the difference of perception, the cadets and veterans do have some differing opinions about some of the factors. In a study of Active Duty soldiers, Mitchell (2012) found that unit cohesion is a strong protective factor. Seventy-three percent of the veteran participants viewed unit cohesion as a strong protective factor while 27% viewed unit cohesion as a potential protective factor for select members. This is not surprising given the participants' experiences in the military. Four participants report serving Active Duty and four report serving in the National Guard or Reserves and nine of the respondents have deployed one or more times. It is reasonable to infer that the heightened number of veterans that view unit cohesion as a less prominent protective factor are aware of the challenges of only being part of the unit one weekend a month in the National Guard and Reserve components. Cadets, on the other hand, viewed unit cohesion as a greater

protective factor (94%). This could be attributed to the fact that cadets attend classes together and live on the same campus through their four years of college.

Because cadets are located on campus, it is no surprise that 100% of the cadets viewed friendships as a strong protective factor while only 83% of veterans did. The cadet sample's median age is 22 while the veteran sample's average age is 33. The veteran sample is more likely to have spouses and children while the cadet sample is still actively engaged in school and campus activities. However, only 39% of cadets compared to 75% of veterans, viewed education as a protective factor and 16% of cadets do not consider education a protective factor at all; 25% of veterans believed education could be a protective factor on occasion. The gap between the veteran and cadet beliefs could be influenced by the stress associated with full-time schooling and the pressures of doing well in order to maintain an ROTC scholarship.

As previously discussed, the age difference in veterans versus cadets is 11 years on average. Age is viewed as a strong protective factor by 92% of the veterans and only 66% of the cadets. This could be linked to life experiences.

Life experiences could also be a factor in why 92% of veterans and 88% of cadets viewed sense of purpose as a protective factor. As service members, a common theme for joining can be for a sense of purpose, so it is not surprising that a large majority of these populations find a sense of purpose to be protective.

Stigma

In order to fully understand the differences in perception of risk and protective factors it is important to reflect on the differences in opinion on the stigma in the military. I believe getting a pulse on how the service members view the military will add

insight to where some of the beliefs on the risk and protective factors stem. Based on the research it is evident that there is a much higher perception of negativity regarding the military's stance on mental health issues and suicide from the veteran sample. The perception of the military as discriminatory and wanting to "sweep mental health issues under the rug" could play a role in why considerably more veterans viewed sexual identity issues and sexual assault as risk factors compared to the cadets.

Implications

It is evident that service members still perceive that there is a negative stigma surrounding mental health issues and suicide ideations. However, the cadets did not agree as heavily regarding the stigma, which goes to show that the newer generation of service members does not experience the same negativity that once was so prevalent in the military. The study also shows a general knowledge of suicide risk and protective factors in both the cadet and veteran samples. This goes to show that the education and awareness training is reaching service members. This knowledge could come from the mandatory suicide prevention and awareness training; it could also have come from life experiences. It is extremely important for service members to be aware of potential risk factors in order to identify members of their units who may be at-risk. Continuing suicide awareness training and perhaps adding to that program will ensure the widest dissemination of information to all service members. It is equally important to foster an environment of acceptance and understanding regarding mental health issues—specifically suicide.

The Active Duty components are on the right track with their declining suicide numbers. They attribute their success to training programs (which are the same as

Reserve and National Guard training) and accessibility to services (Baldor, 2014).

Additionally, Active Duty components have access to their at-risk service members every day, while Guard and Reservists only see their service members once a month (Baldor, 2014). This creates a large gap in intervention. I recommend that National Guard and Reservists mandate that at-risk service members are called weekly in order to have a continuity of care throughout the month. The first-line leader of that service member should be required to check-in with that service member and then relay the status report to the next leader in the chain of command. By doing so, the at-risk service member has a larger connection with the unit and is given more opportunities to ask for services if need be.

While there is a broad knowledge of the risk factors, many of these factors can go unnoticed. Active Duty service members are at a benefit because they are able to see their troops daily and may be more inclined to notice any changes. National Guard and Reservists, seeing their service members only monthly, may not have the knowledge base to determine any emotional or psychological changes in their troops. I recommend the National Guard and Reserves train section leaders how to ask about the risk factors. Not every service member is going to disclose a pending divorce or legal issue, so it is important to ask these individuals. By asking service members a series of questions throughout the drill weekend, section leaders gain a broader knowledge about their troops and open the lines of communication for service members in need to ask for help.

