USE OF DEMOGRAPHICS TO PREDICT HIGH RISK INDIVIDUALS FOR SUICIDE

GRADUATE RESEARCH PROJECT

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Abstract

The Department of Defense is committed to the reduction in suicide events, which erodes good order and discipline, through the implementation of suicide prevention programs. This study examines the efforts in the military and civilian population to decrease the suicide rate and to determine what tools a commander can use based on the best evidence available.

The research uses data from the Center for Disease Control, the Department of Defense Suicide Event Reports, and the Defense Manpower Data Center to identify individuals who are at a higher risk for suicide. The study compares separate demographic groups based on perceived stress, an identified risk factor for suicide.

The research specifically targets the perceived stress levels between the ranks of military members as well as the perceived stress levels between the four branches of the U.S. Armed Forces. Results suggest mean stress levels differed by rank and service, indicating the benefits of screening for higher risk individuals. Of note is the difference between the increases in perceived mean stress level between each branch of service. Given the differences, the Department of Defense can benefit from further research evaluating the effectiveness of suicide prevention programs available from civilian and military sectors.

For my lovely wife and children

Acknowledgements

I would like to express my sincere appreciation and many thanks to my faculty advisor Lt Col Sharon Heilmann for her guidance and expertise throughout the course of this research project. I would also like to thank my wife and children for their patience, love, and support which are the cornerstones of my success.

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USE OF DEMOGRAPHICS TO PREDICT HIGH RISK INDIVIDUALS FOR SUICIDE

I. Introduction

Background and Motivation

In 2012, 349 service members committed suicide which is an increase of 16% over 2011. This includes 182 in the US Army, 48 in the US Marine Corps, 60 in the US Navy, and 59 in the US Air Force (Briggs, 2013). More service members committed suicide in 2012 than were killed in Afghanistan, 295 (Burns, 2013). This is the highest number of suicides recorded in the past 10 years after reaching a peak of 309 in 2009 (Luxton, 2011).

The rate of suicide in the Department of Defense (DoD) is alarming and continues to rise. Suicide is considered a preventable death that drains valuable resources. An increased ability to predict or identify those at greater risk for committing suicide can lead to early intervention and prevent this tragedy from happening. It is the commander's responsibility with the help of frontline supervisors for assessing the need for early intervention. The commander's ability to assess individuals is only as good as the tools he is given to combat this problem.

Suicide prevention is a significant challenge according to Martin Dempsey, the Chairman of the Joint Chiefs of Staff, as he indicates solving the challenge requires the

commitment and focus of leaders at every level (Roulo, 2012). He views the loss of life of each service member caused through suicide as one loss too many, so the DoD is trying to find proven suicide prevention strategies that will save more lives (Lyle, 2013). DoD spokewoman, Cynthia O. Smith, said "We are deeply concerned about suicide in the military, which is one of the most urgent problems facing the department. Our most valuable resource within the department is our people. We are committed to taking care of our people, and that includes doing everything possible to prevent suicides in the military" (Londoño, 2013).

The DoD Task Force on the Prevention of Suicide released its August 2010 report with 76 recommendations to reduce the suicide rate within the DoD (Berman, 2010). The first recommendation was to establish the creation of a DoD Suicide Prevention Policy Office. In response to this recommendation, the DoD created the Defense Suicide Prevention Office (DSPO) in November 2011 to "standardize policies and procedures with respect to resiliency, mental fitness, life skills, and suicide prevention" (Berman, 2010). The report also concluded that commanders need better tools to assess risk (Berman, 2010). The key to providing commanders with better tools is the ability to identify those at risk. The purpose of this study was to provide some insight into the makeup of an organization and to better equip the commander to seek help for those individuals deemed at higher risk.

Problem Statement

Based on available demographic and survey data, can tools be made available to commanders so they can assess a service member's potential risk for committing suicide?

Research Questions

This paper focuses on the following research questions.

1. Is there a difference between the rate of suicide in the military population versus the civilian population?
2. Is there a difference between the rate of suicide in each Service Branch within the DoD?
3. Is there a difference between the rate of suicide in different ranks of DoD members?

II. Literature Review

Introduction

This chapter begins by examining the terminology used in the epidemiological study of suicide and suicide prevention. This follows with a discussion of the risk factors associated with suicide. Next the possible links between suicide and stress are investigated followed by an exploratory focus of the current suicide prevention programs used throughout each service. Finally, a discussion on how demographics play a role in the rates of suicide in the military is presented.

What is suicide?

Suicide is a complex human behavior that has crossed gender, race, and religious boundaries over the course of human history (Berman, 2010). When discussing the issue of suicide, the clear definition of terms is valuable to standardize them across reporting agencies and in the analysis of suicide (Ramchand, 2011). The variability in the definition of terminology limits the ability to compare epidemiological prevalence rates (Posner, 2007).

The reason that defintions are important is the ability to classify events. Misclassification of an event can lead to a bias toward the null. This bias however does not guarantee that the observed estimate will be an underestimate. Non-differential misclassification can provide an overestimation of the observed relative risk (Jurek, 2005).

There are many definitions of suicide and suicide attempt used by different organizations, Naval Administrative (NAVADMIN) 122/09 defines a suicide as a self-inflicted death with evidence, either implicit or explicit, of the intent to die. It further

defines a suicide attempt as a self-inflicted, potentially injurious behavior with a nonfatal outcome for which there is evidence of intent to die. Finally it delineates other suicidal behaviors such as communications or exhibited behavior without the intent to die (NAVADMIN 122/09). Another definition of a suicide is a suicide attempt that results in a fatal injury for the individual (Ramchand, 2011).

The Center for Disease Control (CDC) proposed to standardize the definitions for self-directed violence to enhance the analysis of the data in February 2011 (Crosby, 2011). DoD, Veterans Affairs, CDC, and Substance Abuse and Mental Health Services Administration (SAMHSA) all agreed to adopt the same nomenclature for suicide-related behaviors after the February 2011 release (Berman, 2010). The following definitions were proposed to delineate terminolgy (Crosby, 2011).

Self-Directed Violence: Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself. There are two types of self-directed violence, non-suicidal and suicidal.

Non-suicidal self-directed violence: Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself. There is no evidence, whether implicit or explicit, of suicidal intent.

Suicidal self-directed violence: Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself. There is evidence, whether implicit or explicit, of suicidal intent.

Undetermined self-directed violence: Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself. Suicidal intent is unclear based on the available evidence.

Suicide attempt: A non-fatal self-directed potentially injurious behavior with any intent to die as a result of the behavior. A suicide attempt may or may not result in injury.

Interrupted self-directed violence-by self or by other:

By other: A person takes steps to injure self but is stopped by another person prior to fatal injury. The interuption can occur at any point during the act such as after the initial thought or after onset of behavior.

By self: A person takes steps to injure self but is stopped by self prior to fatal injury.

Figure 1 shows the flowchart of how medical personnel classify a suicide event. Starting at the top of the chart, a determination is made as to whether there was self-directed violence which can then lead to three outcomes; self-directed violence, undetermined self-directed violence, or non-suicidal self-directed violence. Once it is determined that it was suicidal self-directed violence, it is classified as fatal or non-fatal. If the self-directed violence is fatal, it is classified as a suicide; otherwise, the self-directed violence is a suicide attempt or other suicidal behavior.

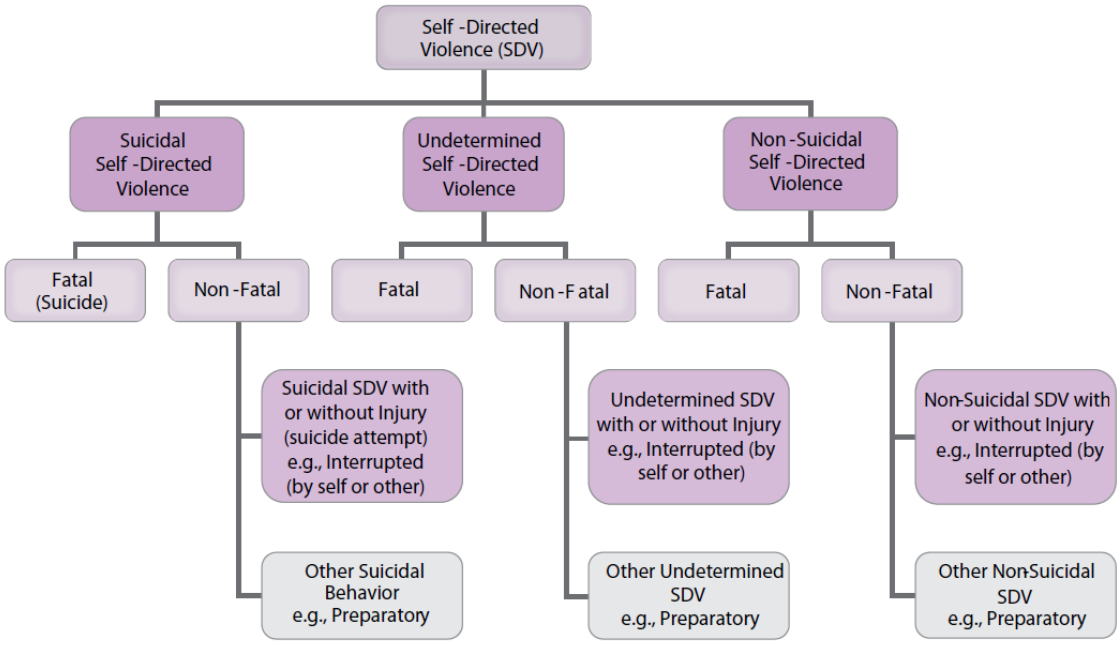

Figure 1: Classification of Terminology (Crosby, 2011)

The DoD has a central clearing house for the determination of a suicide event. The Armed Forces Medical Examiner System (AFMES) performs medical-legal examinations on service members and American citizens who die in a combat zone and certain individuals who are killed or die within the United States or abroad. The AFMES positively identifies individuals and issues death certificates that state the cause and manner of death (Luxton, 2008). This central agency ensures a consistent classification of suicide events is made throughout the DoD for research and prevention efforts. Since up to 90% of suicides are confirmed by the AFMES prior to the April deadline for the preceding year's numbers, the risk of overestimation is low and the change between the final numbers and suspected numbers is 1-2 cases per year (Reger, 2008).

Risk Factors

Operation Iraqi Freedom and Operation Enduring Freedom placed unprecedented demands on the Armed Forces over since 2001. The operational requirements for each service continue to rise with a constant personnel level (Berman, 2010). The DoD Task Force on the Prevention of Suicide sees the cumlutative effects of these factors as a reason for the increasing rate of suicide in the Armed Forces (Berman, 2010). The emphasis placed on suicide prevention within the DoD has led to the development of numerous initiatives to reduce the risk of suicide throughout the services (Berman, 2010).

The Air Force had 273 active duty suicides between 2003 and 2009. The Air Force concluded based on these 273 events, the top three risk factors were relationship problems (67%), legal problems (39%), and financial problems (25%) (Berman, 2010).

Table 1: Air Force Top Risk Factors

Top Risk Factors	Identified in ADAF CY03-CY09 suicides
1. Relationship Problems	67%
2. Legal Problems	39%
2. Financial Problems	25%

The United States Marine Corps (USMC) identified the top 4 risk factors and top five risk stressors from 1999 through 2007 suicides. The top four risk factors and associated percent of occurerence in suicide events in the USMC are negative emotional state (51%), mental health history (40%), changes in mood or behavior (34%), and self destructive or aggressive behavior(28%). The top five associated stressors are relationship problems (53%), work related problems (50%), pending disciplinary action (43%), physical illness (33%), and financial problems (13%) (Berman, 2010). The United States Army (USA) used demographic data targeting suicide prevention programs

toward junior enlisted members because this population was thought most at risk (Berman, Aug 2010). The Army and Navy did not identify top risk factors or associated stressors in their suicide data.

Table 2: Marine Corps Top Risk Factors and Associated Stressors

Top Risk Factors	Identified in 1999-2007 Suicides
1. Negative Emotional State	51%
2. Mental Health History	40%
3. Changes in Mood or Behavior	34%
4. Self Destructive/ Aggressive Behavior	28%

Top Associated Stressors	Identified in 1999-2007 Suicides
1. Relationship Problems/Loss	53%
2. Work Related Problems	50%
3. Pending Disciplinary Action	43%
4. Physical Illness	33%
5. Financial Problems	13%

Strong evidence exists for the top three risk factors for suicide: a previous suicide attempt, substance abuse issues, and mental health issue (Acosta, 2012). The following is a discussion of the literature surrounding each of these factors.

Previous Suicide Attempt

A large proportion of male and a substantial proportion of female suicide deaths occur on their first suicide attempt. Early recognition of the suicide risks in these individuals is paramount in reducing these cases. Recognition of periods of high suicide risk on the grounds of recent non-fatal suicide attempts is likely to be important for suicide prevention among females. Individuals completing suicide commonly switch from one suicide method to another making a previous attempted suicide a strong predictor in subsequent suicide (Isometsä, 1998). The individuals that attempt suicide should be considered a higher risk for a future suicide attempt (Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2008). Studies

demonstrated that individuals who attempted a suicide in the past have a 5 to 15% greater chance of dying by suicide. This is a 40- to 50-fold increase in the risk of dying by suicide (Acosta, 2012).

Substance Abuse

Substance abuse is another factor that increases an individual's risk for suicide attempt (Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2008). Approximately 8.8% of all drug-related emergency room visits involved suicide attempts by asolescents from 12 to 17 years old (Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2008). Screening for substance abuse problems can lead to the identification of individuals that are at a higher risk for mental health issues (Bray, 2011). Between 20 and 30% of those individuals that die by suicide are legally intoxcated at the time of death (Goldsmith, 2002). A number of studies discovered a strong correlation between substance abuse and suicide or suicidal ideations. Factors associated with an increased likelihood for substance abuse are the same factors that are associated with an increased likelihood for suicide (Forman, 1998).

Mental Health

A history of mental health issues is the third risk factor for which there is strong evidence of suicide associated. Over 90% of individuals who committed suicide had a history of mental illness and/or some type of substance abuse issue (Goldsmith, 2002). The risk factor that had the strongest link with suicide in a review of 154 different studies was a mental health disorder (Cavanagh, 2003). There is some concern that U.S. military service members are exposed to certain mental health disorders due to the prolonged and continuing deployments in support of Operation Iraqi Freedom and Operation Enduring Freedom. The military population is at an increased risk for depression and anxiety

disorders which include post traumatic stress disorder (PTSD) (Ramchand, 2011). Individuals who report symptoms of depression will die by suicide 4% of the time.

Access to Firearms

The availability of firearms in the home leads to an increase in risk of suicide. This increase was even more pronounced in homes where the firearm was not locked up or was already loaded versus homes that kept firearms locked up (Kellermann, 1992). A large proportion of these cases had the firearm in the home for an extended period of time and did not purchase the firearm within days of the suicide event (Kellermann, 1992). In 1998, firearms accounted for 57% of the total suicides (Goldsmith, 2002). Limiting the access to firearms did not see an increase in these individuals use of a different method for suicide (Goldsmith, 2002).

Triggering Events

A triggering event is some specific life event such as the events the Air Force listed as top risk factors of relationship problems, legal problems, and financial problems (Berman, 2010). These life events may increase an individuals suspectability to suicide. The trigger events may combine with the fundamental vulnerabilities of behavioral health to suicide that causes the increased suspectability from these somewhat common events (Acosta, 2012).

The "TIP" of the iceberg or the area above the surface represents the suicide-related behaviors and the act of suicide (see Figure 2). The larger area below the surface represents the much larger set of underlying psychological, physical, spiritual, emotional, relationship, environmental, occupational and social stressors. The effects of the stressors are influenced by an individual's resiliency in a certain set of conditions (Berman, 2010).

In order to prevent suicide and sustain suicide prevention efforts, any comprehensive suicide prevention program must address the stressors that are hidden beneath the surface and build an individual's resiliency while decreasing the stigma of seeking help (Berman, 2010).

