

THE EFFECTS OF DEPLOYMENTS ON ALCOHOL USE, STRESS, MENTAL HEALTH,
AND HELP-SEEKING BEHAVIORS IN MILITARY SPOUSES

by

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Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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APPROVED BY:

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ABSTRACT

Operation Iraqi Freedom and Operation Enduring Freedom have kept the United States military engaged in one of the longest wars in the nation's history. Due to the high operations tempo during that time, both service members and their spouses have endured enormous difficulties as they learned to navigate the challenges brought forth by frequent deployments. The purpose of this research study was to study the alcohol consumption, mental health, stress, and help seeking behaviors of military spouses who have endured deployments, with the hypothesis that alcohol use will not increase during deployment, military spouses will report poorer mental health and increased stress during deployment, and military spouses who have endured deployment will utilize appropriate mental health resources. This quantitative study collected data via web-based survey from 293 military spouses from various branches of the military. A chi-square test for independence was used to investigate the categorical variables. Results of the study determined there were statistically significant associations to be found between current deployment and alcohol consumption as well as an association between deployments and stress. Implications and limitations are also discussed, as well as implications for future research.

Keywords: Military spouse, deployment, military, alcohol use, stress, mental health

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Dedication

This dissertation is dedicated to all persons who have served in the United States military. This dissertation is also dedicated to all the men and women who have ever served the United States military by providing support to their active duty service members, as the support of military spouses is essential to mission readiness. In addition, this work is dedicated to my own military family, my amazing husband Daniel and our equally amazing children, Ian and Isabel.

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CHAPTER ONE: INTRODUCTION

Overview

The terrorist attacks on the World Trade Center that took place on September 11th, 2001 changed the world for many. Not only did the attacks dramatically alter the lives of those living in New York City and the United States in general, but the lives of those serving in the military changed dramatically as well. Since that day, there has been a 300% increase in military combat deployments overseas, with over 2.5 million service members deploying, some of those service members enduring numerous deployments, with deployments often lasting from approximately six to eighteen months (Crum-Cianflone et al., 2014; Hall, 2016). Even when military service members are at their home duty station, they can come down on orders to deploy again, even shortly after returning from deployment. A number of research studies have been completed examining the effects of these frequent deployment cycles on active duty service members, to include detrimental effects to physical and mental health, but little research has been done concerning the military spouses that are left behind during the deployment to take care of the home front (McGuire et al., 2016).

Background

During the past several decades, military service members have been more likely than ever in history to be married and have children, with the Department of Defense (2018a) reporting over half of active duty service members being married and/or having children. In 2018, it was reported that there were over 1.5 million active duty family members, to include spouses and children (Department of Defense, 2018a). With the high operations tempo in the United States military combined with the fact that so many active duty service members are married with children, one could surmise that military families have also been affected by the

Operation Iraqi Freedom and Operation Enduring Freedom conflicts taking place in Iraq and Afghanistan. Despite the fact that military families do not endure conflict themselves, they are placed at a higher risk of experiencing the consequences of armed conflict, such as combat-related injuries to include Traumatic Brain Injury (TBI), Posttraumatic Stress Disorder (PTSD), and other behavioral conditions that returning service members often experience (Crum-Cianflone et al., 2014). The distress that military families experience can have a direct influence on military readiness in that the well-being of the family has an immeasurable influence on the service member (Chambers, 2013). Service members whose spouses are dissatisfied with military life are more likely to leave military service after their contract is fulfilled (Eaton et al., 2008).

Military spouses experience many hardships and challenges that are associated with military life. Some of the stressors that are commonly associated with military life include unpredictable and often long working hours, expectations of behavior, geographical separation from family and support systems, living in and adjusting to life in foreign countries, risk of death or injury, and frequent and periodic separations due to field problems, temporary duty assignments, and deployments with sometimes undisclosed locations (Padden et al., 2013a). These frequent and sporadic separations have been found to be stressful for military spouses as separations can cause financial difficulties, the military spouse can find themselves in the role of the single parent, and the military spouse can experience emotional difficulties due to the high levels of stress experienced (Trone et al., 2018). Deployments have the probability of adding to the stress that military spouses feel since those deployments create a sense of uncertainty and they can develop a fear of safety for their deployed loved ones (Eaton et al., 2008). Although there are many positive aspects of being associated with the military, these hardships have the

potential to affect the well-being of military spouses, to include elevating the risk for mental health and substance abuse problems among this population (Medly et al., 2016).

There is a growing body of literature that suggests a possible link between experiencing stress and addiction (Goeders, 2003). Alcohol use and abuse have been linked to stressors such as an unhappy marriage or dissatisfaction with employment, and alcohol is often used to cope with life stressors or to relieve anxiety (Goeders, 2003). Due to the nature of military life of frequent moves to new states and possibly even new countries, along with frequent separations from their active duty partners, military spouses experience stressors that their civilian peers do not experience, to include frequent, sporadic and sometimes lengthy separations from their active duty spouses, taking on the role of a single parent with little or no support from family and friends, financial difficulties, and living in a foreign country, to name a few. Data that have been gathered in preclinical and clinical investigations suggest that exposure to stressful events can increase vulnerability to addiction (Goeders, 2003). It has also been found that military spouses who hold the perception of their service members deployment of being at least moderately stressful were more likely to abuse alcohol (Trone et al., 2018). Consequently, military spouses are more likely than their civilian peers to use alcohol and engage in binge drinking behaviors (Medly et al., 2016). Even though the operations tempo for the United States military has increased dramatically with separations affecting not only the service member but the military spouse as well, increasing stress levels, current research and literature has not adequately addressed mental health, stress, help seeking, and substance use behaviors of military spouses.

While gathering data in the Millennium Cohort Study, Trone et al. (2018) found that while there were several variables involved, deployments did not impact the prevalence of alcohol misuse among military spouses. This study did find, however, that military spouses who

have experienced a previous deployment had a higher prevalence of risky drinking and binge drinking behaviors. Military spouses were also found to experience increased rates of problem drinking if their service member experienced a combat injury. Alcohol use among the military spouse population also has the potential to affect children of military couples, possibly perpetuating a generational cycle of alcohol use and abuse (Trone et al., 2018). Further research assessing the long-term risk factors for risky drinking among military spouses and its long-term effects needs to be conducted.

Military spouses often feel the need to be able to manage the needs of military life unassisted, which adds to the stress of their already stressful lives (Mailey et al., 2018). Several studies have supported the notion that higher levels of perceived stress are associated with decreased participation in health-seeking behaviors, to include stress-management, exercise, and seeking social interaction (Padden et al., 2013a; Padden et al., 2013b). In data gathered during the National Survey on Drug Use and Health focusing on military spouses, it was found that 0.9% of military spouses sought help for substance use, and 22.6% sought help for their mental health. Even though 67.8% of military spouses reported alcohol use in the previous 30 days, 31.5% reported binge drinking in the past 30 days, and 29.1% of military spouses reported having a mental health disorder (Medly et al., 2016). Mailey et al. (2018) found in their research on military spouses and potential barriers to seeking support that military spouses do not want to be perceived as “weak” or be seen as not being able to cope with the demands of military life. Military spouses are often seen in a supportive role to that of the active duty service member, and often put the needs of the service member and their children above their own. They feel a pressure from military culture to be able to “do it all”. Further research on barriers to care for military spouses is warranted (Eaton et al., 2008; Mailey et al., 2018).

The operations tempo of the U.S. Military has increased with many service members deploying and even experiencing multiple deployments since September 11th, 2001. The increased deployment cycles have also had an effect on military spouses, who often face hardships their civilian peers do not, often in the form of frequent separations to a combat zone with often unknown dates of return, taking on the role of a single parent, being far away from family and friend support systems, financial difficulties due to separations, and learning how to live away from family or in a foreign country (Haapala, 2012; Padden et al., 2011; Trone et al., 2018). Research has determined a potential link between stress and alcohol use, with military spouses being found to consume more alcohol than their civilian counterparts, possibly due to the increased stressors military spouses face (Erbes et al., 2017). Research has determined that deployments do not necessarily have an effect on alcohol consumption for military spouses, but those spouses who have experienced previous deployments may experience increased alcohol consumption (Trone et al., 2018). Increased alcohol consumption has also been found in those military spouses whose active duty service member has experienced a combat-related injury (Trone et al., 2018). These behaviors have been found to have an effect on military marriages, military readiness and retention, and on military children as the mental health of the parent at home has an effect on the mental health of the children in the military family (Chandra et al., 2010; Eaton et al., 2018; Kelley & Jouriles, 2011; Lester et al., 2010; Link & Palinkas, 2013; McGuire et al., 2016; Trone et al., 2018; White et al., 2011). This relationship seems to be reciprocal in that the response of children to parental deployments are associated with the well-being of both the at home parent and the deployed parent (Paley et al., 2013). Despite the fact that frequent deployments have an effect on military spouses and were found to be stressful, little research has been conducted on the alcohol use, stress, mental health, and help-seeking behaviors

in this population (Eaton et al., 2008; Erbes et al., 2017; Gribble et al., 2018; Haapala, 2012; Mailey et al., 2018; Trone et al., 2018).