Access to care outside of drill weekends is a major risk factor for the Guard and Reserve service members. Recently, the Reserves on the East Coast have opened six regional "Army Strong Community Centers" that offer help to the Reserve soldiers

(Baldor, 2014). I recommend that more access for service members in the community be available to the Reserve and Guard. Incorporating a wing in a Veteran's Affairs (VA) Medical Center specifically for National Guard or Reservists facing mental health issues could help bridge the gap in services for non-veteran status service members. Creating an outreach center for these service members would also help bridge that gap. An outreach center could provide services, offer resources and referrals and find community programs throughout the country for service members in more remote locations.

Additionally, social workers in the community should be aware of challenges faced by service members in order to serve this population.

The research shows that a large percentage of service members view family as a protective factor. The branches of the military do offer Family Readiness Groups (FRGs) that are a way to educate families and get them involved with unit. On Active Duty bases there are more resources available for the families and likely more participation in the FRG. The Reserve and Guard components provide FRGs to their units, however families are spread throughout the state leaving little support throughout the month. I recommend that Guard and Reserve components create a way for families to communicate throughout the month which will create a larger sense of community within the unit. One recommendation is to create an online forum where family members can log in and view education materials along with training schedules unique to their loved one's unit. This online group can also be a place for family members to post questions to each other. Additionally, I recommend adding a training element for families that will educate them on risk factors for suicide. Providing this training to families will not only give them insight into the training their love one is receiving, but it

will also teach them what to look for in their loved ones. Because the Guard and Reserves only see their service members two days a month, enlisting the help of family members will help ensure no service member slips through the cracks.

Forging a better bond between families and the units will not only help strengthen the family as a protective factor, but it will strengthen unit cohesion. Unit cohesion is an important protective factor that the Guard and Reserves may have a more challenging time with. Again, the distance service members must travel to attend a drill weekend and the limited time spent with the members of their unit is an inhibiting factor to creating a cohesive unit. Offering opportunities for service members to get to know each other outside of the duty day may help build unity. Depending on the location of the drill weekend units may host a movie night after the duty day where service members can stay at the armory and get to know their comrades. Giving the service members an opportunity to know each other will add another layer to protecting against suicide.

Protecting against suicide goes beyond training and educating; it involves community support and outreach as well as continuing to research this area. It is important to further the research about service members' views and perceptions of suicide risk and protective factors, stigma and the training programs in order to improve upon a program that is showing positive results in the Active Component. Focusing research on the Guard and Reserve components will help determine what needs to be done to help reach that population in a more effective way.

Conclusion

Service members are faced with many of the same risk and protective factors as the general population. There are additional stressors like deployments that can exacerbate other risk factors, but it is important to note that the more risk factors a person is faced with, the higher the risk for suicide (Nock, 2013). Service members from this study showed a general knowledge of suicide risk and protective factors which indicates that the Armed Forces are educating their troops on the importance of recognizing these signs. Where the gaps remain are in outreach and resources to service members in the National Guard and Reserve who do not have access to the same resources as their Active Duty counterparts.

References

- Aguirre, R. P., & Slater, H. (2010). Suicide Postvention as Suicide Prevention:

 Improvement and Expansion in the United States. *Death Studies*, *34*(6), 529-540.

 doi:10.1080/07481181003761336
- Bah, A., Wilson, C., Fatkin, L., Atkisson, C., Brent, E., & Horton, D. (2011). Computing the Prevalence Rate of At-Risk Individuals for Suicide Within the Army.Military Medicine, 176(7), 731-742.
- Bachynski, K. E., Canham-Chervak, M., Black, S. A., Dada, E. O., Millikan, A. M., & Jones, B. H. (2012). Mental health risk factors for suicides in the US Army, 2007--8. *Injury Prevention*, 18(6), 405-412. doi:10.1136/injuryprev-2011-040112
- Baldor, L.C., Military suicides drop 15% in 2013; Army National Guard sees uptick.