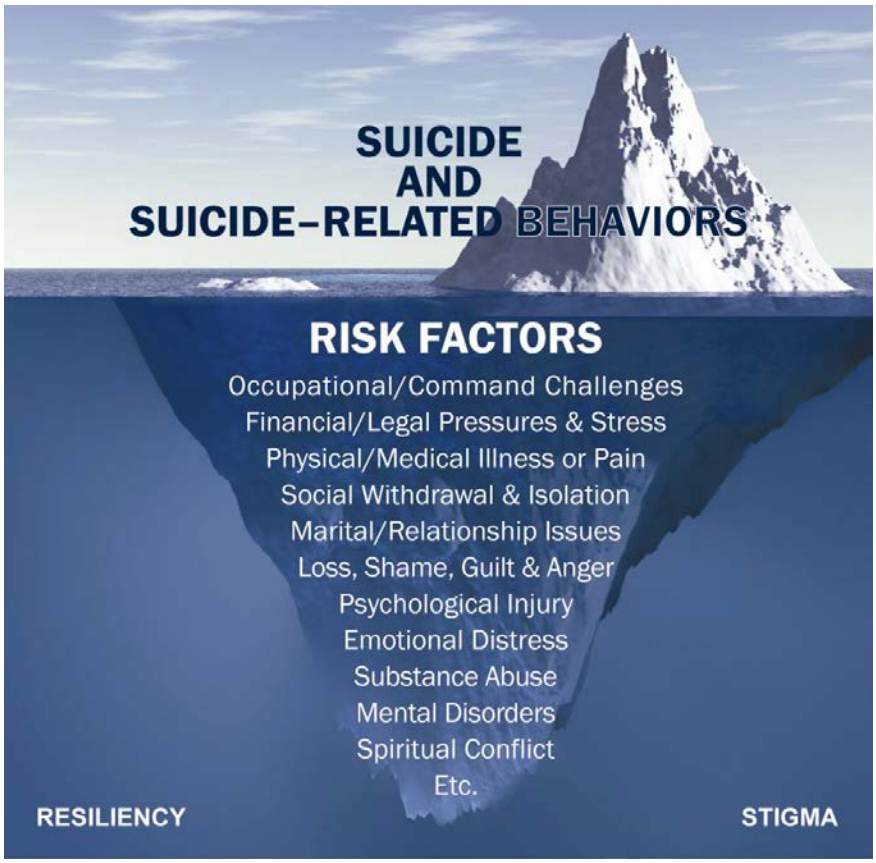

Figure 2: Suicide and Suicide Related Behaviors (Berman, 2010)

Stress

The definition of stress focuses on two main parts. The first is the "cause" of stress or the environmental stressors that a person feels (Kopp, 2010). These evironmental stressors or stimuli include major events such as deployments or minor events such as daily tasks. The second part of stress is the "effect" which is the person's reaction to the stress (Kopp, 2010). The reaction to stress has two parts which are the

stress appraisal and the emotional response to the event in question (Kopp, 2010). There are three main foundational ways to measure an individual's stress. The environmental approach focuses on the causes of the stress and the impact of those stressors on the individual (Kopp, 2010). The psychological approach assesses a person's own abilities to handle the demands of individual events (Kopp, 2010). The biological approach focuses on the measurement of the physiological systems that are activated in response to stress (Kopp, 2010).

One tool using the psychological approach assessment of stress is the Perceived Stress Scale (PSS). This is an instrument that assesses an individual's perceived stress and was designed to measure "the degree to which individuals appraise situations in their lives as stressful" (Cohen, 1983; Kopp, 2010). Higher scores on the PSS indicate higher levels of perceived stress. The PSS "can be used as an outcome measure in stress reduction interventions" (Kopp, 2010).

Higher percentages of military personnel rated their jobs (32.5%) as more stressful than their personal lives (18.9%). The most frequently indicated stressors for both men and women were being away from family (16.6%), deployment (13.4%), and increases in work load (12.9%). Overall work and family stress levels have not changed significantly since 2002 (Bray, 2005). Defense Manpower Data Center (DMDC) data show that E1-E4 have higher perceived stress levels than other paygrades. This data also shows that perceived stress levels across each branch of service remain relatively constant each year.

Suicide Prevention Programs

The Task Force on the Prevention of Suicide by Members of the Armed Forces identified four main areas for a successful suicide prevention program. The four focus areas are (1) Organization and Leadership; (2) Wellness, Enhancement, and Training; (3) Access to, and Delivery of, Quality Care; and (4) Surveillance, Investigations and Research (Berman, 2010). When developing a strategy to deal with suicide prevention, these areas should be integrated to develop a sound program that reduces suicide risk (Berman, 2010). A depiction of how the four focus areas fit together to form a comprehensive strategy is presented in Figure 3.

Figure 3: Developing Comprehensive Suicide Prevention Strategy (Berman, 2010)

These four focus areas show where suicide prevention programs should prioritize their resources. Each service has developed an individual suicide prevention campaign

that has evolved over time. The following will show some of the suicide prevention efforts of each service and how they fit into the four focus areas.

The Army first developed its suicide prevention program in 1984. In 2008, the Army adopted the Comprehensive Soldier Fitness approach which is a program designed to strengthen individual soldier's resilience in the areas of emotional, social, spiritual, family, and physical which encompasses the total fitness of a soldier (Berman, 2010). This program is incorporated into basic training and is revisited at intervals throughout a soldier's career (Berman, 2010). The Army also collaborated on a suicide prevention video titled "Beyond the Front" (Berman, 2010).

The Navy formally established a suicide prevention program in 1996. In 2009 the Navy established the Navy Operational Stress Control which promoted building resilience, problem solving, and creating a healthy environment (Berman, 2010). Suicide prevention information is disseminated through the annual training requirements for all sailors dealing with warning signs, risk factors, and protective factors of suicide. The training is distributed through multiple mediums including live, video, and computer based training (Berman, 2010).

The Air Force created the integrated product team in 1996 to address the problem of increasing suicide rates. The Air Force developed 11 key elements to its suicide prevention program in AFPAM 44-160 (Berman, 2010). These 11 key elements were continually enhanced over the years to include the development of Frontline Supervisor Training to career fields indentified as higher risk. The Air Force also created a training program to ensure the latest evidenced based treatment options were disseminated to medical providers (Berman, 2010). The suicide rate in the Air Force experienced a 33%

reduction after the implemetation of the program and was used as a model for other programs (Berman, 2010, Knox, 2003).

The Marine Corps established their suicide prevention policy in 1992 with requirements for small unit suicide prevention and awareness training (Berman, 2010). The current policy involves multiple elements that include health promotion and life skills training. The Suicide Prevention Program is refined continually with new guidance on the latest initiatives to reduce suicide (Berman, 2010).

The Signs of Symptoms(SOS) suicide prevention program demonstrated significantly lower rates of suicide attempts than from the control group. Participating in the SOS program increased students' knowledge of depression and suicide and fostered more adaptive attitudes toward these problems (Aseltine, 2007). The SOS program encourages individuals to "ACT" (Ask, Care, Treatment) when they see the signs of suicides in others which may further reduce the risk of suicide in others (Aseltine, 2007).

Government agencies at all levels, schools, not-for-profit organizations, and others have initiated programs and campaigns to address suicide risks. Every state now has coordinated suicide prevention plans and initiatives that are implemented at the state level (Berman, 2010). Using the Task Force on Suicide Prevention's four main focus construct, there are six critical emphasis areas for an effective prevention program (Ramchand, 2011), to include:

1. Raising awareness and promoting self-care.
2. Identifying those at high risk of suicide.
3. Facilitating access to quality care.
4. Providing quality care.

5. Restricting access to lethal means.

6. Responding appropriately to suicides and suicide attempts.

Table 3 identifies how well each service's suicide prevention programs meet the six critical emphasis areas.

Table 3: Service Suicide Prevention Program Goals (Ramchand, 2011)

Goal	Army	Navy	Air Force	Marine
1. Raise Awareness and Promote Self Care	Primarily awareness campaigns, with fewer initiatives aimed at promoting self-care			
2. Identify those at Risk	Expansive but rely mostly on gatekeepers	Mostly rely on gatekeepers	Investigation policy	Mostly rely on gatekeepers
3. Facilitate access to quality care	Stigma addressed primarily by locating behavioral health care in nontraditional settings			
	No policy to assuage privacy or professional concerns		Limited Privilege	No policy
	No education benefits of accessing behavioral health care			
4. Deliver Quality Care	Not considered in domain of suicide prevention		Past efforts exist with a sustainment plan	Past efforts exist but not sustainment
5. Restrict access to lethal means	No current policies		Limited guidance	No policy
6. Respond appropriately	Personnel/teams available, but limited guidance			

Suicide prevention programs are divided into two separate categories. The first category is universal or primary prevention programs. Primary prevention programs target whole populations and are generally comprised of skill building and suicide awareness training (Ramchand, 2011). Screening also falls into this category since entire populations are usually screened. The second category is selective or secondary prevention programs (Ramchand, 2011). These programs target a specific group of individuals based on some known risk factor. Each branch of service uses both types of

prevention programs. In the Air Force, the primary prevention program is comprised of the annual Advanced Distributed Learning System (ADLS) suicide prevention training. Each member is required to complete annual training on an annual basis. This training targets the entire Air Force population. A secondary prevention program that the Army uses is the Military Family Life Consultant program which targets specific individuals based on risk factors for special counseling. This program helps individuals who are having trouble coping with concerns and issues of daily life (Military Family Life Consultants, 2012).

The most promising programs which include skill building and awareness are the ones which build coping strategies and focus on behavioral changes (Ramchand, 2011). Awareness programs alone do not seem to influence a reduction in suicide. The combination of resiliency and coping skills reduce the risk of suicide. Research suggests that coping skills can be taught (Goldsmith, 2002).

One program that aims to teach resilience skills is the Master Resilience Trainer (MRT) course which is based on the Penn Resilience Program and adopted by the U.S. Army. This program strengthens the evidence based protective factors including optimism, problem solving, self-efficacy, self-regulation, emotional awareness, and strong relationships (Reivich, 2011). The course is comprised of five separate modules. Module 1 is resilience, focusing on self-awareness and self-regulation skills (Reivich, 2011). Module 2 is building mental toughness which teaches multiple skills that increase the resilinece competencies learned in Module 1 (Reivich, 2011). Module 3 is Identifying Character Strengths where individuals identify strengths in themselves and also in others (Reivich, 2011). Module 4 is Strenthening Relationships which teaches positive

communication styles and provides tools for healthy relationships (Reivich, 2011). Module 5 is the sustainment component which enables individuals to take the skills they learn and apply them in the military context (Reivich, 2011).

Barriers to Mental Health Care

At multiple levels interventions attempt to address risk factors and to enhance protective factors. Programs that integrate prevention at multiple levels are likely to be the most effective. The Air Force's prevention program is an example of a comprehensive program that has effectively reduced suicide rates in the population. This program achieved successes in removing barriers to treatment; increasing knowledge, attitudes, and competencies within the studied population. It also increased access to help and support which showed a decrease in suicide rates (Goldsmith, 2002). Any universal prevention program that might inadvertently increase the stigma for those experiencing suicidal states was thought by experts to be potentially detrimental, since it could actually lead to more barriers to care for those in need (Ramchand, 2011).

An integrated suicide prevention program allows members the ability to access quality mental health care. This entails removing the obstacles members face in seeking mental health care when they need it. One of the issues service members face when accessing mental health care is a perception of negative career implications (Ramchand, 2012). Another issue that creates a negative perception is the denial of a security clearance or the breach in confidentiality between the patient and medical provider after a member has accessed the mental health care system. The negative perceptions in policies that both of these issues create is called a "mental health stigma" by some members (Ramchand, 2012). This may be labeled discrimination over those who access the mental

health system and any suicide prevention program should address these concerns (Ramchand, 2012).

U.S. military members experience unique barriers to behavioral healthcare that jeopardize opportunities for intervention. In an evaluation of service members deployed to Iraq or Afghanistan, results indicated that only half of those in need of behavioral healthcare received treatment (Cox, 2011). Table 4 shows some of the most common barriers to mental health in the military population (Ramchand, 2011).

Table 4: Barriers to Mental Health

Barriers to Mental Health in General Population and Formerly Deployed Military Personnel	
In General Population	**Formerly Deployed Military Personnel**
-Lack of Perceived Need	-Negative career repercussions
-Unsure about where to go for help	-Inability to receive a security clearance
-Cost(too expensive)	-Concerns about confidentiality
-Perceived lack of effectiveness	-Concerns about side effects of medications
-Reliance on self (desire to solve problem on own or thoughts the problem will get better)	-Preferred reliance on family and friends
	-Perceived lack of effectiveness

These barriers to the mental health system preclude at risk individuals from seeking help on their own. If individuals are not willing to seek help because of these barriers, screening tools can help providers identify those individuals with elevated risks.

Screening Tools

A screening tool is most effective if the condition being screened for can be effectively treated and the prevalence rate is not too low. A screening tool is effective if it is easy to administer to individuals and be able to detect the condition for which the screen is intended to detect without registering false positives (Horowitz, 2009). In order to detect suicide risk, it is imperative to identify a larger number of individuals to ensure

the at-risk population is captured (Horowitz, 2009). A false negative will lead individuals to not get the proper care they need while a false positive will drain valuable resources (Horowitz, 2009). The Columbia Suicide Screen was able to improve the identification of at-risk individuals for suicide than were previously identified by school professionals alone (Scott, 2009). Screening also had a lower false positive rate than school professionals in determining the population of at-risk individuals (Scott, 2009).

Age and Gender Adjustments

The rates of all causes of death vary by age. The technique of age adjustment removes the effects of age from the crude rates which allows for meaningful comparisons across populations with different underlying age structures (Klein, 2001). The Center for Disease Control publishes age-adjusted rates for causes of disease, injury, and death (Klein, 2001). The National Center for Health Statistics achieved an agreement by Federal and State agencies to age adjust mortality data using 2000 projected U.S. population data (Klein, 2001). The military population and the U.S. population have different age structures, creating a problem of age confounding which makes it appropriate to adjust for these differences (Klein, 2001). To eliminate age confounding, the process of rate adjustment changes, the amount each age group contributes to the overall rate and ensures consistency throughout the data (Klein, 2001). The process of calculating the age adjustment rate begins by the identification of the age groups used for the adjustment. Then the age specific rates are multiplied by the age specific weights to determine the Age adjusted Rate. An example of the calculation is presented in Table 5 (Klein, 2001).

Table 5: Age Adjustment

Age Group	# of Suicides (a)	Population (b)	Rate per 100,000 c = (a/b) x 100,000	Weight d = b/ Total Pop	Age Adjusted Rate e = c x d
18-21	20	118,000	16.95	0.22	3.68
22-25	26	235,000	11.06	0.43	4.79
26-29	18	190,000	9.47	0.35	3.31
Total	64	543,000	11.79	1	11.79

The military is approximately 86% male and 14% female while the U.S. population is roughly split 50% male and 50% female (Ramchand, 2011). The process to adjust the rates for gender is similar to the age adjustment process. The adjustment process enables a comparison of similar data sets across different populations. This is a critical step when comparing the rates betweeen different age groups and gender vary widely as they do in suicide rates (Klein, 2001).

Hypotheses

In accordance with the research objectives of the problem statement the following hypotheses will be tested.

1. *H1: The rate of suicide is higher in the military population than the civilian population*
2. *H2: The Army has a higher suicide rate than other service branches*
3. *H3: The Army has higher stress levels than other service branches*
4. *H4: E1-E4 have higher stress levels than other enlisted and officer ranks*

Summary

This chapter covered the background information on what suicide is and some of the risk factors for suicide. Next was a discussion of previous and current efforts in various suicide prevention programs and characteristics of a successful suicide prevention program. The suicide prevention programs in the DoD mainly focus on awareness training and prevention through the use of gatekeepers. In the Air Force, the wingman concept is used in the gatekeeper role. The most promising programs are the ones that take a comprehensive approach to suicide prevention by not only advocating suicide awareness but facilitating access to mental health treatment. This followed with an examination of some of the barriers to mental health care. The chapter concluded with the method of demographic adjustment for age and gender.

III. Methodology

Introduction

The data for this project came from three main sources. The civilian data is collected from the Center for Disease Control and Prevention, National Center for Injury Prevention, and Control Web-based Injury Statistics Query and Reporting System (WISQARS). The data source for WISQARS Fatal Injury Data is the National Vital Statistics System which is operated by the National Center for Health Statistics. The military data is collected from the DOD Suicide Event Reports (DODSER) from the National Center for Telehealth and Technology. The information on stress levels was collected from the DMDC Status of Forces Survey (SOFS) of Active Duty Members from 2008-2009. The DMDC survey is comprised of approximately 175 questions, depending on the month and year. The data in all three of these systems had demographic information on age and gender which make it useful when comparing populations.