Problem Statement

The success and healthy functioning of the military family heavily relies on the health and well-being of the military spouse. There has been a plethora of research documenting the associations between alcohol misuse, mental health, stress, and help-seeking behaviors among service members, however, little is known about whether deployments are associated with these issues among the military spouse population (Eaton et al., 2008; Erbes et al., 2017; Gribble et al., 2018; Haapala, 2012; Mailey et al., 2018; Trone et al., 2018). In fact, the researcher had difficulty in finding research on this topic. The Millennium Cohort Study was conducted in 2018, with the aim to study the smoking and alcohol use behaviors of military spouses. Their findings were that there did not seem to be a clear association between a deployment and the military spouses' alcohol misuse, but they did find that military spouses who endured more than one deployment were more likely to misuse alcohol (Trone et al., 2018). There were several limitations of note in this study, one of which is the fact that this study was comprised of only opposite-sexed married couples and because of this fact, findings may not be generalizable as it may not be representative of all military spouses. The authors also made the statement that their figures were most likely conservative and did not accurately depict alcohol use in military spouses as this was likely underreported (Trone et al., 2018). The authors also mentioned that future studies on concordance and discordance in drinking behaviors would be beneficial.

The data from the 2015 National Survey on Drug Use and Health, focusing on military families, reported that military spouses are more likely than their civilian peers to suffer from a mental health disorder and misuse alcohol (Medly et al., 2016). The authors of this study made

the statement that the questionnaires used for this study, however, are not geared toward the military population and, therefore, there can be no inferences made as to the impact of deployments on the well-being of military spouses or whether they have access to or make use of the supportive services that are made available to them by the military.

Among the little research that has been done concerning this topic, there does seem to be some mixed results. For example, Gribble et al. (2018) shared that their results indicated that there exists limited evidence concerning alcohol misuse among the military spouse population. However, the authors did state that while deployments in and of themselves did not seem to be a factor associated with alcohol misuse among this population, the length of deployments may be associated with alcohol misuse. This study was conducted in the United Kingdom, though, and because of this, the results may not be generalizable to the military spouse population in the United States.

The problem is that there is simply not enough research that attempts to examine the relationship between deployments and the alcohol use, mental health, stress, and help-seeking behaviors of military spouses. The few studies that have been conducted may not be generalizable as they may not be representative of all military spouses. Most of the studies have also excluded male military spouses from their research, also making the data less representative of the population of military spouses. The existing research also has contradicting results concerning the alcohol use of military spouses, how deployments may or may not have an effect on alcohol use, stress, mental health, and the help seeking behaviors of military spouses.

Purpose Statement

The purpose of this study was to address concerns regarding lack of research pertaining to the alcohol use patterns, mental health, stress, and help-seeking behaviors of military spouses

pertaining to deployments and other stressors military spouses endure. This study aimed to fill the gaps in existing literature by gathering data from a population of military spouses that is representative of the larger military population, to include enlisted spouses, officer spouses, and male spouses where results can be generalized. In addition, this study may add to the existing literature to help determine which stressors, if any, may contribute to alcohol use of military spouses. Little is known about alcohol misuse, mental health, and stress pertaining specifically to the military spouse population, and there is a need to determine where military spouses might be vulnerable to alcohol abuse as they learn to manage the stressors related to deployments (Blow et al., 2013). Lastly, this study sought to explore the help-seeking behaviors of military spouses as it specifically relates to alcohol use, mental health, and stress which to the researcher's knowledge, no other study has done.

Significance of Study

This particular study is significant because the intent is to build off of and add to the existing knowledge base and research concerning deployments, military spouses, alcohol use, mental health, stress, and the help-seeking behaviors of military spouses during the deployment cycle. Little is known concerning alcohol misuse among spouses of military service members in order to better understand where military spouses are vulnerable to alcohol misuse as they manage deployments and stressors associated with deployments (Blow et al., 2013).

In military families, the health of the parent who remains at home is important to the health and well-being of the children they care for (Blow et al., 2013). Deployment stress has the potential to have a negative effect on parenting, and children of these parents are at a higher risk of abuse, neglect, and emotional and behavioral difficulties. If military spouses are misusing alcohol to cope with deployment-related stressors or mental health concerns, this could have

profound impacts on their children, to include worsened child psychological distress (White et al., 2011). The stigma against seeking support for mental health and substance use disorders among the military population is well-documented, and this stigma to avoid seeking care might carry over to military spouses as well, but this has not been widely studied (Mansfield et al., 2010). Studying alcohol misuse, mental health, stress, and help-seeking behaviors among the military spouses can have long-term implications on not only the health of the military spouse, but on the family unit as a whole and their children. In addition, military service members may be better able to focus on the mission at hand if their spouses and children are cared for.

This study is important in that it has the potential to help military commanders, policy makers, and clinicians working with the military population all over the world who are working with military spouses during the deployment cycle. Because the health of the parent who remains at home is important to the health and well-being of the children they care for, this study has the potential to impact future generations as well.

Research Questions

The following research questions guided this study:

RQ1: Do deployment cycles affect alcohol use in military spouses?

RQ2: Do deployment cycles affect mental health in military spouses?

RQ3: Do deployment cycles have an effect on stress in military spouses?

RQ4: Do military spouses seek help for mental health, stress and alcohol use disorder issues?

Definitions

1. *Deployment* – An assignment that is long-term, typically to a combat zone (Hall, 2016).

2. *Deployment cycle* – Deployments have various stages, to include pre-deployment, deployment, sustainment, and redeployment, and post-deployment (Hall, 2016).
3. *Active duty* – Military personnel who serve on a full-time status (Gray, 2016).
4. *Enlisted* – Military personnel whose pay grades include E-1 through E-9. Enlisted personnel typically perform jobs that are close to their military occupational specialty (MOS; Gray, 2016).
5. *Officer* – Warrant officers, which include the pay grade of CW1 through CW5, and commissioned officers which include pay grades O1 through O10. Most officers hold college degrees, typically hold positions of authority, and bear great responsibility (Gray, 2016).
6. *Rank* – A title that is used to indicate a service member’s position and level of responsibility. Indications of rank are often work on the collar or chest (Gray, 2016).
7. *Readiness* – The ability of the United States Armed forces to carry out their mission when called upon to do so (Gray, 2016).
8. *Reintegration* – The period of transition and adjustment service members and family members experience following a deployment (Gray, 2016).
9. *Service member* – A member of any branch of the U.S. military (Gray, 2016).
10. *Military spouse* – A spouse of a service member who is eligible for military benefits (Gray, 2016).
11. *Problem drinking* – The positive endorsement of any alcohol related complication that took place on more than one occasion during the past year (Trone et al., 2018).
12. *Risky drinking* - According to national recommendations, risky drinking is defined as drinking five or more alcoholic beverages at least one time in the past year, consuming 14

or more alcoholic beverages in a typical week for men and seven or more beverages for women, or consuming four or more drinks per day on at least one occasion (Trone et al., 2018).

Summary

Due to the increased operations tempo of the United States military since the terrorist attacks in New York City on September 11th, 2001, the U. S. military and those who serve have experienced more deployments than ever before in history. Not only do the service members feel the effects of frequent deployment cycles, but their families and children do as well. Military spouses experience increased stressors due to the nature of the military lifestyle, and often feel even more stress when their service members are deployed. While the effects of deployment and alcohol use in service members is well documented, there has not been much research conducted on the effects of military spouses, deployments, and alcohol use due to those deployments. There is also very limited research on the help-seeking behaviors of military spouses as it relates to substance use. The purpose of this study was to address concerns regarding lack of research pertaining to the alcohol use patterns and help-seeking behaviors of military spouses pertaining to deployments and other stressors military spouses endure.

CHAPTER TWO: LITERATURE REVIEW

Overview

This chapter begins with a review of the existing literature as it pertains to the frequent deployment cycle that military service members have endured since the beginning of Operation Iraqi Freedom and Operation Enduring Freedom. More specifically, the literature review highlights the effects the frequent deployment cycles have on the alcohol use, mental health, stress, and help-seeking behaviors of military spouses, as military spouses are often left to manage homes and children on their own while their active duty partners are away.

Before leading into a discussion of the significant impact of military deployments on military spouses, it is important to discuss the theoretical and conceptual framework that was used to guide the study. This research project was built upon a foundation of the work of others, along with an appreciation for the research that has already been conducted concerning military spouses. An overview of studies that have been influential in contributing to the existing knowledge base of the impact of deployments on military spouses was presented. The existing foundation of literature is helpful in forming an argument as to how the present study adds to the existing knowledge-base concerning the overall effects of frequent deployments on alcohol use, mental health, stress, and help-seeking behaviors in military spouses.