 Associated Press. April 25, 2014.
- Black, S. A., Gallaway, M., Bell, M. R., & Ritchie, E. C. (2011). Prevalence and Risk Factors Associated With Suicides of Army Soldiers 2001-2009. *Military Psychology (Taylor & Francis Ltd)*, 23(4), 433-451. doi:10.1080/08995605.2011.590409
- Bryan, C. J., Cukrowicz, K. C., West, C. L., & Morrow, C. E. (2010). Combat experience and the acquired capability for suicide. Journal Of Clinical Psychology, 66(10), 1044-1056. doi:10.1002/jclp.20703
- Bush, N. E., Reger, M. A., Luxton, D. D., Skopp, N. A., Kinn, J., Smolenski, D., & Caine, E. D. (2013). Forging an Agenda for Suicide Prevention in the United States.

American Journal Of Public Health, 103(5), 822-829. doi:10.2105/AJPH.2012.301078

- Dean Sinclair, G. G. (2009). Homosexuality and the Military: A Review of the Literature. *Journal Of Homosexuality*, 56(6), 701-718. doi:10.1080/00918360903054137
- Defense Science Board Task Force. (2007). Deployment of Members of the National
 Guard and Reserve in the Global War on Terrorism. Office of the Under
 Secretary of Defense for Acquisition, Technology, and Logistics. Washington,
 D.C.
- Easton, S. D., & Renner, L. M. (2013). Factors from Durkheim's Family Integration

 Related to Suicidal Ideation among Men with Histories of Child Sexual Abuse.

 Suicide & Life-Threatening Behavior, 43(3), 336-346. doi:10.1111/sltb.12020
- Evren, C., & Evren, B. (2006). The relationship of suicide attempt history with childhood abuse and neglect, alexithymia and temperament and character dimensions of personality in substance dependents. *Nordic Journal Of Psychiatry*, 60(4), 263-269. doi:10.1080/08039480600790051
- Fraser, M. W., Richman, J. M., & Galinsky, M. J. (1999). Risk, protection, and resilience: toward a conceptual framework for social work practice. *Social Work Research*, 23(3), 131-143.
- Gahm, G. A. (2013). Suicides and Suicide Attempts in the U.S. Military, 2008-2010.

 Suicide & Life-Threatening Behavior, 43(3), 262-273. doi:10.1111/sltb.12012
- Garamone, J. (2004). Deploying Unit Shows Differences Between Active, Reserve.

American Forces Press Service.

- Gradus, J. L., Shipherd, J. C., Suvak, M. K., Giasson, H. L., & Miller, M. (2013).

 Suicide Attempts and Suicide among Marines: A Decade of Follow-up. Suicide

 & Life-Threatening Behavior, 43(1), 39-49. doi:10.1111/j.1943
 278X.2012.00126.x
- Griffith, J. (2012). Suicide in the Army National Guard: An Empirical Inquiry. Suicide & Life-Threatening Behavior, 42(1), 104-119. doi:10.1111/j.1943-278X.2011.00075.x
- Griffith, J. (2012). Suicide and War: The Mediating Effects of Negative Mood,
 Posttraumatic Stress Disorder Symptoms, and Social Support among Army
 National Guard Soldiers. Suicide And Life-Threatening Behavior, 42(4), 453-469.
- Heuser, S. (2013). PowerPoint Presentation. VA Medical Center. September 16, 2013.
- Hooven, C., Snedker, K. A., & Thompson, E. (2012). Suicide Risk at Young Adulthood:

 Continuities and Discontinuities from Adolescence. *Youth & Society*, 44(4), 524-547.
- Hyman, J., Ireland, R., Frost, L., & Cottrell, L. (2012). Suicide Incidence and Risk

 Factors in an Active Duty US Military Population. American Journal Of Public

 Health, 102(S1), S138-S146. doi:10.2105/AJPH.2011.300484
- Injury Prevention and Control. (2013). Retrieved November 13, 2013, from http://www.cdc.gov/violenceprevention/suicide/riskprotectivefactors.html
- Jobes, D. A. (2013). Reflections on Suicide Among Soldiers. *Psychiatry: Interpersonal & Biological Processes*, 76(2), 126-131. doi:10.1521/psyc.2013.76.2.126