Survey Methodology

The December 2009 Status of Forces Survey of Active Duty Members responses were collected from November 13, 2009, to January 25, 2010. The target population for the survey consisted of active duty members of the Army, Navy, Marine Corps, and Air Force who had at least six months of service at the time the questionnaire was first administered and below flag rank. The Web survey process began with notification letters sent to sample members. Additional e-mail reminders were sent to encourage survey participation. A completed survey was defined as 50% or more of the survey questions asked of all participants are answered. Table 6 shows the participation rate and response number for the survey data used in this research.

Table 6: Number of Completed Surveys by Year and Category

	Survey Year				
	Aug-08	Nov-08	Apr-09	Aug-09	Dec-09
Total Sample Size	53,534	37,494	37,292	34,719	38,604
Complete Surveys	17,673	10,435	11,028	9,538	10,797
Response Rate	33.0%	27.8%	29.6%	27.5%	28.0%
Service					
Army	5,904	3,780	3,704	3,125	3,675
Navy	2,501	2,316	2,520	2,187	2,530
Marine Corps	1,842	1,792	1,911	1,809	1,794
Air Force	7,426	2,547	2,893	2,417	2,798
Paygrade					
E1-E4	2,523	2,102	2,461	1,827	2,274
E5-E9	5,595	4,172	4,601	3,746	4,217
O1-O3	6,524	1,704	1,566	1,602	1,837
O4-O6	2,421	1,795	1,804	1,841	1,872
Gender					
Male	14,321	8,732	8,802	7,936	9,068
Female	3,352	1,703	2,226	1,602	1,729

Measures of Stress

On all active duty SOFS, there are a series of core items that include background information, overall satisfaction, retention intention, tempo, perceived readiness, and stress. This research focused on the measure of stress over time. The applicable background information categories are branch of service and paygrade. Stress was measured with three items of personal stress, work stress, and stress over the last month.

The first two questions (Appendix D, questions 40 and 41) were asked on a five-point scale with responses of much less than usual, less than usual, about the same as usual, more than usual, and much more than usual. Overall, how would you rate the

current level of stress in your work life? Overall, how would you measure the current level of stress in your personal life? The third question on stress (Appendix D, question 42) is a six part question that asks in the past month how often have you…

a) felt nervous and stressed?

b) felt that you were unable to control the important things in your life?

c) been upset because of something that happened unexpectedly?

d) been angered because of things that were outside of your control?

e) felt difficulties were piling up so high that you could not overcome them?

f) found that you could not cope with all of the things you had to do?

The available responses to these questions were never, almost never, sometimes, fairly often, and very often.

Responses from these eight questions were averaged to calculate a total stress measure. Table 6 summarizes the Cronbach's Alpha, mean, and standard deviation for each of the surveys used from 2008 to 2009.

Table 7: Cronbach's Alpha for Stress

	Survey Year				
	Aug-08	Nov-08	Apr-09	Aug-09	Dec-09
Cronbach's Alpha	0.89	0.89	0.87	0.90	0.89
n	17,873	10,409	10,637	9,586	10,499
Mean	2.72	2.77	2.79	2.73	2.71
S.D.	0.79	0.81	0.72	0.81	0.80

Demographic Data Collection

The demographic data of interest in the research was branch of service and paygrade. Question 1 was "In what Service were you on active duty on December 7,

2009?" The choices are Army, Navy, Marine Corps, Air Force, and None, I have separated or retired. Question 2 was "What is your current paygrade?" Respondents could choose a single paygrade from E1 through O-6. This data was then used to create four paygrade groups E1-E4, E5-E9, O1-O3, and O4-O6. These groups were the basis for analyzing the different levels of stress in each group and comparing them.

Summary

This chapter explained the different sources of data used in the research. It also showed what types of data were collected and identified the survey participants and response rates to the individual surveys. Next the procedure used to compute a mean value of stress for different demographic groups was explained and the corresponding Cronbach's Alpha for the reliability of the measure were presented.

IV. Results and Analysis

Introduction

This section provides the analysis of the proposed research questions and hypothesis. Research question one compares the military and civilian population using the data collected and adjusting population for demographic differences. Hypothesis one is used to answer this research question through the analysis of a chi-squared test. Research question two uses hypothesis two with a Chi-square test and hypothesis three with an analysis of variance and an independent samples t-test to answer. Research question uses hypothesis four with an analysis of variance and an independent samples t-test to answer.

Research Question 1.

Is there a difference between the rate of suicide in the military population versus the civilian population?

Research question 1 was addressed by first considering the total number of suicides in each service by year. As depicted in Figure 4 shows that while the Air Force, Navy, and Marine Corps numbers are relatively constant over the ten year period, the Army shows a steady increase from 102 suicides in 2006 to 167 suicides in 2011.

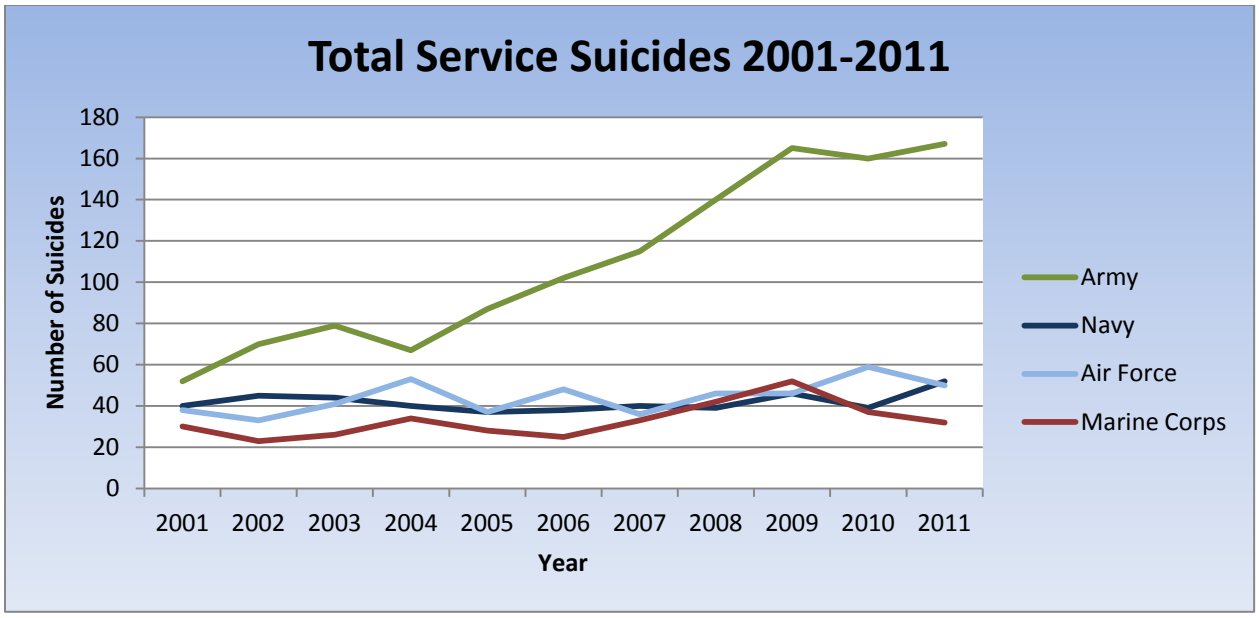

Figure 4: Total Service Suicides by Year from 2001-2011

In order to compare populations, the total number of suicides is turned into a rate per 100,000 of the population. Figure 5 shows the rate per 100,000 in each service by year from 2001-2011. Results indicate that the Army and Marine Corps have rates that increased from 2006 to 2009; the Army rate continued to decrease, and the Marine Corps rate fell after 2009.

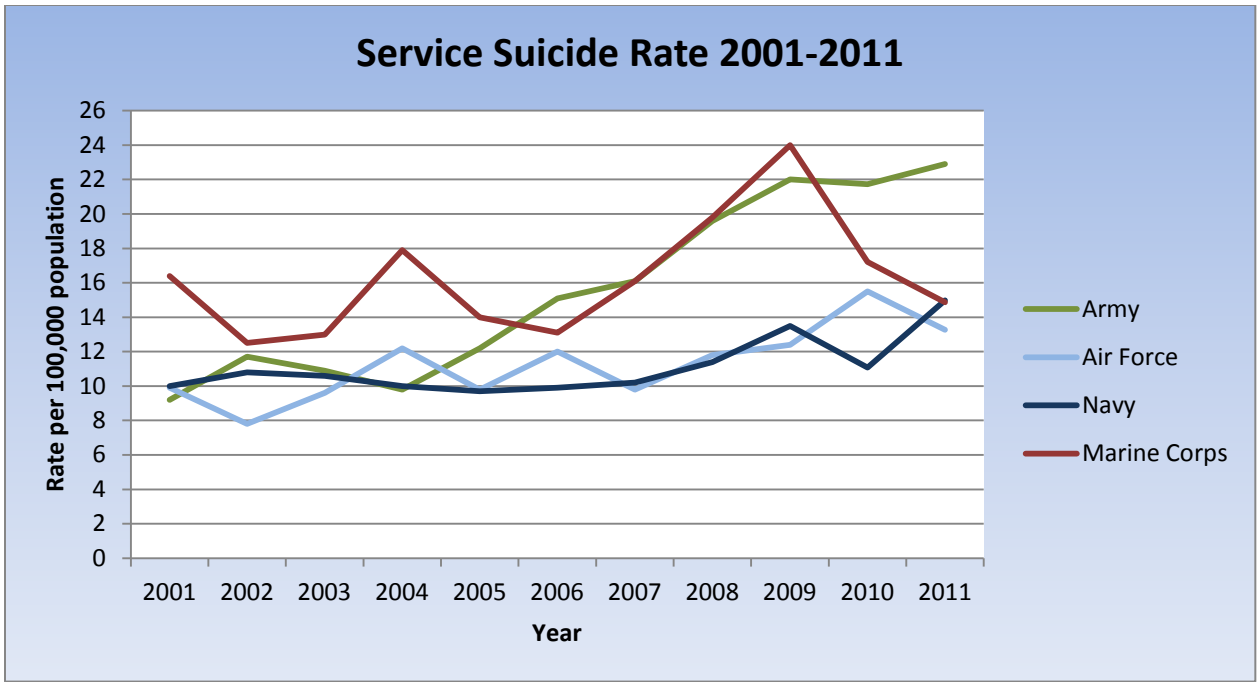

Figure 5: Service Suicide Rate by Year 2001-2011

The DoD rate is a weighted average of all the service components. The Civilian rate is computed from the CDC data for all suicides. Figure 6 shows that the civilian rate increased slightly from 2001 to 2011 while there was a dramatic increase in the DoD rate from 2006 to 2011.

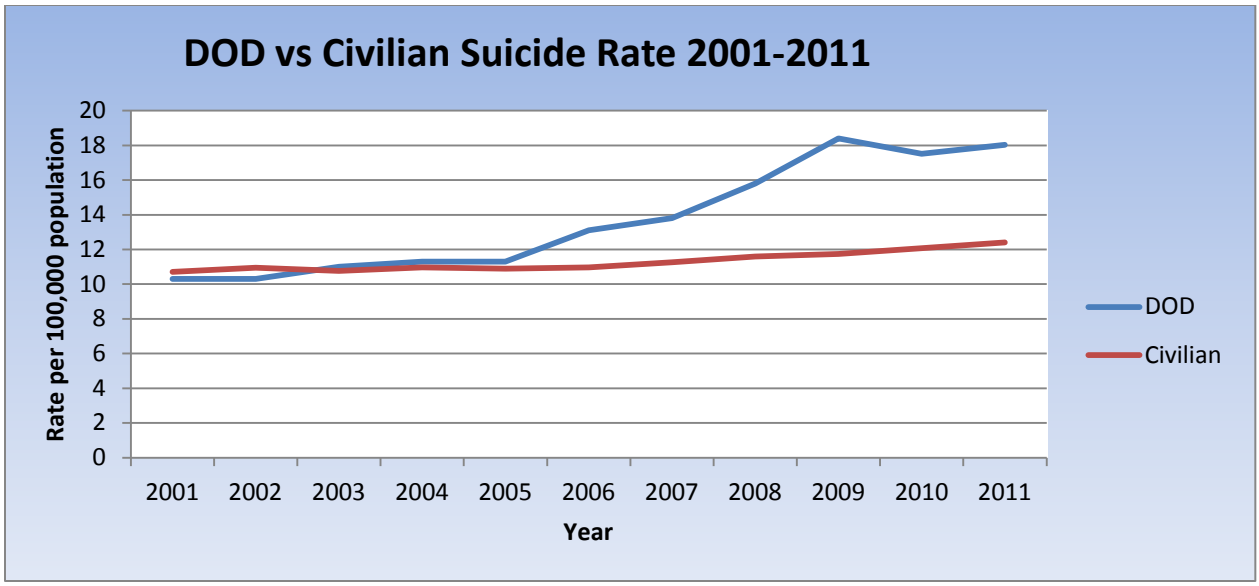

Figure 6: DOD vs. Civilian Suicide Rate 2001-2011

The populations of the DoD and Civilian are not comparable in terms of gender and age. The DoD population is comprised of approximately 85.7% males and 14.3% females (Bray, 2011). Figure 7 shows that the rate of suicide was significantly higher in males than in females in the general population and these rates remained fairly stable over time.

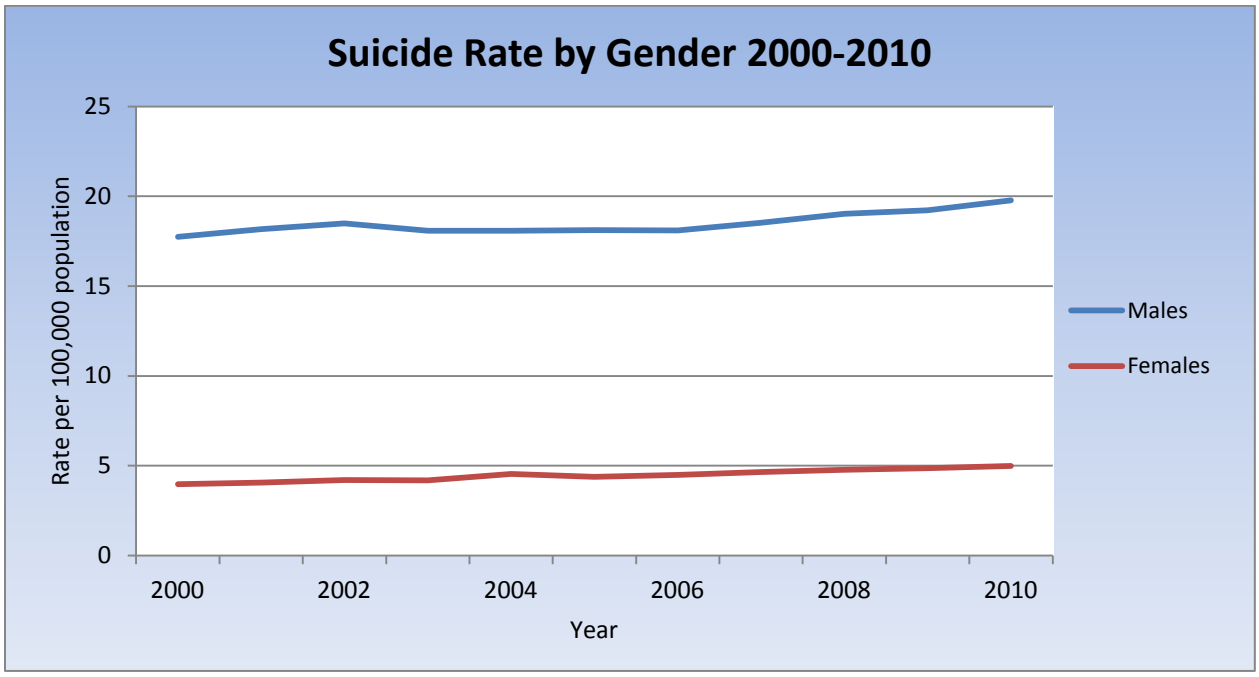

Figure 7: Suicide Rate by Gender in General Population 2000-2010

Since the DoD and Civilian population differ so dramatically, an adjustment for gender was used to make a comparison. The general civilian population was given the same demographic profile of the DoD. Figure 8 shows the rate in the civilian population adjusted for gender factors. It also shows that the civilian population remains stable above the DoD population until 2006 when the increase in rate in the DoD occurred and started to outpace the general population.