Conceptual or Theoretical Framework

In this particular study, a systemic perspective is being use as a lens to explore the effects of deployments on military spouses as well as their help-seeking behaviors as it pertains to alcohol use, mental health, stress, and help-seeking behaviors. As an overall model, the family systems framework allows for the inclusion of other theories that have the potential to affect human behavior. The family systems paradigm was developed over time by many influencers,

and therefore, the development of the model cannot be attributed to just one person (Gurman & Kniskern, 2014). Early influencers of this paradigm noticed that the success of the patient in therapy is dependent upon the support and reactions from their family, and because of this observation, the family systems paradigm places a large emphasis on the importance of the family unit (Broderick, 1993; Gurman & Kniskern, 2014). The family systems perspective surmises that the family as a unit is greater than the sum of its individual parts, and that individual family members are continually impacting one another. Moreover, Paley et al. (2013) posited that individual members of a family need to be understood while keeping the context of the family system in mind. If one family member experiences dysfunction, the family experiences dysfunction; if one family member finds healing, the family will benefit from that experience as well. Subsequently, the stress that a family experiences, along with their resources, contribute significantly to the psychological health of the military spouse, which has the potential to influence the psychosocial health of the entire family (Green et al., 2013; Trail et al., 2017).

Social learning theory compliments the family systems perspective in that it posits that substance use is a learned behavior that stems from societal influences (Moos, 2007). Since individuals learn within their environment through social interaction with others, social learning theory proposes that substance-specific behaviors and attitudes are learned from peers and adults who serve as role models to an individual (Moos, 2007). The social learning model also proposes that an individual will perform any behavior that they are rewarded for, and that the more alcohol is used, or misused, the more of a habit the behavior becomes. Social learning theory also places a large emphasis on the significance of peers and other important people in the lives of the individual, which is called modeling. An example of such would be when a child sees their parents have a drink at the end of the stressful day in order to unwind.

Another theory that compliments the family systems theory is the stress and coping theory, which postulates that stressful circumstances that are often experienced in life, to include stress from family members, friends, school, and work, have the potential to lead to distress and alienation and eventually to substance use and abuse (Moos, 2007). This theoretical model places emphasis on both the environmental system and the personal system, with the environmental system being composed of social climate and stressors in the environmental domain of the individual, and with the personal system being comprised of the person's characteristics and resources. Characteristics and resources in this model include cognitive ability, self-confidence, social competence, and individual personality traits (Chun et al., 2006). New life events that are transitory in nature are assessed by the individual for their degree of threat and whether or not the individual is equipped with the proper personal and environmental resources to be able to address that event.

The social-ecological perspective broadens the lens of the family systems perspective in that not only do transactions with one's family have an effect on the individual, but it is also the larger systems within which military families are embedded and how families interact with those particular systems that shape how an individual experiences an event, such as a deployment (Paley et al., 2013). Systems within the military context that might influence a family include the unit the service member belongs to, the culture of the particular military installation the service member is assigned to, and the culture of the branch in which the military member serves. Each family system might differ in how much interaction they have with the larger systems that affect their lives, and to which degree they are able to effectively make use of the resources that are made available to them through the military community.

The health of the family as a unit is dependent upon the health of each individual family member (Link & Palinkas, 2013). As such, caring for the health needs of the military service member will not be effective if the attention is focused solely on their needs. Taking into consideration there is an association between the development of posttraumatic stress disorder in veterans, and later the development of medical and mental health problems in military spouses, the logical conclusion would be to focus on the health of the military spouse as their health is relevant to the health of the entire family.

Related Literature

Military Deployments

Since the terrorist attacks on the World Trade Center and the Pentagon took place on September 11th, 2001, the United States military has experienced a higher frequency of the deployment cycle than any other war time in the history of the United States. The average length of military deployments can vary depending on the branch of service. The National Academy of Sciences (2013) reported the average mean length of deployments in months for the Army was 9.66 months, 6.0 months for the Navy, 4.89 months for the Air Force, 5.29 months for the Coast Guard, and 7.21 months for the Marine Corps. Prior to 9/11, the deployment cycle included a period of “dwell time”, which consisted of approximately 18 to 24 months in between deployment (Paley et al., 2013). Dwell time is the time between deployments that allow the military service members and their families to “reset” before the next deployment cycle (National Academy of Sciences, 2013). During the increased operations tempo and more frequent deployment cycle, though, this dwell time between deployments has been reduced, although the reduction in dwell time varied by branch of service with the average mean dwell time being 20.37 months for the Army, 22.46 months for the Navy, 21.95 months for the Air

Force, 15.86 months for the Coast Guard, and 15.76 months for the Marine Corps. Several months after returning from deployment, service members and their families are notified of another impending deployment. Often, military families must prepare for upcoming deployment with little notice. In addition, there are many uncertainties of the upcoming deployment including details of the mission including location, what the active duty service member will be doing, and length of time. The unknowns of the upcoming deployment along with decrease in dwelling time may significantly impacts military spouses' stress levels. Consequently, this new deployment cycle has also been associated with higher rates of divorce, increases in child and spouse abuse, an increase in significant health risks for military spouses, and difficulties in reintegration after deployment (Villagran et al., 2013).

The Deployment Cycle

The deployment cycle is an ongoing process that consists of multiple stages in addition to the separation of a military service member's time away from home. During the deployment cycle, the military spouse may have a variety of experiences prior to deployment. The military spouses may anticipate and prepare for the service member's departure, learn to adjust to life at home without the service member, anticipate and prepare for the return of the service member, and learn to live with their active-duty service member when they return home from deployment (Paley et al., 2013).

One model of the deployment cycle proposes there are five stages to the deployment cycle, consisting of pre-deployment, deployment, sustainment, redeployment, and post-deployment (Hall, 2016; Padden, 2006). The first stage of the deployment cycle, pre-deployment, is the stage of the deployment cycle where the order to deploy arrives and ends when the service member has departed their home duty station (Hall, 2016). Pre-deployment

encompasses a period of time lasting from several weeks to more than a year, and can be characterized by both denial and anticipation of loss. Other common feelings may include denial, fear, anger, resentment, hurt, and an emotional withdrawal may occur before the service member leaves. Another characteristic of pre-deployment is the need for the family to get their affairs in order, which includes preparing wills, insurance, powers of attorney, and ensuring the home and the vehicles are properly maintained and in good working order (Hall, 2016).

The second stage within this deployment model is called, “deployment”, and begins when the service member departs from their home installation. The duration of this stage lasts until the end of the first month of separation (Hall, 2016; Knobloch et al., 2013; Padden, 2006). While reactions among military spouses may vary, this stage of the deployment cycle has the potential to invoke strong emotions to include a sense of emptiness, loneliness, numbness, sadness, and even feelings of abandonment. The military spouse may even experience difficulties in sleeping and eating patterns, as well as anxiety in learning to navigate military pay problems, childcare, or other daily concerns. Although technology has allowed for vast improvement in communication since the 2001 terrorist attacks, anxiety might also be increased due to lack of connectivity and knowledge of service member for several weeks before the service member is able to contact their families. At times, both the spouse and the service member may feel helpless and unable to provide the support one believes their partner needs from them, while simultaneously feeling envious of those who are able to provide support to their spouses. Erbes et al. (2017) discovered that although these feelings may exist during the initial stage of the deployment, military spouses also experienced low levels of depression during the deployment stage, which increased throughout the duration of the deployment.

The third stage of the deployment cycle presented in this model is called “sustainment”. The sustainment stage begins within the first few weeks of deployment as life begins to settle down and will last until approximately one month before the military service member is due to return home (Hall, 2016; Padden, 2006). During the sustainment period, both the military service member and the military spouse begin to implement new routines, as well as establish new sources of support (Hall, 2016; Knobloch et al., 2013). Communications during this stage can often be strained, with lack of face-to-face interaction making communications vulnerable to distortion and perceptions (Hall, 2016). Often, family roles are redistributed among the remaining family members in the home to compensate for the service member being deployed. Military spouses may also experience some anxiety due to feelings of concern and fear of receiving approval or disapproval from their deployed service member of their decision-making while deployed (Hall, 2016).

Redeployment is the fourth stage of the deployment cycle, and this stage begins during the last month of the deployment before the service member is scheduled to return to his or her home installation (Hall, 2016; Knobloch et al., 2013; Padden, 2006). The redeployment stage is characterized by conflicting emotions of anticipation, excitement, apprehension, worry, and fear (Hall, 2016). Military spouses may feel a surge of energy and attempt to accomplish everything on the “to do” list before their service member returns home. Expectations for the homecoming are often very high, with many military spouses experiencing feelings of disappointment when their service member returns home. The military spouse was able to implement and manage new routines during the separation that worked without the service member being present, and have another transition to make when the service member returns home.