- Kaplan, M. S., McFarland, B. H., Huguet, N., & Newsom, J. T. (2012). Estimating the Risk of Suicide Among US Veterans: How Should We Proceed From Here?.
 American Journal Of Public Health, 102(S1), S21-S23.
 doi:10.2105/AJPH.2011.300611
- LeardMann, C. A., Powell, T. M., Smith, T. C., Bell, M. R., Smith, B., Boyko, E. J., & ... Hoge, C. W. (2013). Risk Factors Associated With Suicide in Current and Former US Military Personnel. JAMA: Journal Of The American Medical Association, 310(5), 496-506. doi:10.1001/jama.2013.65164
- Lizardi, D. D., Sher, L. L., Sullivan, G. M., Stanley, B. B., Burke, A. A., & Oquendo, M. A. (2009). Association between familial suicidal behavior and frequency of attempts among depressed suicide attempters. *Acta Psychiatrica Scandinavica*, 119(5), 406-410. doi:10.1111/j.1600-0447.2009.01365.x
- Loop, B. (2013). PowerPoint Presentation. VA Medical Center, October 14, 2013.
- Marshall, B. L., Galea, S., Wood, E., & Kerr, T. (2013). Longitudinal Associations

 Between Types of Childhood Trauma and Suicidal Behavior Among Substance

 Users: A Cohort Study. *American Journal Of Public Health*, 103(9), e69-e75.
- Martin, J., Ghahramanlou-Holloway, M., Lou, K., & Tucciarone, P. (2009). A

 Comparative Review of U.S. Military and Civilian Suicide Behavior:

 Implications for OEF/OIF Suicide Prevention Efforts. Journal Of Mental Health

 Counseling, 31(2), 101-118.
- Martin, J., Rosen, L., Sparacino, L. (2000). *The military family: a practice guide for human service providers*. Westport, Conn.: Praeger.

- McDuffie, E., & Brown, G. R. (2010). 70 U.S. Veterans with Gender Identity

 Disturbances: A Descriptive Study. International Journal Of Transgenderism,

 12(1), 21-30. doi:10.1080/15532731003688962
- Mitchell, M. M., Gallaway, M., Millikan, A. M., & Bell, M. (2012). Interaction of Combat Exposure and Unit Cohesion in Predicting Suicide-Related Ideation among Post-Deployment Soldiers. Suicide And Life-Threatening Behavior, 42(5), 486-494.
- Nock, M. K., Deming, C. A., Fullerton, C. S., Gilman, S. E., Goldenberg, M., Kessler,
 R. C., & ... Ursano, R. J. (2013). Suicide Among Soldiers: A Review of
 Psychosocial Risk and Protective Factors. *Psychiatry: Interpersonal & Biological Processes*, 76(2), 97-125. doi:10.1521/psyc.2013.76.2.97
- O'Connor, E., Gaynes, B. N., Burda, B. U., Soh, C., & Whitlock, E. P. (2013). Screening for and Treatment of Suicide Risk Relevant to Primary Care: A Systematic Review for the U.S. Preventive Services Task Force. *Annals Of Internal Medicine*, *158*(10), 741-754.
- Operation Iraqi Freedom. (2013). Retrieved Nov. 1, 2013, from http://icasualties.org/Iraq/index.aspx
- Operation Enduring Freedom. (2103). Retrieved Nov. 1, 2013, from http://icasualties.org/OEF/index.aspx
- Suicide in the US: Statistics and prevention. (2013). Retrieved November 13, 2013, from http://www.nimh.nih.gov/health/publications/suicide-in-the-us-statistics-and-prevention/index.shtml.