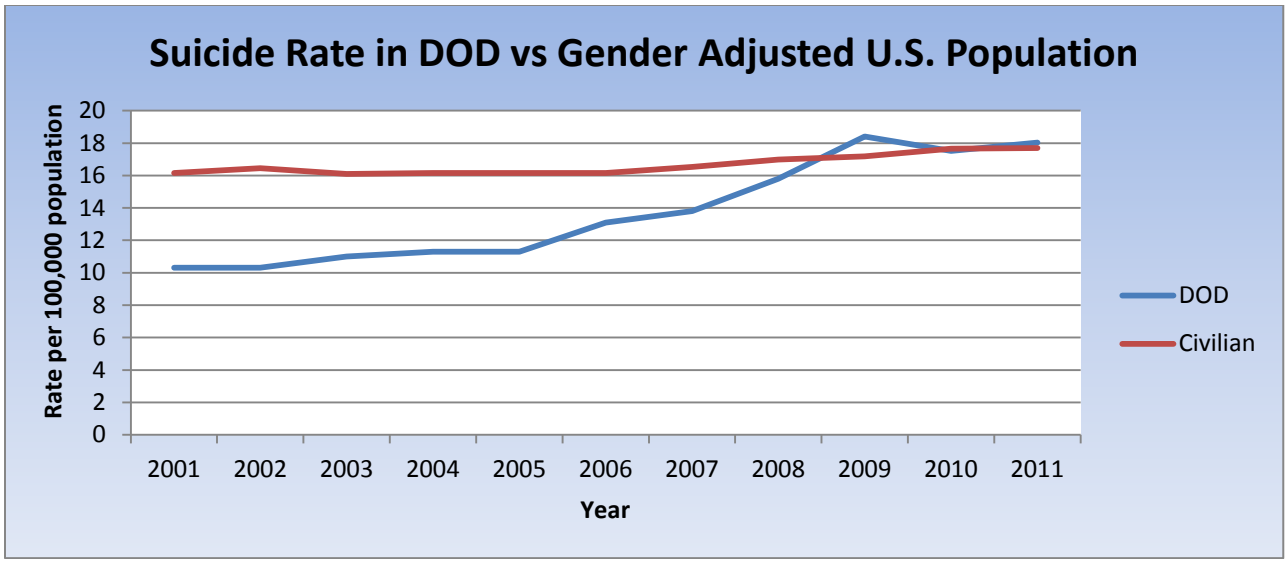

Figure 8: Suicide Rate in DOD vs. Gender Adjusted U.S. Population

The chart in Figure 8 shows a dramatic spike in the suicide rate from 2007 to 2009. In order to compare the military and civilian suicide rates after this spike, a Chi-square test was used.

Hypothesis 1.

Hypothesis one tested whether the DOD suicide rate is higher than the civilian suicide rate

H_o: The two classifications are independent.

H_a: The two classifications are dependent.

Table 7 shows the number of DoD and Civilian personnel who committed suicide in 2010. It also shows the number of personnel who did not commit suicide. This is then used to calculate the expected number of suicides in each population.

Table 8: Observed and Expected number of Suicides in DOD and Civilian Pop. 2010

	Observed		
	Committed	Did Not Commit	Total
DOD	295	1,683,790	1,684,085
Civilian	38,364	308,745,538	308,783,902
Total	38,659	310,429,328	310,467,987

	Expected		
	Committed	Did Not Commit	Total
DOD	210	1,683,875	1,684,085
Civilian	38,449	308,745,4453	308,783,902
Total	38,659	310,429,328	310,467,987

A Chi-square test was used to compare each population to determine differences in them. Based on the Observed and Expected counts a Chi-Square is compared against the critical value with α = .05 level of significance.

$$\chi^2 = \sum \frac{(observed - \exp ected)^2}{\exp ected} \qquad (1)$$

$\chi^2 = 35$ and $\chi^2_{.05} = 3.84$ (α=.05). Since $\chi^2 > \chi^2_{.05}$, results indicate that the observed counts do not closely agree and the hypothesis of independence is false. This means that we accept the alternative hypothesis that the number of suicides is dependent on the type of population; thus Hypothesis one is supported. The DoD suicide rate is higher than the suicide rate of the civilian population. The DoD rate is 17.52 versus the civilian suicide rate of 12.43.

Research Question 2.

Is there a difference between the rate of suicide in each Service Branch within the Department of Defense?

Research question two is addressed by testing hypotheses two and three.

Hypothesis 2.

Hypothesis two tested whether there was a difference between the rate of suicide in each service within the Department of Defense

H_o: The two classifications are independent.

H_a: The two classifications are dependent.

Table 8 shows the number of suicides for each branch of service that were committed in 2011. It also shows the number of people who did not commit suicide. This is then used to calculate the expected number of suicides in each population.

Table 9: Observed and Expected number of Suicides in each Branch of Service

	Observed		
	Committed	Did Not Commit	Total
Army	167	729,258	729,425
Air Force	50	376,790	376,840
Navy	52	347,130	347,182
Marine	32	215,198	215,230
Total	301	1,668,375	1,668,676

	Expected		
	Committed	Did Not Commit	Total
Army	132	729,293	729,425
Air Force	68	376,772	376,840
Navy	63	347,119	347,182
Marine	39	215,192	215,230
Total	301	1,668,375	1,668,676

$$\chi^2 = \sum \frac{(observed - \exp ected)^2}{\exp ected} \qquad (1)$$

$\chi^2 = 17$ and $\chi^2_{.05} = 3.84$ (α=.05). Since $\chi^2 > \chi^2_{.05}$, results indicate that the observed counts do not closely agree, and the hypothesis of independence is false. This means that we accept the alternative hypothesis that the number of suicides is dependent on the branch of service; thus hypothesis two is supported and there is a difference in the suicide rate between the branches of service.

Hypothesis 3.

Hypothesis three tested whether the Army has higher stress levels than other service branches

H_o: The mean stress level of the Army equals the mean stress level of other services

H_a: The mean stress levels differ for at least two services

ANOVA results are provided in Table 11 for the August 2008 through December 2009 survey data. In each case the computed F statistic (240.46, 80.61, 51.27, 82.57, and 83.42 respectively) is greater than the $F_\alpha = 2.60$ (α=.05); indicating the null hypothesis is rejected in favor of the alternative and conclude the mean stress levels differ for at least two branches of service categories.

Table 10: ANOVA of Stress by Branch of Service

Survey Year	ANOVA Stats for Stress by Service				
	Sum of Squares	df	Mean Square	F	Sig
Aug-08	436.19	3	145.40	240.46	0.00
Nov-08	155.46	3	51.82	80.61	0.00
Apr-09	80.50	3	26.83	51.27	0.00
Aug-09	159.40	3	53.13	82.57	0.00
Dec-09	155.09	3	51.70	83.42	0.00

In order to determine which branch of services differed on mean stress levels the next step was to conduct an independent samples t-test. The results are provided in Table 12 of the independent sample t-tests between the Army and the other branches of service. The results indicated that the mean difference in stress levels between the Army and Navy differed significantly only in August 2009 (MD = -0.09, t=-4.09, df = 6027, $p < .01$). This result showed that the Navy's mean stress level was higher which does not support hypothesis three. The results also indicate that the mean stress levels between the Army and Marine Corps differed in every survey from August 2008 through December 2009. Four of the five surveys support hypothesis four between the Army and Marine Corps. Results from the December 2009 survey did not indicate the Army mean stress level was higher than the Marine Corps mean stress level (MD =-0.02, t =-0.89, df = 5317, p = .38) which does not support the hypothesis. The Army had a higher mean stress level than the Air Force in all five surveys with the largest difference in Aug 2008 (MD = 0.33, t = 24.26, df = 13453, p = .00). These results indicate support for hypothesis three that the mean stress level is higher in the Army that the Air Force or Marine Corps. The difference is higher between the Army and Air Force than the Army

and Marine Corps. There is not a significant difference between the Army and Navy to support hypothesis three with respect to these two services.

Table 11: Independent Samples t-test Stress by Branch of Service

Service Pairing	Survey Year	M.D.	t	df	p	Supports Hypothesis
Army-Navy	Aug-08	0.01	0.26	8515	0.80	
	Nov-08	0.02	0.67	6105	0.50	
	Apr-09	0.02	1.20	5994	0.23	
	Aug-09	-0.04	-1.95	5363	0.05	
	Dec-09	-0.09	-4.09	6027	0.00	
Army-Marine	Aug-08	0.05	2.47	7872	0.01	✓
	Nov-08	0.07	3.07	5598	0.00	✓
	Apr-09	0.09	4.10	5406	0.00	✓
	Aug-09	0.07	2.77	4978	0.01	✓
	Dec-09	-0.02	-0.89	5317	0.38	
Army-Air Force	Aug-08	0.33	24.26	13453	0.00	✓
	Nov-08	0.30	14.45	6303	0.00	✓
	Apr-09	0.21	11.55	6344	0.00	✓
	Aug-09	0.29	13.13	5559	0.00	✓
	Dec-09	0.23	11.73	6284	0.00	✓

The chart in Figure 10 confirms the results of our ANOVA and t-tests that the mean stress level is different in different services. The t-test results showed that the Army and Marine Corps mean stress level was equal in the Dec 2009 survey. Also the Army and Navy mean stress levels were equal in the Aug 08, Nov 08, Apr 09, and Aug 09 surveys.

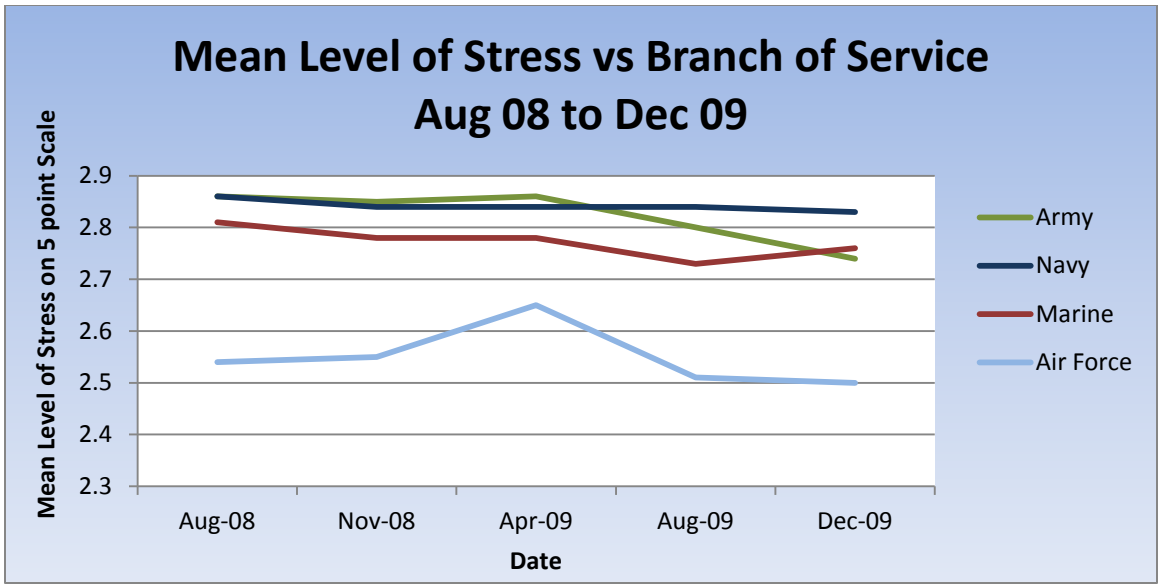

Figure 9: Mean Level of Stress vs. Branch of Service from Aug 08 to Dec 09

Research Question 3.

Is there a difference between the rate of suicide in different ranks of Department of Defense members?

Research question three is addressed by testing hypothesis four.

Hypothesis 4.

Hypothesis four tested whether E1-E4 have higher stress levels than other ranks

H_o: The mean stress level of E1-E4 equals the mean stress level of other ranks

H_a: The mean stress levels differ for at least two rank categories

An analysis of variance (ANOVA) was conducted to test the hypothesis. Results are provided in Table 9 of the ANOVA test for the five surveys from August 2008 to December 2009. In each case the computed F statistic (68.81, 59.90, 73.98, 58.79, and 51.73 respectively) is greater than the $F_\alpha = 2.37$ (α=.05); thus, the null hypothesis is

rejected in favor of the alternative. This test shows the mean stress levels differ for at least two rank categories.

Table 12: ANOVA for Stress by Paygrade

	ANOVA Stats for Stress by Paygrade				
Survey Year	Sum of Squares	df	Mean Square	F	Sig
Aug-08	170.64	4	42.66	68.81	0.00
Nov-08	154.11	4	38.53	59.90	0.00
Apr-09	152.89	4	38.22	73.98	0.00
Aug-09	151.50	4	38.88	58.79	0.00
Dec-09	128.80	4	32.20	51.73	0.00

In order to determine which rank categories differ, the next step was to conduct an independent samples t-test between the ranks of E1-E4 and E5-E9, O1-O3, and O4-O6. Results are provided in Table 10 of an independent samples t-test between the different rank pairings. The results show that in every case the mean stress level is higher in group E1-E4 than any other rank group for each survey conducted. The average ($MD = 0.26$, $p < .01$). Therefore, the data suggests hypothesis four is supported and E1-E4 have higher mean stress levels than other paygrades.

Table 13: Independent Samples T-Test Results between Ranks

Rank Pairing	Survey Year	M.D.	t	df	p	Supports Hypothesis
E1-E4 to E5-E9	Aug-08	0.22	11.18	8285	0.00	✓
	Nov-08	0.13	5.91	6271	0.00	✓
	Apr-09	0.16	8.33	6781	0.00	✓
	Aug-09	0.22	9.39	5636	0.00	✓
	Dec-09	0.15	6.71	6303	0.00	✓
E1-E4 to O1-O3	Aug-08	0.26	14.46	9179	0.00	✓
	Nov-08	0.23	8.53	3810	0.00	✓
	Apr-09	0.27	11.23	3870	0.00	✓
	Aug-09	0.29	10.43	3472	0.00	✓
	Dec-09	0.24	9.62	3993	0.00	✓
E1-E4 to O4-O6	Aug-08	0.34	14.73	5000	0.00	✓
	Nov-08	0.38	14.81	3902	0.00	✓
	Apr-09	0.36	15.66	4106	0.00	✓
	Aug-09	0.38	14.12	3698	0.00	✓
	Dec-09	0.33	13.30	4023	0.00	✓

Figure 10 below shows the trend of perceived stress in each paygrade over time from each survey. This chart matches the results of our ANOVA and t-tests that the mean stress level is different in different paygrades.

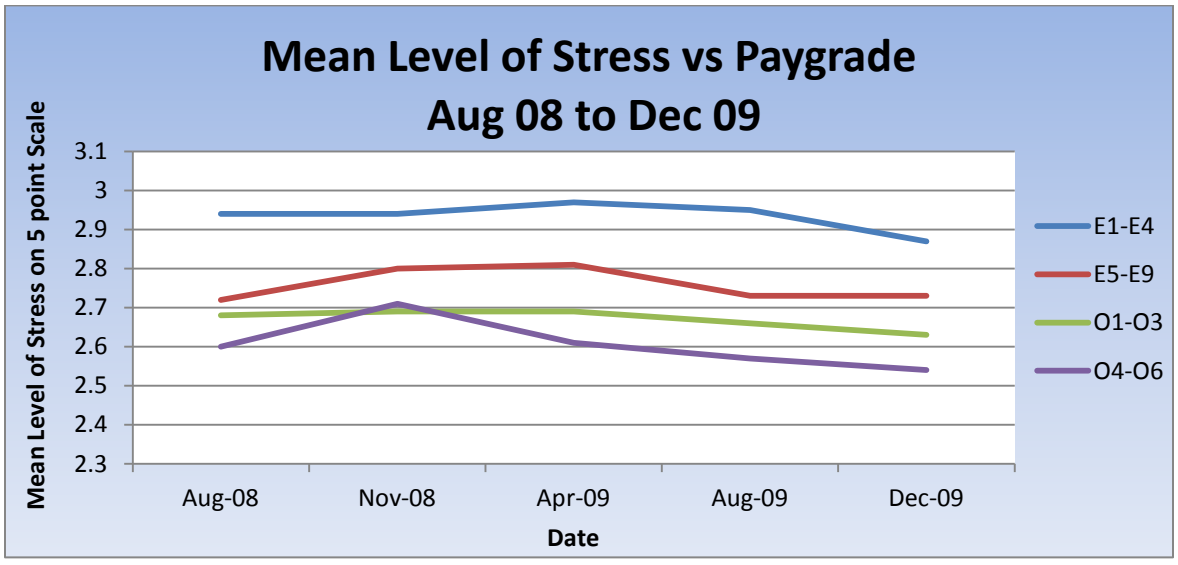

Figure 10: Mean Stress Level vs. Paygrade from Aug 08 to Dec 09 surveys

V. Conclusions and Recommendations

Introduction

The purpose of this study was to identify any data that would enable commanders to recognize high risk individuals in their units. Suicide data was collected from the DoD Suicide Event Reports and from the Defense Manpower Data Center Status of Forces of Active Duty Personnel to test for corresponding increases in mean perceived stress levels of military members. This study is unique in the timeliness of the research matched the recent increase in suicide events within the DoD.

