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COLLEGE OF COMMUNICATON

THE ROLE OF COMMUNICATION, PRIOR EXPERIENCE AND BELIEFS AS
FACTORS INFLUENCING COMBAT STRESS RECOMMENDATIONS FROM
MILITARY SPOUSES

By

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ABSTRACT

Encouraging help-seeking behavior for Combat Operational Stress Reaction (COSR) among military service members is an important factor in maintaining military readiness and military family quality of life. This research explores the role that military spouses play in encouraging help-seeking behavior among service members using a hybrid model that merged the Theory of Planned Behavior (TPB) with elements of Protection Motivation Theory (PMT) to understand spouses' behavior intention. Six predictor variables were explored during focus group meetings and ultimately incorporated into questions in an online survey completed by 306 military spouses of service members from all branches of service. The six predictor variables were analyzed using multiple regression and simple regression to determine their significance in predicting spouse behavior intention for service members to seek help at military and NON-military treatment facilities.

The research focused on five hypotheses and seven research questions. The hypotheses focused on information sources and usefulness about COSR, the amount of direct experience with COSR, the degree of favorable outcomes of COSR medical treatment, the perceived stigma associated with combat stress, the perceived vulnerabilities which included risk and severity, normative beliefs about help-seeking and the perceived military spouse efficacy to encourage help-seeking behavior at both military and NON-military treatment facilities. The research questions provided a range of generalized information about the variables.

Statistical analyses indicated that spouses who report that they have more military sources that provide useful information, about combat stress, are also more likely to (1) report more favorable beliefs about military care outcomes, (2) recognize the risks and severity of combat stress, and (3) feel that they are capable of effectively making recommendations that service members seek care at a military facility. Spouses with more direct experience with combat stress also are more likely to report favorable beliefs about outcomes resulting from military health care. Spouses who have more favorable outcome beliefs, higher perceptions of risk and severity (vulnerability), plus greater general and personal efficacy are more likely to encourage their service members to seek help at a military care facility.

A positive relationship was found between useful NON-military information sources about combat stress and behavioral intentions to recommend care at a NON-military care facility. In addition, spouses who have more useful NON-military information report higher levels of perceived stigma associated with combat stress. Direct behavioral NON-military care experiences are positively related to beliefs about favorable outcomes resulting from care at NON-military facilities. Three variables were found to be predictors of behavior intentions. The spouses who have (1) favorable outcome beliefs, (2) who experience normative expectations and are motivated to comply with these norms, and (3) who feel greater efficacy are more likely to encourage service members to seek help at a NON-military care facility.

CHAPTER 1

INTRODUCTION

Problem Statement

Military service members belong to a unique community of superiors, peers, subordinates and families. This community relies on its members to support one another during the performance of assigned duties in some of the world's most challenging physical and psychological environments (Fillion, Clements, Averill, and Vigil, 2002). The mental health of service members plays an important role in determining their fitness for these challenging assignment and missions (Fillion et al., 2002). Service members are expected to withstand the stress of their duties while accomplishing their assignments and supporting their fellow service members. They are also expected to serve in combat which exposes them to traumatic events that can have an adverse effect on their mental health (Hoge et al., 2004; Hoge, Auchterlonie, and Milliken, 2006). This exposure can lead to a condition known as Combat/Operational Stress Reaction (COSR). COSR is a term used by the military to describe the physical, psychological and behavioral side effects of experiencing a traumatic event or cumulative exposure to many stressors (Arrit, et al, 2006). This term was created to specifically address concerns that deal with symptoms associated with active duty military personnel (VA/DoD Clinical Practice Guideline Working Group, 2003).

Mental Health Treatment and Confidentiality

COSR is treatable, and full recovery from the condition is possible. Treatment for COSR is typically offered to service members in military health care facilities. Military treatment facilities function differently than civilian health care facilities in that Commanders and Department of Defense employees are allowed access to service members' health records (Jeffrey, Rankin, and Jeffrey, 1992; Security and Privacy, 2005). Traditional physician/patient confidentiality does not apply to service members (Eisenhower Army Medical Center, 2003; Security and Privacy, 2005). Their health records are considered government property and knowing the health of service

members is considered vital to military unit functionality (Jeffrey et al, 1992). Therefore, service members must weigh the cost and benefits about seeking help for COSR at a military care facility with the knowledge that their health information can be shared with their superiors (Britt, 2000; Taylor and Johnson, 1994). Some researchers argue that this is one of the underlying reasons that few service members choose to seek COSR treatment (Britt, 2000; Taylor and Johnson, 1994).

Stigma

Researchers also propose that there can be a stigma associated with COSR and mental illness in general (Koenen, Goodwin, Struening, Hellman and Guardino, 2003). Moreover there is evidence that because of mental health stigma, people resist getting help from mental health specialists (Barney, Griffiths, Jorm, and Christensen, 2006; Corrigan, 2004). Some researchers posit that underutilization of military treatment facilities is due to the lack of confidentiality coupled with a stigma that service members associate with seeking help for mental illness (Brant, 2005; Britt, 2000; Fillion et al., 2002; Finer, 2005; Friedman, 2005).

Within the military community it is commonly understood that service members believe that there is a stigma toward receiving treatment for traumatic stress, including COSR (Association of the United States Army[AUSA], 2005; Brant, 2005; Britt, 2000; Figley, 2005; Fillion et al., 2002; Finer, 2005; Friedman, 2005; Gilgoff et al., 2004; Glassman, 2005; Hess, 2005; Hoge et al., 2004). One of the most prevalent views of COSR stigma is that seeking treatment for traumatic stress is perceived as a weakness by fellow service members and superiors (Fillion et al., 2002). This can adversely affect service members' potential for promotion because weak service members are viewed as being unable to perform assigned duties (Britt, 2000; Fillion et al., 2002). Historically, weakness is associated with unmanly behavior (Scott, 2004). This label may prevent service members from bonding with their peers (Britt, 2000). It also makes the service members more vulnerable to exclusion from the military camaraderie that is essential for mentoring and unit cohesion (Britt, 2000; Fillion et al., 2002).

In the case of service members, disclosing a psychological problem is seen as carrying more stigma than simply disclosing a medical problem (Britt, 2000). This is notable because many medical problems could be equally likely to end a service

member's career (Britt, 2000). Admitting to psychological problems, in particular, is perceived to be damaging to a service members standing and career opportunities (Britt, 2000). However, once the service member leaves the military, disclosing symptoms to Veteran's Affairs is deemed to be less stigmatizing (Friedman, 2005).

Health Risks

There are many risks that are associated with failure to address psychological problems. A situation with large numbers of service members suffering from untreated traumatic stress conditions has the potential to reduce the effectiveness of the military community to support one another, which may adversely affect long term mission outcomes (Fillion et al., 2002). Untreated COSR increases the severity of the symptoms which can lead to soldiers leaving the service (willingly or unwillingly). When COSR goes untreated it may also result in increased long term care costs as acute symptoms progress into chronic conditions. This may prompt soldiers to seek treatment through the Veterans Affairs health care system (Hoge et al., 2006).

Additionally, if COSR becomes severe and goes untreated it can become Post-traumatic Stress Disorder (PTSD) which can result in secondary PTSD symptoms developing among service member families (Dirkzwager, Bramsen, Ader and Van de Ploeg, 2005; Figley, 2005). This can also have other undesired effects on spouses and family members (Jordan et al., 1992; Kashdan, Frueh, Knapp, Hebert and Magruder, 2006) which may increase the financial burden (Solomon, 2003) and decrease quality of life for military families. Ultimately this can impact the retention and recruitment of service members (Cobbold, 2005).

Research has found that supportive reactions from significant others increases the likelihood of disclosing mental health problems and seeking mental health care (Bolton, Glenn, Orsillo, Roemer and Litz, 2003; Chadda, Agarwal, Singh, and Raheja, 2001). A better understanding of the concerns about mental health confidentiality and the stigma associated with COSR can be important in seeking and receiving the required care. One potential strategy to reduce these concerns is to facilitate military spouses' awareness and understanding of COSR and to promote their willingness to encourage help-seeking behaviors for traumatic stress.

Military Spouses

Figley (1993) argues that the “family unit” needs to be considered when dealing with issues related to military stressors. Spouses, whether alone or with children, are critical players when responding to the stress of military life. Knox and Price (1999, p.132) further argue that spouses attitudes toward military life in particular are key factors influencing “the retention of military personnel as well as individual and organizational readiness.” Studies also show that military spouses are major sources of support for their service members (Biddle, Elliott, Creamer, Forbes and Devilly, 2002). Spouses, therefore, will be the focal point for this study.

Purpose

The purpose of this research is to investigate, among military spouses, (1) their awareness of COSR symptoms, (2) their perceptions about the health risks associated with COSR, (3) their perceptions about the norms and stigma risk associated with COSR, (4) their perceptions about the response efficacy and their personal efficacy in addressing COSR, (5) their prior experiences in dealing with health issues, including combat stress and (6) where they receive their information about COSR including the perceived usefulness of this information. These six variable groups will be used to predict military spouses’ behavioral intentions to recommend help-seeking behaviors in the event that their family service member presents symptoms of COSR. The research objective is to identify theoretically grounded variables that can be used to predict whether and under what conditions spouses will encourage “at risk” military service members to seek help for COSR.

Organization of Thesis

Chapter one introduces the problem statement and purpose of this thesis. Chapter two reviews the literature associated with traumatic stress, COSR, stigma, help-seeking behaviors and theories that can be used to predict health-related behavior. This chapter also presents the studies, hypothesis and research questions. Chapter three discusses the methods used to gather and analyze data resulting from focus groups, a pilot survey and an online survey. Chapter four details the survey analysis, results and conclusions. Chapter five discusses the survey findings, study limitations

and recommendations for future research. The appendices and references provide supporting documentation.

CHAPTER 2

LITERATURE REVIEW

Introduction

Traumatic stress is a condition that has been studied extensively as a result of the large number of Vietnam veterans suffering from the disease (Scott, 2004; Spiller, 1990). This research created the foundation for newer studies in the 1990s (Jones, Hyams and Wessely, 2003) and more recently when interest in this topic was renewed because of the Desert Storm and the Operations Enduring Freedom (OEF) and the Operation Iraqi Freedom (OIF) conflicts (Rona, Hyams, Wessely, 2005). Results of these studies have shown that traumatic stress treatment effectiveness is improved when treatment begins as soon as symptoms begin to occur (Lipton, 1994, p. 6; United States Government Accountability Office [GAO-05-287], 2005). This early treatment reduces the severity of the symptoms (Department of the Army Headquarters Field Manual 6-22.5 [FM 6-22.5], 2000; GAO-05-287, 2005) and limits secondary effects of the condition on families (Dirkzwager et al. 2005; GAO-05-287, 2005; Monroe, Shay, Fisher, Makary, Rapperport and Zimering, 1995).

Based on continued traumatic stress research, screening procedures have been developed to identify service members with high risk indicators (Hoge et al., 2004; Hoge et al., 2006; Kean, Caddell and Taylor, 1988; King, King, Fairbank, Keane and Adams, 1993). The recent increase in exposure of service members to combat during OEF and OIF has resulted in additional numbers of service members with added traumatic stress risk factors (Hoge et al, 2004; Hoge et al, 2006). Military health organizations are using the newly developed screening procedures on service members deployed to OEF/OIF and tracking treatment services that are provided. However, service members are not seeking traumatic stress treatment services in the numbers expected by military health professionals (Hoge et al., 2004; Hoge et al., 2006). Unfortunately many of these screening procedures involve post-deployment health surveys that when warranted send service members to see a medical or psychological health professional in full view

of fellow service members (Britt, 2000). This lack of privacy regarding consultation with mental health care providers may be contributing to the stigma associated with help-seeking for traumatic stress experienced by military personnel.

Combat/Operational Stress Reaction

Combat/Operational Stress Reaction (COSR) is just one of the most recent names for a syndrome that has a long history among the U.S. military. One of the earliest named instances of the disorder dates to the American Civil War where the term "Da Costa's Syndrome" was used (United States Department of Veterans Affairs [VA], 2005). Other terms such as "disease of the soul" or "neurasthenia" were used in the years leading up to World War I but the labels were for the most part only known to medical academics (Spiller, 1990). During WWI, the phrases "shell shock" or "war neurosis" were commonly used in military circles to describe these health problems among military personnel (Spiller, 1990). During WWII the syndrome was known as battle fatigue, combat exhaustion, or operational fatigue (Hyam, Wignall and Roswell, 1996) and the prevalence estimates indicate approximately one combat stress casualty for every three service members wounded in Europe (FM 6-22.5, 2000). During the Korean War and Vietnam, the term "combat fatigue" was used (Hyam et al., 1996) and the diagnosis transformed into neuropsychiatric casualty and then to Post-Vietnam Syndrome (Spiller, 1990). The diagnosis name, Post-Vietnam Syndrome, was used by the members in the anti-war effort as a tool in the fight to bring soldiers home from the Vietnam War, and brought the disorder into the public consciousness for the first time in a significant manner (Spiller 1990). The name for the condition was then changed to Post Traumatic Stress and in 1980, Posttraumatic Stress Disorder (PTSD) was officially recognized as a diagnosable disorder appearing in the American Psychological Association third edition of the Diagnostic and Statistical Manual (Kutchins and Kirk 1997).

PTSD can be considered either acute, chronic or with delayed onset (American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders Fourth edition, 2000). Acute Stress Disorder (ASD) has been added as a diagnosable disorder and is differentiated from PTSD not by symptoms but by the duration. Since ASD can

last only up to four weeks, the diagnosis of PTSD would be considered after that time period (DSM-IV-TR, 2000; Kutchins & Kirk, 1997). The military currently uses the term COSR to describe the physical, psychological and behavioral side effects of experiencing a traumatic event, but events are not limited to combat experiences and can occur during operational training or from cumulative exposure to many stressors (Arrit et al, 2006). This term was created to specifically address concerns that deal with symptoms associated with active duty military personnel (VA/DoD Clinical Practice Guideline Working Group, 2003)

PTSD and Acute Stress Disorder are the technical clinical terms for a diagnosed disorder, however the term PTSD is widely used in the vernacular to describe people who suffer from symptoms that could be an indication of PTSD, Acute Stress Reaction, Acute Stress Disorder or Combat Operational Stress Reaction (Glassman, 2004). Despite the differences in name and symptom duration, the specific symptoms that one person experiences are not necessarily identical to those that another individual might experience (Kutchins and Kirk, 1997).

The U.S. Army, Marine Corps and Navy acknowledge that combat stress is a critical concern that must be addressed to build and maintain effective units. The services have moved to address the combat stress condition by developing a joint field manual to train leaders to identify and address the root causes and symptoms of combat stress (FM 6-22.5, 2000). The manual defines combat stress as

“the mental, emotional or physical tension, strain or distress resulting from exposure to combat andis not restricted only to combat, but may also arise from combat-like conditions present during military operations other than war. Combat stress reactions are the result of exposure to the same conditions during military actions that cause physical injury and disease in battle or its immediate aftermath (FM 6-22.5, 2000, preface).”

The manual states that combat stress “has the potential to disable the most courageous Service Member and influences the success or failure of a unit in accomplishing its mission” (FM 6-22.5, 2000, p.1) and that “severe stress reactions may...create a concern for personal safety or the safety of others” (FM 6-22.5, 2000, p.4).

The symptoms of combat stress can be both physical and emotional and can include fatigue, headaches, backaches, inability to relax, shaking, tremors, perspiration, nausea, vomiting, loss of appetite, digestive problems, heart palpitations, hyperventilation, faintness, giddiness, sleep disturbances, visual problems, hearing problems, partial paralysis, body arousal, hyper-alertness, startle reactions, anxiety, irritability, depression, low energy, social withdrawal, change in appearance, substance abuse, loss of ability, disruptive reactions, compromise of one’s own safety or the safety of others (FM 6-22.5, 2000). These symptoms are similar to the DSM-IV definitions for PTSD. The DSM-IV states that

“The person's response to the event must involve intense fear, helplessness, or horror...The characteristic symptoms resulting from the exposure to the extreme trauma include persistent re-experiencing of the traumatic event, persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness, and persistent symptoms of increased arousal... the disturbance must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning” (DSM-IV-TR, 2000, p.463).

After a person observes or experiences a traumatic event, the person may experience trouble sleeping, nightmares, flashbacks, and feeling out of place in their own lives. When symptoms go untreated long enough, they can significantly disrupt a person’s life (VA, 2005). Despite the unpleasant nature of these effects, service members are not seeking out the military health treatment facilities in significant numbers (Hoge et al., 2004).

Addressing the under-use of traumatic stress health services by active duty service members with high risk factors is key to improving the effectiveness of treatment for military service members. There are a number of reasons cited in the literature for

underutilization including: lack of confidentiality for self disclosure and stigma toward help-seeking behavior for mental illness (Britt, 2000). While the lack of confidentiality is well understood due to the military culture in which soldier readiness issues are not supposed to be kept from the command, the stigma associated with help-seeking is less understood. To understand this aspect of under-use, it is important to comprehend the basis for the stigma toward help-seeking behavior for mental illness.

Stigma

Stigma is a burden for numerous groups including those with HIV/AIDS, leprosy, people who are unemployed or who are homosexual and many others (Link and Phelan, 2001). The word stigma is used widely and definitions vary depending on who is asked. Some define it as an undesirable characteristic that goes against the norm, while others think it is related more to stereotypes or marks of disgrace (Link and Phelan, 2001). Researchers for the most part agree that “stigma exists when elements of labeling, stereotyping, separation, status loss, and discrimination occur together in a power situation that allows them” (Link and Phelan, 2001, p. 377). Researchers also agree that there are different types of stigma.

Self stigma is defined as an individual’s internalization of stigma that other people have about them which makes them feel disapprovingly about themselves (Barney, 2006; Corrigan, 2004). Perceived stigma-- sometimes called public stigma-- (Corrigan, 2004) is the idea that other people have stigmatized ideas that they act upon or express when they find out an individual is seeking help (Barney, 2006; Corrigan, 2004). Both types are common with respect to mental illness and reduce the likelihood of individuals seeking help from health professionals (Barney, 2006). The most significant type of stigma related to COSR is public stigma where individuals who are at risk for a type of mental illness refuse to seek help because that may bring their mental health condition to the public’s attention (Corrigan, 2004). The more someone feels that others will stigmatize their seeking help for a mental health issue the more negatively the individual’s attitude is towards getting help (Wrigley, Jackson, Judd and Komiti, 2005).

Mental illness stigma has been an issue for a long time and is a strain on families who may view it as a source of shame and try to hide members from society by withdrawing from social activities (Falk, 2001). In the general population, the fear of this

stigma is a prime reason for people failing to seek mental health counseling (Barney et al., 2006; Koenen et al., 2003; Pinfold, Byrne and Toulmin, 2005). The strength of this belief is reinforced by cases of discrimination perpetuated upon those whose behavior is associated with mental illness (Pinfold et al., 2005).