The fifth and final stage of the deployment cycle is called post-deployment. This stage begins when the service member arrives at their home military installation and may last for up to six months after their return. The time frame may vary depending on individual family dynamics (Hall, 2016; Knobloch et al., 2013; Padden, 2006). During this stage, military families may experience a sort of “honeymoon stage” which consists of excitement and intense joy of the family being reunited and couples learn to get to know one another again (Chambers, 2013; Knobloch et al., 2019). The honeymoon phase is often followed by a period of frustration and awkwardness as the military family adjusts to the service member living in the home again (Knobloch et al., 2013). During post-deployment, military families work to establish, or re-establish daily routines and emotional closeness as a couple and as a family. Some military spouses may struggle with giving up responsibilities that used to belong to the service member that they learned to enjoy during the deployment. Another challenge that may arise is that the service member formed a close bond with the soldiers that they deployed with and may want to spend time with them, which may anger the spouse or instigate feelings of abandonment. Each partner in the military couple needs to be mindful of the fact that both they and their partner may have encountered experiences and periods of growth that have changed priorities for each of them. Due to these experiences, the couple may need to re-learn how to be in a relationship with one another (Hall, 2016; Knobloch et al., 2013). The unprecedented rate of deployments has put military families in a position never before seen in history, as military service members and their families might be working on reintegration issues while simultaneously preparing for a future deployment (Paley et al., 2013).

Hardships Military Spouses Endure

The current military operations in Afghanistan and Iraq are the longest-standing military operations to have taken place since the war in Vietnam. Due to the increased deployment cycle, military spouses have also faced an increased frequency in the deployments and separations from their military service members (Van Winkle & Lipari, 2015). Not only do military spouses face hardships due to the military deployments they are forced to endure, but they often face other hardships their civilian peers do not.

Frequent Relocations

Military families are highly mobile and, with some exception, typically move every two to three years, which is far more often than civilian families (Gleason & Beck, 2017; Hall, 2016). Military installations are located all over the United States and even in other countries, which means that most of the time, the military spouses are in a new state or country with no natural support system in place, such as friends or family, to help them with children or other areas they may need support with when their service member is away (Joseph, 2014; Runge et al., 2014). Examples of support military spouses may need while their service members are deployed include home maintenance, vehicle maintenance, childcare needs, and any other type of support may be required.

Frequent relocations also have an effect on the continuity of medical care that is received, which is essential to quality healthcare (Gleason & Beck, 2017). Military service members and their families are able to access medical care on an unlimited basis while paying little to no out-of-pocket cost, however, each permanent change of station (PCS) move requires a change in healthcare providers. Access to care also varies according to the location of the duty station and

the service required (Hall, 2016). Continuity of care for medical purposes is important, as it has been shown to be consistent with better health outcomes (Gleason & Beck, 2017).

Frequent Separations

Military spouses endure frequent separations from their service members, which can be as soon as the service member joins the military to attend basic training and then to Advanced Individual Training (AIT) for their respective career fields (Hall, 2016). Military service members, once they report to their units, often go to the field for training, and sometimes even on temporary duty (TDY) assignments that take them away from their families. Then, of course, there are deployments. Some of the emotional hardships and adjustments that military spouses make during deployments have been discussed in the previous section. However, there are more hardships that military spouses endure when their service members are deployed that are worth mentioning.

According to the Department of Defense statistics, 37.3% of active duty military service members have children, with an estimate of more than two million children having experienced a deployment since the OEF/OIF conflicts have started (Department of Defense, 2018a; Posada et al., 2015). Military-related deployments place a considerable amount of stress on families (Leroux et al., 2016). While there are conflicting findings on the impact of deployments on children, some research does describe hardships for children as well. For example, while the deployment may not directly affect children, it has been found to affect the non-deployed parent whose behavior has been found to significantly impact that of the children (Hall, 2016). It has been found that in children with a deployed parent, children often worry about the health and well-being of their deployed parent, and experience increased levels of stress throughout the deployment cycle (Pexton et al., 2018). It has also been found that reunion can be difficult to

navigate for children depending on their age and understanding. Children have been also been found to be loyal to the non-deployed parent and may not respond well to discipline from the service member when they return home. Children may experience anxiety for up to a year after the return of the deployed parent. Learning to parent children who may be experiencing behavioral difficulties, educational difficulties, or sleep problems has the potential to add stress to an already stressful situation (Dimiceli et al., 2010; Posada et al., 2015). These difficulties have the potential to negatively impact the quality of parenting children receive.

Employment

Military spouses were found to be much more likely to remain unemployed or underemployed than their civilian peers with similar characteristics, with as many as one-third of military spouses reluctantly staying out of the work force (Dimiceli et al., 2010; Dorvil, 2017; Meadows et al., 2016; Runge et al., 2014). Often times, the education and careers of military spouses need to be put on hold due to frequent relocations (Hall, 2016). This can make it difficult to gain employment, or even maintain seniority in the workplace. If they are able to gain employment, often times, military spouses are forced to take low-paying jobs or jobs they are overqualified to perform (Hall, 2016; Meadows et al., 2016). It can often be difficult to navigate childcare due to the unpredictable nature and work hours of their military service member which can also serve as a barrier to maintain gainful employment. Sometimes, military spouses choose not to work because childcare costs as much, if not more, than what the military spouse would be able to earn. Frequent moves can also have an effect on those military spouses with professional careers that require licensure, as with each move to a different state they would require to seek licensure in that particular state (Hall, 2016). Employers are often hesitant to train military spouses due to the transient military lifestyle.

Caregiving Roles

Military spouses are often left at home to serve as the only parent, but that is not often the only caregiving role in which they serve. It was noted that both Operation Enduring Freedom and Operation Iraqi Freedom resulted in a total of more than 50,000 service members who were wounded in action and 118,000 receiving a diagnosis of posttraumatic stress disorder following their return from deployment (Castro, 2014). This implies that there are a number of military spouses who are serving in a role as caregiver to their active duty spouses, which not only can be stressful but can also cause marital strain (Link & Palinkas, 2013).

Stress

Stress is defined as the experiencing of a negative emotional or physiological response following exposure to life experiences that are perceived as threatening to an individual (Reyes et al., 2008; Sillaber & Henniger, 2004; Sinha, 2008). Stressors are the events that can initiate the stress response, and they may come from a plethora of sources to include mild stressors such as morning traffic or meeting a deadline in the workplace, more moderate stressors such as injuries or medical diagnoses, and severe stressors that may be considered to be traumatic such as a car accident or a person-on-person crime (Dimiceli et al., 2010; Goeders, 2003; Reyes et al., 2008; Sinha, 2001). It has been found that stressful events cause the most distress when a person is required to make substantial changes to adapt to their environment, and continued stress can be debilitating to some people. Everyone responds to stress in different ways with the stress response for each person being affected by predisposing genetic and biological factors, the emotional state of the individual, personality traits, and precipitating environmental factors (Dimiceli et al., 2010; Goeders, 2003; Reyes et al., 2008; Sillaber & Henniger, 2004; Sinha, 2008).

The understanding of several dimensions is important to understand in the role of stress and the increase of maladaptive behaviors, to include alcohol use (Sinha, 2008). These dimensions include the intensity of the stressor, the controllability of the stressor, the predictability of the stressor, mastery, and being able to adapt to the stressor (Sinha, 2008). There are several stressful life events that have been associated with the increased risk of substance abuse. These life events include the loss of a parent, parental divorce and conflict, physical abuse, physical violence, low parental support, emotional abuse, neglect, isolation, single-parent family structure, and unfaithfulness in a relationship (Sinha, 2008). Experiencing high emotional stress has been associated with loss of impulse control and the inability to delay gratification and inhibit behaviors that might be considered inappropriate (Sinha, 2008). It has been reported that the more prolonged, chronic, and unpredictable the stressor is, the lower the sense of mastery or adaptability and the greater the extent of the stress and the impact on the well-being of the individual (Aronson & Perkins, 2013; Sinha, 2008). This research supports the findings that lengthy deployments and the feeling of isolation many military spouses experience, combined with real or perceived lack of social support, and being forced to take on parenting as a single parent during military separations creates an enormous amount of stress in the lives of military spouses and can make that population vulnerable to substance use and mental health issues (Joseph, 2014).

Stress and the Military Lifestyle

As mentioned previously, military spouses experience numerous stressors that are associated with the military lifestyle. These stressors include frequent relocations, deployments, lack of social support, taking on parenting as a single parent, taking on chores and tasks that may belong to the active duty service member, and learning to live in a foreign country, to name just a

few. Some research on the stressors of the military lifestyle and military spouses has been conducted, with some interesting findings.

Deployments are a stressful experience. Dimiceli et al. (2010) surveyed 77 female military spouses from the 4th Infantry Division in Fort Hood, Texas. The researchers found that deployments were viewed as the most stressful event that military wives encounter, with 85% of respondents making that statement. The length of deployment was also found to be a significant factor in the perceived stress that military wives experience (De Burgh et al., 2011; Dimiceli et al., 2010; White et al., 2011). The researchers mentioned that for military spouses to effectively cope with stressors associated with the military lifestyle is incredibly important in the retention of career service members, as service members are more likely to reenlist if their spouses are supportive of their careers and are able to successfully navigate the stressors associated with the military lifestyle.