- Suicide Risk Assessment Guide. (2013). Retrieved November 13, 2013, from http://www.mentalhealth.va.gov/docs/Suicide Risk Assessment Guide.doc
- Sundararaman, R., Viranga Panangala, S., and Lister, S. (2008). CRS Report for Congress. Suicide Prevention Among Veterans. *Congressional Research Service*.
- Sunnqvist, C., Westrin, Å., & Träskman-Bendz, L. (2008). Suicide attempters:

 biological stressmarkers and adverse life events. *European Archives Of*Psychiatry & Clinical Neuroscience, 258(8), 456-462. doi:10.1007/s00406-008-0819-6
- Trofimovich, L., Reger, M. A., Luxton, D. D., & Oetjen-Gerdes, L. A. (2013). Suicide
 Risk by Military Occupation in the DoD Active Component Population. Suicide
 & Life-Threatening Behavior, 43(3), 274-278. doi:10.1111/sltb.12013
- Ursano, R. J. (2013). Suicide: A National Health Challenge, An Army Health Threat.

 Psychiatry: Interpersonal & Biological Processes, 76(2), 95-96.

 doi:10.1521/psyc.2013.76.2.95
- Zapata, L. B., Kissin, D. M., Bogoliubova, O., Yorick, R. V., Kraft, J., Jamieson, D. J.,
 & ... Hillis, S. D. (2013). Orphaned and Abused Youth Are Vulnerable to
 Pregnancy and Suicide Risk. *Child Abuse & Neglect: The International Journal*,
 37(5), 310-319.

Appendix A

Perceptions of Suicide Risk and Protective Factors

Survey

Q1 What do you think Service Members consider protective factors? Protective factors are things that help a person become more resilient.

<u> </u>	ip a person occom	- 111010 10011101101		
	I don't think this is a protective factor	I think this could be a protective factor in select situations for some service members	I think this could be a protective factor most of the time for some service members	I think this is a protective factor all of the time for some service members
Family	0	0	0	O
Friends	O .	O	•	•
Unit Cohesion	O .	O	•	•
Education	O .	O	•	•
Age	O .	O	•	•
Race	O .	O	•	•
Religious beliefs	•	•	•	•
Employment	O	O	0	0
Sense of purpose	•	•	•	•
Other	O	O	•	0

Q2	Did/have	you received	suicide	awareness	training i	in the	military?
•		J			\mathcal{C}		_

O Yes

O No

Q3 How useful did/do you find the following training?

	Very Useless	Useless	Neutral	Useful	Very Useful
Suicide Awareness/Prevention training	•	•	•	•	•
Resilience Training	O	•	•	O	O
Other (please list)	O	0	0	O	O

Q4 Have you ever known a Service Member who has attempted or completed suicide? O Yes O No
Q22 Do you believe that person displayed any risk factors? • Yes • No

Q7 Please indicate below whether you agree or disagree that service members experiencing these factors are at risk for suicide.

experiencing these	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Financial difficulties	O	•	•	O	•
Childhood sexual assault	•	•	•	O	0
Military sexual trauma	O	•	•	O	•
Abused/neglected	0	O	O	O	O
Deployments	0	0	O	O	O
Losing a job	0	0	O	O	O
Loss of relationship (divorce, breakup)	O	O	O	O	0
Death of a loved one	•	•	•	O	•
Legal issues	0	O	O	O	O
Sexual identity issues	O	0	•	O	O
Death/loss of pet	0	O	O	•	O
Substance use/abuse	O	•	•	O	•
Mental Illness	0	0	O	O	O
Prior suicide attempt	O	O	O	O	O
Suicide death of a family member	O	O	O	O	O
Sexual Assault	O	0	O	O	O

Q5 Do you think there are other reasons a Service Member may turn to suicide? If yes
please describe.
O Yes

O No

Q6 Please respond to the following statements

Qu Flease lespo	Q6 Please respond to the following statements				
	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I think Service Members are uncomfortable disclosing mental health concerns to the military	O	O	O	O	0
I think the military discriminates against service members with mental illnesses	•	•	•	•	0
I think a person's career would be over if he/she sought mental health care	•	•	•	•	•
I think it is safe to ask for help from the chain of command if you are struggling with thoughts of suicide	•	•	•	•	•
I think suicide is preventable	0	0	O	O	0
I think the military wants to help people with mental health issues/suicidal	0	O	O	O	O

ideations			
I think the			
military wants			
to sweep			
mental health			
issues "under			
the rug"			

Q8 Is there anything you would like to add about your perception on the risk and protective factors of suicide in the military? O No O Yes
Q9 Gender O Male
O Female
Q10 Race O White O Black/African American O Asian O Native Hawaiian/Pacific Islander O American Indian/Alaskan Native
O Other Q11 Employment status (Choose all that apply) □ Full time employment □ Part time employment □ Full time student □ Part time student □ Other
O12 What is your current age?