Because stigma is a barrier to help-seeking behavior it is a considerable public health concern (Corrigan, 2004; Crisp et al., 2000). Research indicates that less than 30% of people with some type of psychiatric disorder seek help (Corrigan, 2004). In the military it is difficult to determine the prevalence of traumatic stress because service members avoid seeking treatment at military medical facilities (Britt, 2000). However, in a 2004 survey, one in six service members returning from OEF/OIF met the criteria for severe depression/anxiety or traumatic stress. Of those, only 23-40% sought help for their condition (Hoge et al., 2004). The military community is in need of mental illness stigma reduction strategies (Sammons, 2005). At this time no research could be found on whether spouses had the same stigma as military members towards help-seeking for traumatic stress.

Help-seeking and Military Spouses

The reasons that so few people who suffer from psychological symptoms following a traumatic event do not seek help is not completely clear. However, it is known that the more social support and the more social contacts one had, the more likely the individual was to seek help (Gavriolovic, Schützwohl, Fixel and Priebe, 2005). Spousal support is a key source of social support for family members.

Recent survey data shows that 57% of all military personnel are married (Defense Manpower Data Center, 2005). Although the military is comprised of both women and men, NON-military males married to female service members make up only 8.5% of total service members for the Army, Navy and Air Force, and only 5% of the Marine Corps (Harrell, Lim, Castaneda and Golinelli, 2004). Thus, the overwhelming majority of military spouses are women. Research has demonstrated that compared to their male counterparts, females are consistently more likely to be in favor of seeking professional medical help (Fischer and Farina, 1995). Moreover, females tend to see life events as more serious (Strohmer, Biggs and McIntyre, 1984). Research has found that the suggestion by family members and friends is the primary reason people with

psychiatric issues ask for professional assistance (Chadda et al., 2001) and recommendations by significant others were primary reasons for visiting a mental hospital (Chadda et al., 2001).

As indicated previously, military spouses are a principal source of social support for service members returning from deployment. Therefore, it is important that they are able to recognize the symptoms and understand the experiences of the service member (Biddle et al., 2002). When service members transition out of a combat environment, they must learn to share information about their experiences, especially to supportive significant others. This type of sharing has been proven to lower levels of symptom severity for those who experience positive feedback or validating responses (Bolton, et al., 2003). For the 43% of single service members who are not being addressed by this study, research shows that people who do seek treatment for mental health issues are more likely to be unmarried (Leaf et al., 1988), separated or divorced (Koenen et al., 2003).

Information and Direct Experience

Numerous researchers and health communication scholars have pointed to the importance of information and prior experience, "personal knowledge," as factors influencing decision making and behaviors (Cheng & Ng, 2006; Downs, Graham, Yang, Bargainnier & Vasil, 2006; Hornick, 2002; Melton, Clarke, Shabolt, 2006; Rice & Atkin, 2001; Rogers, 1995). Information and prior experiences help individuals understand the issues they are facing, the risks involved and the available options for responding (Bunn, et al., 2006). Using the Theory of Planned Behavior, past behavior has been shown to interact with intentions to predict future activities (Brickell, Chatzisarantis & Pretty, 2006). Possibly most notable, researchers have reported that when health information, "knowledge," is added to the Theory of Planned Behavior, knowledge is an independent predictor of preventive behaviors (Cheng & Ng, 2006; Swanson, Power, Kaur, Carter & Sheperd, 2006).

It is generally expected that individuals who seek and have more useful information will not only be more aware of their options but also more likely to make better decisions (Bunn, et al., 2006; Ramanadhan and Viswanath, 2006). Researchers, however, have also warned that health information can be "complex," "daunting,"

improperly framed and "biased", and potentially confusing and ineffective (Zapka, et al., 2006). Health information can involve both positive and negative elements, and the design and presentation of complex communications, that truly inform decisions, is difficult (Speir, 2006; Zapka, et al., 2006). Consequently, health-related information can have both positive and negative effects.

At this time there is relatively little known about the information military spouses have concerning combat stress and how the information they have influences the service member. There is also little known about what they consider their best alternatives when confronted with combat stress. The following discussion focuses on theoretically based cognitive and emotive factors that may prove useful in studying spouses' perceptions and potential reactions to combat stress.

Theory of Planned Behavior

While numerous theories can be used to address health behaviors, the original Theory of Reasoned Action (TRA) and the more recent Theory of Planned Behavior (TPB) are particularly relevant when predicting behavioral intentions. Fishbein's early work on psychological processes (Conner and Sparks, 2005) was the basis for the Theory of Reasoned Action. TRA was formalized in 1975 by Fishbein and Ajzen and further advanced by the two in 1980 (Ajzen, 1991). TRA uses attitudes and subjective norms to predict behavior intention, which is the individual's intention to perform a given behavior (Fishbein and Ajzen, 1975).

The Theory of Planned Behavior was an expansion of the TRA developed by Ajzen in 1985 (Conner and Sparks, 2005). The TPB includes three predictor variables (Ajzen, 2006). The first is attitude toward the behavior which is influenced by beliefs about outcomes and outcome evaluation. The second is subjective norm which is influenced by normative beliefs and the motivation to comply with the norms. The final predictor is perceived behavioral control which takes into account perceptions of how easy or difficult it would be to take a particular action and recognizes that behavior is not always under voluntary control.

Merging the deliberation of attitude toward the behavior, subjective norm and perceived behavioral control results in a behavior intention (Ajzen, 2006). The following model depicts the relationships among the predictor and predicted variables.

Attitude (A) towards behavior can be defined as the sum of the probability that each behavior (b_i) has a consequence multiplied by the evaluation of that consequence (e_i) for each consequence (i) associated with that behavior. The formula is as follows

$$A \propto \sum b_i e_i$$

The subjective norm (SN) sums up the normative belief that an important other thinks one should perform that behavior (n_i) multiplied by the motivation to comply (m_i) with the important other's desire summed over the set of important others (i). The formula is as follows:

$$SN \propto \sum n_i m_i$$

Perceived behavior control (PBC) is defined as the sum of the frequency of occurrence of control belief factors (c_i) multiplied by the power of the factors (p_i) summed over the total number of control belief factors (i). The formula is as follows:

$$PBC \propto \sum c_i p_i$$

The formula indicates that Behavior Intention (BI) is a function of Attitude plus Subjective Norm plus Perceived Behavior Control each of which is empirically weighted. The resulting formula is as follows:

$$BI = w_1 A + w_2 SN + w_3 PBC$$

This theory has been used to predict a wide variety of health related behaviors including physical exercise, diets, healthy lifestyles, smoking, AIDS prevention, alcohol consumption, medication regimen observance and cancer prevention (Conner and Armitage, 1998; Conner and Sparks, 2005; Floyd, Prentice-Dunn and Rogers, 2000). Armitage and Conner's 2001 meta analysis indicated a correlation of .49 ($r^2 = .24$) between attitude and behavioral intention, a correlation of .34 ($r^2 = .12$) between subjective norms and behavioral intention, and a correlation of .43 ($r^2 = .18$) between perceived behavioral control and behavioral intention. Overall there was a multiple correlation of .63 ($r^2 = .39$) when using the three variables to predict behavior intention. There are very few studies that apply TPB to mental health issues and stigma.

Protection Motivation Theory

Rogers Protection Motivation Theory (PMT) was introduced in 1975. This theory was originally developed as a model of health promotion and disease prevention through fear appeals. The theory has implications for behaviors related to mental health.

The PMT proposes that decisions to engage in health related behaviors are influenced by four factors: perceived severity of risk, vulnerability to risk, response efficacy and self efficacy (Floyd et al., 2000). The perceived severity of a health-related risk or threat comes from the individual's assessment of how great they feel the consequences are to their personal lives. The vulnerability to a risk or threat represents the individual's perception of their susceptibility. If the individual feels that there is a high likelihood of severe consequences and they feel highly vulnerable to the health risk or threat, then it is assumed that they will be more motivated to respond. Response efficacy addresses whether the individual believes that something can be done to address a risk or threat. Self efficacy addresses whether the individual personally feels that he or she is able to follow through on protective behavior to address the threat. The costs are directly tied to what type of response the individual chooses and they can include personal costs, financial costs, outlay of time or effort (Floyd et al., 2000). In a meta analysis written by Floyd, Prentice-Dunn and Rogers in 2000, each of these components showed significant positive effects on (protection motivation) "adaptive intentions and behaviors" (Floyd et al. 2000, p.414.). Specifically, the heterogeneous effect sizes were +.41 for threat vulnerability, +.39 for threat severity, +.54 for response efficacy, +.88 for self efficacy and +.52 for response cost (Floyd et al. 2000, p. 415).

Merging Protection Motivation and Theory of Planned Behavior

According to Ajzen (1991) there is considerable overlap in the variables of perceived behavior control (TPB) and self efficacy (PMT). He states that “the Theory of Planned Behavior places the construct of self efficacy belief or perceived behavioral control within a more general framework of the relations among beliefs, attitudes, intentions, and behavior.” (p. 184). Moreover, the PMT addresses perceived susceptibility and perceived severity of a particular hazard while some argue that the TPB does not specifically provide for vulnerability or emotional implications of the threat, including cost (Conner and Norman, 2005; Oliver and Berger, 1979). By merging Protection Motivation Theory and the Theory of Planned Behavior, researchers can capture a range of emotional and rational variables that predict behavioral intentions and behaviors (c.f. Oliver and Berger, 1979; Conner and Norman, 2005). The key elements of PMT and TPB will be combined in this thesis.

Hypotheses and Research Questions

It must be emphasized that the following hypothesis are conditional. Ultimately the intentions to encourage help-seeking behaviors depend on the occurrence of combat/operational stress reaction among the respondents’ spouses and the continuation of the symptoms for an extended period.

It is reasonable to expect that individuals’ current beliefs and future behaviors will be influenced by the information they have received and their own prior experiences. In the case of COSR, relatively little has been published about the amount and usefulness of information that military spouses receive and their own experiences concerning combat stress. In response to the scarcity of prior research, the following research questions will be examined first:

RQ1a – What is the relationship between spouses’ exposure to information about combat stress disorders and their beliefs about treatment outcomes, combat stress related stigma, their vulnerability to combat stress, and their efficacy when dealing with combat stress?

RQ1b- What is the relationship between spouses' direct behavioral experiences with combat stress and their beliefs about outcomes at treatment facilities, combat stress related stigma, their vulnerability to combat stress, and efficacy when dealing with combat stress?

Based on the key predictor variables in the Theory of Planned Behavior and Protection Motivation Theory the following hypotheses will be tested.

H1 - The greater the amount of combat stress-related information received and the greater the perceived usefulness of this information, the greater the intention to encourage help-seeking behaviors associated with combat stress.

H2- The greater the direct behavioral experience in dealing with combat stress and the more favorable the outcomes, the greater the intention to encourage help-seeking behaviors associated with combat stress.

H3a- The more favorable the perceived outcome beliefs associated with combat stress (positive benefits, no major costs) and the more positive the evaluation of these outcomes, the greater the intentions to encourage help-seeking behaviors associated with combat stress.

H3b- The greater the perceived stigma associated with combat stress, the less the intentions to encourage help-seeking behaviors associated with combat stress.

H3c- The greater the perceived health vulnerability beliefs (high risks, high severity) associated with combat stress, and the more negative the evaluations of these beliefs, the greater the intentions to encourage help-seeking behaviors associated with combat stress.

H4 - The greater the combat stress related normative beliefs toward encouraging professional care and the greater the motivation to comply with those beliefs, the

greater the intention to encourage help-seeking behaviors associated with combat stress.

H5- The greater the perceived efficacy (general and personal) associated with combat stress health beliefs, the greater the intention to encourage help-seeking behaviors associated with combat stress.

The initial research questions and five hypotheses will be tested in conditions comparing military versus NON-military related information, behavioral experiences, beliefs and intentions.

In addition to the initial research questions and hypotheses an additional six research questions were used to expand on results derived from the tests of the hypotheses. The additional research questions are:

RQ2 - What is the prevalence of military spouses who are familiar with health symptoms associated with COSR?

RQ3 - From whom do spouses of military service members get their information about COSR?

RQ4 - What do military spouses perceive the COSR health risks to be?

RQ5.- What are the military spouse evaluations of the COSR risks?

RQ6 - Do military spouses perceive a stigma associated with seeking help for COSR by service members?

RQ7 - Do military spouses differentiate between encouraging help-seeking at a military health care facility versus encouraging help-seeking at a civilian health care facility?

Integrated Model- TPB With Elements of PMT

This research tests the Theory of Planned Behavior with added elements from the Protection Motivation Theory model. The following model illustrates the integration of these theory-based predictor variables with the research.

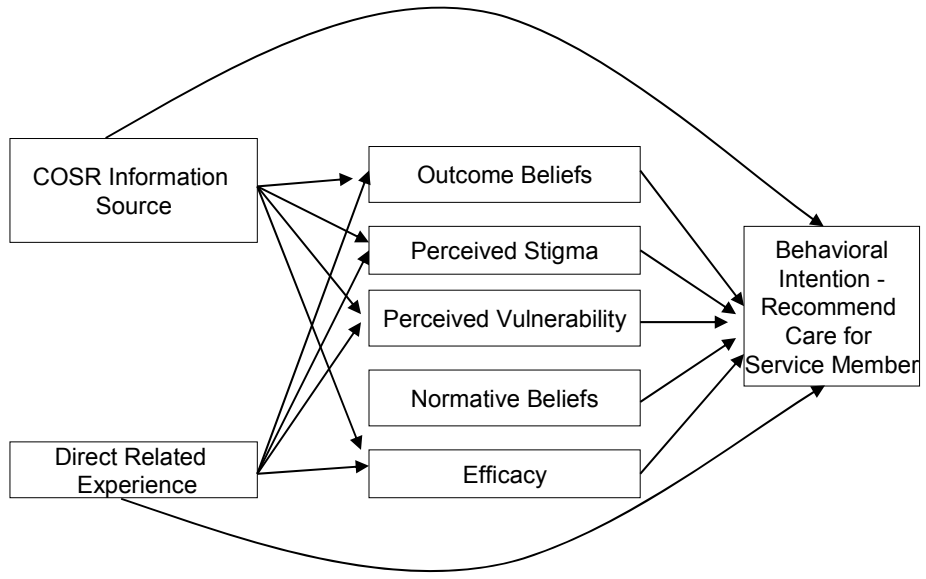


Figure 1: Theory of Planned Behavior With Elements of Protection Motivation Theory

CHAPTER 3

METHOD SUMMARY

This thesis utilized a combination of focus groups, personal interviews and an online survey of military spouses to gather data needed to address the research questions and hypotheses.

Two focus groups and three personal interviews were completed with twelve spouses of active duty, reserve and retired military personnel. The results of the focus groups and personal interviews (see Appendix E) were combined with the key variables from Protection Motivation Theory and Theory of Planned Behavior to develop questions used in the online survey. A pilot survey completed by 15 spouses, was used to evaluate respondents understanding of questions, collect feedback on the survey's software interface and to estimate survey completion times. The final survey (see Appendix L) was completed by 306 military spouses.

Focus Group Summary.

The purpose of the focus groups was to identify key terms, words, issues, problems, strategies and consequences that military spouses associate with combat/operational stress. The information gathered from the focus groups was compiled and combined with the key variables from Protection Motivation Theory and Theory of Planned Behavior to develop questions used in the online survey.

Two focus group sessions were conducted on July 12–13, 2006, in the homes of military spouses in the local communities near Dothan, Alabama. Additionally, three individual interviews were arranged with military spouses who could not attend the focus groups. Military spouses who were associated with the Fort Rucker Army community were invited via email to attend the sessions.

Focus group participant demographics. Information was gathered from Caucasian female participants between the ages of 22 and 51. The participants were military spouses who had been married between one and twenty-two years to military

service members. The focus group sessions followed a pre-established protocol to standardize feedback across the different groups (see Appendix A, B and D)

Focus group findings. Participants from the focus group were well-versed on the topic of combat stress and willing to share their opinions about the subject. Most indicated they would only encourage help-seeking for combat stress at NON-military health care facilities. Spouses repeatedly modified their answers to questions about service members seeking, or spouses encouraging, treatment based on whether or not a military or NON-military health care facility provided the services. The focus group results provided terminology and insight into how spouses view help-seeking for combat stress which guided the development of the survey questionnaire. Based on the focus group findings, an online pilot survey questionnaire was developed.

Pilot Online Survey Questionnaire

The pilot questionnaire included variations on the same questions to hopefully achieve both reliable and valid measurement. The questionnaire had 14 different segments. Questions were focused on the following variables:

- Sixteen questions asked about sources of information and sixteen questions evaluated the usefulness of the information received.
- Eighteen questions addressed behavior beliefs and outcome beliefs and were each followed by an evaluation of those beliefs.
- Six questions related to stigma.
- Six questions addressed risk and five questions measured severity (combined to create an index of perceived vulnerability).
- Twenty questions measured efficacy.
- Thirteen questions asked about direct behavioral experience.
- Twelve questions covered normative beliefs.
- Demographic questions and questions of interest for possible future analyses completed the questionnaire.

The draft questionnaire was pilot tested by individuals who participated in the focus group and personal interviews, as well as faculty and family members who served

as independent testers. The pilot questionnaire was used to answer the following questions:

1. How long does it take respondents to complete the survey and do they feel military spouses will complete the questionnaire in its entirety?
2. Are there any survey questions that they systematically do not answer?
3. Do any of the questionnaire items present difficulties in terms of wording, content (i.e. What the question is asking)?
4. Do respondents have any technical difficulties in operating the software survey interface (finding, opening, scrolling through and answering online survey items)?
5. Do the respondents have any concerns about the survey or suggestions to improve the survey?

Based on the pilot test findings, the draft survey questionnaire was revised in the following way:

- Questionnaire was shortened to reduce average survey completion time from 47 to 26 minutes. This was done in response to respondents' doubts that other military spouses would complete such a lengthy survey.
- A number of questions were changed to correct double negatives and clarify wording.
- A warning was added to inform respondents that once an answer was saved it could not be changed.
- Answer measures were changed to allow respondents to cover a larger range of responses.
- Page lengths were shortened to allow questions/answers to fit on a standard monitor without scrolling.
- Directions were provided at the beginning of most pages.

The final questionnaire was placed online using a web site running software hosted by Survey Pro (see Appendix L and K).