Findings in research indicate that military spouses experience stress at higher levels than their civilian peers. In a study of a convenience sample of 105 female military spouses of active duty service members, it was found that the average score on the Perceived Stress Scale for military spouses was a 17.5, where the score for the normative sample of females in the civilian population is 13.7 (Padden et al., 2013a). The researchers found that the higher levels of perceived stress were even found in military spouses whose active duty partners had been deployed to a military operation other than war. The authors explained the reasoning for this may be able to be explained by the nature of these types of missions, as these shorter, frequent deployments may cause additional uncertainty in military spouses due to the short notification of deployment and undisclosed location of the deployments. A higher level of perceived stress was associated with both lower mental and physical well-being, and those military spouses who

reported lower perceived stress were associated with higher mental and perceived well-being. It was also discovered that female military spouses also frequently present to military health clinics with emotional and physical symptoms related to the stress of a military separation.

One of the largest contributors to stress experienced during a deployment is fear over the safety and well-being of the deployed service member on behalf of the military spouse (Carter et al., 2020). In order to protect their deployed service member, some military spouses participate in what is known as protective buffering, which is when one partner intentionally withholds important information from another partner “for their own good” (Carter et al., 2020). The rationale for this agreement is to avoid distracting the active duty service member during deployment when one is not positioned to assist, though the distraction could negatively impact the mission and potentially put other lives and/or a service member’s life in danger. Military spouses reported that stress incurred from protective buffering may be associated with increased psychiatric distress, emotional distress over decision making processes that the military couple would normally share, and facing issues on their own due to the fact they were not disclosed to their partner (Cafferky, 2014).

Deployment and stress have the potential to affect overall well-being in military spouses. In a study of 105 female military spouses, Padden (2006) was able to identify a significant relationship between general well-being and personal stress. Those military spouses with increased perceived stress experienced lower overall well-being and separation since deployment was found to be a significant stressor in relation to overall well-being. Padden also found there was no significant correlation between previous separation due to deployment and overall well-being, meaning that over time, one does not view deployments as stressful no matter how many deployments were experienced on the behalf of the military spouse.

Approximately 74% of military spouses have children in the home, and these women can often experience more stress than those who do not have children. Wheeler and Torres-Stone (2010) conducted a qualitative study of female Army National Guard spouses. During their interviews with the military spouses, the researchers discovered that military wives who had children experienced more stressors during a deployment than military wives who did not have children. The researchers also came across an interesting theme, with many of the military spouses reporting anger and uncertainty. These findings of course cannot be generalized to the population of active duty spouses as National Guard soldiers go to drill one week a month, and two weeks per year, generally during the summer time. So, while they do experience the deployment cycle to both combat zones and peace keeping missions alike, these soldiers go to work in their civilian careers and do not typically live near a military installation. Also, this sample was reported to be a homogenous group, with each of the military spouses having had at least two years of college, they were all Caucasian, and they were all married to noncommissioned officers or commissioned officers, which is not a representative sample of the military population.

Other research indicates that having children in the home during the deployment adds to stress as well. Bernthal et al. (2015) conducted a qualitative study on 31 female military spouses with the intent of researching decision making during times of stress as a lone parent. During their interviews with these military spouses, researchers discovered that frequent relocation and separation from their active duty partners increased both anxiety and vulnerability in spouses who are mothers. The authors made the statement that undergoing a military-forced separation can challenge the sense of well-being and safety a military spouse experiences, which can be viewed as a magnifier for already existing stressors as the impact of the daily and preexisting

stressors can be amplified. Another study discovered there was little association between deployment and the health of the military spouse, but more emotional and behavioral problems were noted in children who have experienced two or more deployments, which may be a contributor to the fact that women with children experience more stress during deployment (Chandra et al., 2010; McGuire et al., 2016).

Age and education may be a factor in how military spouses experience stressors. When researchers examined the sociodemographic information of their sample, it was found that those military spouses who were married to field grade officers and those who were reared in military families had reported lower levels of perceived stress (Padden et al., 2011). The spouses of field grade officers also had the highest mental and physical well-being out of the sample. Padden et al. (2011) posited the higher rank and military experience of the spouses married to field grade officers serve to reduce the emotional stress associated with deployment. In addition, they found that spouses of junior enlisted service members have been identified to be an “at-risk” group, as are company grade officer wives.

Allen et al. (2010) also found that higher levels of stress were associated with lower income and greater economic strain. In a study conducted with 300 married couples in which the active duty husband has deployed in the past year in an attempt to examine the relationship between recent deployments, posttraumatic stress symptoms, and marital functioning for army couples, the findings for this study showed that higher levels of stress were found for couples who reported lower income and greater economic strain. These coincide with the study conducted by Padden et al. (2011) discussed earlier when it was reported that military spouse of junior enlisted have been identified as an at-risk group in experiencing chronic stress. Junior enlisted soldiers do not earn much in salary compared to non-commissioned officers and officers,

and it is often the case that if they are married with children, their spouses do not work to save on childcare costs, which often causes financial difficulties for this population.

These same researchers mentioned other interesting findings. The researchers examined several domains, to include stress, combat exposure, status, military experience, connection, support, quality of the marriage, psychological functioning, children, and perceptions of the Army and the mission (Allen et al., 2010). In the examination of those domains, combat exposure was found to be the most stressful for both the spouse and the service member. Military experience, which was operationalized as both years in service and coming from a military family, did not relate to lower levels of stress. Surprisingly, these findings also suggest that connection with other Army families had no relation to stress, which are similar to the results that Quinn (2017) reported in her study on military spouses of Australian Defense Force personnel. These findings are contradictory to many other studies that report lack of perceived social support to be a stressor for military spouses (Erbes et al., 2017; Padden et al., 2013b; Pflieger et al., 2018; Van Winkle & Lipari, 2015).

The stress associated with military deployments can increase and decrease throughout the deployment cycle. Van Winkle and Lipari (2015) used data already gathered from the 2008 Survey of Active Duty Spouses (2008 ADSS). The data they used was gathered from 6,470 female military spouses; as male military spouses, spouses married to members of the coast guard, and spouses who reported being in the military themselves were excluded from this survey. As such, the findings can only be generalized to female military spouses who have never served in the military. The findings in the research, however, stated that military spouses do indeed find military deployments to be stressful, with the perceived stress levels initially increasing as deployments increase. However, after approximately two deployment cycles, the

perceived stress was reported to decrease, with the potential reasoning being acclimation to deployment lifestyle and built-up resistance. However, after around the fourth or fifth deployment, the military spouses who were surveyed reported their perceived stress level to increase, which may reflect the difficulty of coping with continuous and repeated deployment cycles.

Research on stress and military spouses showed some mixed results. Joseph (2014) attempted to explore the chronic stress of military spouses. A convenience sample of military spouses were recruited from military spouse clubs on several military installations throughout the United States and consisted of 71 female military spouses (Joseph, 2014). To the surprise of the researcher, the findings indicated lower levels of stress than were anticipated. The researchers noted reason for this outcome may be due to the sample, as the sample was rather homogenous in nature and may not be representative of the general military spouse population.

Stress and Alcohol Consumption

Individuals consume alcohol for a variety of reasons. Sillaber and Henniger (2004) noted that 53% of both social and problem drinkers consume with the expectation of relieving tension, decreasing negative emotions associated with stress, and relaxing. Subsequently, many of the major theories of addiction have identified stress as a major factor in the addiction process, with substantial evidence from clinical studies supporting a positive association between negative affect, psychosocial adversity, chronic distress, and vulnerability to addiction (Sinha, 2008). Several models of addiction have also proposed the notion that stress has the potential to increase the risk of substance abuse and relapse (Sinha, 2001). Even for those who consume alcohol socially, exposure to stressors such as an interpersonal evaluation, anger due to provocation, and the need to figure out problems that are deemed insolvable has led to increased alcohol

consumption when compared to alcohol consumption during periods that are not perceived as stressful (Sinha, 2001).

Military Life and Alcohol Misuse

Little is known about alcohol use and misuse in the military spouse population, however, there is a growing body of clinical literature that suggests the existence of a link between stress, mental health, and substance use (Brady & Sonne, 1999; Goeders, 2003; Sinha, 2008). Alcohol misuse in the military spouse population has been on the rise since 2001, and there exists a potential for substance use disorders to stem from the stress associated with the military lifestyle (Ahmadi & Green, 2011; Gribble et al., 2019; Melamed & Castro, 2011). With 92% of the military spouse population being female, the majority of military spouses who misuse alcohol are women (Department of Defense, 2018b). Research has reported that women are more likely than men to consider stressors as being correlated with the initiation of alcohol consumption that is problematic in nature (Brady & Sonne, 1999). Alcohol consumption has also been associated with an exposure to stressors such as dissatisfaction with employment, marital discord, and low marital quality (Goeders, 2003; Pflieger et al., 2018). Alcohol is often used to cope with tension that is associated with environmental stressors or in an effort to relieve anxiety, irritability, and depression.