Individual Characteristics

This study supports the idea that more junior individuals perceive higher levels of stress than more senior individuals in the survey. The higher levels of stress coincide with higher rates of suicide among younger individuals than with older individuals. The study also found that there was a significant difference in perceived stress level between the Army and Air Force. The study also indicated that once the suicide rate in the military population is adjusted for gender it has increased over time while the civilian rate remains stable.

Limitations

Suicide events are rare. The circumstances surrounding a suicide are seldom known before the event occurs. Identifying prevention programs that are effective at reducing suicide deaths is difficult because of the lag in the availability of suicide data (Acosta, 2012). Low suicide base rate events also present significant challenges in analyzing the data. Rate estimates with fewer than 20 suicides in a specific category

generally are unstable (Acosta, 2012). Unstable means the results are highly variable when the number of suicides changes by a small factor. This results in dramatic changes to the rate estimate.

Future Research

Future research should focus on the objective outcomes of suicide prevention programs. Studying how the suicide rates compare before and after the implementation of an individual program can aid in establishing best practices between each branch of service. Determining what prevention programs suicide victims were exposed to before the incident may also help in determining the effectiveness of those programs.

Another focus for study is assessing the other five suicide prevention program goals of raising awareness, facilitating access to quality care, providing quality care, restricting access to lethal means, and responding appropriately to suicides that are not addressed in this study. Specifically, studying the preceptions of accessing mental health care in military members can tailor help for those in need of care. Addressing any barriers to mental health is a topic that needs focus on in any comprehensive suicide prevention program.

Conclusions

Suicide is a preventable mental health condition (Science Writing, Press & Dissemination Branch, 2013). A comprehensive suicide prevention program starts with the organization and leadership to build protective factors in unit members. It also needs to provide access to quality mental health care, promote total wellness and training, and sustain surveillance efforts for continuing research. Commander's need tools to identify at risk individuals in their units to ensure these members receive the mental health care appropriate for the situation. One such tool is the perceived stress scale (Appendix A).

Commander's can use this tool to identify members that exhibit elevated stress levels and allocate resources to provide care. Any suicide prevention program must increase the protective factors of psychological, spiritual, family, physical, emotional, social, financial, and vocational while simultaneously reducing the risk factors.

The military population differs from the civilian population in both demographics and nature of risk factors. Therefore, any DoD suicide prevention program should be tailored with specific risk factors in mind. Differences in mean stress levels are present among the branches of service therefore a DoD suicide prevention program should be adapted to the specific needs of each service.

Lastly, this study shows that junior military members experience higher average levels of stress. Commander's may be able to directly influence and reduce the amount of stress these individuals perceive by including measures to enhance life skills and interpersonal relationships. Education targeted toward the reduction of substance abuse and other risky behaviors can reduce the amount of perceived stress.

Appendix A: Perceived Stress Scale

Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts **during the last month**. In each case, you will be asked to indicate by circling *how often* you felt or thought a certain way.

Name _____Date _____
Age _____Gender (*Circle*): **M F**

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

1.	In the last month, how often have you been upset because of something that happened unexpectedly?	**0**	**1**	**2**	**3**	**4**
2.	In the last month, how often have you felt that you were unable to control the important things in your life?	**0**	**1**	**2**	**3**	**4**
3.	In the last month, how often have you felt nervous and "stressed"? ..	**0**	**1**	**2**	**3**	**4**
4.	In the last month, how often have you felt confident about your ability to handle your personal problems?.....	**0**	**1**	**2**	**3**	**4**
5.	In the last month, how often have you felt that things were going your way?.....	**0**	**1**	**2**	**3**	**4**
6.	In the last month, how often have you found that you could not cope with all the things that you had to do?.....	**0**	**1**	**2**	**3**	**4**
7.	In the last month, how often have you been able to control irritations in your life?.....	**0**	**1**	**2**	**3**	**4**
8.	In the last month, how often have you felt that you were on top of things?……	**0**	**1**	**2**	**3**	**4**
9.	In the last month, how often have you been angered because of things that were outside of your control?.....	**0**	**1**	**2**	**3**	**4**
10.	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?\.....	**0**	**1**	**2**	**3**	**4**

Appendix B: CDC Suicide Data

Table 14: WISQARS Suicide Data by Year and Gender

Sex	Year	Number of Deaths	Population***	Crude Rate	Age-Adjusted Rate**
Males	2000	23,618	138,053,563	17.11	17.75
	2001	24,672	139,891,492	17.64	18.17
	2002	25,409	141,230,559	17.99	18.49
	2003	25,203	142,428,897	17.7	18.09
	2004	25,566	143,828,012	17.78	18.09
	2005	25,907	145,197,078	17.84	18.11
	2006	26,308	146,647,265	17.94	18.1
	2007	27,269	148,064,854	18.42	18.52
	2008	28,450	149,489,951	19.03	19.03
	2009	29,089	150,807,454	19.29	19.23
	2010	30,277	151,781,326	19.95	19.78
		291,768	**1,597,420,451**	**18.26**	
Females	2000	5,732	143,368,343	4	3.97
	2001	5,950	145,077,463	4.1	4.06
	2002	6,246	146,394,634	4.27	4.21
	2003	6,281	147,679,036	4.25	4.18
	2004	6,873	148,977,286	4.61	4.54
	2005	6,730	150,319,521	4.48	4.38
	2006	6,992	151,732,647	4.61	4.49
	2007	7,329	153,166,353	4.78	4.65
	2008	7,585	154,604,015	4.91	4.78
	2009	7,820	155,964,075	5.01	4.87
	2010	8,087	156,964,212	5.15	4.99
		75,625	**1,654,247,585**	**4.57**	
Total		**367,393**	**3,251,668,036**	**11.3**	

Table 15: WISQARS Suicide Data by Age Group, Year, and Gender

Age Group	Sex	Year	No. of Deaths	Population	Crude Rate	Sex	Year	No. of Deaths	Population	Crude Rate
18-24	M	2000	2,803	13,873,829	20.2	F	2000	409	13,269,625	3.08
		2001	2,815	14,334,430	19.64		2001	408	13,658,222	2.99
		2002	2,870	14,590,398	19.67		2002	430	13,890,310	3.1
		2003	2,860	14,796,935	19.33		2003	460	14,119,811	3.26
		2004	3,039	15,015,203	20.24		2004	533	14,286,976	3.73
		2005	2,930	15,102,513	19.4		2005	535	14,339,033	3.73
		2006	2,979	15,200,885	19.6		2006	489	14,401,954	3.4
		2007	2,963	15,291,029	19.38		2007	523	14,516,996	3.6
		2008	2,993	15,466,154	19.35		2008	542	14,728,120	3.68
		2009	3,001	15,610,366	19.22		2009	577	14,919,980	3.87
		2010	3,213	15,661,633	20.52		2010	652	15,010,455	4.34
			32,466	**164,943,375**	**19.68**			**5,558**	**157,141,482**	**3.54**
25-29	M	2000	1,956	9,798,760	19.96	F	2000	385	9,582,576	4.02
		2001	2,015	9,516,234	21.17		2001	374	9,303,113	4.02
		2002	2,003	9,442,754	21.21		2002	420	9,248,586	4.54
		2003	1,901	9,464,481	20.09		2003	375	9,307,104	4.03
		2004	2,015	9,627,975	20.93		2004	397	9,479,080	4.19
		2005	1,975	9,822,166	20.11		2005	402	9,712,544	4.14
		2006	2,087	10,095,589	20.67		2006	473	10,014,422	4.72
		2007	2,190	10,313,439	21.23		2007	483	10,229,259	4.72
		2008	2,199	10,509,136	20.92		2008	516	10,393,532	4.96
		2009	2,184	10,611,357	20.58		2009	515	10,466,871	4.92
		2010	2,459	10,635,591	23.12		2010	541	10,466,258	5.17
			22,984	**109,837,482**	**20.93**			**4,881**	**108,203,345**	**4.51**
30-34	M	2000	1,982	10,321,769	19.2	F	2000	469	10,188,619	4.6
		2001	2,184	10,388,245	21.02		2001	497	10,263,930	4.84
		2002	2,132	10,388,113	20.52		2002	491	10,270,193	4.78
		2003	2,255	10,278,392	21.94		2003	534	10,193,818	5.24
		2004	2,127	10,118,356	21.02		2004	535	10,041,145	5.33
		2005	2,091	9,888,783	21.15		2005	522	9,835,154	5.31
		2006	1,966	9,673,250	20.32		2006	459	9,611,918	4.78
		2007	2,091	9,611,431	21.76		2007	514	9,559,334	5.38
		2008	2,074	9,678,926	21.43		2008	511	9,625,879	5.31

		2009	2,109	9,844,555	21.42		2009	512	9,800,559	5.22
		2010	2,184	9,996,500	21.85		2010	551	9,965,599	5.53
			23,195	**110,188,320**	**21.05**			**5,595**	**109,356,148**	**5.12**
35-39	M	2000	2,457	11,318,696	21.71	F	2000	655	11,387,968	5.75
		2001	2,518	11,094,408	22.7		2001	658	11,141,510	5.91
		2002	2,484	10,847,772	22.9		2002	657	10,903,446	6.03
		2003	2,347	10,604,058	22.13		2003	611	10,660,101	5.73
		2004	2,292	10,421,329	21.99		2004	656	10,453,320	6.28
		2005	2,259	10,387,033	21.75		2005	634	10,411,620	6.09
		2006	2,419	10,451,785	23.14		2006	696	10,489,448	6.64
		2007	2,360	10,461,052	22.56		2007	662	10,502,839	6.3
		2008	2,432	10,379,654	23.43		2008	683	10,437,809	6.54
		2009	2,414	10,215,627	23.63		2009	681	10,292,169	6.62
		2010	2,372	10,042,022	23.62		2010	712	10,137,620	7.02
			26,354	**116,223,436**	**22.68**			**7,305**	**116,817,850**	**6.25**
40-44	M	2000	2,657	11,129,102	23.87	F	2000	793	11,312,761	7.01
		2001	2,662	11,314,915	23.53		2001	797	11,500,919	6.93
		2002	2,821	11,353,422	24.85		2002	889	11,536,009	7.71
		2003	2,791	11,343,445	24.6		2003	853	11,546,602	7.39
		2004	2,775	11,363,212	24.42		2004	915	11,562,414	7.91
		2005	2,804	11,253,162	24.92		2005	853	11,453,723	7.45
		2006	2,646	11,064,405	23.91		2006	830	11,238,163	7.39
		2007	2,792	10,833,176	25.77		2007	908	10,999,163	8.26
		2008	2,693	10,617,099	25.36		2008	895	10,757,924	8.32
		2009	2,728	10,430,574	26.15		2009	854	10,549,441	8.1
		2010	2,661	10,393,977	25.6		2010	826	10,496,987	7.87
			30,030	**121,096,489**	**24.8**			**9,413**	**122,954,106**	**7.66**
45-49	M	2000	2,307	9,889,506	23.33	F	2000	680	10,202,898	6.66
		2001	2,484	10,193,034	24.37		2001	776	10,505,949	7.39
		2002	2,608	10,466,497	24.92		2002	865	10,785,791	8.02
		2003	2,616	10,705,411	24.44		2003	869	11,017,265	7.89
		2004	2,749	10,880,756	25.26		2004	994	11,184,506	8.89
		2005	2,826	11,060,083	25.55		2005	938	11,357,088	8.26
		2006	2,926	11,209,831	26.1		2006	967	11,505,455	8.4
		2007	3,043	11,257,548	27.03		2007	1,008	11,542,213	8.73
		2008	3,205	11,263,990	28.45		2008	1,060	11,556,983	9.17
		2009	3,176	11,285,671	28.14		2009	1,036	11,576,574	8.95
		2010	3,375	11,209,085	30.11		2010	997	11,499,506	8.67
			31,315	**119,421,412**	**26.22**			**10,190**	**122,734,228**	**8.3**
50-54	M	2000	1,842	8,607,724	21.4	F	2000	608	8,977,824	6.77
		2001	2,020	9,146,153	22.09		2001	662	9,541,132	6.94

		2002	2,188	9,168,094	23.87		2002	647	9,571,812	6.76
		2003	2,271	9,337,624	24.32		2003	725	9,759,654	7.43
		2004	2,329	9,565,045	24.35		2004	834	9,999,623	8.34
		2005	2,443	9,821,292	24.87		2005	784	10,257,441	7.64
		2006	2,650	10,064,753	26.33		2006	883	10,506,120	8.4
		2007	2,781	10,344,429	26.88		2007	946	10,795,749	8.76
		2008	3,041	10,598,921	28.69		2008	981	11,040,553	8.89
		2009	3,293	10,783,563	30.54		2009	1,093	11,221,280	9.74
		2010	3,358	10,933,274	30.71		2010	1,069	11,364,851	9.41
			28,216	**108,370,872**	**26.04**			**9,232**	**113,036,039**	**8.17**
55-59	M	2000	1,306	6,508,729	20.07	F	2000	402	6,960,508	5.78
		2001	1,534	6,759,579	22.69		2001	451	7,209,396	6.26
		2002	1,708	7,341,077	23.27		2002	478	7,801,990	6.13
		2003	1,771	7,672,601	23.08		2003	543	8,141,956	6.67
		2004	1,787	8,059,227	22.17		2004	562	8,547,949	6.57
		2005	1,888	8,495,361	22.22		2005	589	9,007,859	6.54
		2006	2,115	8,923,795	23.7		2006	677	9,473,065	7.15
		2007	2,212	8,945,299	24.73		2007	750	9,509,473	7.89
		2008	2,469	9,112,330	27.1		2008	743	9,702,238	7.66
		2009	2,661	9,334,386	28.51		2009	830	9,946,217	8.34
		2010	2,859	9,523,648	30.02		2010	901	10,141,157	8.88
			22,310	**90,676,032**	**24.6**			**6,926**	**96,441,808**	**7.18**

Appendix C: DODSER Suicide Data

Table 16: Suicide Data Collected from DODSER

		2008	Rt/100K	2009	Rt/100K	2010	Rt/100K	2011	Rt/100K
	Total Suicides	268	16.1	309	18.5	295	17.52	301	18.03
Service	**Army**	140	19.6	164	22	160	21.72	167	22.9
	Air Force	45	11.8	46	12.4	59	15.51	50	13.27
	Navy	41	11.4	47	13.5	39	11.08	52	14.98
	Marine Corps	42	19.8	52	24	37	17.21	32	14.87
Gender	**Males**	255	18.2	300	21.02	281	19.57	285	20.05
	Female	13		9		14		16	
Age Range	**Under 25**	142	20.1	143	23.2	140	23.03	114	19.3
	25-29	38	13.7	73	19.05	76	19.25	91	22.79
	30-34	53	12.1	43	21.19	30	12.09	32	12.52
	35-39			26	12.62	33	16.53	36	18.76
	40-44	35	15.7	15		14		22	16.21
	45+			10		2		6	
Rank	**Cadet**	1		3		1		0	
	E1-E4	138	20.1	168	24.2	161	22.91	148	21.14
	E5-E9	102	14.8	112	16.26	118	17.15	128	19.02
	Officer	25	10.2	22	8.91	15		25	9.72
	Warrant Officer	2		4		0		0	
Comp	**Active Duty**	235	16.9	285	19.87	269	17.52	267	18.03
	Reserve	12		8		9		12	
	National Guard	21		16		17		22	16.15
Ed	**Some HS**	9		2		2		5	
	GED	24	24.1	44	45.21	26	29.91	32	42.51
	HS	170	16.4	209	20.01	206	19.77	194	18.79
	Some College	4		16		15		16	
	Degree	25		9		18		18	
	Four Year College	18		17		18		22	12.54
	Master's	3		9		3		6	
	Don't Know	7		3		7		8	
Marital Status	**Never Married**	125	15.2	106	16.2	125	18.99	107	16.53
	Married	147	15.9	158	16.94	147	15.64	167	17.85
	Legally Separated	1		0		1		0	
	Divorced	20	27.6	37	49.61	20	24.2	23	27.65
	Widowed	0		1		0		4	
	Don't Know	2		7		2		0	

Appendix D: December 2009 Status of Forces Survey of Active Duty Members

December 2009 Status of Forces Survey of Active Duty Members

BACKGROUND INFORMATION

1. In what Service were you on active duty on December 7, 2009?
   - Army
   - Navy
   - Marine Corps
   - Air Force
   - None, I have separated or retired

******** Page Break **********

BACKGROUND INFORMATION

2. What is your current paygrade? Mark one.

E-1	E-6	W-1	O-1/O-1E
E-2	E-7	W-2	O-2/O-2E
E-3	E-8	W-3	O-3/O-3E
E-4	E-9	W-4	O-4
E-5		W-5	O-5
			O-6 or above

******** Page Break **********

BACKGROUND INFORMATION

3. What is your marital status?
   - Married
   - Separated
   - Divorced
   - Widowed
   - Never married

******** Page Break **********

BACKGROUND INFORMATION

4. How many years have you been in a relationship with your current significant other (that is, your girlfriend or boyfriend)?
   - Does not apply; I do not have a girlfriend/boyfriend
   - Less than 1 year
   - 1 year to less than 6 years
   - 6 years to less than 10 years
   - 10 years or more

******** Page Break **********

BACKGROUND INFORMATION

In the following section, you will be asked questions about your spouse's employment status in enough detail to ensure comparability with national employment surveys.