Survey Participants and Survey Promotion

Military spouses were contacted through support groups and military e-mail lists. Military spouse web bloggers were asked (see Appendix F) to share the link with other military spouses. A letter of invitation was tailored to the target group, however, they all contained the basic information about the survey (see Appendix J). An e-mail was sent to roughly 100 military and former military individuals, 25 Army community service organizations, 80 military public affairs offices for all services, 100 Army active duty and national guard family support group leaders, 20 military spouse hosted web blogs and 20 ROTC programs. An interview with the Army Flyer newspaper at Fort Rucker Army Post, which was also published in the Montgomery Advertiser, was conducted on September 29, 2006 (see appendix G). In all of the correspondence, spouses who were married to Active Duty, Reserve and National Guard service members were invited to go to the webpage and complete the online questionnaires.

Data Processing and Analyses

The completed questionnaires were downloaded directly into an SPSS data file. This data file was formatted and labeled to be consistent with the online questionnaire. Where appropriate, effects and composite indices were created to represent the variables in the research questions and hypotheses. The dimensionality and reliability of the measures were assessed and the indices were modified as necessary to maximize conceptual uniformity and reliability. Ultimately, the revised indices were used to test the research questions and hypotheses using simple and multiple regression statistical procedures that are traditionally used with the Theory of Planned Behavior and Protection Motivation Theory.

Index Development

In creating the indices, where possible, the measures were separated into military and NON-military sections. When necessary, all variables were recoded so they were consistent with the direction of the hypotheses. The Theory of Planned Behavior defines attitudes as beliefs multiplied by evaluations. Normative beliefs are similarly computed by multiplying perceived expectations by the individual's corresponding motivation to comply. The variables regarding information received

were multiplied by respondent's perceptions of usefulness. The outcome belief and direct behavioral experience variables were multiplied by the corresponding evaluations of the outcomes and experiences. The behavioral intention variables were multiplied by evaluations of the intentions. The variables in each of these multiplicative products was then summed to create indices.

Protection Motivation Theory deals with emotional responses. In this study perceived risks and severity of combat stress measures were summed into a vulnerability index. A summed index was likewise created for stigma. Each of these indices, with the exception of the vulnerability index and stigma index have military and NON-military versions. The perceived vulnerability and the perceived stigma indices were the same measures for both conditions.

The following table summarizes the characteristics and standardized alpha coefficients for these indices:

Table 1
Indices Characteristics

<u>Indices</u>	<u>Items</u>	<u>Standardized Alpha α</u>
Military:		
Information	6	.87
Direct Experiences	3	.64
Military Care:		
Outcome Beliefs	8	.72
Stigma	4	.85
Vulnerability	8	.84
Normative Beliefs	3	.64
Efficacy	7	.87

Table 1 (continued)

NON-military:		
Information	5	.68
Direct Experiences	3	.74
NON-military Care:		
Outcome Beliefs	8	.64
Stigma	4	.85
Vulnerability	8	.84
Normative Beliefs	3	.74
Efficacy	7	.89

Although Nunnally (1967, p. 226) argues that “in the early stages of research ...reliability of .60 or .50 will suffice”, the resulting correlational measures will be attenuated by the low reliability. In general, reliabilities of .80 or higher are preferred. The previous summary identifies ten unique measure of reliability, two are duplicated (vulnerability and stigma). All of the ten are above .60, while only four meet the .80 threshold. The low reliabilities will be considered in the results and discussion sections.

CHAPTER 4

RESULTS

Introduction

This chapter examines the data results from the study of military spouses' intentions to recommend help-seeking for service members with combat stress. Using the methodology described in the previous chapter, the demographics of the data are provided first, followed by the analyses of RQ1a and RQ1b and test of the hypotheses. The chapter concludes with the remainder of the results of the research questions.

Demographics

There were over a thousand hits to the online webpage, with around 700 respondents beginning the survey. Of that number, almost 400 either were not eligible to take the survey or did not finish the survey in its entirety. A total of 306 military spouses completed the online survey. Their demographic profile summary follows. Almost all (99%), of the participants were female with only three males completing the survey. Of note, over 90% of the respondents were Caucasian. The majority of the respondents were Army (80%) and Active Duty (91%) spouses. This is understandable since the main means for recruiting respondents was through active duty Army spouses and bases that housed mainly active duty Army organizations. Over half of the respondents were between 31 and 40 years of age, and 45% were spouses of either mid-grade enlisted or mid-grade officers (E5's, E6's, and O3's). This is not surprising since those ranks are typically the ones leading large and small groups or sections of the military. Those leaders' spouses frequently are given the responsibility for providing information to the family readiness groups and are commonly active in military events. The following tables show the demographics and military profiles of the respondents to the online survey.

Table 2
Frequency Distributions Indicating Demographic Background and
Military Profiles of Sample Respondents
n = 306

Demographics	<u>Percent</u>
Sex	
Female	99.0%
Male	1.0%
Race	
African-American (Black)	1.0%
Asian	0.7%
Caucasian (White)	90.2%
Hispanic	5.6%
Multi-race	1.3%
Native American	0.7%
N/A	0.7%
Education	
High-School	4.9%
Vocational/Technical School	4.6%
Some College	24.2%
Bachelor's Degree	43.1%
Master's Degree	20.6%
Professional Degree	1.0%
Doctorate	1.6%
Age	
18-20	0.3%
21-25	12.4%
26-30	16.7%
31-35	26.8%
36-40	26.1%
41-45	9.5%
46-50	5.6%
51-55	1.3%
56-60	0.3%
Over 60	1.0%

Table 2 Continued

Service Member Military Profile	<u>Percent</u>
Branch of Service	
Air Force	7.5%
Army	80.4%
Coast Guard	0.3%
Marine Corps	2.6%
Navy	9.2%
Status	
Active Duty	91.8%
National Guard	6.5%
Reserves	1.6%
Grade	
E2	0.3%
E3	1.3%
E4	6.5%
E5	10.8%
E6	11.4%
E7	4.9%
E8	3.3%
E9	1.0%
W1	1.0%
W2	2.9%
W3	2.6%
W4	2.3%
W5	0.7%
01	2.0%
02	9.5%
03	23.2%
04	10.5%
05	5.2%
08	0.3%
N/A	0.3%

In the following sections the relationship between the study variables are analyzed through multiple regression procedures. The analyses of the data were split into military and NON-military sections, with the military results appearing first. The regression analyses are followed by parsimonious figures which provide a final complete graphical representation of the results.

Analyses of Military Related Predictor and Predicted Variables

The first research question has two parts. The first part concerned the relationship between spouses' exposure to military information about combat stress disorders and their beliefs about (1) military treatment outcomes, (2) vulnerability to combat stress, and (3) efficacy when dealing with combat stress. A second part of this research question (RQ1b) concerned the relationship between spouses' military-related direct behavioral experiences with combat stress and the same three belief measures (outcomes, vulnerability and efficacy). In answering the first research question, multiple regression analyses were run for each of the predictor and predicted variables. On the following pages, tables three to six summarize the results. Table 3 indicates a statistically significant standardized positive beta coefficient ($\beta = .25$) between exposure to military information about combat stress and spouses (favorable) outcomes beliefs concerning care at military facilities. Similarly, there is a significant positive relationship ($\beta = .20$) between spouses' direct (favorable) experiences in the military environment and their outcome beliefs concerning care at military facilities. The more useful information that spouses have received concerning combat stress from military sources and the greater their own favorable experiences with combat stress, the more likely they are to believe that service members will have positive outcomes from care at military facilities.

Table 3
Multiple Regression Analysis Using Military Information and Direct Behavioral Experiences to Predict Outcome Beliefs About Military Care for Combat Stress
n = 261

Predicted Variable				
Outcome Beliefs Concerning Care for Combat Stress at <u>Military</u> Facilities				
Predictor Variables				
	B	Std. Error	β	
Military Source of Information	0.179	0.043	0.250	***
Direct Behavioral Experiences Concerning Military Care	0.298	0.091	0.196	**

* p ≤ .05
** p ≤ .01
*** p ≤ .001

R 0.354
Adj R² 0.119***

Table 4 contains a non-significant standardized beta coefficient between exposure to military information about combat stress and perceived stigma. There was a significant negative relationship between spouses' direct experiences in the military environment and their perceptions of stigma ($\beta = -.12$). Spouses with more combat stress-related experiences are less likely to perceive stigma associated with combat stress.

Table 4
Multiple Regression Analysis Using Military Information, Direct Behavioral Experiences to Predict Perceived Stigma to Combat Stress
n = 272

Predicted Variable		Perceived Stigma		
Predictor Variables		B	Std. Error	β
	Military Source of Information	0.009	0.008	0.073
	Direct Behavioral Experiences Concerning Military Care	-0.033	0.017	-0.123*

* $P \leq .05$
 ** $p \leq .01$
 *** $p \leq .001$

R 0.130
Adj R² 0.009

Table 5 further summarizes a multiple regression analysis indicating a statistically significant positive beta coefficient ($\beta = .19$) between exposure to military provided information about combat stress and perceived vulnerability to combat stress - risks and severity. Direct behavioral experience was not a significant predictor of perceived vulnerability. The more useful information received from military sources, the more likely the spouses are to perceive their vulnerabilities to combat stress.

Table 5
Multiple Regression Analysis Using Military Information, Direct Behavioral Experiences to Predict Perceived Vulnerability to Combat Stress
n = 271

Predicted Variable		Perceived Vulnerability to Combat Stress			
		B	Std. Error	β	
Predictor Variables					
Military Source of Information		0.020	0.007	0.193	**
Direct Behavioral Experiences Concerning Military Care		-0.001	0.014	-0.003	

* $P \leq .05$
** $p \leq .01$
*** $p \leq .001$

R 0.192
Adj R² 0.030 **

The fourth segment of RQ1a concerns the relationship between spouses' exposure to military information about combat stress disorders and their perceived efficacy in recommending treatment at a military care facility. Table 6 indicates a significant standardized positive coefficient of $\beta = .30$ between exposure to military information about combat stress and spouses' perceived efficacy concerning recommending care at military treatment facilities. The more useful information that they have received concerning combat stress, the more likely the spouses feel that are able to encourage help-seeking care at military. Direct behavioral experiences were not significant predictors of efficacy.

Table 6
Multiple Regression Analysis Using Military Information and Direct Behavioral Experiences to Predict Spousal Efficacy to Recommend That Service Members Seek Treatment at Military Care Facilities
n = 272

Predicted Variable		B	Std. Error	β	
Spousal Efficacy to Encourage Service Members to seek Treatment at a <u>Military</u> Care Facilities					
Predictor Variables		B	Std. Error	β	
	Military Source of Information	0.043	0.008	0.299	***
	Direct Behavioral Experiences Concerning Military Care	0.028	0.017	0.093	
<p>* p ≤ .05</p> <p>** p ≤ .01</p> <p>*** p ≤ .001</p> <p>R 0.333</p> <p>Adj R² 0.104 ***</p>					

Hypotheses H1 through H5 propose a series of relationships predicting that military spouse behavioral intentions to encourage help-seeking by military service members for combat stress would be a positive function of the amount of useful information received, level of prior favorable experiences, outcome beliefs about treatment at military care facilities, perceived vulnerability to the disorder, normative behavioral expectations and the perceived efficacy towards the disorder.

Table 7 And Table 8 contain multiple regression analyses simultaneously testing these hypotheses. The analyses are divided into spouses' intentions to make recommendations either for help-seeking at military or NON-military care facilities.

Table 7
Multiple Regression Analysis Using Military Information, Direct Behavioral Experiences, Outcome Beliefs, Perceived Stigma, Perceived Vulnerability, Normative Beliefs, and Efficacy to Predict Behavioral Intentions to Recommend That Service Members Seek Treatment for Combat Stress Military Care Facilities
n = 234

Predicted Variable				
Behavioral Intention to Recommend that Service Member Seek Treatment for Combat Stress at <u>Military</u> Care Facilities				
	B	Std. Error	β	
Predictor Variables				
Military Source of Information	-0.002	0.012	-0.007	
Direct Behavioral Experiences Concerning Military Care	0.001	0.024	0.003	
Outcome Beliefs Concerning Military Care	0.079	0.020	0.230	***
Perceived Stigma	-0.040	0.092	-.021	
Perceived Vulnerability	0.209	0.108	0.092	*
Normative Beliefs Regarding Military Care	0.017	0.025	0.036	
Efficacy towards Military Care	0.966	0.109	0.536	***

* p ≤ .05

** p ≤ .01

*** p ≤ .001

R 0.730

Adj R² 0.519 ***

Table 7 refers to military care facilities. The multiple correlation was ($R = 0.730$) and the adjusted R^2 was 0.519. Three of the seven predictor variables accounted for approximately one-half of the variance in intentions to recommend that service members seek treatment for combat stress in military facilities.

Looking across the seven predictors, the greater the favorable outcome beliefs about military care ($\beta = .23$), the greater the perceived vulnerability ($\beta = .09$), and the greater the efficacy beliefs regarding military care for combat stress ($\beta = .54$), the greater the intentions to recommend that service members seek treatment in military facilities. These three predictor variables were all significant predictors of intentions. The beta coefficient for efficacy indicated a particularly strong predictive relationship. In contrast, the military sources of information, prior direct experiences, stigma and normative beliefs were not significant direct predictors of behavioral intentions.

Analyses of NON-military Related Predictor and Predicted Variables

The following tables repeated the same analyses in the same order as the previous tables for military predictor and predicted variables. This time the analyses are of NON-military related predictor and predicted variables.

Multiple regression analyses in Table 8 shows NON-military sources of information (which included friends and family not affiliated with the military, newspaper, television, talk radio, NON-military healthcare facilities, and NON-military affiliated religious organizations) were not a significant predictor of outcome beliefs. However, a statistically significant standardized positive beta coefficient ($\beta = .18$) was shown between spouses' direct (favorable) experiences in a NON-military care facilities and their outcome beliefs. The greater the spouses' direct experiences with NON-military care, the more likely they are to believe that service members will have positive outcomes from care at NON-military facilities.

Table 8
Multiple Regression Analysis Using NON-military Information and Direct Behavioral Experiences to Predict Outcome Beliefs about NON-military Care for Combat Stress

n = 259

Predicted Variable

Outcome Beliefs about Recommending that Service Member Seek Treatment for Combat Stress at NON-military Care Facilities

	B	Std. Error	β	
Predictor Variables				
NON-military Sources of Information	-0.055	0.110	-0.032	
Direct Behavioral Experiences Concerning NON-military Care	0.290	0.105	0.177	**

* p ≤ .05

** p ≤ .01

*** p ≤ .001

R 0.171

Adj R² 0.022*

Table 9 contains a statistically significant positive standardized beta coefficient between exposure to NON-military information about combat stress and perceived stigma ((β = .18). There was a non-significant relationship between spouses' direct experiences in the NON-military environment and their perceptions of stigma. Spouses with more NON-military information are more likely to perceive stigma associated with combat stress.

Table 9
Multiple Regression Analysis Using NON-military Information, Direct Behavioral Experiences to Predict Perceived Stigma to Combat Stress
n = 271

Predicted Variable		Perceived Stigma		
		B	Std. Error	β
Predictor Variables				
NON-military Source of Information		0.060	0.020	0.181**
Direct Behavioral Experiences Concerning NON-military Care		0.001	0.020	0.002

* $P \leq .05$
** $p \leq .01$
*** $p \leq .001$

R 0.181
Adj R² 0.026 *

The third segment of RQ1a addresses the predictive relationships between NON-military information about combat stress, NON-military behavioral experiences and perceived vulnerability to combat stress. Table 10 indicates there are no significant relationships between these predictor and predicted variables. The level of NON-military information and NON-military experiences with combat stress does not influence spouses' perceptions of vulnerability.

Table 10
Multiple Regression Analysis Using NON-military Information, Direct Behavioral Experiences to Predict Perceived Vulnerability to Combat Stress
n = 271

Predicted Variable		Perceived Vulnerability to Combat Stress		
Predictor Variables		B	Std. Error	β
NON-military Sources of Information		0.029	0.017	0.106
Direct Behavioral Experiences Concerning NON-military Care		0.007	0.017	0.026
<hr/>				
*	p ≤ .05			
**	p ≤ .01			
***	p ≤ .001			
R	0.117			
Adj R²	0.006			

Table 11 similarly shows that the information spouses receive from NON-military sources and their own direct behavioral experiences do not predict whether spouses feel capable of encouraging help-seeking for combat stress at NON-military care facilities.

Table 12 merges H1 to H5 with reference to treatment at NON-military care facilities. The multiple correlation was ($R = 0.718$); the adjusted R^2 was 0.500. In this analysis, four of the predictor variables, NON-military information, outcome beliefs, normative expectations and efficacy, accounted for approximately one-half of the variance in intentions to recommend that service members seek treatment for combat stress in NON-military care facilities. Looking across these four predictors, among the

sample spouses, the more useful the information from NON-military sources ($\beta = .10$), the greater the favorable outcome beliefs about NON-military care ($\beta = .13$), the greater the normative beliefs regarding NON-military care ($\beta = .10$), and the greater the efficacy beliefs regarding NON-military care for combat stress ($\beta=.59$), the greater the intentions to recommend treatment in NON-military care facilities. The beta coefficient for efficacy, once more, indicated a particularly strong predictive relationship. Prior direct experience with combat stress, perceived stigma and perceived vulnerability to combat stress were not significant predictor of behavior intentions.

Table 11
Multiple Regression Analysis Using NON-military Information and Direct Behavioral Experiences to Predict Spousal Efficacy to Recommend That Service Members Seek Treatment at NON-military Care Facilities
n = 270

Predicted Variable				
Spousal Efficacy to Recommend that Service Members seek treatment at a <u>NON-military</u> Care Facility		B	Std. Error	β
Predictor Variables				
	NON-military Sources of Information	0.032	0.026	0.080
	Direct Behavioral Experiences Concerning NON-military Care	0.027	0.025	0.069
<hr/>				
	* $p \leq .05$			
	** $p \leq .01$			
	*** $p \leq .001$			
R	0.119			
Adj R²	0.007			

Table 12
Multiple Regression Analysis Using NON-military Information, NON-military Direct Behavioral Experiences, Outcome Beliefs, Perceived Stigma, Perceived Vulnerability, Normative Beliefs, and Efficacy to Predict Behavioral Intentions to Recommend That Service Members Seek Treatment for Combat Stress at NON-military Care Facilities

N = 230

Predicted Variable

Behavioral Intention to Recommend that Service Member Seek Treatment for Combat Stress at NON-military Care Facilities

Predictor Variables	B	Std. Error	β	
NON-military Source of Information	.075	0.037	0.102	*
Direct Behavioral Experiences Concerning NON-military Care	-0.018	0.031	-0.027	
Outcome Beliefs Concerning NON-military Care	0.049	0.019	0.132	**
Perceived Stigma	0.030	0.099	.015	
Perceived Vulnerability	0.164	0.117	.068	
Normative Beliefs Regarding NON-military Care	0.049	0.027	0.097	*
Efficacy towards NON-military Care	0.931	0.085	0.587	***

* p ≤ .05

** p ≤ .01

*** p ≤ .001

R 0.718

Adj R² 0.500 ***

Summary Findings

Statistical analyses initially indicated that combat stress-related information from military sources was positively related to spouses' outcome beliefs, and their perceptions of vulnerability and efficacy. This pattern was not found when considering

COSR information from NON-military sources. Spouses' direct experiences were positively related to their outcome beliefs in military and NON-military environments. The direct experiences variable, however, was not related to any of the other tested variables.