The majority of military spouses are female, and alcohol use rate of the female population in the United States is starting to mirror that of their male peers (Castelo-Branco et al., 2014). According to the research conducted by Trone et al. (2018), which included information from 9,872 military spouses that were enrolled in the Millennium Cohort Study which was conducted during 2011 until 2013, the number of spouses who reported risky drinking was 36.3% and the number of spouses who reported problem drinking was 7.3%. One interesting

finding was that the prevalence rates of all outcomes of this research was significantly higher in male military spouses than in their female cohorts, with 50.2% of males in the study reporting risky drinking and 10.4% reporting problem drinking. These numbers were 34.3% and 6.9%, respectively, for female military spouses. Other researchers have found that men are more frequently present with binge drinking and alcohol use disorders and are in general more vulnerable to substance abuse as well (Adam et al., 2016; Alvanzo et al., 2014; Zilberman et al., 2003). Trone et al. (2018) also noticed that spouses of warrant officers and commissioned officers and those married to Air Force personnel demonstrated lower rates of both risky and problem drinking.

In 2015, SAMHSA (2016) conducted a study on female military spouse and found that an estimated 29.1% of military spouses had a diagnosable mental illness and 12.8% of military spouses used illicit drugs. The same study found that 67.8% of military wives consumed alcohol within the past 30 days, with 31.5% of military wives engaging in binge drinking. This same study also found that when compared to their civilian peers, military wives aged 18 to 49 were less likely to use marijuana but were more likely to use alcohol in the past 30 days and engage in binge drinking behaviors.

Alcohol use may not necessarily negatively impact well-being in military spouses. Padden (2006) conducted research on 105 female military spouses. Padden hypothesized that female spouses who reported lower substance use would also have greater overall well-being than those military spouses who reported greater substance use during separation due to deployment. However, it was discovered that there was no significant relationship between substance use and overall well-being. In fact, researchers found that the best predictor of

consuming alcohol due to stress was a perceived lack of emotional support and poor communication with the deployed service member (Padden, 2006; Trone et al., 2018).

Using alcohol can be a way to cope with the stressors that the military lifestyle presents (Ahmadi & Green, 2011; Blow et al., 2017; Trone et al., 2018). Blow et al. (2017) conducted a study with 122 couples that the service member was identified with the National Guard. The findings of this study noted that when a military found that when a military spouse used coping skills that were avoidant in nature to help manage their feelings and deployment stressors, they were more disengaged, in denial, and most likely using alcohol in order to cope with the deployment. Military spouses who viewed the deployment of the service member to be at least moderately stressful were found to be more likely to use alcohol (Trone et al., 2018). Steenkamp et al. (2018), however, reported in their findings that alcohol use in military spouses was not related to their service member's deployment status, and then went on to state that the rates of alcohol use in this population were nearly double that of women studied in other population-based research.

One unexpected finding in relation to alcohol use and military spouses comes from the research Gray (2016) conducted on the overall well-being of military spouses. The researcher found that the use of alcohol over the previous 30 days was found to have a positive association with social well-being, which is important considering that many military spouses feel lonely and isolated. Gray did state, though, that the model did not include information about the amount and types of alcohol that were consumed, and that the findings of this study may lean toward the positive social benefits that can be associated with moderate alcohol consumption.

Stress may play an important factor in the alcohol use of military spouses. Trone et al. (2018) also discovered that military spouses who reported feeling very stressed were found to be

consistently more likely to engage in both risky and problem drinking. In addition, those spouses who viewed their service members' combat deployment as being at least moderately stressful were more likely to use alcohol as well. Caregiving may also play additional stress on the military spouse, as those spouses whose service members experienced an injury during combat experienced increased rates of problem drinking, as did those spouses who were caring for an injured or disabled service member (Trone et al., 2018).

There is a lack of data on mental health and substance abuse regarding military spouses that is nationally representative (Mansfield & Engel, 2011; SAMHSA, 2016). Due to this lack of nationally representative data, it is difficult to assess the extent of both mental health and substance abuse issues for military spouses. A perspective that is systemic in nature would argue that the well-being of the family members can influence the well-being of the military service members and veterans (Erbes et al., 2017). There exists a limited research base that examines substance use disorders among the population of military spouses, which serves as an opportunity for researchers to further examine alcohol use among military spouses and drive knowledge of the topic in a variety of directions (Ahmadi & Green, 2011). In civilian research, it has been found that alcohol use by one member of the couple can have a negative impact on all members of the family (Blow et al., 2013). Research on this topic will help military and government officials to implement services in order to ensure that military spouses who have a deployed service member do not turn to alcohol or other drugs in order to cope with the many difficulties associated with a military lifestyle (Melamed & Castro, 2011).

Concordant Alcohol Use

Throughout the history of the military, substance use and misuse by service members has been a serious problem (Sharbafchi & Heydari, 2017). The Department of Defense has

recognized the fact that substance use among the active duty population is a major issue that is affecting the mission readiness of the fighting force (Bray & Hourani, 2007; Osilla et al., 2014). Although alcohol use can have negative effects on any segment of the population, alcohol use and misuse can have detrimental effects for the military population as they have the mission to protect and defend the nation (Bray et al., 1991). It is estimated that between 50 and 84% of active duty service members participate in binge drinking behaviors, with approximately 40% of married service members reporting heavy drinking as well, which is a rate three times higher than that of their civilian counterparts (Gribble et al., 2018; Rodriguez et al., 2018). Military spouses often experience a plethora of problems related to the alcohol consumption of their active duty partner (Rodriguez et al., 2019).

Many married service members heavily consume alcohol, which is concerning as those who consume heavily tend to experience higher rates of depression and anxiety. In addition, couples who are in committed relationships tend to be concordant in their substance use; meaning that couples have a tendency to share specific traits and behaviors (Derrick et al., 2019; Kehayes et al., 2017; Low et al., 2007; Rodriguez et al., 2019). There is limited research in the literature focused on concordant use in military couples, however, research focused on civilian couples has demonstrated that alcohol misuse by one member of the couple can have lifelong effects on not only the other partner but on the entire family; these lifelong effects include decreased marital satisfaction, depression, and lifetime problems with alcohol (Homish & Leonard, 2015). Military spouses are more likely than their civilian peers to misuse alcohol and participate in binge drinking behaviors, and very few military spouses seek help for their substance use despite the fact that women typically have better outcomes than their male peers when they decide to seek treatment (Erol & Karpyak, 2015; Rodriguez et al., 2018). Men and

women are more likely to make positive behavioral changes if their partner does as well, and it has been demonstrated that if one member of a couple makes the decision to stop consuming alcohol, the other partner is five times more likely to discontinue their alcohol consumption than if the spouse were to continue drinking (Falba & Sindelar, 2008). Focusing on the mental health behaviors and substance use of the couple is very much likely to benefit the other partner.

Military Life, Stress, and Mental Health

Military spouses are at an elevated risk for a variety of mental health disorders during all phases of the deployment cycle (De Burgh et al., 2011; Erbes et al., 2017). Research has demonstrated a notable association between the prevalence of mood disorders, anxiety disorders, and chronic psychiatric distress; perceived stress has been found to be predictive of the psychological well-being of the individual (Mentzakis et al., 2016; Padden, 2006; Sinha, 2008). Co-occurring disorders are quite common, as substance and alcohol use are often associated with mental health, with major depressive disorder and alcohol use disorders being the most common dual diagnoses in a clinical setting (Carton et al., 2018). These findings support that mental health should be considered when exploring the alcohol use of military spouses.

Military lifestyle has been noted to be stressful. This stress is compounded for military spouses compared to their civilian peers, as military spouses have the civilian peers' daily life tasks in addition to the uniqueness of military lifestyle (i.e. relocation, deployments, etc.). Consequently, military spouses who view military lifestyle as stressful have been found to have lower overall psychological well-being and are more vulnerable to distress than other military spouses (Eaton et al., 2008; Trone et al., 2018). Depressive symptoms are common in both military spouses and the returning service member during reunion following deployment, and

from a family system's perspective, the mental health of both the military spouse and the service member are linked to the well-being of the couple as a dyad (Knobloch et al., 2013).

A number of military spouses view deployments as a stressful experience. The elevated levels of stress, anxiety, and depression in this population can potentially impact the mental health (Mailey et al., 2018). In their study using surveys from 77 female military wives from the 44th Infantry Division stationed in Fort Hood, Texas, Dimiceli et al. (2010) found that deployments were viewed as one of the most stressful factors that military spouses encounter, with a response rate of 85%. Interestingly, in this study, the active duty service members were deployed at the time of the survey. One finding from this study indicated 44.2% of those military wives were found to have moderately severe levels of depressive symptoms. Both the actual deployment and the length of the deployment have been found to be associated with a mental health diagnosis (Mansfield et al., 2010).