5. Is your spouse currently serving on active duty (not a member of the National Guard or Reserve)?
   - Yes
   - No

******** Page Break **********

BACKGROUND INFORMATION

6. Is your spouse currently serving as a member of the National Guard or Reserve in a full-time, active duty program (AGR/FTS/AR)?
   - Yes
   - No

******** Page Break **********

BACKGROUND INFORMATION

7. Is your spouse currently serving as a member of another type of National Guard or Reserve unit (e.g., drilling unit, Individual Mobilization Augmentee (IMA), Individual Ready Reserve (IRR))?
   - Yes
   - No

******** Page Break **********

BACKGROUND INFORMATION

8. Last week, did your spouse do any work for pay or profit? Mark "Yes" even if your spouse worked only one hour, or helped without pay in a family business or farm for 15 hours or more.
   - Yes
   - No

******** Page Break **********

BACKGROUND INFORMATION

9. Last week, was your spouse temporarily absent from a job or business?
   - Yes, on vacation, temporary illness, labor dispute, etc.
   - No

******** Page Break **********

BACKGROUND INFORMATION

10. Has your spouse been looking for work during the last 4 weeks?
   - Yes
   - No

******** Page Break **********

BACKGROUND INFORMATION

11. Last week, could your spouse have started a job if offered one, or returned to work if recalled?
   - Yes, could have gone to work
   - No, because of his/her temporary illness
   - No, because of other reasons (in school, etc.)

******** Page Break **********

BACKGROUND INFORMATION

12. What is the highest degree or level of school that you have completed? Mark the one answer that describes the highest grade or degree that you have completed.
   - 12 years or less of school (no diploma)
   - High school graduate — traditional diploma
   - High school graduate — alternative diploma (home school, GED, etc.)
   - Some college credit, but less than 1 year
   - 1 or more years of college, no degree
   - Associate's degree (e.g., AA, AS)
   - Bachelor's degree (e.g., BA, AB, BS)
   - Master's, doctoral, or professional school degree (e.g., MA, MS, MEd, MEng, MBA, MSW, PhD, MD, JD, DVM, EdD)

******** Page Break **********

BACKGROUND INFORMATION

For the next questions, the definition of "child, children, or other legal dependents" includes anyone in your family, except your spouse, who has, or is eligible to have, a Uniformed Services Identification and Privilege card (also called a military ID card) or is eligible for military health

care benefits, and is enrolled in the Defense Enrollment Eligibility Reporting System (DEERS).

13. Do you have a child, children, or other legal dependents based on the definition above?
- Yes
- No

******** Page Break **********

BACKGROUND INFORMATION

14. How many children or other legal dependents do you have in each age group? Mark one answer in each row. To indicate none, select "0". To indicate nine or more, select "9".

	0	1	2	3	4	5	6	7	8	9
a. 5 years and younger										
b. 6 - 9 years old										
c. 10 - 22 years old										
d. 23 years and older										

******** Page Break **********

BACKGROUND INFORMATION

15. Are you Spanish/Hispanic/Latino?
- No, not Spanish/Hispanic/Latino
- Yes, Mexican, Mexican-American, Chicano, Puerto Rican, Cuban, or other Spanish/Hispanic/Latino

******** Page Break **********

BACKGROUND INFORMATION

16. What is your race? Mark one or more races to indicate what race you consider yourself to be.
- White
- Black or African-American
- American Indian or Alaska Native
- Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
- Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian or Chamorro)

******** Page Break **********

BACKGROUND INFORMATION

17. Where is your permanent duty station (homeport) located?

- In one of the 50 states, D.C., Puerto Rico, or a U.S. territory or possession
- Europe (e.g., Bosnia-Herzegovina, Germany, Italy, Serbia, United Kingdom)
- Former Soviet Union (e.g., Russia, Tajikistan, Uzbekistan)
- East Asia and Pacific (e.g., Australia, Japan, Korea)
- North Africa, Near East, or South Asia (e.g., Bahrain, Kuwait, Saudi Arabia, Diego Garcia)
- Sub-Saharan Africa (e.g., Kenya, South Africa)
- Western Hemisphere (e.g., Cuba, Honduras, Peru)
- Other or not sure

******** Page Break **********

BACKGROUND INFORMATION

Please select from the list below your permanent duty station location (homeport) within one of the 50 states, D.C., Puerto Rico, or a U.S. territory or possession.

Please select

******** Page Break **********

BACKGROUND INFORMATION

Please specify the name of the country or installation where your permanent duty station (homeport) is located.

******** Page Break **********

BACKGROUND INFORMATION

18. Where do you live at your permanent duty station?

- Aboard ship
- Barracks/dorm/BEQ/UEPH/BOQ/UOPH military facility
- Military family housing, on base
- Military family housing, off base
- Privatized military housing that you rent on base
- Privatized military housing that you rent off base
- Civilian/community housing that you own or pay mortgage on
- Civilian/community housing that you rent
- Other

******** Page Break **********

BACKGROUND INFORMATION

Please specify where you live at your permanent duty station.

[ ]

******** Page Break **********

SATISFACTION

19. Taking all things into consideration, how satisfied are you, in general, with each of the following aspects of being in the military?

	Very satisfied	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied	Very dissatisfied
a. Your total compensation (i.e., base pay, allowances, and bonuses)					
b. The type of work you do in your military job					
c. Your opportunities for promotion					
d. The quality of your coworkers					
e. The quality of your supervisor					

******** Page Break **********

SATISFACTION

20. Overall, how satisfied are you with the military way of life?
    - Very satisfied
    - Satisfied
    - Neither satisfied nor dissatisfied
    - Dissatisfied
    - Very dissatisfied

******** Page Break **********

RETENTION

21. How many years of active duty service have you completed (including enlisted, warrant officer, and commissioned officer time)? To indicate less than 1 year, enter "0". To indicate 35 years or more, enter "35".

    [ ] Years

******** Page Break **********

RETENTION

22. Suppose that you have to decide whether to stay on active duty. Assuming you could stay, how likely is it that you would choose to do so?
- Very likely
- Likely
- Neither likely nor unlikely
- Unlikely
- Very unlikely

******** Page Break **********

RETENTION

23. Does your spouse or significant other think you should stay on or leave active duty?
- Strongly favors staying
- Somewhat favors staying
- Has no opinion one way or the other
- Somewhat favors leaving
- Strongly favors leaving

******** Page Break **********

RETENTION

24. Does your family think you should stay on or leave active duty?
- Strongly favors staying
- Somewhat favors staying
- Has no opinion one way or the other
- Somewhat favors leaving
- Strongly favors leaving

******** Page Break **********

RETENTION

25. To what extent do you agree or disagree with the following statements?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a. I enjoy serving in the military.					
b. Serving in the military is consistent with my personal goals.					

c. If I left the military, I would feel like I am starting all over again.					
d. I would feel guilty if I left the military.					
e. Generally, on a day-to-day basis, I am happy with my life in the military.					

(Continued) To what extent do you agree or disagree with the following statements?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
f. It would be difficult for me to leave the military and give up the benefits that are available in the Service.					
g. I would not leave the military right now because I have a sense of obligation to the people in it.					
h. I really feel as if the military's values are my own.					
i. I would have difficulty finding a job if I left the military.					
j. Generally, on a day-to-day basis, I am proud to be in the military.					

(Continued) To what extent do you agree or disagree with the following statements?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
k. If I left the military, I would feel like I had let my country down.					
l. I continue to serve in the military because leaving would require considerable sacrifice.					
m. I feel like being a member of the military can help me achieve what I want in life.					
n. One of the problems with leaving the military would be the lack of available alternatives.					
o. I am committed to making the military my career.					

******** Page Break **********

RETENTION

26. When you leave active duty, how likely is it that you will join a National Guard or Reserve unit?
    - Does not apply, retiring or otherwise ineligible

- Very likely
- Likely
- Neither likely nor unlikely
- Unlikely
- Very unlikely

******** Page Break **********

TEMPO

27. Have you ever made a Permanent Change of Station (PCS)?
    - Yes
    - No

******** Page Break **********

TEMPO

28. How many months has it been since your last PCS? To indicate less than one month, enter "0". To indicate more than 99 months, enter "99".
    [ ] Months

******** Page Break **********

TEMPO

29. In the past 12 months, how many days have you had to work longer than your normal duty day (i.e., overtime)? To indicate none, enter "0".
    [ ] Days

******** Page Break **********

TEMPO

30. In the past 12 months, how many nights have you been away from your permanent duty station (homeport) because of your military duties? To indicate none, enter "0".
    [ ] Nights

******** Page Break **********

TEMPO

31. In the past 24 months, have you been deployed longer than 30 consecutive days?

- Yes
- No

******** Page Break **********

TEMPO

32. Are you currently on a deployment that has lasted longer than 30 consecutive days?
- Yes
- No

******** Page Break **********

TEMPO

33. Where are you currently deployed?
- In one of the 50 states, D.C., Puerto Rico, or a U.S. territory or possession
- Afghanistan
- Iraq
- Other North African, Near Eastern or South Asian country (e.g., Bahrain, Kuwait, Saudi Arabia, Diego Garcia)
- Europe (e.g., Bosnia-Herzegovina, Germany, Italy, Serbia, United Kingdom)
- Former Soviet Union (e.g., Russia, Tajikistan, Uzbekistan)
- East Asia and Pacific (e.g., Australia, Japan, Korea)
- Sub-Saharan Africa (e.g., Kenya, Liberia, South Africa)
- Western Hemisphere (e.g., Cuba, Honduras, Peru)
- Other or not sure

******** Page Break **********

TEMPO

Please select from the list below your deployment location within one of the 50 states, D.C., Puerto Rico, or a U.S. territory or possession.

Please select

******** Page Break **********

TEMPO

Please enter the name of the country or installation where you are currently deployed.

******** Page Break **********

TEMPO

34. In the past 12 months, have you spent more or less time away from your permanent duty station (homeport) than you expected when you first entered the military?
    - Much more than expected
    - More than expected
    - Neither more nor less than expected
    - Less than expected
    - Much less than expected

******** Page Break **********

TEMPO

35. What impact has time away (or lack thereof) from your permanent duty station (homeport) in the past 12 months had on your military career intentions?
    - Greatly increased your desire to stay
    - Increased your desire to stay
    - Neither increased nor decreased your desire to stay
    - Decreased your desire to stay
    - Greatly decreased your desire to stay

******** Page Break **********

READINESS

36. Overall, how well prepared are you to perform your wartime job?
    - Very well prepared
    - Well prepared
    - Neither well nor poorly prepared
    - Poorly prepared
    - Very poorly prepared

******** Page Break **********

READINESS

37. Overall, how well prepared is your unit to perform its wartime mission?
    - Very well prepared
    - Well prepared
    - Neither well nor poorly prepared
    - Poorly prepared
    - Very poorly prepared

******** Page Break **********

READINESS

38. How well has your training prepared you to perform your wartime job?
    - Very well
    - Well
    - Neither well nor poorly
    - Poorly
    - Very poorly

******** Page Break **********

READINESS

39. How well has your training prepared you to perform your wartime job in support of joint operations?
    - Very well
    - Well
    - Neither well nor poorly
    - Poorly
    - Very poorly

******** Page Break **********

STRESS

40. Overall, how would you rate the current level of stress in your work life?
    - Much less than usual
    - Less than usual
    - About the same as usual
    - More than usual
    - Much more than usual

******** Page Break **********

STRESS

41. Overall, how would you rate the current level of stress in your personal life?
    - Much less than usual
    - Less than usual
    - About the same as usual
    - More than usual

Much more than usual

******** Page Break **********

STRESS

42. In the past month, how often have you...

	Never	Almost never	Sometimes	Fairly often	Very often
a. Felt nervous and stressed?					
b. Felt that you were unable to control the important things in your life?					
c. Been upset because of something that happened unexpectedly?					
d. Been angered because of things that were outside of your control?					
e. Felt difficulties were piling up so high that you could not overcome them?					
f. Found that you could not cope with all of the things you had to do?					

******** Page Break **********

DEPLOYMENTS SINCE SEPTEMBER 11, 2001

43. Since September 11, 2001, how many times have you been deployed for any of the following operations? Mark one answer in each row. To indicate none, select "0 times".

	0 times	1 time	2 times	3 or more times
a. Operation Noble Eagle (airport security)				
b. Operation Enduring Freedom (Afghanistan)				
c. Operation Iraqi Freedom				
d. Other				

******** Page Break **********

DEPLOYMENTS SINCE SEPTEMBER 11, 2001

Please specify the other operation for which you were deployed since September 11, 2001.

******** Page Break **********

DEPLOYMENTS SINCE SEPTEMBER 11, 2001

44. Since September 11, 2001, how many times have you been deployed?
    ☐ Times

******** Page Break **********

DEPLOYMENTS SINCE SEPTEMBER 11, 2001

45. Since September 11, 2001, what is the total number of days you have been away from your permanent duty station (homeport)?
    ☐ Days

******** Page Break **********

DEPLOYMENTS SINCE SEPTEMBER 11, 2001

46. Since September 11, 2001, have you been deployed to a combat zone or an area where you drew imminent danger pay or hostile fire pay?
    ○ Yes
    ○ No

******** Page Break **********

DEPLOYMENTS SINCE SEPTEMBER 11, 2001

47. Since September 11, 2001, how many days have you been deployed to a combat zone?
    ☐ Days

******** Page Break **********

DEPLOYMENTS SINCE SEPTEMBER 11, 2001

48. For your most recent deployment, how many months have you been or were you deployed to an area where you drew imminent danger pay or hostile fire pay? Include partial months. For example, even if you were deployed to a combat zone for 2 days, and those days were in different months, enter "2".
    ☐ Months

******** Page Break **********

DEPLOYMENTS SINCE SEPTEMBER 11, 2001

49. Were you involved in combat operations?
- Yes
- No

******** Page Break **********

DEPLOYMENTS SINCE SEPTEMBER 11, 2001

50. Are you currently deployed to a combat zone or an area where you are drawing imminent danger pay or hostile fire pay?
- Yes
- No

******** Page Break **********

DEPLOYMENTS SINCE SEPTEMBER 11, 2001

51. Were any of your deployments since September 11, 2001 longer than you expected?
- Yes
- No

******** Page Break **********

DEPLOYMENTS SINCE SEPTEMBER 11, 2001

52. Since September 11, 2001, have you been under stop-loss at any time?
- Yes
- No

******** Page Break **********

IMPACT OF DEPLOYMENTS

53. While you were away during your most recent deployment, to what extent were the following a concern?

	Very large extent	Large extent	Moderate extent	Small extent	Not a concern
a. Spouse's job or education demands					
b. Managing bills and expenses					
c. Household repairs, yard work, or car maintenance					
d. Loss of income from part-time job					

e. Safety of your family in their community					
f. Your feelings of anxiety or depression					
g. Serious health problems in the family					

(Continued) While you were away during your most recent deployment, to what extent were the following a concern?