Overall, hypotheses H3a and H5 were confirmed in analyses of both the military and NON-military models. Hypothesis H3c was supported only in the military model; while H1 and H4 were only supported in the NON-military model. These findings become more apparent in the analyses below.

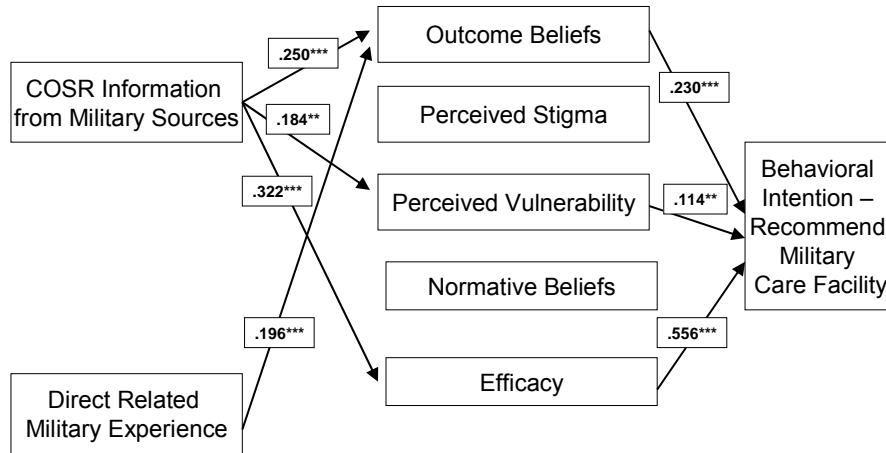
Parsimonious Predictive Models

Based on the results of the multiple regression analyses Figures 2 and 3 show that a more parsimonious set of predictor variables were analyzed. This analysis included a subset of variables that were all statistically significant predictors in the initial analyses, eliminating those that were not.

Military Parsimonious Summary

Figure 2 depicts the importance of military information sources with relation to outcome beliefs, perceived vulnerability, and efficacy. Spouses, who report that they have more military sources that provide useful information, are also more likely to (1) report more favorable beliefs about military care outcomes, (2) recognize the risks and severity of combat stress, and (3) feel that are capable of effectively making recommendations that service members seek care at a military facility. Much along the same line, spouses with more direct experience with combat stress are more likely to report favorable beliefs about outcomes resulting from military health care. The negative relationship ($B = -.12$) between prior military experiences and perceived stigma in the multiple regression analysis, was not statistically significant in the parsimonious simple regression analysis.

When predicting behavioral intentions, that service members seek care for combat stress in military facilities, three predictor variables were significant: outcome beliefs, perceived vulnerability and efficacy.



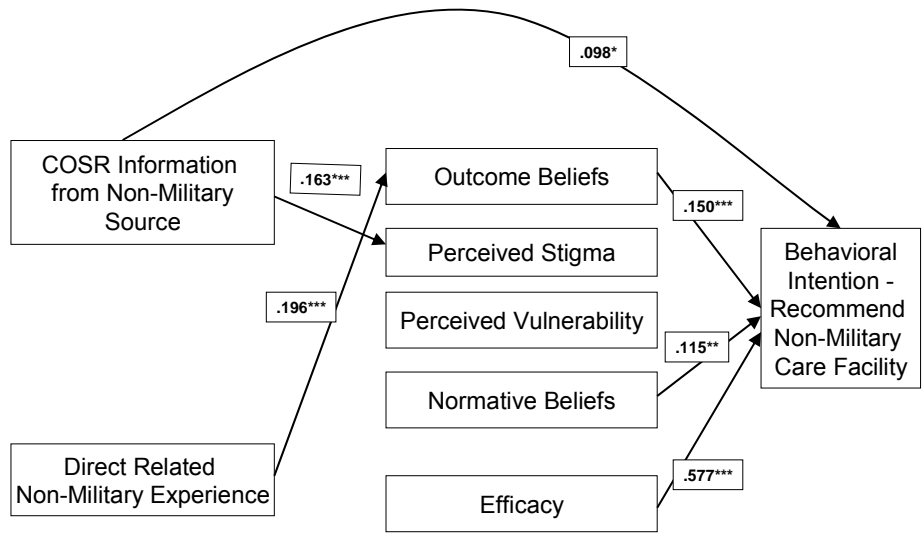
*p ≤ .05
 **p ≤ .01
 ***p ≤ .001

Figure 2: Military Parsimonious Model

NON-military Parsimonious Tables

The final parsimonious figure (Figure 3) shows the relatively weak, positive relationship between NON-military information sources and behavioral intentions to recommend care at a NON-military care facility. Spouses who have more useful NON-military information report higher levels of perceived stigma associated with combat stress. Direct behavior NON-military experiences are likewise positively related to beliefs about favorable outcomes resulting from care at NON-military facilities.

Finally, there were once again three variables that predicted behavior intentions. The spouses who have (1) favorable outcome beliefs, (2) who experience normative expectations and are motivated to comply with these norms, and (3) who feel greater efficacy are more likely to encourage service members to seek care at a NON-military facility.



* $p \leq .05$
 ** $p \leq .01$
 *** $p \leq .001$

Figure 3: Non-Military Parsimonious Model

Research Questions

In addition to the research questions and hypotheses depicted in the figures, there were an additional six questions that provide further insight from the sample data.

RQ2. What is the prevalence of military spouses who are familiar with health symptoms associated with COSR?

Of the eleven correct symptoms provided in the survey 73% of the respondents identified nine or more correct answers. Possibly most notable, there was not a single correct symptom that everyone recognized.

RQ3. From whom do spouses of military service members get their information about COSR?

The spouses most often indicated that they received information from the web (25%) and community service organizations. The surprising answer to this question really pointed to where service members are not getting their information about combat stress. Respondents (74%) stated that they rarely or never receive COSR-related information from their military friends. Similarly, the spouses' own service member were not sources of COSR information for 76% of the respondents.

RQ4 What do military spouses perceive the COSR health risks to be?

On a seven point Likert scale from “very low” to “very high” 90% of respondents identified a high “risk of abusing alcohol” and 75% identified a high “risk of abusing drugs” if the service member did not receive help for untreated combat stress symptoms within ninety days of experiencing symptoms. A majority of survey respondents (70%) stated that there was a high risk of suicide and 80% felt there was a high “risk of becoming physically abusive” within the same time period if the service member did not receive help for untreated combat stress symptoms.

RQ5.- What are the military spouse evaluations of the COSR risks?

Four out of 5 respondents felt that service members who left combat stress symptoms untreated for over 90 days risked having severe marital problems (choosing either 6 or 7 on a seven point Likert scale with 1 being very low risk and 7 very high risk). Respondents were fairly evenly split over whether a service member’s decision to seek help for combat stress would have a negative impact on their career, cause them to lose their job, or allow the commander access to medical records. However, more than 50% feel that seeking help for combat stress would negatively impact the service member’s specialty mission skills status which includes flight duties, special operations, command and nuclear/chemical/biological operations. More than 75% felt that it was likely that seeking help would have an impact on the mission skill status.

RQ6-Do military spouses perceive a stigma associated with seeking help for COSR by service members?

Of the respondents, 32% had heard the term “scared” used to describe service members who seek help for combat stress. Other terms such as “weak”- 28%, “wimpy” - 24%, and “undependable”- 16% had also been heard in the same context.

RQ7. Do military spouses differentiate between encouraging help-seeking at a military health care facility versus encouraging help-seeking at a civilian health care facility?

Based on their evaluation of the risks associated with service members seeking help for combat stress slightly more respondents were willing to encourage help-seeking for their spouses at a military care facility versus a NON-military care facility.

CHAPTER 5

DISCUSSION

Summary

This research applied a combination of the Theory of Planned Behavior combined with elements of Protection Motivation Theory in an attempt to develop a merged theoretical model that could be used to predict military spouse intentions to encourage help-seeking behavior for combat stress. The Theory of Planned Behavior featured the three predictor variables: outcome beliefs (attitudes), normative beliefs, and efficacy (control) to predict behavior intention. Although the TPB model is sometimes used to predict behavior, this study included hypothetical scenarios and therefore it was not feasible to measure actual behaviors. The Protection Motivation Theory elements were added to account for factors related to perceived vulnerability – risks and severity, as well as a deeper accounting of efficacy.

Findings

This study examined two research questions and five hypotheses associated with the theoretical model. Looking across the research findings associated with seeking help for COSR at military treatment facilities, military sources and the information they provide clearly influences spouses' views concerning efficacy, followed by outcome beliefs and perceptions of vulnerability to combat stress. Counter to what might be expected, spouses own personal experiences with combat stress are only linked to their perceptions of outcomes resulting from medical care at military and NON-military facilities.

The general and personal efficacy reported by the spouses is the major predictor of their own intentions to recommend service members seek care at military treatment facilities. Outcome beliefs are appreciably weaker, though positively related to behavioral intentions. Perceptions of vulnerability, risks and severity, are relatively

weak predictors of spouses' intentions to encourage service members to seek help for combat stress in military treatment facilities.

When evaluating the research findings associated with encouraging help seeking at NON-military health care facilities, NON-military sources and the information they provide, have a weak positive influence over spouses views concerning perceived stigma and their behavioral intention to recommend service members seek help at NON-military care facilities. Again, military spouses own personal experiences are linked only to their perceptions of outcomes resulting from NON-military medical care.

As with the military model findings, the general and personal efficacy reported by the spouses is a strong predictor of their own intentions to recommend service members seek care at NON-military health care facilities. Outcome beliefs are considerably weaker, as are normative beliefs although still positively related to behavioral intentions.

Limitations of Study

The findings from this study raise four issues that merit further consideration. First, a majority of the variables and computed indices were related to one another in ways that are consistent with the existing literature. These relationships largely replicated previous research and supported key hypotheses of this study. Two variables however did not fit this pattern. The normative belief and stigma indices were unrelated to behavioral intentions. The normative belief index has been repeatedly found to be a predictor of behavior intentions. Given the prominence of stigma in the literature and popular discussions, it was particularly surprising that perceptions of stigma were unrelated to behavioral intentions. Part of the problem with normative beliefs may be found in the low reliability (internal consistency) of the items in the index and the small number of items that proved useful in computing the index. The problem with the stigma index was not due to low reliability. Based on the results of the online survey, it was not clear why stigma proved unrelated to the other measures in this study.

A similar set of measurement problems can be found with the direct experiences and the outcome beliefs indices. In both indices the internal consistency calculations were below what is generally preferred (ie. alphas = .80 or higher). The direct experiences index also suffered from having a small number of items in the index. In designing this study a larger number of items were developed to measure direct experiences. However, the resulting measures proved not to be reliable.

A second issue resulting from this study involved the sample. The final sample of spouses who completed the survey was smaller than anticipated. In addition to the 306 who completed the survey an estimated 700 began the survey but did not finish. Also, a majority of the respondents were spouses of U.S. Army, active duty service members, in the grade of E5, E6 and O3. The sample respondents were also largely Caucasian. A larger, more diverse sample would have improved representative population assumptions for this study of stress resulting from combat. Moreover, because the potential selection biases in this non-probability sample, it is difficult to estimate the if these findings can be generalized.

A third issue deals directly with the hypothetical nature of many questions. An in depth study of actual behaviors, measuring spousal encouragement of help-seeking for combat stress related symptoms, would be ideal. Comparing those results with hypothetical behavioral intentions to encourage help seeking would yield a more complete picture of this problem. This population sample should include spouses whose service members who have been in combat, exhibited symptoms of combat stress and have either sought help or not sought help from a care facility.

A final issue associated with this study centers on the statistical procedures that were used. This study used a combination of frequency distributions, Principal component analyses and regression analyses. Ultimately, structural equation modeling (SEM) should be used in this type of study. SEM analysis, at this time, is beyond the scope and statistical training of this researcher.

Lessons learned.

Focus Group Lessons. The focus group was an extremely valuable process and could have been a stand alone study. Military spouses seemed eager to share their opinion about the combat stress health issue. Several spouses made special efforts, often canceling previously arranged engagements to participate in the focus group process. In the future, an offer of individual interview as a substitute for focus group participation would likely be beneficial. Spouses whose husbands had experienced combat stress may be more forthcoming in a one-on-one session versus a group setting. Of the thirteen participants the researcher was personally acquainted with only four. Still most of the focus group participants' service members were pilots or attached to a Fort Rucker Army aviation organization. Future focus group research should include other branch and military occupational skill groups. The status of the service members for this focus group was either Active Duty or Active National Guard. In the future, talking with non active Guard or reservists could provide additional insights that were not apparent in this study.

Survey Lessons.

No official contact was begun with the military prior to placing the survey online. A number of military installations, through local Public Affairs Offices, authorized local distribution of the request through official family readiness group lists. Contact made with the Marine Corps Headquarters indicated they were willing to support a Marine Corps wide distribution of the survey link; however, the approval process time exceeded the time allotted for data collection. A future online survey should either pre-coordinate with military authorities or allow more time for military authorization.

Future Research

Future researchers clearly need to address the limitations of this study, including the measurement problems, sampling issues and the use of more advanced analyses. Equally important, future researchers need to explore the balance of cognitive versus emotive variables that are involved in military spouses' decision making concerning

combat stress. It is possible that many decisions made in such situations are reactive and based primarily on non-contemplative benefits.

The stigma variable, in particular public stigma, warrants further consideration. In this study stigma was not a useful variable. Researchers need to further explore this construct conceptually and operationally. There is every reason to believe that stigma is a factor in the decision making by military spouses. The prior research qualitative portion of this study pointed to the importance of this measure. Quantitatively, however, the stigma variable proved difficult to predict and did not serve as a useful predictor.

Ultimately a comprehensive study of spouses' intentions regarding combat stress merits an intensive study across a longer time period. Additional time would be very helpful in securing (1) military approval, (2) greater promotional visibility to potential respondents, (3) a larger, more representative sample of military spouses.

Recommendations

Based on the results of this research, recommend the military take the following two steps:

1. Develop educational and communication campaigns that target spouses with COSR-related information tailored to maximize encouragement of help-seeking behaviors. In particular, these communication initiatives should feature (1) the favorable outcomes that can result from military mental health care, (2) the risk and severity of combat stress that is treated late or never, and (3) the importance and effectiveness of spouses' efforts that encourage service members to seek care for COSR at military facilities. This study indicates that information from military sources, which is perceived to be useful, already influences spouses' views concerning combat stress. Attention should be given to the COSR information provided by military sources to be sure that the information is available, consistent, relevant and ultimately usable by spouses.
2. Expand the pre and post deployment education/counseling to include spouses with respect to COSR. Once again this study demonstrates that spouses are aware of and interested in, pre and post deployment education/counseling. This is another

avenue where spouses could be included in services or educational programs already provided to military members.

APPENDIX A

FOCUS GROUP

SPOUSE FOCUS GROUP MODERATOR GUIDE

I. Rules and Ice Breaker

a. Hand out consent/demographic information forms.

b. Welcome and discussion rules.

- Thank you for coming today. I appreciate your willingness to participate in this thesis project. (Introduce self).

- The purpose of this focus group is to gain insight from you all about specific aspects of our military community, spouse awareness and feelings about combat stress along with help-seeking behaviors. This insight is going to provide the foundation for a survey that will be put online for a larger group of military spouses to complete.

- Please know that there are no wrong answers and all your opinions are important. Please know that your name is not used in any way in the writing or documentation of this project.

- Since we only have a short time I will occasionally move on to the next question before you might be ready to move on. If you feel you have more to say on a particular subject please write it down on the note pad I have given you and we can discuss it at the end of the session.

- This session should take about an hour and a half. Are there any questions at this time?

c. Ice breaker and introductions.

- Introductions
- Ice breaker
- Collect signed consent /demographic information forms.

II. Questions for Participants

a. Definitions/norms

•Let's first come to some understanding of how you would define or describe combat stress. (*Ask for symptoms and put definitions on flip chart. Make sure PTSD and ASD are in this definition*)

•What if anything have you heard about how the military defines combat stress reaction?

•How about service members? What words do they use to define combat stress reaction?

•What would you say is your normal reaction when people in the military environment talk about combat stress reaction?

b. Perceived susceptibility

•Who do you believe is at risk for developing combat stress reaction?

•What have you heard if anything about the military's view on service members risk for developing combat stress reaction?

c. Perceived seriousness of condition

•How serious do you believe combat stress reaction to be?

•How do you believe this affects service members and their families?

- How do you believe this affects the units and the military in general?

- How do you believe this effects individual performance of military duties?

d. Belief in effectiveness of the new behavior

- Do you believe that there is a treatment for combat stress reaction?

- What have you heard if anything about the military's ability to treat combat stress reaction?

- What if anything have you heard about the quality of military health care for service members with combat stress reaction?

e. Cues to action

- If you have witnessed family members or other families get help for combat stress reaction and feel comfortable sharing that information with this group, what would you say are the reasons they sought out treatment?

f. Barriers to taking action

- If you know (or heard about) someone that you suspected had combat stress reaction and did not seek treatment what are the reasons you believe that they did not seek help?

- If you believe there are consequences for those Service Members who seek treatment, in a military health care facility what do you believe they would be? *Ask how likely those consequences are for each suggestion. Suggestions if not brought up-*

- *loss of status in unit*
- *loss of particular job in unit*
- *loss of job*
- *criticism from co-workers*

- *bullying from co-workers*
- *loss of confidence from co-workers*
- *viewed as wimpy by co-worker*
- *family harassed*
- *family ostracized*

g. Attitude towards help-seeking (definition of help-seeking- talking to chaplain, counselor, MD, self help groups).

•Hypothetically, if a friend confided in you that she thought her husband (active duty) was experiencing combat stress reaction six months after returning from a war zone would you recommend she encourage him to seek help? If so where would you recommend he go for help? If no, why not?