Leroux et al. (2016) had similar findings in their study conducted with 2,530 female military spouses whose husbands were deployed on Navy aircraft carriers. Some participants indicated they had two deployments. The results indicated that out of the 20.2% of military spouses who utilized mental health services, with majority having a primary diagnosis of depression, anxiety, or adjustment disorder. In addition, one-third of the military spouses who utilized mental health services were diagnosed with more than one mental health disorder. Leroux et al. noted differences in utilization of mental health services during the first deployment, between the two deployments, and during the second deployment phase when compared to the same baseline yard period.

Military spouses typically report significantly higher rates of distress than their civilian peers. Quinn (2017) conducted a study on 184 female Australian Defense Force Spouses in an

effort to assess variables such as distress, anxiety, depression, stress, sleep quality, levels of perceived social support, and barriers to care. The results indicated that rates of mild to severe depression in this population were 24.9%, and rates of anxiety were reported at 26.9%. These results showed that military spouses reported significantly higher rates of distress than those rates that were reported among the general population of women in Australia. In addition, those spouses who perceived less emotional support than they desired experienced elevated symptoms of depression. These findings were concerning in that military spouses are a vulnerable population and are in need of resources, support, and clinical attention. Of course, these results are not applicable to the United States population of military spouses, however, the Australian Defense Force does deploy frequently and the military spouses do experience similar stressors as those spouses associated with the United States armed forces.

The distress that many military spouses feel does not necessarily dissipate or vanish upon the return of the service member, and the mental health of the military spouse has the potential to further impact the stress of reintegration during the reunification process when the service member returns from deployment (Marek & D'Aniello, 2014). Knobloch et al. (2019) conducted a study on 1,110 individuals which contained 554 cross-sex couples and one same-sex couple. These couples were asked to provide data online once per month for eight consecutive months following the return of the service member. The researchers measured variables such as combat and relationship satisfaction, as well as secondary covariates such as race, age, sex, and education; depressive symptoms, anxiety symptoms, posttraumatic stress symptomatology in both the service member and the military spouse, reunion uncertainty, reintegration interference from partner and difficulty with reintegration. The couples in this sample reported a slight increase in reintegration difficulty at approximately four to five weeks after reunion. Researchers

also discovered that military spouses reported more mental health symptoms, reunion uncertainty, and reintegration difficulties than did the service members.

Posttraumatic stress disorder (PTSD), while often thought of in the context of the military service member and deployments, is also found in the military spouse population (Marek & D’Aniello, 2014). In fact, research has demonstrated that many military spouses reported either a formal diagnosis of PTSD or PTSD symptomology (Marek & D’Aniello, 2014). Approximately one-third of military spouses were found to demonstrate symptoms of PTSD (Melvin et al., 2012). Military spouses can develop PTSD from traumatic experiences endured outside of the military context, such as from a car accident or sexual trauma, as fewer than 20% of military spouse have reported that their symptoms were attributed solely to the military experiences of their service member (Renshaw et al., 2011). However, military spouses are at risk for experiencing secondary traumatic stress, which has been identified as a serious threat to military families as they adapt to the disordered behavior of their newly returned service member (Castro, 2014). Personnel who have been diagnosed with PTSD and other mental health problems were found to be more likely to report a negative relationship change and a decrease in marital functioning (Allen et al., 2010; Rowe et al., 2012). In fact, PTSD was found to be the only factor that is military-related that has been found to be associated with decreased marital functioning (Pflieger et al., 2018).

Communication with the deployed service member may also be found to be a stressful experience and can have an effect on the mental health of the military spouse on the home front. Knobloch et al. (2018) presented findings from their research that supported this concept, as negative communication during the deployment cycle was found to be associated with more anxiety upon reunion of the service member. Trone et al. (2018) reported similar findings in their

study, stating that the quality of communication with the deployed service member, coupled with the military spouses' stress level, was predictive of risky alcohol consumption in that population. Knobloch et al. (2018) went on to state that communication during deployment may act as a double-edge sword. On one hand, communication can boost the military spouses' sense of security and enhance confidence in the relationship; on the other hand, communication can also provoke conflict, intensify feelings of distance, and exacerbate feelings of distress.

The distress that military spouses feel upon return can, unfortunately, endure for a lifetime. In one study, a convenience sample of 89 cohabiting female partners of male veterans who were enrolled in an outpatient treatment program for PTSD were interviewed using a structured phone interview (Maguno-Mire et al., 2007). The researchers found that the partners of these veterans demonstrated high levels of psychological distress which exceeded the 90th percentile on clinical scales. In fact, severe levels of depression, suicidal ideation, and overall psychological distress were found to be prevalent in this population. These findings demonstrate that partners of veterans who have a PTSD diagnosis experience pronounced levels of emotional distress requiring clinical attention. Caregiver burden has also been associated with negative psychological outcomes, although the military spouses and partners in this study with higher scores of distress were more likely to seek mental health treatment.

Research has demonstrated that those who have been diagnosed with PTSD and other problems with mental health were more likely to report negative relationship change (Rowe et al., 2012). Subsequently, both misusing alcohol and binge drinking were significantly associated with negative relationship change (Rowe et al., 2012). Alcohol misuse and binge drinking are not commonly reported in the military spouse population, however, in the study Eaton et al. (2008) conducted, 4.3% of military spouses reported having used alcohol more than they had intended,

and 3.0% reported that they needed to “cut down” on their alcohol use. In another study, researchers stated that 11% of military spouses engage in hazardous alcohol use, while the most recent research available found that approximately 8.2% of military spouses reported alcohol misuse (Corry et al., 2019; Gurman & Kniskern, 2014).

Help-Seeking Behaviors and Barriers to Care

Each of the military branches and the Department of Defense provide counseling programs, family programs, and other services that cater to the well-being of military families and individuals (Wolf et al., 2018). Women are less likely than men to seek specialized services (Alvanzo et al., 2014). Even though there are ample resources available, particularly for the service member, many military families are reluctant to engage in any type of treatment. It has been reported that nearly 20% of military spouses present to the military health care system with physical and emotional symptoms that are affiliated with the stress of separation (Eaton et al., 2008; Padden et al., 2013b). However, there is evidence that suggests that participation in help-seeking behaviors is scarce despite the fact that 88.5% of military spouses surveyed at a family readiness group (FRG) meeting reported being willing to seek help (De Burgh et al., 2011; Mailey et al., 2018). This may be attributed to military spouses who meet criteria for depression endorsed agreement with barriers to care at higher rates than those who have not (Warner et al., 2009). Whatever the reason, there appears to be a disconnect between what military spouses say they are going to do, and what they are actually willing to do, which can perhaps be a result of barriers to care.

More women tend to utilize the mental health services that are offered by the military than male military spouses do, which makes sense seeing that 92% of active duty military spouses are female (Department of Defense, 2018b; Leroux et al., 2016). There are many

potential barriers to care that are identified by military spouses. In the study on military spouses of Australian Defense Forces, findings suggested that anxiety seemed to be the strongest predictor in barriers to care (Quinn, 2017). Since this study was conducted on spouses of Australian military spouses who may have similar experiences to those spouses associated with the United States military, the findings cannot be generalized to that particular population. Other barriers to care mentioned in research included potential damage to the service-members' career, negative stigma associated with seeking help, difficulty in obtaining appointment, expense, difficulties with being released from work, child care, and not knowing how to seek assistance (Eaton et al., 2018; Quinn, 2017; Terplan et al., 2015).

Some military spouses might have difficulty viewing their well-being as a priority, despite the fact that research has demonstrated that the health and well-being of the at-home parent is important to the well-being of the children in the home, the family, and the military mission (Blow et al., 2013; Eaton et al., 2018; Green et al., 2013; Sheppard et al., 2010; White et al., 2011). In their study of 230 military spouses and 22 focus group sessions, Mailey et al. (2018) found that the most prevalent barrier to care was the lack of time, followed by parenting and family responsibilities. Researchers suggested that, perhaps, military spouses had difficulty in making their own health and general well-being a priority.

Military culture can also act as a barrier to care (Mailey et al., 2018). In military culture, it is often implied that the role of the military spouse is to serve their active duty service members in support of the overall military mission. Because the service member is so frequently absent, sometimes for long periods of time, it is the responsibility of the military spouse to shoulder all of the responsibilities regarding the household and family obligations alone. Seeking help for mental health related issues may be seen as "weak" by military spouses, as they fear

being perceived as a burden or as though they are incapable of meeting the demands of military life. There is also a negative stigma associated with seeking mental health treatment in military culture (Link & Palinkas, 2013; Mansfield et al., 2010; Melamed & Castro, 2011; Melamed & Cubic, 2011; Verdeli et al., 2012; Wolf et al., 2018). Due to the negative stigma associated with seeking treatment, it is unclear as to whether or not military spouses will make the decision to seek treatment unless they are assured some sort of anonymity (Melamed & Castro, 2011). The military culture is a warrior culture, meaning that the military expects and values toughness, which can unintentionally prevent spouses from seeking services, as help-seeking is perceived as weakness by many people in the military (Eaton et al., 2008; Wolf et al., 2018). Many military spouses also fear that seeking out services would have a negative impact on their service member's career, and fear that there is a lack of confidentiality in receiving treatment on the installation due to a military duty to disclose such information (Verdeli et al., 2012; Wolf et al., 2018). This negative thinking toward seeking treatment exists even though some issues such as marital, family, and grief issues are excluded from security background checks, meaning that seeking treatment for these reasons will have no effect on a service member's security clearance or their career (Melamed & Cubic, 2011).