Ω1	3 Highest level of education
_	High school diploma/GED
	Some college
	Associates Degree
	Bachelor Degree
	Some Masters
	Masters Degree
	Other
Q1	4 How did you come to take this survey
O	I am a Veteran
O	I am a Cadet
Q1	5 What age were you when you joined the military?
wh	6 Did you consider other viable options after high school besides the military? If so, at were they? Yes
	No No
•	110
_	7 What branch of service are/were you a member of? (Choose all that apply) Air Force
	Army
	Marine Corps
	Navy
	Coast Guard
	Active Duty
	Reserve Component
	National Guard
	Trational Guard
Q1	8 As of today, how long have you served in the military?
Q1	9 What is the highest rank you achieved?
O	E1-E4
O	E5-E7
O	E8-E9
O	01-03
O	O4-O6
O	WO1-CW2
O	CW3-CW5
O	Cadet

Q2	1 How many times have you deployed
Ó	None
O	1
O	2
O	3
O	4
0	5 or more

Appendix B

Perceptions of Suicide Risk and Protective Factors

Email Consent Form

Perceptions of Suicide Risk and Protective Factors in the Military

My name is Nicole Fisher and I am conducting a study under the advisement of Kendra Garrett, Ph.D. investigating the perception of suicide risk and protective measures in the military. I invite you to participate in this research if you are currently or have ever served in the Armed Forces.

This study is completely anonymous and voluntary. Please read this form before agreeing to be in this study. If you have questions about participating in this study, you may contact me at patn7394@stthomas.edu. I am conducting this study as a requirement for graduation in the Masters of Social Work degree program from University of St. Thomas/St. Catherine University.

Background Information:

In recent years the military has begun to educate service members on suicide awareness and prevention. Additionally, there has been vast research on suicide risk and protective factors in the Active Duty components but little research on the perceptions of risk and protective factors from current and former service members.

Procedures:

If you agree to be in this study, I will ask you to participate in an anonymous on-line survey that can be completed in approximately fifteen minutes or less. This survey presents you with questions regarding your perceptions of risk and protective factors of suicide, your opinions regarding suicide prevention in the military and personal/military demographic information.

Risks and Benefits of Participating:

This study has minimal risks. The questions in this survey regarding suicide can be personal. Some questions may be hard or uncomfortable to answer. You may leave the survey at any time or skip any questions that feel too personal or uncomfortable. This survey is anonymous. The way the survey program is configured makes it impossible me to identify any of the respondents. The participation in this study is completely optional. There is no obligation to participate.

There are no direct benefits for participating in this study.

The survey may heighten your awareness to suicide. If you or someone you know is having thoughts of suicide you can call the National Suicide Prevention Lifeline by calling or accessing their webpage. http://www.suicidepreventionlifeline.org/ The 24 hour Lifeline is 1-800-273-8255; Veterans PRESS 1. You may also call Crisis Connection for 24 hour support at 612-379-6363 or toll free 1-866-379-6363

Confidentiality:

The data collected in this survey is anonymous. I do not have access tot eh identity of anyone who completes the survey. The data is collected electronically and will be stored

on my password-protected computer. The data will be deleted upon completion of the research in May 2014.

Voluntary Nature of the Study:

Participation in this study is voluntary. If you decide to participate in this study you have the option of skipping questions you do not feel comfortable with or leaving the survey at any point.

Contact and Questions:

If you have questions about participating in this study, you may contact me at patn7394@stthomas.edu.

Statement of Consent:

By choosing to take the survey you are indicating the following is true:

- You have read the above information.
- You consent to participate in the study.
- You are at least 18 years of age.
- You are currently or have been a member of the Armed Forces Click to take survey:

http://stthomassocialwork.qualtrics.com/SE/?SID=SV_6kTqFUyrWN3caq1