•Have you heard of any scenarios with people that you know or have heard about who have sought treatment for combat stress reaction and (1) had a negative consequences because of it, or (2) had a positive outcome because they sought treatment?

h. Influences on spouse regarding help-seeking behavior

•Now let's look at a non combat stress reaction illness. When your spouse is ill or hurt how likely are you to say "you should go see a Dr about that or you should go to sick call for that?" Do they follow that advice?

i. Behavior intention/response efficacy

•Hypothetically if your spouse exhibited signs of combat stress reaction would you recommend s/he get help? If so where? If so what do you believe might be his/her argument against treatment? If not why wouldn't you encourage your spouse to get treatment?

j. Perceived behavior control/ self efficacy

- Hypothetically speaking if you were sure that your spouse needed to seek help for combat stress reaction how sure are you that you could have a conversation with them about seeking treatment tomorrow? (Scale-Extremely sure I could 1 2 3 4 5 Extremely sure I could not)

- Still in the hypothetical- would you discourage your spouse from seeking treatment if they showed signs of combat stress reaction? Why?

k. (note the following question was asked of the second focus group and the individual interviews not the first focus group).

- What do you think the military would have to do for soldiers to seek help from military health facilities?

III. Closing

Thank you for coming. You have been a huge help. You have my contact information if you would like to get in touch with me please feel free to do so.

APPENDIX B

FOCUS GROUP DEMOGRAPHIC INFORMATION/FAMILIARITY LEVEL QUESTIONS

1. What year were you born? _____
2. What is your gender?
 Male
 Female
3. What is your race?
 Asian
 Black
 Caucasian/White
 Latino
 Other (Specify) _____
4. What is the highest level of education you have completed?
 Less than High School
 High School/GED
 Some College
 2-year College Degree
 4-year College Degree
 Graduate/Professional Degree
5. Is your spouse currently in the military?
 yes
 no (if no please stop and talk to moderator)
6. What branch?
 Army Navy Air Force Marine Coast Guard
7. Current military grade (please circle)
E1 E2 E3 E4 E5 E6 E7 E8 E9 W1 W2 W3 W4 W5 O1 O2 O3 O4 O5 O6 O7 O8 O9 O10
8. Status
 Active Duty National Guard Reserve
9. Has your spouse ever been deployed to a combat environment?
 yes
 no
10. Were you ever or are you currently a military service member?
 yes
 no (if no- please skip to question number 15)

11. Are you still in the service?
yes- Current military grade (please circle)
 E1 E2 E3 E4 E5 E6 E7 E8 E9 W1 W2 W3 W4 W5 01 02 03 04 05 06 07 08 09 010
no
 (a) What year did you leave the service? _____
 (b) Military grade when you left service (please circle)
 E1 E2 E3 E4 E5 E6 E7 E8 E9 W1 W2 W3 W4 W5 01 02 03 04 05 06 07 08 09 010

12. What branch?
Army Navy Air Force Marine Coast Guard

13. What is/was your Status?
Active Duty National Guard Reserve

14. Have you ever been deployed to a combat environment?
yes
no

15. Please indicate how many years you have been a military spouse (write in number) _____

LEVEL OF FAMILIARITY WITH Combat Stress Reaction (which can include combat related Post Traumatic Stress Disorder)

Please read each of the following statements carefully. After you have read all of the statements below, place a check by EVERY statement that represents your experience with persons with post traumatic stress.

- I have watched a movie or television show in which a character depicted a person with combat stress reaction.
- My job involves providing services/treatment for persons with combat stress reaction.
- I have observed, in passing, a person I believe may have had combat stress reaction.
- I have observed persons with combat stress on a frequent basis.
- I have personally experienced combat stress reaction.
- I have worked with a person who had combat stress reaction.
- I have never observed a person that I was aware had combat stress reaction.
- A friend of the family has or had combat stress reaction.
- I have a relative who has or had combat stress reaction.
- I have watched a documentary on television about combat stress.
- I live with a person who has experienced combat stress reaction.

Thank you for your participation in this survey!

APPENDIX C

LETTER OF INVITATION FOR FOCUS GROUP

I am a graduate student under the direction of Professor Gary Heald in the College of Communication at Florida State University. I am conducting a research study to evaluate military spouse attitudes towards help-seeking behavior and combat stress reaction. I am also a military spouse.

I am recruiting subjects to participate in a focus group that will be held with about eight to ten military spouses. We will discuss attitudes and feelings about combat stress and issues related to seeking help in a military community. The information gained from these sessions will help me create a survey that will be posted online in August. The focus group session will take approximately an hour and a half.

Your participation in this study is voluntary. If you choose not to participate or to withdraw from the session there will be no consequences. The results of the research may be published, but individual results and your name will not be used. Personal information will be kept confidential to the extent allowed by law.

If you would like to participate please contact me at asa05d@fsu.edu or you can call me at 240-431-1859. All sessions will be held at a home of a military spouse. Your presence is needed at only one session and you can choose from July 12 at noon in Enterprise, July 14 in Dothan at 7pm or July 19 at 7pm in Enterprise.

If you have any questions concerning this research study, please feel free to contact me at 240-431-1859 or you can talk to my advisor Dr. Gary Heald at 850-644-9698.

Please feel free to forward this email to a military spouse you believe would like to participate in this focus group.

Thank you very much for your time,

Anna Stowe Alrutz

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Vice President for the Office of Research at (850) 644-8633.

APPENDIX D

INFORMED CONSENT FORM FOR FOCUS GROUP

I freely and voluntarily and without element of force or coercion, consent to be a participant in the research project entitled "Combat Stress Reaction, Help-seeking Behavior and the Military Spouse."

This research is being conducted by Anna Stowe Alrutz, Department of Communication at Florida State University. I understand the purpose of her research project is to better understand military spouse views on Combat Stress Reaction (which can include Post traumatic Stress Disorder) in the military environment. In addition to general health seeking practices it is exploring military spouse attitudes and practices related to service members seeking early care for Combat Stress Reaction. I understand that if I participate in the project I will be asked questions about my feelings about Combat Stress Reaction, and help-seeking behavior as well as general information about the attitudes my peers have towards these issues.

I understand I will be asked to participate with other military spouses in a discussion about Combat Stress Reaction. The total time commitment would be about an hour and a half. I understand my participation is totally voluntary and I may stop participation at anytime without penalty or consequence. I understand the information obtained during the course of the study will remain confidential, to the extent allowed by law and that the researcher will keep consent forms in a secure location until the conclusion of the study at which time they will be destroyed. I understand that only group findings not individual responses will be reported.

I understand there are benefits for participating in this research project. First, my own awareness about Combat Stress Reaction may be increased. Also, I will be providing valuable insight into military spouse feelings and behaviors regarding Combat Stress Reaction. This knowledge can assist the researcher generate a more accurate survey which will be filled out by many military spouses. The result of that survey can help researchers and educators target the appropriate demographic to encourage service members to seek help for Combat Stress Reaction in the early stages. I understand that the foreseeable risks or discomforts associated with participating in this study are minimal and mainly involve possible internal conflict over personal attitudes towards Combat Stress Reaction and help-seeking behavior in a military environment and the evaluation of sharing that information with other spouses.

I understand that this consent may be withdrawn at any time without prejudice, penalty or loss of benefits to which I am otherwise entitled. I have been given the right to ask and have answered any inquiry concerning the study. Questions, if any, have been answered to my satisfaction.

I understand that I may contact Anna Stowe Alrutz, through the Associate Dean of the College of Communication at Florida State University, Dr. Gary Heald at 850-644-9698 or directly at asa05d@fsu.edu for answers to questions about this research. Group results will be sent to me upon my request.

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Vice President for the Office of Research at (850) 644-8633.

I have read and understand this focus group consent form.

Name- _____ Signature- _____ Date _____

APPENDIX E

FOCUS GROUP RESULTS

Two focus groups were held to gather information for the online survey questions. The first focus group was held at the home of an Army spouse in Enterprise, AL and the second at the home of an Army spouse in Dothan, AL. A third scheduled focus group was canceled. The first group involved four participants, the second, five participants, and three participants from the cancelled group met with the researcher individually. The focus group questions followed the moderator guide (see appendix A). All participants filled out consent forms (see appendix D), a demographic form and a familiarity with combat stress questionnaire (appendix B). An introduction and overview of the discussion ground rules preceded the questioning at each meeting.

Demographic Write-up

Information was gathered from twelve Caucasian female participants born between 1955 and 1984. The participants all had some undergraduate college education or higher. Four participants had graduate or professional degrees. Ten participants were current Army wives with husbands on active duty, one participant was a fiancée to a service member on active duty (who was not differentiated for the purposes of this write up), and one participant's husband had recently retired from active duty service.

Participants included spouses of two enlisted service members, six warrant officers and four commissioned officers. With the exception of the spouse of the retired service member, all the respondents were married to service members who were either on active duty or active National Guard. Ten of the twelve service members had been deployed to a combat environment. Two of the wives had been former active duty enlisted service members (Navy and Army). Both were no longer in the military and had never served in a combat environment. The participants had been military spouses for between one and twenty-two years.

Definitions/Norms of Combat Stress Reaction

a. The following terms were used by participants to describe symptoms of combat stress reaction: anxiety, depression, paranoia, moody, sleeping problem, night terrors, jumpiness, preoccupation, not listening, overly sensitive, withdrawn, not talking, overly quiet, denial (not always negative), teeth grinding, sleep walking, flashbacks, accumulated stress, over drinking, substance abuse (or fear of substance abuse), domestic violence, afraid of normal situations (lines, crowds, traffic), generally more afraid, more sensitive than before and experiencing over reaction.

A question was raised about whether this definition had to be negative and there was a discussion about combat stress versus post traumatic stress which mainly concluded with the idea that the two conditions were the same but the root cause (combat) was the difference.

b. None of the spouses were aware of how the military defines Combat Stress Reaction.

c. Spouses perspective on words service members use to define Combat Stress Reaction - wimpy, weak, scared.

d. Normal reaction from spouses when people in a military environment talk about Combat Stress Reaction- sympathy, admiration for sacrifice made for country, wonder how anyone can come back from combat situation unchanged, ignore like the elephant in the room.

Perceived Susceptibility

a. Who is at risk for developing Combat Stress Reaction- Everyone, front line, infantry, younger more at risk than older service members, depends on length of time deployed, depends on family support and if there is an unsupportive wife the service member is more at risk. Newly-wed, recently divorced, and service members getting “Dear John” letters while deployed are more at risk as well as those who had personal problems

before leaving. Many felt that there would be less risk if the public reaction to service members in combat was more supportive and positive.

b. The respondents said they hadn't heard anything about how the military views the susceptibility of service members for developing Combat Stress Reaction.

Perceived Seriousness of Condition

a. Seriousness of combat stress - The respondents were split on the seriousness of the problem of combat stress. Many said it was very serious but others felt they don't get enough information to make a determination of the seriousness. Some felt that there is a mystery about COSR, since it isn't talked about openly and believe that the military shrouds itself in secrecy on this issue to avoid having service members look bad.

b. Combat stress reaction's affect on service members and their families - The participants felt that combat stress causes divorce because the instability tears families apart and because families and service member are unprepared for the service member's reactions when returning home. Spouses think about the party/reunion but are not prepared for how shut out they will be from their service member and how alone they will feel even though the soldier is home. Families should expect service members to be changed but instead expect life to return to the way it was before deployment. Many respondents stated that service members don't want to admit problems and get help. Another stated that service members may react to national/ethnic differences in people around them when they didn't before and they tend to overreact to situations that they can not control. On respondent who's husband actually had returned from a deployment suffering from COSR said she kicked her husband out of the house, called his commander and requested that the commander get her husband help since all of his reactions were out of line in dealing with her, their children and people in general. She felt strongly that he was going to hurt himself or someone else.

c. Effect on individual military units and the military in general - Respondents felt that the retention rates declined because of combat stress. Family pressure to change the work/life environment from what caused the service member to change. Respondents felt that moral support and command support was inconsistent and that individual

service members treatment depends on the type of commander and the atmosphere of concern at the unit level.

d. Combat stress and it's affect on individual performance of military duties -

Respondents stated that combat stress causes service members to be stressed out which adversely affects job performance. This symptom is especially hard for National Guard and Reserve service members since they could be working in a NON-military environment where co-workers can't relate to what happened during deployment and don't understand the COSR behaviors.

Belief in Effectiveness of New Behavior

a. Is there a treatment for COSR?- All respondents felt there was definitely something that could be done to treat combat stress. Some said it was manageable while others felt it was curable. Some believed that the remedy could be found in a pharmaceutical approach, while others said they felt psycho-analysis, group, peer or individual counseling was the best way to deal with the issue. Still others felt that spiritual intervention was the remedy.

b. Does the military have the ability to treat combat stress reaction?-

1. Negative Comments - One respondent stated that the murders in a North Carolina military unit a few years ago really should have been a wake up call and yet the military hasn't taken combat stress more seriously. A number of respondents felt that the post deployment assessment survey used by the military is proof that the military doesn't take combat stress seriously. They felt that handing out a survey with a few COSR questions is more bureaucratic than anything and serves simply to prove that the military does ask service members if they are suffering from COSR. Many felt that there was not enough COSR information given to spouses or service members before or after deployments. Most felt mental health was not an open subject in the military and that the military really shouldn't expect service members returning from deployment to truthfully check a block that will send them to the "crazy" line and delay their return home.

2. Positive Comments. The military does provided a 24 hour hotline through Military OneSource website. Some service members had participated in two weeks of special classes held right after a deployment. Although these classes were mandatory, they felt that good information was presented to those who cared to listen. A few respondents had been involved with family support groups that provided good information about what to expect when service members returned from deployment. The information included how to get reacquainted and touched on topics about giving the service member space, not expecting the service member to give the spouse a break and watch kids right away, warning that sexual issues may take place, and discussed the challenge of reallocating household jobs.

c. Quality of military health care for combat stress -

1. Negative Comments - Many respondents felt that the quality of care was not good and many complained there wasn't help for service members while they were deployed in theater. They felt that military counseling was not a good place to get help and that there was better care at NON-military treatment facilities.

2. Positive Comments - One spouse whose husband had gotten treatment for combat stress from a military treatment facility said it was good although she didn't really have anything to compare it to. She said it was such a difficult time and it was an extremely slow recovery process that there are always doubts about whether the treatment was the best or not, but years later she can't complain because he got the help he needed and he continues to serve in the military.

Cues to Action

Reasons family or friends have sought out treatment for combat stress - The main reason repeated by all groups was that service members seek help for COSR because they want to preserve their marriage. Other reasons included people with prior experience going to counseling for other issues and service members who attend because of family member insistence.

Barriers to Taking Action

- a. Reasons service members do not seek treatment - Stigma about having combat stress was a major reason. Service members don't want other service members to know because they could be seen as weak which is especially bad if they are in charge of other soldiers. Respondents also felt having combat stress could hurt the service member's career. Others pointed out that combat stress still equals "crazy".

- b. Consequences for service members who seek treatment in military care facilities - Respondents felt that service members may not get promoted, could have leadership roles taken away, less responsible jobs could be given to service members, revocation of flight status for aircrew members, loss of job, or discharge from the service. Some participants feared that other spouses wouldn't want their children around service members with COSR. Some participants stated that some spouses might be blamed for service members suffering from COSR because they are an unsupportive spouse which can affect the service member. Another consequence is that the service member may appear weak to his or her children if they attend counseling. Others felt that members of a combat unit might not be sympathetic since the whole unit was in combat experiencing the same situations yet some service members might be selected to return home with combat stress while others are returned to duty.

Attitude Towards Help-seeking (defined as talking to chaplain, counselor medical Dr, self help group).

- a. Hypothetically, if a friend confided in you that she thought her husband (active duty) was experiencing Combat Stress Reaction six months after returning from a war zone would you recommend she encourage him to seek help? All respondents answered that they would encourage help-seeking. Sources of help varied including military chaplain, NON-military chaplain, NON-military counselor, anywhere but military treatment facility, people who are experienced with military issues, NON-military psychiatrist, and wherever the service member would feel most comfortable.

b. Scenarios with people that you know or have heard about who have sought treatment for Combat Stress Reaction –

1. Negative consequences from seeking treatment - A respondent shared that one service member she knew about had lost his job and was transferred out of the unit while another was given a menial labor job and then kicked out of the Army upon return stateside. Some participants had heard of instances where service members feign illness from COSR to get out of undesirable duty or be re-assigned out of combat duty which puts a negative light on seeking help. Others said they thought service members were claiming they had combat stress to get benefits later.

2. Positive outcome because they sought treatment - One respondent shared a story about a female service member who was ordered to treatment before deploying because she had previously gone to counseling for other issues and was also ordered to attend upon redeployment as a safety precaution. One service member's wife shared that she had called the command and told them that she had kicked her husband out and she would take him back when they got him help. They ordered him into counseling and he is still in military, got the help he needed and they are still together.

Influence On Help-seeking Behavior

a. Where does spouses' information about combat stress come from - Respondents shared that they get their information from the Internet, movies (Rambo, Forrest Gump), other spouses, prior military experiences, personal experience, media, friends, spouse and family readiness groups.

b. For non-combat stress reaction illnesses will spouses encourage service members to seek medical treatment? The respondents said they often advise their husbands to seek medical treatment.

c. How likely are service members to take advice? The respondents felt that the husbands rarely if ever take their advice on this matter.

Behavior Intention/Response Efficacy

- a. Hypothetically if your spouse exhibited signs of Combat Stress Reaction would you recommend s/he get help? Overwhelming response was “yes” however there was one “maybe” who felt it really is her husband’s call.
- b. Where would you recommend service members seek help for COSR symptoms? All but one who expressed their opinion felt that NON-military medical care was the only option. Many respondents indicated that the location recommended depended on the behavior exhibited by the individual. Recommendation to a NON-military chaplain or church was the most frequent response. Some felt that religious counseling was sufficient treatment, others viewed religious counseling as a starting point. A number of respondents felt that clinical counseling would be the best option.
- c. What might be the service member’s argument against treatment? Respondents felt that service members would feel that treatment wouldn’t help, that treatment is not needed, that they don’t have time to get help, and for pilots that treatment would prevent them from performing flight duties. Some felt that service members would argue against treatment to keep their privacy for their job sake because medical records are open to their command and could be used to discharge them.

Perceived Behavior Control

- a. Respondents were extremely sure they could encourage their military spouses to seek help tomorrow if needed.
- b. No respondents said they would discourage help-seeking, however many would only encourage NON-military medical care.

Additional Question Used Only With the Second Focus Group:

- a. What do you think the military would have to do for service members to encourage them to seek help from military counselors? Respondents felt that the military would have to admit this is a real problem and start support groups led by Vietnam or first gulf war veterans. They also felt that the military needed to attach civilian counselors to

military units and that counselors are needed for deployed troops in the theater of operations. Many felt that peer counselors trained to talk to service members were needed in each unit and that the military needed to keep the records of counseling sessions private. Many believed that if the military could show statistics on how service members with COSR are being treated, of the types of medical treatments that are working and that service members with COSR aren't losing their specialty jobs then service members would be more encouraged to seek treatment.

b. Other suggestions-

- Service members and families need a real post-deployment assessment not just a check the block exercise.
- Service members need to have multiple post-deployment briefs over three to six months to better determine which service members need COSR treatment.
- More information is need on how normal is it to have post-deployment adjustment problems and the military needs to provide online and in person chat groups to talk over normal versus extreme symptoms.
- Clarify myths about combat stress. Is it really true that if you get PTSD you can't be in Special Forces or a Ranger Battalion.
- Train commanders to handle COSR systems consistently (one service member kicked out versus another sent for counseling with same issue).
- Reintegrate service members with COSR issues back into the unit
- Have medical professionals know what they are talking about. One colonel said the military is trying to reduce stigma associated with COSR but that information doesn't help spouses address issues with their service members.
- If the military had a better attitude towards counseling by encouraging superior officers to speak positively about counseling and not punishing or ostracizing

those who get help, service members would also have a better attitude towards counseling.