	Very large extent	Large extent	Moderate extent	Small extent	Not a concern
h. Serious emotional problems in the family					
i. Technical difficulties communicating with spouse/family					
j. Difficulty maintaining emotional connection with spouse/family					
k. Major financial hardship or bankruptcy					
l. Birth or adoption of a child					
m. Marital problems					
n. Your feelings of loneliness					

(Continued) While you were away during your most recent deployment, to what extent were the following a concern?

	Very large extent	Large extent	Moderate extent	Small extent	Not a concern
o. Managing child care/child schedules					
p. Increased need for child care					
q. Lack of free/personal time					
r. Your difficulty sleeping					
s. Unintended weight gain or loss					
t. Your ability to continue your college education					
u. Other					

******** Page Break **********

IMPACT OF DEPLOYMENTS

Please specify your other concern while you were away during your most recent deployment.

******** Page Break **********

IMPACT OF DEPLOYMENTS

54. After your most recent deployment, to what extent were you likely to... Mark one answer in each row.

	Very large extent	Large extent	Moderate extent	Small extent	Not at all
a. Be more emotionally distant (e.g., less talkative, less affectionate, less interested in social life)?					
b. Appreciate life more?					
c. Get angry faster?					
d. Appreciate your family and friends more?					
e. Drink more alcohol?					
f. Have more confidence in yourself?					
g. Take more risks with your safety?					
h. Be different in another way?					

******** Page Break **********

IMPACT OF DEPLOYMENTS

How were you different after your most recent deployment?

******** Page Break **********

IMPACT OF DEPLOYMENTS

55. Did you receive support services (e.g., support groups, counseling) after returning home from your most recent deployment?

- Yes, and it helped
- Yes, but it did not help
- No, I did not want support services
- No, but I wanted support services
- Don't know

******** Page Break **********

IMPACT OF DEPLOYMENTS

56. Have you had reunion and reintegration support from any of the following sources? Mark "Yes" or "No" for each item.

	Yes	No
a. Family Readiness/Support Group		
b. Military OneSource		
c. Faith based organization (e.g., church, synagogue, mosque)		
d. Services in your civilian community		
e. Other military-sponsored program		
f. Other program		

******** Page Break **********

IMPACT OF DEPLOYMENTS

57. In response to being deployed, did you talk to anyone about... Mark one answer for each item.

	Yes, and it helped me	Yes, but it did not help me	No, and I did not want to talk to anyone about this topic	No, but I wanted to talk to someone about this topic
a. Problem solving?				
b. Coping with stress?				
c. Financial management?				
d. Family issues?				
e. Marital issues?				

(Continued) In response to being deployed, did you talk to anyone about... Mark one answer for each item.

			No, and I did	No, but I wanted to

	Yes, and it helped me	Yes, but it did not help me	not want to talk to anyone about this topic	talk to someone about this topic
f. Dealing with family separations?				
g. Parent/child communication?				
h. Deployment and reunion?				
i. Crisis situations?				
j. Grief and loss?				

******** Page Break **********

IMPACT OF DEPLOYMENTS

58. Which of the following describes your readjustment to being back at home after your most recent deployment?
- Very easy
- Easy
- Neither easy nor difficult
- Difficult
- Very difficult

******** Page Break **********

IMPACT OF DEPLOYMENTS

59. During your most recent deployment, did you have any children ages 18 or under living with you either part-time or full-time?
- Yes, one child
- Yes, more than one child
- No

******** Page Break **********

IMPACT OF DEPLOYMENTS

60. In response to your most recent deployment, did <u>your child(ren)</u> experience any of the following behavioral changes? Mark one answer in each row. Where your child(ren)'s behavior did not change, please mark "No change".

	Increased	No change	Decreased	Don't know
a. Academic performance				
b. Problem behavior at school				
c. Problem behavior at home				

d. Pride in having a military parent				
e. Fear/anxiety				
f. Independence				

(Continued) In response to your most recent deployment, did your child(ren) experience any of the following behavioral changes? Mark one answer in each row. Where your child(ren)'s behavior did not change, please mark "No change".

	Increased	No change	Decreased	Don't know
g. Being responsible				
h. Closeness to family members				
i. Closeness to friends				
j. Distress over discussions of the war in the home, school, or media				
k. Anger about my military requirements				
l. Other behavior(s)				

******** Page Break **********

IMPACT OF DEPLOYMENTS

Please specify what other behavioral change(s) your child(ren) experienced in response to your most recent deployment.

******** Page Break **********

IMPACT OF DEPLOYMENTS

61. How important are the following in your child(ren)'s ability to cope with your deployments? Mark one answer in each row.

	Very important	Important	Moderately important	Somewhat important	Not important
a. Communications with the deployed parent					
b. Spouse/guardian support for the deployment					
c. Spouse/guardian ability to maintain a stable household routine					

d. Caregiver/teacher reaction to deployment					
e. The way family members deal with the deployment					
f. Geographic stability during deployment (i.e., no relocations, changes in schools)					
g. Limited exposure to media coverage of the war					
h. Other					

******** Page Break **********

IMPACT OF DEPLOYMENTS

Please specify other important factors that help your child(ren) cope with deployments.

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

62. During the past 12 months, were you away from your permanent duty station for the following duties?

	Yes	No
a. Exercise		
b. Unit training		
c. Mission support TAD/TDY		
d. Home station training		

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

63. How satisfied are you with deployment compensation and incentives (i.e., tax-free income, family separation pay, hazardous duty pay)?
- Very satisfied
- Satisfied

- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

64. What was your primary reason for being dissatisfied with deployment compensation and incentives?
    - Considering risk and hardship, compensation was too little
    - Other members facing far less risk were getting as much as I was getting
    - Considering the risk and hardship, compensation was too high
    - The incentives do not vary with paygrade
    - Other

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

Please specify why you were dissatisfied with deployment compensation and incentives.

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

65. While you were away during the past 12 months, did you use any of the following to communicate with family or friends?

	Yes	No
a. Internet		
b. Commercial telephone		
c. DSN telephone		
d. Military exchange-provided telephone		
e. Postal/telegram services		
f. Video communications		

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

66. While you were away during the past 12 months, how often did you use the Internet to communicate with family or friends?
    - Daily
    - Three or four times a week
    - One or two times a week
    - Less than once a week
    - Less than once a month

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

67. How satisfied were you with the opportunities (i.e., frequency and duration) you were given to contact family or friends using the Internet while you were away?
    - Very satisfied
    - Satisfied
    - Neither satisfied nor dissatisfied
    - Dissatisfied
    - Very dissatisfied

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

68. Where did you most often access the Internet?
    - Work computer
    - MWR Internet cafe
    - Personal computer with AAFES Internet service at personal expense
    - Personal computer with commercial provider at personal expense

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

69. How much, on average, did you spend per month to purchase Internet access?
    - $0, I used free MWR Internet cafes
    - Less than $40
    - $40 to less than $60
    - $60 to less than $80
    - More than $80

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

70. While you were away during the past 12 months, how often did you use commercial telephones to communicate with family or friends?
    - Daily
    - Three or four times a week
    - One or two times a week
    - Less than once a week
    - Less than once a month

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

71. How much, on average, did you spend per month to use commercial telephones to communicate with family or friends?
    - None
    - Less than $20
    - $20 to less than $40
    - $40 to less than $60
    - $60 or more

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

72. How satisfied were you with the opportunities (i.e., frequency and duration) you were given to communicate with family or friends using commercial telephones while you were away?
    - Very satisfied
    - Satisfied
    - Neither satisfied nor dissatisfied
    - Dissatisfied
    - Very dissatisfied

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

73. While you were away during the past 12 months, how often did you communicate with family or friends using DSN telephones?
    - Daily

- Three or four times a week
- One or two times a week
- Less than once a week
- Less than once a month

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

74. How much, on average, did you spend per month to use a DSN telephone commercial patch to make personal calls using prepaid calling cards?
    - None
    - Less than $20
    - $20 to less than $40
    - $40 to less than $60
    - $60 or more

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

75. How much, on average, did you spend per month to use a DSN telephone commercial patch to make personal calls using other payment methods? (Include costs of calling cards [not prepaid], credit cards, and collect calls.)
    - None
    - Less than $20
    - $20 to less than $40
    - $40 to less than $60
    - $60 or more

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

76. How satisfied were you with the opportunities (i.e., frequency and duration) you were given to communicate with family or friends using DSN telephones while you were away?
    - Very satisfied
    - Satisfied
    - Neither satisfied nor dissatisfied
    - Dissatisfied
    - Very dissatisfied

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

77. While you were away during the past 12 months, how often did you use military exchange-provided telephones to communicate with family or friends?
- Daily
- Three or four times a week
- One or two times a week
- Less than once a week
- Less than once a month

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

78. How much, on average, did you spend per month to use a military exchange-provided telephone to make personal calls using prepaid calling cards?
- None
- Less than $20
- $20 to less than $40
- $40 to less than $60
- $60 or more

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

79. How much, on average, did you spend per month to use a military exchange-provided telephone to make personal calls using other payment methods? (Include costs of calling cards [not prepaid], credit cards, and collect calls.)
- None
- Less than $20
- $20 to less than $40
- $40 to less than $60
- $60 or more

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

80. How satisfied were you with the opportunities (i.e., frequency and duration) you were given to contact family or friends using military exchange-provided telephones while you were away?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied

- Very dissatisfied

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

81. How satisfied were you with the postal/telegram service while you were away?
    - Very satisfied
    - Satisfied
    - Neither satisfied nor dissatisfied
    - Dissatisfied
    - Very dissatisfied

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

82. What was your primary problem with the postal service?
    - I did not receive all of the letters/packages that were sent to me
    - I received too much mail
    - There was far too much delay in receiving mail
    - Packages were delivered to me while I was in a war zone and I could not do anything with them
    - Other

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

Please specify your primary problem with the postal service.

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

83. While you were away during the past 12 months, how often did you use video communications to communicate with family or friends?
    - Daily

- Three or four times a week
- One or two times a week
- Less than once a week
- Less than once a month

******** Page Break **********

DETAILS ON OPS/PERSTEMPO

84. How satisfied were you with the opportunities (i.e., frequency and duration) you were given to contact family or friends using video communications while you were away?
    - Very satisfied
    - Satisfied
    - Neither satisfied nor dissatisfied
    - Dissatisfied
    - Very dissatisfied

******** Page Break **********

PERMANENT CHANGE OF STATION (PCS) MOVES

85. During your active duty career, how many PCSs have you made? (Include PCS for a remote or unaccompanied assignment.)
    ____ PCS moves

******** Page Break **********

PERMANENT CHANGE OF STATION (PCS) MOVES

86. During your active duty career, how many times did your family members move to a new location because of your PCS?
    ____ Times

******** Page Break **********

PERMANENT CHANGE OF STATION (PCS) MOVES

87. For your most recent PCS move, to what extent were the following a problem?

	Very large extent	Large extent	Moderate extent	Small extent	Not a problem
a. Change in PCS orders (report date or destination)					
b. Hours and/or location of offices providing PCS assistance					

c. Waiting for permanent housing to become available					
d. Selling or renting out your former residence					
e. Purchasing or renting your current residence					
f. Amount of time to prepare for move					
g. Packing of household goods					
h. Shipping/storing household goods					

(Continued) For your most recent PCS move, to what extent were the following a problem?

	Very large extent	Large extent	Moderate extent	Small extent	Not a problem
i. Availability of non-base temporary lodging or nearby commercial lodging					
j. Making a reservation for PCS lodging					
k. Temporary lodging expenses					
l. Costs related to security deposit(s)					
m. Costs of moving pets					
n. Costs of moving vehicles					
o. Costs of setting up new residence (e.g., curtains, carpeting, painting)					

(Continued) For your most recent PCS move, to what extent were the following a problem?

	Very large extent	Large extent	Moderate extent	Small extent	Not a problem
p. Settling damage claims					
q. Non-reimbursed transportation costs incurred during the move					
r. Timeliness of reimbursements					
s. Accuracy of reimbursements					
t. Change in cost of living					
u. Transferability of college credits					
v. Time off at destination to complete move					

******** Page Break **********

PERMANENT CHANGE OF STATION (PCS) MOVES

88. For your most recent PCS move, to what extent were the following a problem?

	Very large extent	Large extent	Moderate extent	Small extent	Not a problem

a. Loss or decrease of spouse income					
b. Spouse employment					
c. Spouse changing schools					
d. Obtaining certifications necessary for my spouse's employment					
e. Availability of special medical and/or educational services for my spouse					

******** Page Break **********

PERMANENT CHANGE OF STATION (PCS) MOVES

89. For your most recent PCS move, to what extent were the following a problem?

	Very large extent	Large extent	Moderate extent	Small extent	Not a problem
a. My child(ren) changing schools					
b. Availability of child care					
c. Availability of special medical and/or educational services for my child					

******** Page Break **********

DETAILS ON READINESS

90. Was any new equipment fielded to your unit in the past 24 months?
- Yes
- No

******** Page Break **********

DETAILS ON READINESS

91. How satisfied are you with the training you received for any new equipment fielded to your unit in the past 24 months?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

DETAILS ON READINESS

92. Was any of the new equipment intended to improve your organization's ability to operate in a joint environment?
- Yes
- No

******** Page Break **********

DETAILS ON READINESS

93. How satisfied are you with new equipment intended to improve your organization's ability to operate in a joint environment?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

DETAILS ON READINESS

94. In the past 12 months, have you...

	Yes	No	No, not available
a. Participated in unit training exercise (mission rehearsal)?			
b. Participated in live fire training?			
c. Participated in a joint (interservice, interagency, or intergovernmental) training exercise?			
d. Received individual training or taken a military-related course (either skill/technical or professional development) via the Internet?			
e. Participated in a virtual (human in a simulator) training event?			
f. Participated in a constructive (computer-generated) training event?			

******** Page Break **********

DETAILS ON READINESS

95. How did participation in unit training in the last 12 months affect your personal readiness level?
- Greatly increased

- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

DETAILS ON READINESS

96. How did participation in unit training in the past 12 months affect your unit's readiness level?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

DETAILS ON READINESS

97. How satisfied were you with the unit training in which you participated in the last 12 months?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

DETAILS ON READINESS

98. How did participation in live fire training in the past 12 months affect your personal readiness level?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

DETAILS ON READINESS

99. How did participation in live fire training in the past 12 months affect your unit's readiness

level?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

DETAILS ON READINESS

100. How satisfied were you with the live fire training in which you participated in the past 12 months?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

DETAILS ON READINESS

101. How did participation in joint training in the past 12 months affect your personal readiness level?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

DETAILS ON READINESS

102. How did participation in joint training in the past 12 months affect your unit's readiness level?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

DETAILS ON READINESS

103. How satisfied were you with the joint training in which you participated in the past 12 months?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

DETAILS ON READINESS

104. How did taking a military-related course via the Internet in the past 12 months affect your personal readiness level?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

DETAILS ON READINESS

105. How satisfied were you with the military-related course via the Internet in which you participated in the past 12 months?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

DETAILS ON READINESS

106. How did participation in a virtual (human in a simulator) training event in the past 12 months affect your personal readiness level?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

DETAILS ON READINESS

107. How satisfied were you with the virtual (human in a simulator) training event in which you participated in the past 12 months?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

DETAILS ON READINESS

108. How did participation in a constructive (computer-generated) training event in the past 12 months affect your personal readiness?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

DETAILS ON READINESS

109. How satisfied were you with the constructive (computer-generated) training event in which you participated in the past 12 months?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

DETAILS ON READINESS

110. How many days per week do you participate in at least 30 minutes of physical training?
- None
- 1 or 2 days
- 3 or 4 days

- [ ] 5 or more days

******** Page Break **********

DETAILS ON READINESS

111. When did you last update your Record of Emergency Data?

a. Month last updated: Please select month

b. Year last updated: Please select year

******** Page Break **********

DETAILS ON READINESS

112. When do you verify the accuracy of your Record of Emergency Data?

	Yes	No
a. Regularly; usually every 6 months	☐	☐
b. Before deployments	☐	☐
c. As part of PCS moves	☐	☐
d. Change in personal information (e.g., address, phone)	☐	☐
e. Change in marital status and/or other dependents	☐	☐
f. Other	☐	☐

******** Page Break **********

DETAILS ON READINESS

Please specify when you verify the accuracy of your Record of Emergency Data.