- Post deployment assessments should be done in small groups and ranks should not be mixed.
- Post deployment sessions – Presenters should be conscious that some service members have a hard time listening to COSR information because they want to get back to family instead of watching movie about getting together with family.
- There is a need to have post deployment sessions for families.
- Need spouse group trainers who have “been there done that”. These trainers talk to spouse groups before and after deployments and share techniques and resources for dealing with post deployment issues including combat stress.
- The military needs to train service members that change is normal and that their actions and reactions are going to be different. Information should be provided that symptoms of COSR don’t necessarily appear immediately but could happen months later.
- Families should be educated on how to use hazardous duty and family separation allowances to help with difficult issues while the service member is gone, and how to adjust when the service member returns and the allowances are no longer provided.

APPENDIX F

Spouse-Buzz Online Article

Military Spouse Survey on Combat Stress

September 21, 2006|[Andi](#)

Anna Stowe Alritz is a graduate student researcher at Florida State University, and a military spouse of sixteen years. Anna is conducting an on-line survey for military spouses as part of her thesis research. She writes:

My graduate research is exploring issues associated with combat stress. Combat stress is becoming an increasingly important issue across the military community as our service members carry out combat deployments. The purpose of this research project is to better understand military spouse views on combat stress. In addition to understanding general health seeking behaviors, my research is exploring military spouse attitudes and practices related to service members seeking early care for combat stress symptoms.

This survey is open to all U.S. military spouses. If you are currently a military spouse I would like to hear from you. Please take twenty minutes to complete this survey which provides critical information needed to address these research questions.

During the survey you will be asked questions about your feelings regarding combat stress, help-seeking behavior and general information about the attitude your peers have towards combat stress. You must be at least 18 years of age to participate.

If you're interested in reading more, or participating, [click here](#).

APPENDIX G

Army Flyer Article

Army spouse researches combat-related disorders

By Marti Gatlin
Army Flier Staff Writer

October 12, 2006

Through a college research project, an Army spouse hopes to help service members and their families seek medical aid for combat-stress symptoms and disorders.

Florida State University graduate student Stowe Alrutz is conducting a free, anonymous online survey of Armed Forces military spouses to research the role spouses play in supporting their partners seeking medical help for combat-stress symptoms. The information Alrutz collects will be part of her thesis research.

"It's a difficult issue, and hopefully will help someone," Alrutz said.

The project's purpose is to better understand military spouses' views about combat stress, she said. In addition to understanding general health-seeking behaviors, Alrutz's research explores military spouses' attitudes and practices related to military members seeking early care for combat-stress symptoms.

"Spouses encourage Soldiers, and I think there's an opportunity to find out what spouses are encouraging," Alrutz said during an interview Sept. 29. "Spouse encouragement is a driving force especially in health issues and whether someone seeks medical help."

Alrutz asks that Fort Rucker military spouses visit http://www.spousebuzz.com/blog/2006/09/military_spouse.html, and click on "click here."

Military.com is sponsoring the site, she said.

Open to spouses of all U.S. military branches, individuals must be at least 18 years of age to participate. No experience with or prior knowledge of combat-stress symptoms is needed to answer the roughly 20-minute survey, she said.

Slated to be collected through Oct. 16, information may still be gathered after that date, Alrutz said, noting she'll post a message stating when the survey ends.

A military spouse for 16 years, Alrutz is married to Lt. Col. Eric Stierna, U.S. Army Aviation Technical Test Center test pilot at Fort Rucker. They have a 13-year-old daughter, Ander. Stierna has served 17 years in the Army.

"Stowe's online survey will provide the first, formal investigation of the role military spouses play in encouraging servicemembers to seek medical help for combat-stress reaction symptoms," Stierna said about his wife's project. "The more military spouses in the local community who take the survey and encourage friends across the Army to do the same, the greater the potential to produce definitive results. I believe that her published survey results will help Army leaders understand the issues that impact military spouse behavior toward encouraging their servicemembers to seek help for combat-stress symptoms."

Alrutz said she's seen the stress families undergo when Soldiers are deployed and come home.

"When I was here at Fort Rucker, I taught parenting classes and child abuse programs from 1995-1998," she said. "Being around servicemembers and family members who have (spouses) coming home from deployments, showed the stress families are under."

Alrutz said it will be interesting to see what spouses know about the issue — where they get their information concerning facts and myths about combat- stress symptoms. She added that it will also be fascinating to see if the information is consistent between spouses who have been in the situation versus those dealing with hypothetical circumstances and what they would do if this happened to them.

She said she is not tracking installations the responses are coming from. She is collecting data about which military branches the spouses' partners serve with, ranks, how long respondents have been military spouses and if they are prior military. To collect information, Alrutz sent e-mails to various Army organizations, and they passed it on to their local entities. She also sent e-mails to friends in the Navy, Marine Corps and Air Force, as well as to several Coast Guard public affairs officers and family service centers.

"So far, no Coast Guard spouses have taken the survey," she said.

Alrutz said her goal is to receive completed online surveys from 1,000 spouses.

"We hope to publish and make available our findings," she said.

The graduate student contacted Sue Jackson, Fort Rucker's Army Community Service director, about informing military spouses here regarding the survey, which is not a Department of the Army or ACS survey.

Jackson passed information concerning the survey to ACS' Waiting Families and Army Family Team Building instructors, Employment Readiness Program volunteers and put Alrutz in touch with unit Family Readiness Groups.

"I hope (Alrutz will) send me the findings," Jackson said during an interview Sept. 29. "A lot of what ACS does is prevention education, financial and other assistance and providing information. If this information (from the survey) proves to be beneficial for Fort Rucker's demographics, we'll use it. We may look at other avenues of getting information out about ACS. Our goal is to make sure families and Soldiers get assistance and the resources they need and are taken care of."

APPENDIX H

HUMAN SUBJECT APPROVAL



Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-8673 · FAX (850) 644-4392

APPROVAL MEMORANDUM

Date: 6/21/2006

To:
Anna Alrutz
4863 Heritage Park Blvd.
Tallahassee, FL 32311

Dept.: INTEGRATED MARKETING COMMUNICATION

From: Thomas L. Jacobson, Chair

A handwritten signature in black ink, appearing to read "Thomas Jacobson".

Re: Use of Human Subjects in Research
PTSD, Stigma Towards Help-Seeking Behavior and the Military Spouse

The forms that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Secretary, the Chair, and two members of the Human Subjects Committee. Your project is determined to be Expedited per 45 CFR § 46.110(b) 7 and has been approved by an accelerated review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals, which may be required.

If the project has not been completed by **6/19/2007** you must request renewed approval for continuation of the project.

You are advised that any change in protocol in this project must be approved by resubmission of the project to the Committee for approval. Also, the principal investigator must promptly report, in writing, any unexpected problems causing risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols of such investigations as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Protection from Research Risks. The Assurance Number is IRB00000446.

Cc: Gary Heald
HSC No. 2006.0495

APPENDIX I

AUTHORIZATION TO USE FAMILIARITY QUESTIONNAIRE

Sent: Tuesday, May 16, 2006 10:18 AM
To: Patrick W. Corrigan, Psy.D.
University of Chicago
Center for Psychiatric Rehabilitation
7230 Arbor Drive
Tinley Park, IL 60477 USA

From: Stowe Alrutz
Master Degree Candidate Florida State University
Dear Dr. Corrigan,

I am working on my Master's Thesis in the Department of Communication at Florida State University. I would like to ask your permission to use your Level of Familiarity Questionnaire (slightly modified) to ascertain the level of familiarity that military spouses have with people who have Post-traumatic stress. The information gathered will be used for my thesis. I have attached a copy of changes that I would like to make when using your base questionnaire.

If you have any questions regarding this request I can be contacted at the email below or you can contact my adviser Dr. Gary Heald at 644-9698 or gheald@garnet.acns.fsu.edu.

Best Regards,
Stowe Alrutz

Date: Tue, 16 May 2006 10:26:17 -0500 [05/16/2006 11:26:17 AM EDT]
From: Pat Corrigan <corrigan@iit.edu>
To: 'Stowe Alrutz' <asa05d@fsu.edu>
Subject: RE: Permission request

Stowe
Your adaptation makes sense and potentially may progress research in stigma.
Yes, you have my permission
Best of luck with your work
Let me know if you find out anything interesting
Pat

Patrick W. Corrigan, Psy.D.
Professor, Institute of Psychology
Illinois Institute of Technology
3424 S. State Street
Chicago, IL 60616 USA

APPENDIX J

BASIC LETTER OF INVITATION – ONLINE SURVEY

Greetings,

I am a military spouse conducting an online survey for military spouses as part of my thesis research at Florida State University. One of my research advisors, Dr. Charles Figley, has been a leading researcher on combat stress and post traumatic stress disorder for the last thirty years. Our research is addressing the role spouses play in supporting service members seeking medical help for combat stress symptoms.

The results of this survey will provide critical information needed to fill a gap in the knowledge base on combat stress and may positively impact treatment of service members suffering from combat stress symptoms.

I was hoping you would be willing to share my survey link with the military spouse leaders in your community. I am asking military spouses to visit the site and take the survey. My goal is to receive completed online surveys from one thousand service member spouses by mid October 2006. This survey is open to any U.S. military spouse (Active duty, National Guard or Reserve) regardless of service.

All military spouses no matter how long they have been a military spouse and no matter what they have experienced are asked to take the survey. No experience with or prior knowledge of combat stress is needed to answer the questions. The survey takes about 20 minutes to complete.

Here is the link: <http://www.surveympro.com/TakeSurvey?id=19564>

If there is additional information that I can provide please don't hesitate to contact me.

Your help is deeply appreciated.

Sincerely,
Anna Stowe Alrutz

APPENDIX K

WEB LOOK OF ONLINE SURVEY

The screenshot shows a Microsoft Internet Explorer browser window with the address bar displaying 'stowe-thesis - MIL SPOUSE FINAL - stowe-thesis MIL SPOUSE FINAL - Microsoft Internet Explorer'. The page content is titled 'Military Spouse Survey.' and contains the following questions and options:

What branch of the military is your spouse currently working for? *

- Air Force
- Army
- Coast Guard
- Marine Corps
- Navy

Current Military Grade *

What is the service member's status? *

- Active Duty
- Reserve
- National Guard

Has your spouse ever been deployed to a combat environment? *

- Yes
- No

Were **you** ever or are **you** currently a military service member? *

- Yes
- No

Please contact [Anna Stowe Alutz](#) if you have any questions regarding this survey.

The browser's taskbar at the bottom shows the 'start' button, a taskbar with the active window 'stowe-thesis - MIL SP...', and a system tray with the time '8:03 AM'.

APPENDIX L

ONLINE SURVEY QUESTIONS

Online Survey.

Hello, my name is Anna Stowe Alrutz. I am a graduate student researcher at Florida State University and for the last sixteen years I have been a military spouse.

My graduate research is exploring issues associated with combat stress. Combat stress is becoming an increasingly important issue across the military community as our service members carry out combat deployments. The purpose of this research project is to better understand military spouse views on combat stress. In addition to understanding general health seeking behaviors, my research is exploring military spouse attitudes and practices related to service members seeking early care for combat stress symptoms.

This survey is open to all U.S. military spouses. If you are currently a military spouse I would like to hear from you. Please take twenty minutes to complete this survey which provides critical information needed to address these research questions.

During the survey you will be asked questions about your feelings regarding combat stress, help-seeking behavior and general information about the attitude your peers have towards combat stress. You must be at least 18 years of age to participate.

Completion of the questionnaire is implied consent to use the data you have provided and agreement to the following: "I freely and voluntarily and without element of force or coercion, consent to be a participant in the research project entitled "Communications about combat stress, stigma and help-seeking from the military spouse perspective."

I understand I am participating in an online questionnaire. I understand my participation is totally voluntary and I may stop participation at anytime without penalty or consequence. I understand that the information obtained during the course of the study will remain confidential, to the extent allowed by law and that I will be identified by a subject code number. My name will not be asked for and my Internet identifying number will not appear on any of the results. I understand that only group findings not individual responses will be reported.

There are no foreseeable risks or discomforts if I agree to participate in this study. I understand there are benefits for participating in this research project. First, I will be providing valuable insight into military spouse feelings and behaviors regarding combat stress. This knowledge can assist researchers and educators target the appropriate demographic for educational emphasis in order to encourage service members to seek help for combat stress in the early stages. Also, my own awareness about my attitude towards combat stress may be increased.

I understand that this consent may be withdrawn at any time without prejudice, penalty or loss of benefits to which I am otherwise entitled. I have been given the right to ask and have answered any inquiry concerning the study. Questions, if any, have been answered to my satisfaction.

I understand that I may contact Anna Stowe Alrutz, through the Associate Dean of the College of Communication at Florida State University, Dr. Gary Heald at 850-644-9698 or directly at asa05d@fsu.edu for answers to questions about this research or my rights. Group results will be sent to me upon my request. The data will be stored under lock and key on file at 4100 University Center C, Tallahassee, FL until one year after the study has been completed, and destroyed on September 15, 2007. All e-mail correspondence will be kept confidential and will be destroyed one year after the study has been completed.

Thank you for taking the time to support my research
Sincerely,

Anna Stowe Alrutz

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of Human Subjects Committee at the Florida State University Institutional Review Board at 850.644.8633 located at the Office of Research, Innovation Park, 2010 Levy Ave, Suite 276, Tallahassee, FL, 32306-2742.

This survey will simply use the term "combat stress" when referring to "combat/operational stress reaction", "post-traumatic stress symptoms" and "acute stress disorder symptoms" related to military service. Please note that once you click "continue" on any page of this survey you will not be able to return to that page.

1. Is your spouse currently serving in the U.S. military? *

- Yes
- No

2. What branch of the military is your spouse currently working for? *

- Air Force
- Army
- Coast Guard
- Marine Corps
- Navy

3. Current Military Grade *

- E1, E2, E3, E4, E5, E6, E7, E8, E9
- W1, W2, W3, W4, W5
- O1, O2, O3, O4, O5, O6, O7, O8, O9, O10

4. What is the service member's status? *

- Active Duty
- Reserve
- National Guard

5. Has your spouse ever been deployed to a combat environment? *

- Yes
- No

6. Were you ever or are you currently a military service member? *

- Yes
- No

7. How many years have you been a military spouse? (Include all years with past spouses if applicable) *

- 1-50 years

8. Have you ever heard of consequences for service members who seek treatment for combat stress? *

- Yes
- No

9. Has your spouse (current or former military spouse) ever sought treatment for combat stress? *

- Yes
- No

10. Given your understanding of combat stress, the following are symptoms or effects of combat stress reaction. Check all that apply:

- a. Aggression
- b. Alcohol/Drug Abuse
- c. Anxiety
- d. Bronchitis
- e. Depression
- f. Ear infections
- g. Flashbacks

- h. Fungal growth
- i. Nose bleeds
- j. Over reaction to normal situations
- k. Paranoia
- l. Poor eye sight
- m. Sleeping problems
- n. Swollen glands
- o. Thoughts/attempts of suicide
- p. Verbally Abusive
- q. Viral Infections
- r. Weight gain/loss

The following questions ask about how often military sources provide you with information about combat stress and if that information is useful. Later, similar questions will be asked about NON-military sources of information.

Never
1 2 3 4 5 6 Often
7

11. I never/often receive information from my military friends about combat stress.

Never Strongly
Received Disagree
Information 1 2 3 4 5 6 Strongly
7 Agree

12. I generally find this information useful.

Never
1 2 3 4 5 6 Often
7

13. I never/often receive information from my family readiness group and/or my spouse's military command about combat stress.

Never Strongly
Received Disagree
Information 1 2 3 4 5 6 Strongly
7 Agree

14. I generally find this information useful.

Never
1 2 3 4 5 6 Often
7

15. I never/often receive information from my military community service organization about combat stress.

Never Strongly
Received Disagree
Information 1 2 3 4 5 6 Strongly
7 Agree

16. I generally find this information useful.

Never Received Information	Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7	

34. I generally find this information useful.

35. Please read each of the following statements carefully. After you have read all of the statements below, place a check by EVERY statement that represents your experience with persons with combat stress.

Check all that apply.

35a. I have watched a movie or television show in which a character depicted a person with combat stress.

35b. My job involves providing services/treatment for persons with combat stress.

35c. I have observed, in passing, a person I believe may have had combat stress.

35d. I have observed persons with combat stress on a frequent basis.

35e. I have personally experienced combat stress.

35f. I have worked with a person who had combat stress at my place of employment.

35g. I have never observed a person that I was aware had combat stress.

35h. A friend of the family has or had combat stress.

35i. I have a relative who has or had combat stress.

35j. I have watched a documentary on television about combat stress.

35k. I live with a person who has experienced combat stress.

How often have you heard people describe service members who seek help for combat stress using the following terms? Please indicate the frequency on a scale of 0-7. A 0(zero) means you have never heard this term used in this context and 7 means you hear it used very frequently.

Never						Often
1	2	3	4	5	6	7

36. I have heard the term "wimpy" used to describe service members who seek help for combat stress symptoms.

Never						Often
1	2	3	4	5	6	7

37. I have heard the term "strong" used to describe service members who seek help for combat stress symptoms.

Never						Often
1	2	3	4	5	6	7

38. I have heard the term "weak" used to describe service members who seek help for combat stress symptoms.

Never
1 2 3 4 5 6 Often
7

39. I have heard the term "brave" used to describe service members who seek help for combat stress symptoms.

Never
1 2 3 4 5 6 Often
7

40. I have heard the term "fearless" used to describe service members who seek help for combat stress symptoms.

Never
1 2 3 4 5 6 Often
7

41. I have heard the term "courageous" used to describe service members who seek help for combat stress symptoms.

Never
1 2 3 4 5 6 Often
7

42. I have heard the term "scared" used to describe service members who seek help for combat stress symptoms.

Never
1 2 3 4 5 6 Often
7

43. I have heard the term "undependable" used to describe service members who seek help for combat stress symptoms.

Never
1 2 3 4 5 6 Often
7

44. I have heard the term "dependable" used to describe service members who seek help for combat stress symptoms.

The following questions ask about your attitude toward encouraging help-seeking at a military health care facility. Later, similar questions will be asked about your attitude toward encouraging help-seeking at a NON-military health care facility.