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

113. How satisfied are you with your opportunities to pursue an education?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

114. While you were away during the past 12 months, did you use the Internet to participate in off-duty, voluntary education courses?
- Yes
- No

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

115. Would you have liked to use the Internet to participate in off-duty, voluntary education courses while you were away in the past 12 months?
- Yes
- No

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

116. While you were away during the past 12 months, how often did you use the Internet to participate in off-duty, voluntary education courses?
- Daily
- Three or four times a week
- One or two times a week
- Less than once a week
- Less than once per month

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

117. How satisfied were you with the opportunities you were given to participate in off-duty, voluntary education coursework, using the Internet while you were away?
- Very satisfied
- Satisfied

- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

118. In your military career, have you ever...

	Yes	No
a. Taken any basic skills education courses?		
b. Taken any off-duty vocational/technical courses (do not include MOS/AFSC/Rating instruction)?		
c. Taken any off-duty college-level courses?		
d. Taken any off-duty graduate school courses?		
e. Taken any off-duty civilian post-secondary distance learning courses?		

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

119. How did taking basic skills education courses affect your level of performance at your military job?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

120. How did taking basic skills education courses affect your chances for promotion?
- Greatly increased
- Increased
- Neither increased nor decreased

- Decreased
- Greatly decreased

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

121. How did taking off-duty vocational/technical courses affect your level of performance at your military job?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

122. How did taking off-duty vocational/technical courses affect your chances for promotion?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

123. How did taking off-duty college-level courses affect your level of performance at your military job?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

124. How did taking off-duty college-level courses affect your chances for promotion?
- Greatly increased

- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

125. How did taking off-duty graduate school courses affect your level of performance at your military job?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

126. How did taking off-duty graduate school courses affect your chances for promotion?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

127. How did taking off-duty civilian post-secondary distance learning affect your level of performance at your military job?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

128. How did taking off-duty civilian post-secondary distance learning affect your chances for promotion?
- Greatly increased
- Increased
- Neither increased nor decreased
- Decreased
- Greatly decreased

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

129. In the past 12 months, have you taken AFLOAT College Education courses?
- Yes
- No

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

130. In the past 12 months, how satisfied were you with the AFLOAT College Education courses?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

131. In the past 12 months, have you taken EArmyU courses?
- Yes
- No

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

132. In the past 12 months, how satisfied were you with the EArmyU courses?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied

- Very dissatisfied

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

133. In the past 12 months, have you taken Community College of the Air Force (CCAF) instructor certification courses?
- Yes
- No

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

134. In the past 12 months, how satisfied were you with the CCAF instructor certification courses?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

135. In the past 12 months, have you taken full-time officer graduate education program courses?
- Yes
- No

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

136. In the past 12 months, how satisfied were you with the full-time officer graduate education program courses?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

137. In the past 12 months, have you taken courses using military tuition assistance?
- Yes
- No

******** Page Break **********

OFF-DUTY EDUCATION FOR SERVICE MEMBERS

138. How satisfied were you with the military tuition assistance provided for the courses in the past 12 months?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

MYDODBENEFITS PORTAL

The myDoDbenefits portal allows DoD sponsors, eligible spouses, and family members over the age of 18 to verify the accuracy of their DEERS information, to update contact information to DEERS, view healthcare eligibility, manage TRICARE enrollments, and review Servicemembers' Group Life Insurance (SGLI) eligibility. This new online portal can be accessed at www.dmdc.osd.mil/mydodbenefits.

139. In the past 12 months, have you accessed the myDoDbenefits Web site (www.dmdc.osd.mil/mydodbenefits)?
- Yes
- No

******** Page Break **********

MYDODBENEFITS PORTAL

140. What is your primary reason for not using the myDoDbenefits Web site (www.dmdc.osd.mil/mydodbenefits) in the past 12 months?
- Not familiar with the myDoDbenefits Web site
- Did not need to update my personal information and/or did not need benefit information
- Concerned about confidentiality
- Prefer to talk on the telephone with a consultant
- MyDoDbenefits was hard to use
- Use another online Web site

- Other

******** Page Break **********

MYDODBENEFITS PORTAL

What was the other reason why you did not use the myDoDbenefits Web site (www.dmdc.osd.mil/mydodbenefits) in the past 12 months?

******** Page Break **********

MYDODBENEFITS PORTAL

141. How satisfied are you with the myDoDbenefits Web site (www.dmdc.osd.mil/mydodbenefits)?
- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

******** Page Break **********

PERMANENT CHANGE OF STATION (PCS) MOVES

142. Assuming you were going to PCS in the next 12 months, how desirable would each of the following assignments be to you in terms of quality of life?

	Highly desirable	Desirable	Neither desirable nor undesirable	Undesirable	Highly undesirable
a. Unaccompanied tour to Korea (24 months)					
b. Unaccompanied tour to Korea (12 months)					
c. Accompanied tour to Korea (36 months)					
d. Accompanied tour to Korea (24 months)					

e.	Unaccompanied tour to Guam (24 months)
f.	Accompanied tour to Guam (36 months)
g.	Unaccompanied tour to Japan (24 months)

(Continued) Assuming you were going to PCS in the next 12 months, how desirable would each of the following assignments be to you in terms of quality of life?

		Highly desirable	Desirable	Neither desirable nor undesirable	Undesirable	Highly undesirable
h.	Accompanied tour to Japan (36 months)					
i.	Unaccompanied tour to Germany (24 months)					
j.	Accompanied tour to Germany (36 months)					
k.	Unaccompanied tour to Bahrain (12 months)					
l.	Accompanied tour to Bahrain (24 months)					
m.	Unaccompanied tour to Saudi Arabia (12 months)					
n.	Accompanied tour to Saudi Arabia (24 months)					

(Continued) Assuming you were going to PCS in the next 12 months, how desirable would each of the following assignments be to you in terms of quality of life?

		Highly desirable	Desirable	Neither desirable nor undesirable	Undesirable	Highly undesirable
o.	Unaccompanied tour to Kuwait (12 months)					
p.	Accompanied tour to Kuwait (24 months)					
q.	Unaccompanied tour to Cuba (12 months)					
r.	Accompanied tour to Cuba (24 months)					
s.	Unaccompanied tour to Turkey (15 months)					
t.	Accompanied tour to Turkey (24 months)					

******** Page Break **********

FINANCIAL HEALTH

143. Which of the following best describes the financial condition of you (and your spouse)?
- Very comfortable and secure
- Able to make ends meet without much difficulty
- Occasionally have some difficulty making ends meet
- Tough to make ends meet but keeping your head above water
- In over your head

******** Page Break **********

FINANCIAL HEALTH

144. Did you apply for the Defense Department's Family Subsistence Supplemental Allowance (FSSA) in the past 12 months?
- Yes
- No, I did not need the FSSA
- No, I am not aware of the FSSA program

******** Page Break **********

FINANCIAL HEALTH

145. Did you receive the Defense Department's Family Subsistence Supplemental Allowance (FSSA) in the past 12 months?
- Yes
- No

******** Page Break **********

DOD/VA BENEFITS

146. Which of the following would be your most preferred method of receiving benefits-related information and services from the Department of Defense (DoD) and Veterans Affairs (VA)? Select one item from the list below.

Please select

******** Page Break **********

DOD/VA BENEFITS

Please specify your most preferred method of receiving benefits-related information and services from the Department of Defense (DoD) and Veterans Affairs (VA).

******** Page Break **********

DOD/VA BENEFITS

147. Which of the following would be your second most preferred method of receiving benefits-related information and services from the Department of Defense (DoD) and Veterans Affairs (VA)? Select one item from the list below.

Please select

******** Page Break **********

DOD/VA BENEFITS

Please specify your second most preferred method of receiving benefits-related information and services from the Department of Defense (DoD) and Veterans Affairs (VA).

******** Page Break **********

DOD/VA BENEFITS

148. Which of the following would be your third most preferred method of receiving benefits-related information and services from the Department of Defense (DoD) and Veterans Affairs (VA)? Select one item from the list below.

Please select

******** Page Break **********

DOD/VA BENEFITS

Please specify your third most preferred method of receiving benefits-related information and services from the Department of Defense (DoD) and Veterans Affairs (VA).

******** Page Break **********

DOD/VA BENEFITS

149. How aware are you of the DoD/VA benefits, programs, and services that are available to Service members who have been wounded, become ill, or been injured as a result of a combat-related injury or illness?
- Very aware
- Aware
- Neither aware nor unaware
- Unaware
- Very unaware

******** Page Break **********

DOD/VA BENEFITS

150. How confident are you that, should you become wounded, ill, or injured, you and your family would be provided these DoD/VA benefits, programs, and services?
- Very confident
- Confident
- Neither confident nor unsure
- Unsure
- Very unsure

******** Page Break **********

THRIFT SAVINGS PLAN

151. Do you contribute to the Thrift Savings Plan (TSP), a retirement savings plan for Uniformed Service members and federal civilian employees?
- Yes
- No, but I know about TSP
- No, and I do not know about TSP
- Don't know

******** Page Break **********

THRIFT SAVINGS PLAN

152. How have you learned about the Thrift Savings Plan (TSP)? Mark "Yes" or "No" for each item.

	Yes	No
a. Defense Finance & Accounting Service (DFAS) web site		
b. TSP Web site		
c. Briefing on my installation		
d. My chain of command		
e. Newspaper or newsletter article		
f. Friends, relatives, and/or coworkers		

(Continue) How have you learned about the Thrift Savings Plan (TSP)? Mark "Yes" or "No" for each item.

	Yes	No
g. Financial advisor		
h. Military OneSource		
i. "Military Saves" campaign		
j. Other Web site		
k. Other		

******** Page Break **********

THRIFT SAVINGS PLAN

Please specify the other Web site by which you have learned about the TSP.

******** Page Break **********

THRIFT SAVINGS PLAN

Please specify the other means by which you have learned about the TSP.

******** Page Break **********

THRIFT SAVINGS PLAN

153. The Thrift Savings Plan (TSP) will soon have a new option called a Roth TSP. Have you heard of the Roth TSP?
- Yes
- No

******** Page Break **********

THRIFT SAVINGS PLAN

154. How have you learned about the Roth Thrift Savings Plan (TSP)? Mark "Yes" or "No" for each item.

	Yes	No
a. Defense Finance & Accounting Service (DFAS) web site		
b. TSP Web site		
c. Briefing on my installation		
d. My chain of command		
e. Newspaper or newsletter article		
f. Friends, relatives, and/or coworkers		

(Continued) How have you learned about the Roth Thrift Savings Plan (TSP)? Mark "Yes" or "No" for each item.

	Yes	No
g. Financial advisor		
h. Military OneSource		
i. "Military Saves" campaign		
j. Other Web site		
k. Other		

******** Page Break **********

THRIFT SAVINGS PLAN

Please specify the other Web site by which you have learned about the Roth TSP.

******** Page Break **********

THRIFT SAVINGS PLAN

Please specify the other means by which you have learned about the Roth TSP.

******** Page Break **********

THRIFT SAVINGS PLAN

155. Are you aware of the various investment choices available in the Thrift Savings Plan (TSP)?
- Yes
- No, and I do not want to know about the various TSP investment choices
- No, but I would like to know about the various TSP investment choices

******** Page Break **********

THRIFT SAVINGS PLAN

156. During the last 12 months, have you felt unduly pressured by your chain of command to contribute to the Thrift Savings Plan (TSP)?
- Yes
- No

******** Page Break **********

THRIFT SAVINGS PLAN

157. What is your main reason for not contributing to the Thrift Savings Plan (TSP)? Select one item from the list below.

- I do not have the extra money in my pay to save in TSP
- I am not familiar enough with the TSP
- I was advised that I should not contribute to the TSP
- I am familiar with the TSP but have chosen to invest in other savings vehicles
- Other

******** Page Break **********

THRIFT SAVINGS PLAN

Please specify the other reason for not contributing to the TSP.

******** Page Break **********

MOTORCYCLES

158. Are you licensed to operate a motorcycle?

- Yes
- No

******** Page Break **********

MOTORCYCLES

159. Do you own a motorcycle?

- Yes
- No

******** Page Break **********

MOTORCYCLES

160. Is your motorcycle registered on a military installation?

- Yes
- No

******** Page Break **********

MOTORCYCLES

161. How many motorcycle training courses have you ever taken?
- Zero
- One
- Two
- Three
- Four or more

******** Page Break **********

ASSIGNMENT INFORMATION

162. Are you and your spouse currently assigned to the same installation?
- Yes
- No

******** Page Break **********

ASSIGNMENT INFORMATION

163. Are you and your spouse assigned within 50 miles of each other?
- Yes
- No

******** Page Break **********

ASSIGNMENT INFORMATION

164. Are you and your spouse assigned within 100 miles of each other?
- Yes
- No

******** Page Break **********

ASSIGNMENT INFORMATION

165. Do you and your spouse commute to and from the same residence for duty?
- Yes
- No

******** Page Break **********

ASSIGNMENT INFORMATION

166. In the past two years, have you and your spouse lived apart for any of the following reasons?

	Yes	No
a. Assignment		
b. Deployment		
c. Temporary Duty		
d. Other reasons		

******** Page Break **********

ASSIGNMENT INFORMATION

167. What is the primary reason you and your spouse did not live together?

- Employment
- Medical reason
- Education
- Financial reason
- Strained relationship
- Other

******** Page Break **********

ASSIGNMENT INFORMATION

168. In the past two years, how long did you live apart due to assignment(s)?

- Less than one month
- 1-6 months
- 7-12 months
- 13-18 months
- 19-24 months

******** Page Break **********

ASSIGNMENT INFORMATION

169. In the past two years, how long did you live apart due to deployment(s)?

- Less than one month
- 1-6 months
- 7-12 months
- 13-18 months

19-24 months

******** Page Break **********

ASSIGNMENT INFORMATION

170. In the past two years, how long did you live apart due to Temporary Duty?

Less than one month
1-6 months
7-12 months
13-18 months
19-24 months

******** Page Break **********

ASSIGNMENT INFORMATION

171. In the past two years, how long did you live apart due to other reasons?

Less than one month
1-6 months
7-12 months
13-18 months
19-24 months

******** Page Break **********

SOCIAL PRACTICES

172. Are the following statements true or false?

	True	False	Don't know
a. When you are in a social setting, it is your duty to stop a fellow Service member from doing something potentially harmful to themselves or others.			
b. If you tell a Sexual Assault Response Coordinator (SARC) or a Victim's Advocate (VA) that you were sexually assaulted, it is your decision whether the SARC/VA provides your name to your commander.			

******** Page Break **********

173. Where did you take this survey? Mark "Yes" or "No" for each item.

	Yes	No
a. Deployed location (on land)	☐	☐
b. On ship at sea	☐	☐
c. On board a ship in port	☐	☐
d. TDY or training location	☐	☐
e. Home/barracks	☐	☐
f. Work/office	☐	☐
g. Installation/ship library	☐	☐
h. Installation/ship recreation center	☐	☐
i. Non-military location (e.g., public library, Wi-Fi hotspot)	☐	☐

j. Other location on installation

******** Page Break **********

TAKING THE SURVEY

Please specify where you took this survey.

******** Page Break **********

TAKING THE SURVEY

174. If you have comments or concerns that you were not able to express in answering this survey, please enter them in the space provided. Your comments will be viewed and considered as policy deliberations take place. Any comments you make on this questionnaire will be kept confidential, and no follow-up action will be taken in response to any specifics reported. Your feedback is useful and appreciated

******** Page Break **********

175. If you have any additional comments or concerns, please feel free to enter them below.

******** Page Break **********

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13. SUPPLEMENTARY NOTES

14. ABSTRACT

The Department of Defense is committed to the reduction in suicide events, which erodes good order and discipline, through the implementation of suicide prevention programs. This study examines the efforts in the military and civilian population to decrease the suicide rate and to determine what tools a commander can use based on the best evidence available.

The research uses data from the Center for Disease Control, the Department of Defense Suicide Event Reports, and the Defense Manpower Data Center to identify individuals who are at a higher risk for suicide. The study compares separate demographic groups based on perceived stress, an identified risk factor for suicide.

The research specifically targets the perceived stress levels between the ranks of military members as well as the perceived stress levels between the four branches of the U.S. Armed Forces. Results suggest mean stress levels differed by rank and service, indicating the benefits of screening for higher risk individuals. Of note is the difference between the increases in perceived mean stress level between each branch of service. Given the differences, the Department of Defense can benefit from further research evaluating the effectiveness of suicide prevention programs available from civilian and military sectors.

15. SUBJECT TERMS
Suicide, Risk Factors, Suicide Prevention, Stress

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