45. For me to encourage my spouse to seek help at a military health care facility within ninety days of first observing symptoms of combat stress would be

Negative
1 2 3 4 5 6 Positive
7

45a. Negative... Positive

Beneficial
1 2 3 4 5 6 Harmful
7

45b. Beneficial....Harmful

Good							Bad
1	2	3	4	5	6		7

45c. Good...Bad

Wrong							Right
1	2	3	4	5	6		7

45d. Wrong...Right.

The following questions ask about your attitude toward encouraging help-seeking at a NON-military health care facility.

46. For me to encourage my spouse to seek help at a NON-military health care facility within ninety days of first observing symptoms of combat stress would be

Negative							Positive
1	2	3	4	5	6		7

46a. Negative... Positive

Beneficial							Harmful
1	2	3	4	5	6		7

46b. Beneficial...Harmful

Good							Bad
1	2	3	4	5	6		7

46c. Good...Bad

Wrong							Right
1	2	3	4	5	6		7

46d. Wrong...Right

The following questions ask about the influence of others on your decisions. All refer to military health care facilities. Later, similar questions will ask you about NON-military health care facilities.

Should							Should Not
1	2	3	4	5	6		7

47. Most people who are important to me would think that I should/should not encourage my spouse to seek help at a military health care facility within ninety days of first observing combat stress symptoms.

Strongly Agree							Strongly Disagree
1	2	3	4	5	6		7

48. When it comes to encouraging my spouse to seek help for combat stress in a military health care facility I want to do what people important to me think I should.

Strongly							Strongly
1	2	3	4	5	6		7

Approve
1

Disapprove
7

49. If I were to discourage my spouse from seeking help at a military health care facility within ninety days of first observing combat stress symptoms, the people in my life whose opinion I value would strongly approve/strongly disapprove of my decision.

Strongly
Agree
1

2

3

4

5

6

Strongly
Disagree
7

50. When it comes to discouraging my spouse from seeking help in a military health care facility I want to do what people in my life recommend.

Extremely
Likely
1

2

3

4

5

6

Extremely
Unlikely
7

51. It is extremely likely/extremely unlikely that I am expected to encourage my spouse to seek help at a military health care facility within ninety days of first observing combat stress symptoms.

Not At All
1

2

3

4

5

6

Very Much
7

52. When it comes to encouraging my spouse to seek help at a military health care facility I tend to want to do what is expected of me.

The following questions ask about the risk to service members who do not seek help for combat stress symptoms.

Very High
1

2

3

4

5

6

Very Low
7

53. For service members with untreated combat stress, the risk of suicide within ninety days of experiencing symptoms is very high/very low.

Very High
1

2

3

4

5

6

Very Low
7

54. For service members with untreated combat stress, the risk of becoming physically abusive within ninety days of experiencing symptoms is very high/very low.

Very High
1

2

3

4

5

6

Very Low
7

55. For service members with untreated combat stress, the risk of abusing drugs within ninety days of experiencing symptoms is very high/very low.

Very High
1

2

3

4

5

6

Very Low
7

56. For service members with untreated combat stress, the risk of abusing alcohol within ninety days of experiencing symptoms is very high/very low.

Very High						Very Low
1	2	3	4	5	6	7

57. For service members with untreated combat stress, the risk of having severe marital problems within ninety days of experiencing symptoms is very high/very low.

58. What is the number one reason you believe that service members with combat stress seek out treatment? Choose one answer.

58a. Save marriage

58b. Previously sought counseling for another issue

58c. Family encouragement

58d. Direct order by military or civilian authority

58e. Fear of hurting self or someone

58f. Symptoms affecting job effectiveness

58g. Symptoms affecting personal life

58h. Other

The following questions ask about the influence of others on your decisions. All refer to NON-military health care facilities.

Should						Should Not
1	2	3	4	5	6	7

59. Most people who are important to me would think that I should/should not encourage my spouse to seek help at a NON-military health care facility within ninety days of first observing combat stress symptoms.

Strongly Agree						Strongly Disagree
1	2	3	4	5	6	7

60. When it comes to encouraging my spouse to seek help for combat stress in a NON-military health care facility I want to do what people important to me think I should.

Strongly Approve							Strongly Disapprove
1	2	3	4	5	6	7	

61. If I were to discourage my spouse from seeking help at a NON-military health care facility within ninety days of first observing combat stress symptoms, the people in my life whose opinion I value would strongly approve/strongly disapprove of my decision.

Strongly Agree							Strongly Disagree
1	2	3	4	5	6	7	

62. When it comes to discouraging my spouse from seeking help in a NON-military health care facility I want to do what people in my life recommend.

Extremely Likely							Extremely Unlikely
1	2	3	4	5	6	7	

63. It is extremely likely/extremely unlikely that I am expected to encourage my spouse to seek help at a NON-military health care facility within ninety days of first observing combat stress symptoms.

Not At All							Very Much
1	2	3	4	5	6	7	

64. When it comes to encouraging my spouse to seek help at a NON-military health care facility I tend to want to do what is expected of me.

The following questions ask about what you believe other people are likely to do in the given situation. In this section all the questions refer to military health care facilities. Later, similar questions will ask you about NON-military health care facilities.

Completely True							Completely False
1	2	3	4	5	6	7	

65. Most people who are important to me would encourage their own spouses to seek help at a military health care facility for combat stress within ninety days of first observing symptoms.

Would Encourage							Would Not Encourage
1	2	3	4	5	6	7	

66. The people in my life whose opinion and guidance I tend to follow would encourage/would not encourage their own spouse to seek help at a military health care facility for combat stress with in ninety days of first observing symptoms.

Extremely Likely							Extremely Unlikely
1	2	3	4	5	6	7	

67. Many people like me are extremely likely/not extremely likely to encourage their own spouse to seek help at a military health care facility for combat stress within ninety days of first observing symptoms.

NON-military health care facilities is the focus of the following questions.

Completely True							Completely False
1	2	3	4	5	6	7	

68. Most people who are important to me would encourage their own spouses to seek help at a NON-military health care facility for combat stress within ninety days of first observing symptoms.

Would Encourage							Would Not Encourage
1	2	3	4	5	6	7	

69. The people in my life whose opinion and guidance I tend to follow would encourage/would not encourage their own spouse to seek help at a NON-military health care facility for combat stress with in ninety days of first observing symptoms.

Extremely Likely							Extremely Unlikely
1	2	3	4	5	6	7	

70. Many people like me are extremely likely/not extremely likely to encourage their own spouse to seek help at a NON-military health care facility for combat stress within ninety days of first observing symptoms.

The following questions ask about your ability to encourage help-seeking behavior at a military health care facility. Later, similar questions will ask you about NON-military health care facilities.

Definitely True							Definitely False
1	2	3	4	5	6	7	

71. If I wanted to, I could encourage my spouse to seek treatment at a military health care facility within ninety days of first observing combat stress symptoms.

Definitely True							Definitely False
1	2	3	4	5	6	7	

72. I feel I have enough information to be able to encourage my spouse to seek help from a military health care facility if s/he were to exhibit signs of combat stress.

Definitely True							Definitely False
1	2	3	4	5	6	7	

73. I feel I am mentally strong enough to encourage my spouse to seek help from a military health care facility.

No Control							Complete Control
1	2	3	4	5	6	7	

74. I believe I have no control/complete control over my ability to encourage my spouse to seek help from a military health care facility.

The following questions ask about your ability to encourage help-seeking at a NON-military health care facility.

Definitely True							Definitely False
1	2	3	4	5	6	7	

75. If I wanted to, I could encourage my spouse to seek treatment at a NON-military health care facility within ninety days of first observing combat stress symptoms.

Definitely True							Definitely False
1	2	3	4	5	6	7	

76. I feel I have enough information to be able to encourage my spouse to seek help from a NON-military health care facility if s/he were to exhibit signs of combat stress.

Definitely True							Definitely False
1	2	3	4	5	6	7	

77. I feel I am mentally strong enough to encourage my spouse to seek help from a NON-military health care facility.

No Control							Complete Control
1	2	3	4	5	6	7	

78. I believe I have no control/complete control over my ability to encourage my spouse to seek help from a NON-military health care facility.

The following questions focus on consequences/rewards to the service member if s/he were to seek help at a military health care facility. Later, similar questions will be asked about consequences/rewards for seeking help at a NON-military health care facility. Each question has a follow up evaluation question. Please look at the big picture and not just the immediate future when weighing the costs versus the rewards. For example: Question: Requiring my teenager to wear a helmet while biking would cause his friends to tease him. (Extremely Unlikely....Extremely Likely). Evaluation: My child getting teased for this reason would be (Extremely Bad....Extremely Good).

In this case the cost (teasing) is weighed against the reward (safety).

Extremely Unlikely						Extremely Likely
1	2	3	4	5	6	7

79. Encouraging my spouse to seek help for combat stress at a military care facility would cause a negative impact on his/her career.

Extremely Bad						Extremely Good
1	2	3	4	5	6	7

80. A negative impact on my spouse's career for this reason would be

Extremely Unlikely						Extremely Likely
1	2	3	4	5	6	7

81. Encouraging my spouse to seek help for combat stress at a military care facility would cause him/her to lose his/her job.

Extremely Bad						Extremely Good
1	2	3	4	5	6	7

82. Losing his/her job for this reason would be

Extremely Unlikely						Extremely Likely
1	2	3	4	5	6	7

83. Encouraging my spouse to seek help for combat stress at a military care facility would allow my spouse's military commander access to his/her mental health records.

Extremely Bad						Extremely Good
Extremely Bad						Extremely Good
1	2	3	4	5	6	7

84. The military commander getting access to my spouse's mental health records for this reason would be

Extremely Unlikely						Extremely Likely
1	2	3	4	5	6	7

85. Encouraging my spouse to seek help for combat stress at a military care facility would cause peers and co-workers to criticize or harass him/her.

Extremely Bad							Extremely Good
1	2	3	4	5	6	7	

86. Getting harassed or criticized by peer or co workers for this reason would be

Extremely Unlikely							Extremely Likely
1	2	3	4	5	6	7	

87. Encouraging my spouse to seek help for combat stress at a military care facility would improve his/her job performance.

Extremely Bad							Extremely Good
1	2	3	4	5	6	7	

88. Improving his/her job performance for this reason would be

Extremely Unlikely							Extremely Likely
1	2	3	4	5	6	7	

89. Encouraging my spouse to seek help for combat stress at a military care facility would serve as a good example to other service members.

Extremely Bad							Extremely Good
1	2	3	4	5	6	7	

90. Serving as a good example to other service members for this reason would be

Extremely Unlikely							Extremely Likely
1	2	3	4	5	6	7	

91. Encouraging my spouse to seek help for combat stress at a military care facility would reduce his/her risk for long term problems.

Extremely Bad							Extremely Good
1	2	3	4	5	6	7	

92. Reducing risks for long term problems for this reason would be

Extremely Unlikely							Extremely Likely
1	2	3	4	5	6	7	

93. Encouraging my spouse to seek help for combat stress at a military care facility would risk his/her losing specialty mission skill status (including service members with special ops, flight duties, nuclear/ chemical/bio operations, those in command etc.)

Extremely Bad							Extremely Good
1	2	3	4	5	6	7	

94. Losing specialty mission skill status for this reason would be

95. Encouraging my spouse to seek help for combat stress at a military care facility would mean my spouse is following military policy.

True
False
Don't know

Extremely Bad						Extremely Good
1	2	3	4	5	6	7

96. Following military policy for this reason would be

The following questions ask your opinion.

Very Serious						Not Very Serious
1	2	3	4	5	6	7

97. How serious a health problem do you believe combat stress to be?

Completely True						Completely False
1	2	3	4	5	6	7

98. It is easy for service members who get combat stress to get the help they need.

Completely True						Completely False
1	2	3	4	5	6	7

99. Military families with service members who suffer from combat stress can get help from the military community.

Completely True						Completely False
1	2	3	4	5	6	7

100. There are ways to effectively deal with combat stress related health problems.

Completely True						Completely False
1	2	3	4	5	6	7

101. Service members who are treated for combat stress can continue their military careers.

Completely True						Completely False
1	2	3	4	5	6	7

102. Service members who get help for combat stress symptoms can recover from this health issue.

Completely True						Completely False
1	2	3	4	5	6	7

103. Combat stress can not be cured.

Extremely Willing						Not Extremely Willing
1	2	3	4	5	6	7

104. How willing are you to pay out of pocket for your spouse to get help from a civilian health care facility for combat stress?

The following questions address service member consequences/rewards for seeking help at a NON-military health care facility. There is one evaluation question.

Extremely Unlikely						Extremely Likely
1	2	3	4	5	6	7

105. Encouraging my spouse to seek help for combat stress at a NON-military care facility would cause a negative impact on his/her career.

Extremely Unlikely						Extremely Likely
1	2	3	4	5	6	7

106. Encouraging my spouse to seek help for combat stress at a NON-military care facility would cause him/her to lose his/her job.

Extremely Unlikely						Extremely Likely
1	2	3	4	5	6	7

107. Encouraging my spouse to seek help for combat stress at a NON-military care facility would allow my spouse's military commander access to his/her mental health records.

Extremely Unlikely							Extremely Likely
1	2	3	4	5	6		7

108. Encouraging my spouse to seek help for combat stress at a NON-military care facility would cause peers and co-workers to criticize or harass him/her.

Extremely Unlikely							Extremely Likely
1	2	3	4	5	6		7

109. Encouraging my spouse to seek help for combat stress at a NON-military care facility would improve his/her job performance.

NON-military Health Care Facility Consequence/Reward Questions Continued

Extremely Unlikely							Extremely Likely
1	2	3	4	5	6		7

110. Encouraging my spouse to seek help for combat stress at a NON-military care facility would serve as a good example to other service members.

Extremely Unlikely							Extremely Likely
1	2	3	4	5	6		7

111. Encouraging my spouse to seek help for combat stress at a NON-military care facility would reduce his/her risk for long term problems.

Extremely Unlikely							Extremely Likely
1	2	3	4	5	6		7

112. Encouraging my spouse to seek help for combat stress at a NON-military care facility would risk his/her losing specialty mission skill status (including service members with special ops, flight duties, nuclear/chemical/bio operations, those in command etc.)

113. Encouraging my spouse to seek help for combat stress at a NON-military care facility would mean my spouse is following military policy.

True
False
Don't know

Extremely Bad							Extremely Good
1	2	3	4	5	6		7

114. Not following military policy for this reason would be

Extremely True							Extremely False
1	2	3	4	5	6		7

115. Even if I wanted to encourage my spouse to seek help for combat stress, we do not have enough alone time to discuss it.

Complete							Incomplete
1	2	3	4	5	6		7

116. I have a complete/incomplete understanding of how the military system works if I wanted to encourage my spouse to seek help for combat stress.

Very True							Very False
1	2	3	4	5	6		7

117. I have the type of relationship with my spouse that I feel comfortable encouraging him/her to seek help.

Encourages							Discourages
1	2	3	4	5	6		7

118. The military command that my spouse works for encourages/discourages dialogue about combat stress which accounts for my comfort level for encouraging help-seeking.

Encourages							Discourages
1	2	3	4	5	6		7

119. Fellow military spouses encourage/discourage dialogue about combat stress which accounts for my comfort level for encouraging help-seeking.

Extremely True							Extremely False
1	2	3	4	5	6		7

120. Even if I wanted to encourage my spouse to seek help for combat stress, we do not have enough alone time to discuss it.

Complete							Incomplete
1	2	3	4	5	6		7

121. I have a complete/incomplete understanding of how the military system works if I wanted to encourage my spouse to seek help for combat stress.

Very True							Very False
1	2	3	4	5	6		7

122. I have the type of relationship with my spouse that I feel comfortable encouraging him/her to seek help.

Encourages							Discourages
1	2	3	4	5	6		7

123. The military command that my spouse works for encourages/discourages dialogue about combat stress which accounts for my comfort level for encouraging help-seeking.

Encourages							Discourages
1	2	3	4	5	6		7

124. Fellow military spouses encourage/discourage dialogue about combat stress which accounts for my comfort level for encouraging help-seeking.

The following questions ask about what you have encouraged in the past.

Never							Frequently
1	2	3	4	5	6		7

125. I have never/frequently encouraged my spouse to seek help for combat stress at a military health care facility.

Never							Frequently
1	2	3	4	5	6		7

126. I have never/frequently encouraged my spouse to seek help for combat stress at a NON-military health care facility.

The following questions ask about what you have experienced in the past.

Many Scenarios							No Scenarios
1	2	3	4	5	6		7

127. Can you think of any scenarios that you have heard about where a service member sought treatment for combat stress and had a negative consequences because of it?

Many Scenarios							No Scenarios
1	2	3	4	5	6		7

128. Can you think of any scenarios that you have heard about where a service member sought treatment for combat stress and had a positive outcome because of it?

The following questions ask you to give a best estimate.

Extremely Unlikely							Extremely Likely
1	2	3	4	5	6		7

129. Generally speaking, how likely is it that service members in combat will get combat stress?

130. If you had to guess, what percentage of service members currently serving in the military have combat stress?

5 – 100% given as options in 5% increments

131. Of those service members currently in the military who need help for combat stress, what percentage do you think get help?

5 – 100% given as options in 5% increments

132. Please indicate who you think is more at risk for combat stress. Check all that apply.

132a. Younger service members

132b. Older service members

132c. Front line service members

132d. Service Members in Combat Zones

132e. Newly wed service members

132f. Recently divorced service members

132g. Service members with little support from family members

132h. Service members with previous combat stress

132i. Other

After you answer the following hypothetical questions there is only one page left!

Definitely Would							Definitely Would Not
1	2	3	4	5	6	7	

133. Hypothetically speaking, if after ninety days my spouse continued to exhibit symptoms of combat stress I definitely would/would not encourage him/her to seek help at a NON-military health care facility.

Definitely Would							Definitely Would Not
1	2	3	4	5	6	7	

134. Hypothetically speaking if after ninety days my spouse continued to exhibit symptoms of combat stress I definitely would/would not encourage him/her to seek help at a military health care facility.

140. What is your age? *

140a. 18 - 20 years

140b. 21 – 25 years

140c. 26 – 30 years

140d. 31 – 35 years

140e. 36 – 40 years

140f. 41 – 45 years

140g. 46 – 50 years

141. What is your race?

a. African-American (Black)

b. Asian

c. Caucasian (White)

d. Hawaiian Native

e. Hispanic

f. Multi-Race

g. Native American

142. Were you raised in the United States?

Yes

No

REFERENCES

- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Ajzen, I. (2006, January). *Constructing a TpB questionnaire: Conceptual and methodological considerations*. Retrieved July 24, 2006 from <http://www.people.umass.edu/aizen/pdf/tpb.measurement.pdf>.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders, fourth edition, text revision*. Washington, DC: American Psychiatric Association.
- Andi (2006, September 21). *Military spouse survey on combat stress*. Retrieved September 22, 2006 from the SpouseBuzz website at http://www.spousebuzz.com/blog/2006/09/military_spouse.html
- Armed Forces Act of 1956, 10 U.S.C. § 1074 (1998).
- Armitage, C.J. and Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40, 471-499.
- Arrit, S., Bigham, J., Booth, D., Bradley, J., Campis, T., Colwell, J. et al. (2006, March 13). *Leaders Guide for Managing Marines in Distress: Combat and Operational Stress*. Retrieved August 3, 2006 from <http://www.usmc-mccs.org/LeadersGuide/Deployments/CombatOpsStress/generalinfo.cfm#Why>
- Association of the United States Army (2005, October 5). Stigma against post-traumatic stress disorder remains, says army surgeon general. Retrieved February 10 from AUSA website at <http://www.ausa.org/webpub/DeptHome.nsf/byid/KCAT-6GXL3Q?OpenDocument&Print=1>.
- Barney, L.J., Griffiths, K.M., Jorm, A.F., and Christensen, H. (2006). Stigma about depression and its impact on help-seeking intentions. *Australian and New Zealand Journal of Psychiatry*, 40, 51-54.
- Biddle, D., Elliott, P., Creamer, M., Forbes, D. and Devilly G.J. (2002). Self reported problems: a comparison between PTSD-diagnosed veterans, their spouses, and clinicians. *Behavior Research and Therapy*, 40, 853-865.
- Bolton, E.E., Glenn, D.M., Orsillo, S., Roemer, L. and Litz, B.T. (2003). The relationship between self-disclosure and symptoms of posttraumatic stress disorder in peacekeepers deployed to Somalia. *Journal of Traumatic Stress*, 16, (3), 203-210.

- Brant M. (2005). The fall out: The things they carry [Electronic Version]. *Newsweek* 146, (9/10), 36.
- Brickell, T.A., Chatzisarantis, N.L.D., & Pretty, G.M. (2006). Using past behavior and spontaneous implementation intentions to enhance the utility of the Theory of Planned Behavior in predicting exercise. *British Journal of Health Psychology*, 11, 249 - 262.
- Britt, TW.(2000, August). The stigma of psychological problems in a work environment: Evidence from the screening of service members returning from Bosnia. *Journal of Applied Social Psychology*, 30(8), 1599-1618.
- Bunn, H., Lange, I., Urrutia, M. Campos, M.S., Campos, S., Jaimovich, S., Campos, C., Jacobson, M.J., Gaboury, I. (2006). Health preferences and decision-making needs of disadvantaged women. *Journal of Advanced Nursing*, 56 (3), 247 - 260.
- Chadda, R.K., Agarwal, V., Singh, M.C. and Raheja, D. (2001). Help-seeking behavior of psychiatric patients before seeking care at a mental hospital. *International Journal of Social Psychiatry*, 47(4), 71-78.
- Cheng, C., Ng, A.K. (2006). Psychosocial factors predicting SARS-preventive behaviors in four SARS-affected regions. *Journal of Applied Social Psychology*, 36 (1), 224 - 247.
- Cobbold, R. (2005, June). *The effects of operations other than war-fighting on the participants*. Retrieved August 10, 2006 from the Association of the United States Army website at <http://www.ausa.org/pdfdocs/RUSIJune05.pdf>.
- Conner, M. and Armitage, C. (1998). Extending the Theory of Planned Behavior: A review and avenues for further research. *Journal of Applied Social Psychology*, 28 (15), 1429-1464.
- Conner, M. and Sparks, P. (2005). Theory of planned behaviour and health behaviour. In M. Conner, and P. Norman, (Eds.), *Predicting Health Behavior*(2nd ed.) (pp. 170-222). Berkshire, England: Open University Press.
- Conner, M and Norman, P. (2005). Predicting health behaviour: A social cognition approach. M. Conner, and P. Norman, (Eds.), *Predicting Health Behavior* (2nd ed.), (pp. 1-27). Berkshire, England: Open University Press.
- Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist*, 59(7), 614-625.
- Crisp, A.H., Gelder, M.G., Rix, S., Meltzer, H.I. and Rolands, O.J. (2000). Stigmatisation of people with mental illnesses. *British Journal of Psychiatry*, 177, 4-7.

- Defense Manpower Data Center* (2005, November 10). August 2005 status of forces survey of active-duty members: Leading indicators. Retrieved May 15, 2006 from the DMDA database at <https://www.dmdc.osd.mil/>.
- Department of the Army Headquarters* (2000, June 23). Combat Stress Field Manual 6-22.5. Retrieved Aug 2, 2006 from the Marine Corps Community Services website at <https://www.doctrine.usmc.mil/signpubs/r611c.pdf>.
- Dirkzwager, A.J.E., Bramsen, I., Ader, H. and Van de Ploeg, H.M. (2005). Secondary traumatization in partners and parents of Dutch peacekeeping soldiers. *Journal of Family Psychology*, 19(2), 217-226.
- Downs, D.S., Graham, G.M., Yang, S., Bargainnier, S. & Vasil, J. (2006). Youth exercise intention and past exercise behavior: Examining the moderating influences of sex and meeting exercise recommendations. *Research Quarterly on Exercise and Sport*, 77 (1), 91 - 99.
- Eisenhower Army Medical Center* (2003, April). Military Health System Notice of Privacy Practices. Retrieved October 28, 2006 from the Eisenhower Army Medical Center website at http://www.ddeamc.amedd.army.mil/Info_Pat/MHS_PRIVACY_PRACTICES.htm
- Falk, G. (2001). *Stigma*. Amherst, New York: Prometheus Books
- Fillion, J.S., Clements, P.T., Averill, J.B., Vigil, G.J. (2002, August). Talking as a primary method of peer defusing for military personnel exposed to combat trauma. *Journal of Psychosocial Nursing*, 40(8), 41-49.
- Figley, C. R. (1993). Coping with stressors on the home front. *Journal of Social Issues*, 49(4), 51-71.
- Figley, C. R. (2005). Strangers at home: Comment on Dirkzwager, Bramsen, Ader, and Van der Ploeg(2005). *Journal of Family Psychology*, 19(2), 227-229.
- Finer, J. (2005, June 14). Battle-hard G.I.'s learn to release their pain; Team helps soldiers beat trauma. *The Washington Post*, pA1.
- Fischer, E.H. and Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College Student Development*, 36, 368-373.
- Fishbein, M. and Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.
- Floyd, D.L., Prentice-Dunn, S. and Rogers, R.W. (2000). A meta-analysis of research on Protection Motivation Theory. *Journal of Applied Social Psychology*, 30 (2), 407-429.

- Friedman, M. J. (2005). Veterans' Mental Health in the Wake of War. *New England Journal of Medicine*, 352 (13), 1287-1290.
- Gaebel, W., Zaske, H. and Baumann, A.E. (2006). The relationship between mental illness severity and stigma. *Acta Psychiatr Scand* 113(Suppl. 429), 41-45.
- Gatlin, M. (2006, October 12). Army spouse researches combat-related disorders [Electronic Version]. *Army Flyer*. Retrieved October 12, 2006 from <http://www.armyflyer.com/apps/pbcs.dll/article?AID=/20061012/ARMYFLIER02/61011007/1101>
- Gavrilovic, J.J., Schützwohl, M., Fazel, M. and Priebe, S. (2005). Who seeks treatment after a traumatic event and who does not? A review of findings on mental health service utilization. *Journal of Traumatic Stress*, 18(6), 595-605.
- Gilgoff, D., Querna, E., Brink, S., Cannon, A., Shute, N., Szegedy-Maszak M. et al. (2004). The mental toll. *U.S. News and World Report*, 137, (19), 48-49.
- Glassman, M. (2004, July 25). When grace flees under fire [Electronic Version]. *New York Times* p.4.7. Retrieved September 21, 2005 from proquest.umi.com.
- Green, B.L. (2003). Traumatic stress and its consequences. In B.L. Green, M.J. Friedman, J. de Jong, S.D. Solomon, T.M. Keane, J.A. Fairbank, et al. (Eds.), *Trauma Interventions in War and Peace* (pp. 17-32). New York: Kluwer Academic, Plenum Publishers.
- Harrell, M.C., Lim, N., Castaneda, L.W. and Golinelli, D. (2004). *Working Around the Military: Challenges to Military Spouse Employment and Education* [Electronic version]. California: RAND Corporation.
- Hess, P. (2005, June 9). Invisible Casualties: PTSD among Iraq vets [Electronic version]. *The Washington Times*. Retrieved September 16, 2005 from the Washington Times website at <http://washingtontimes.com/upi-breaking/20050609-030758-4322r.htm>
- Hoge C.W., Auchterlonie, J.L. and Milliken, C.S. (2006, March 1). Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *Journal of American Medical Association*, 295(9),1023-1032.
- Hoge, C.W., Castro, C., Messer, S., McGurk, D., Cotting, D. and Koffman, R. (2004, July 1). Combat duty in Iraq and Afghanistan, mental health problems and barriers to care. *The New England Journal of Medicine*, 351(1), 13-22.

- Hornick, R. (2002) Public health communication: making sense of contradictory evidence. In Hornick, R. (ed.), *Public Health Communication: Evidence for Behavior Change*. Lawrence Erlbaum Associates, London, pp. 1-22.
- Hyams, K.C., Wignall, F.S. and Roswell, R. (1996). War syndromes and their evaluation: From the U.S. civil war to the Persian gulf war. *Annals of Internal Medicine*, 125(5), 398-405.
- Jeffrey, T.B., Rankin, R.J. and Jeffrey, L.K. (1992). In service to two masters: The ethical-legal dilemma faced by military psychologists. *Professional Psychology Research and Practice*, 23 (2), 91-95.
- Jones, E., Hyams, K.C. and Wessely, S. (2003). Screening for vulnerability to psychological disorders in the military: An historical survey (review). *Journal of Medical Screening*, 10(1), 40-47.
- Jordan B.K., Marmar, C.R., Fairbank, J.A., Schlenger, W.E., Kulka, R.A., Weiss, D.S. et al. (1992). Problems in families of male Vietnam veterans with posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 60(6), 916-926.
- Kashdan, T.B., Frueh, B.C., Knapp, R.G., Hebert, R. and Magruder, K.M. (2006). Social anxiety disorder in veterans affairs primary care clinics. *Behavior Research and Therapy*, 44, 233-247.
- Keane, T.M., Caddell, J.M., and Taylor, K.L. (1988). Mississippi scale for combat-related posttraumatic stress disorder: Three studies in reliability and validity. *Journal of Consulting and Clinical Psychology*, 56, 85-90.
- King, L.A., King, D.W., Fairbank, J.A., Keane, T.M. and Adams, G.A. (1998). Resilience- recovery factors in post-traumatic stress disorder among female and male Vietnam veterans: Hardiness, postwar social support, and additional stressful life events. *Journal of Personality and Social Psychology*, 74(2), 420-434.
- Knox, J. and Price, D. H. (1999). Total force and the new American military family: Implications for social work practice. *Families in Society*, 80(2), 128-136.
- Koenen, K.C., Goodwin, R., Struening, E., Hellman, F. and Guardino, M. (2003). PTSD and treatment seeking in a national screening sample. *Journal of Traumatic Stress*, 16(1), 15-16.
- Kutchins and Kirk (1997). *Making Us Crazy*. New York: The Free Press.
- Leaf, P.J., Livingston, M.M., Tischler, G.L., Freedman, D.H., Weissman, M.M., and Myers, J.K. (1988). Factors affecting the utilization of specialty and general medical mental health services. *Medical Care*, 26, 9-26.

- Link, B.G and Phelan, J.C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, 27, 363-385.
- Lipton, M.I. (1994). *Posttraumatic Stress Disorder: Additional Perspectives*. Springfield, Illinois: C.C. Thomas.
- Maddux, J.E. and Rogers, R.W. (1983). Protection motivation and self-efficacy: A revised theory of fear appeals and attitude change. *Journal of Experimental Social Psychology*, 19, 469-479.
- Milton, N., Clarke, D. & Shadbolt (2006). Knowledge engineering and psychology: Towards a closer relationship. *International Journal of Human-Computer Studies*, 64 (11), 1214 - 1229.
- Monroe, J.F., Shay, J., Fisher, L., Makary, C., Rapperport, K. and Zimering, R. (1995). Preventing compassion fatigue: A team treatment model. In C.R. Figley (Ed.) *Compassion Fatigue: Coping with Secondary Traumatic Stress Disorder in Those Who Treat the Traumatized* (pp.209-231). New York: Brunner/Mazel.
- Oliver, R.L. and Berger, P.K. (1979, September). A path analysis of preventive health care decision models. *Journal of Consumer Research*, 6(2), 113-202.
- Pinfold, V., Byrne, P. and Toulmin, H. (2005). Challenging stigma and discrimination in communities: A focus group study identifying UK mental health service users' main campaign priorities. *International Journal of Social Psychiatry*, 51(2) 128-138.
- Ramanadhan, S. and Viswanath, K. (2006). Health and the information nonseeker: A profile. *Health Communication*, 20(2), 131-139.
- Rice, R.E. & Atkin, C. K. (2001). *Public communication campaigns*. Thousand Oaks, CA: Sage.
- Rogers, E.M. (1995). *Diffusion of Innovations*. 4th ed. New York: Free Press.
- Rogers, R.W. (1975). A Protection Motivation Theory of fear appeals and attitude change. *The Journal of Psychology*, 91, 93-114.
- Rona, R.J., Hyams, K.C. and Wessely, S. (2005, March 9). Screening for psychological illness in military personnel. *Journal of American Medical Association*, 293(10), 1257-1260.
- Sammons, M.T. (2005, November). Psychology in the public sector: Addressing the psychological effects of combat in the U.S. navy. *American Psychologist*, 899-909.

- Scott, W.J. (2004). *Vietnam Veterans Since the War: The Politics of PTSD, Agent Orange, and the National Memorial*. Norman, Oklahoma: University of Oklahoma Press.
- Security and Privacy, 45 C.F.R. § 164.512 (k) (2005).
- Solomon, S. (2003) Introduction. In B.L. Green, M.J. Friedman, J. de Jong, S.D. Solomon, T.M. Keane, J.A. Fairbank, et al. (Eds.), *Trauma Interventions in War and Peace*, (pp. 3-15). New York: Kluwer Academic, Plenum Publishers.
- Spier, C. (2006). The influence of information presentation formats on complex task decision-making performance. *International Journal of Human-Computer Studies*, 64(11), 1115 - 1131.
- Spiller, R.J. (1990). Shell Shock. *American Heritage*, 41, No 4,76.
- Strohmer, D.C., Biggs, D.A. and McIntyre, W.F. (1984). Social comparison information and judgments about depression and seeking counseling. *Journal of Counseling Psychology*, 31, 591-594.
- Swanson, V., Power, K., Kaur, B., Carter, H. & Sheperd, K. (2006). The impact of knowledge on adolescents' breast-feeding beliefs and intentions. *Public Health Nutrition*, 9 (3), 297 - 305.
- Taylor, L.P. and Johnson, W.B. (1994). Psychiatric stigma in the military. *Military Medicine*, 159 (9), 602-605.
- United States Department of Veterans Affairs* (2005, February 8). What is Post-Traumatic Stress Disorder? Retrieved September 16, 2005 from the Veteran Affairs National Center for PTSD website at http://www.ncptsd.va.gov/facts/general/fs_what_is_ptsd.html.
- United States Government Accountability Office* (2005, February). VA Health Care: VA should expedite the implementation of recommendations needed to improve post-traumatic stress disorder services. Washington, DC: US Government Printing Office.
- VA/DoD Clinical Practice Guideline Working Group* (2003, December). Management of post-traumatic stress. Retrieved August 9, 2006 from the veterans affairs website at http://www.oqp.med.va.gov/cpg/PTSD/PTSD_cpg/content/introduction.htm
- Wrigley, S., Jackson, H., Judd, F. and Komiti, A. (2005). Role of stigma and attitudes toward help-seeking from a general practitioner for mental health problems in a rural town. *Australian and New Zealand Journal of Psychiatry*, 32, 514-521.

Zapka J.G., Geller, B.M., Bulliard, J.L., Jacques, F., Helene, S.G.,
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Technical Proficiency and Skills

Extensive experience as an instructor and course developer for communication training programs used by business executives, technical personnel, military service members, and civilian dependents. Taught or facilitated groups ranging in size from 1 to 100+ over the past 15 years. Technical training and experience as a meeting mediator/facilitator, master trainer, meeting chairperson, classroom instructor, and program coordinator. Graduate research experience with online survey development and analysis.

Employment History, Instructor-Program Developer

GE YOKOGAWA/JAPAN – COMMUNICATIONS INSTRUCTOR (SEPTEMBER 2001 – MAY 2003)

Developed and conducted training seminars for Japanese executives and engineers to use effective negotiation and presentation skills during business presentations in English.

U.S. ARMY/JAPAN - ARMY FAMILY ACTION PLAN (AFAP) ORGANIZER (MARCH 2002 & 2003)

Organized and conducted training for facilitators, subject matter experts and delegates in support of a 100-person, three-day symposium to address community issues in the 5,000-person Camp Zama Community.

U.S. ARMY/UNITED STATES - ALABAMA - ARMY FAMILY TEAM BUILDING (AFTB) INSTRUCTOR AND MASTER TRAINER (JUNE 1995 - JUNE 1998)

Served as an instructor and organizer for the Fort Rucker Army Family Team Building program (program development, instructor training, advertising, and recruitment).

AMERICAN RED CROSS/UNITED STATES – ALABAMA – HIV/AIDS CHAIRPERSON, CASE WORKER AND INSTRUCTOR (JUNE 1994 - JUNE 1998)

Served as the HIV/AIDS Chairperson for the monthly Red Cross board meetings and as a Red Cross-trained caseworker, and disaster relief worker.

FAMILY AND CHILD EDUCATIONAL SERVICES/UNITED STATES - ALABAMA – INSTRUCTOR AND PROGRAM DEVELOPER (OCTOBER 1996 - JUNE 1998)

Developed and taught communication skills classes to groups of parents and school age students in support of a court-directed child abuse prevention program.

Education

- M.A., Integrated Marketing Communications, Florida State University, Tallahassee, Florida, 2006
- B.A., International Affairs, Mary Washington College, Fredericksburg, Virginia, 1990

Other skills

- Languages: English, native speaker; French, fluent.
- Computer skills: Experienced in various Windows software programs: MS Word, MS PowerPoint, MS Publisher; Research tools: SPSS and web based survey and analyses.