The majority of the resources on and off the military installation are geared toward sustaining the fighting force, meaning that the health and welfare of the service member remain a priority (Link & Palinkas, 2013; Mansfield et al., 2010). Because of this, military spouses who find themselves to be in need of treatment for alcohol misuse may find that the available services via military treatment facilities or through TRICARE, the military insurance program, to be insufficient and overburdened by active duty service members that are in need of treatment (Ahmadi & Green, 2011). However, frequent military moves and continuity of care due to these

frequent moves can also hamper the use of help-seeking behaviors in military spouses (Wolf et al., 2018).

Verdeli et al. (2012) suggested that a barrier to care could be the fact that most military spouses are referred to treatment off the military installation, which could be a barrier to care due to transportation and because navigating TRICARE might be difficult to do for someone who is depressed or struggling with alcohol use. Research on this is mixed, however, as Kees and Rosenblum (2015) suggested that because approximately 70% of military families live off the installation in civilian communities that having to come onto the installation for care might be another barrier to receiving care. Providers who are paneled with TRICARE are not required to have any type of additional training to be able to provide care to this population and may have no knowledge of how to treat the special needs and circumstances surrounding the military lifestyle (Verdeli et al., 2012). It is suggested that both the military community and surrounding civilian communities work together in order to establish programs both on and off the installation that can provide the required support in order to meet the emotional needs of the military spouses who are in need of this support and make these programs more accessible to all military spouses (Beardslee et al., 2013; Chambers, 2013).

Access to effective and evidence-based care is vital to military spouses along with knowledge about resources available to make informed decisions about mental health. Left untreated, alcohol use problems and cooccurring mental health disorders have the potential to affect not only the long-term mental health of the military spouse, but also the well-being of her children, and the system of support that the service member and the military relies on (Verdeli et al., 2012). The health of the family is reciprocal and is affected by the health of each member of the family, as such, it would be logical to consider the well-being of the military spouse to be

relevant to overall family health and mission readiness (Link & Palinkas, 2013). If the attention for care is focused solely on the needs of the service member, care for these military families will be found to be inadequate, although military officials are starting to focus attention to military spouses and are beginning to view this population as important investments to the mental and emotional well-being of military families, and ultimately, the retention of military personnel (Green et al., 2013; Link & Palinkas, 2013).

Summary

Since September 11th, the United States military has deployed more often than it ever has in history. These frequent deployments have been found to have numerous effects on the military spouses who are left at home while the military service member is away. There are different parts of the deployment cycle, to include pre-deployment, deployment, sustainment, redeployment, and post-deployment, and all of these parts of the deployment cycle come with significant challenges for military families. Military spouses not only have to learn to manage their lives without the service member present, but they are faced with numerous other challenges as well, which include living away from family, lack of support system, difficulties finding employment, to name a few. Military spouses are exposed to many stressors, and these stressors can have various effects on the general well-being and the mental health of the military spouses. Military spouses, when compared to their civilian counterparts, are more likely to have been diagnosed with a mental health disorder, and they are more likely to consume alcohol than their civilian peers.

There have not been many studies conducted on military spouses and alcohol use, however, the few studies that have been conducted on military spouses and their alcohol use during deployment have noted that deployment does not have an effect on alcohol use unless the

military spouse experiences poor communication with their deployed service member during the deployment. Even when the service member does come home, military spouses may be prone to concordant alcohol use as service members are much more likely to abuse alcohol than their civilian peers. There simply needs more research to be conducted.

Military spouses have a lot of resources available to them as provided by the military and the department of defense, but only a small portion of military spouses seek treatment for their alcohol use. Several barriers to care which may inhibit military spouses from seeking help include the military stigma that seeking help is “weak” and that seeking help means that they cannot cope with the military lifestyle, fear of ruining their service member’s career, arranging childcare, time off from work, and transportation. It is imperative that these barriers to care are studied in order to help government officials encourage military spouses to seek the treatment they need.

CHAPTER THREE: METHODS

Overview

Due to the high operations tempo of the military, service members endure frequent deployments. For married service members, their spouses and families endure the deployments of their loved ones and all the responsibilities and hardships that experiencing a deployment on the home front entails. The purpose of this research study was to study the alcohol consumption, mental health, stress, and help seeking behaviors of military spouses who have endured deployments, with the hypothesis that alcohol use will not increase during deployment, military spouses will report poorer mental health and increased stress during deployment, and military spouses who have endured deployment will not utilize appropriate mental health resources.

This study measured the counselor's knowledge regarding the alcohol use, mental health, and stress of military spouses when their active duty partners are deployed. Additionally, it expanded knowledge on the help-seeking behaviors of military wives. The response of the military spouses was assessed via an online survey. This research dissertation was divided into the following sections: design, research questions, hypotheses, participants and setting, instrumentation, procedures, variables, and data analysis. The overall goal for this study was to gather information that helped to answer the research questions, provide new recommendations for future studies on the topic, provide guidance for military leaders when forming and implementing policies and resources for military families, and help to provide implications for mental health practitioners working with the military population.

Design

The design of this study was quantitative, being composed of an anonymous online questionnaire. This study utilized direct marketing to recruit military spouses of active duty

service members from all branches of the military, to include the Army, Navy, Marines, Air Force, and Coast Guard. Spouses of reserve and national guard service members were not eligible to participate in this study. The purpose for the study design being quantitative was in effort to gather descriptive data from the anonymous online survey, with the intent of describing the sample of interest (Heppner et al., 2016).

An online survey was selected for this research study due to the fact that the military population remains highly mobile due to frequent military relocations. In addition, web-based technology was associated with advantages of being able to reach a larger number within a population, increasing return rate, and reducing costs associated with other types of survey methods, such as processing paper surveys (Crum-Cianflone et al., 2014). Survey research is also often used to identify potential risk factors of public health issues within a specific population (Heppner et al., 2016). Due to the sensitive nature of some of the questions that were asked on the survey, there was a need to reassure military spouses of the confidential nature of the survey, communicating confidentiality standards, and the security of the information they provide. The military spouses were assured they had the right to refuse to answer any question they did not feel comfortable answering, and that they had the right to exit the survey at any point. Particular emphasis was placed on assuring study participants that neither their active-duty military partners nor their command teams will have access to survey responses.

The researcher sought approval from the Institutional Review Board (IRB) at Liberty University, and approval was granted on November 25th, 2020. This study posed no physical risk to research participants and posed only minimal emotional or psychological risk. In order to help ensure the confidentiality of the research participants, the researcher sought a waiver for a written consent form from the IRB at Liberty University that waives the requirement that

research participants list any identifiable information, as the study poses minimal risk to participants.

The welcome page that the survey was posted on informed all research participants that their participation was voluntary. Research participants were also notified that their completion and submission of the survey represented their consent to participate in the study. They were also advised that they can skip any questions that they did not feel comfortable answering, and can quit the survey at any time without receiving any sort of penalty. In addition, participants were assured that their answers would remain confidential and anonymous, as no identifying information were gathered during this study. Important considerations in working with members of the military include the fact that service members and their spouses are often hesitant in sharing sensitive personal information, and often live fast-paced lifestyles that require an element of flexibility. One limitation of an online survey design that was noted is the possibility of fraudulent responses as the researcher had little control over who volunteers to participate in the survey. Another limitation of this design was that some respondents might encounter technical difficulties while completing the survey to include poor internet connection. An additional limitation might include limited access to or lack of technology altogether for many members of the population. Yet another limitation of this design to consider was the possibility of bias in completing the questionnaire due to the participants' inability to accurately recall information (Heppner et al., 2016). One final limitation was the fact that the researcher was dependent on the fact that participants would answer all questions honestly, and there was no follow-up opportunity with participants to discuss the questionnaire.

Once approval from the IRB was gained, the researcher distributed the survey to military spouses via social media platforms and groups that cater specifically to or are frequently

accessed by military active duty military spouses, such as the Fort Bragg Wives Facebook group, via a weblink posted on those platforms. There were no formal controls available to prevent collaboration of participants in completing the anonymous online survey. The online recruitment strategy used in this study was chosen due to its ability to help diverse participants deriving from diverse military backgrounds. It was also deemed an appropriate recruitment strategy due to the importance of social media in the lives of military spouses (Rea et al., 2015). A limitation to using this method is that findings were not generalizable to the greater population of military spouses. In addition, the findings from this study are limited within the context of the research sample. It is for this reason the researcher utilized extreme caution when making inferences about any findings of this study. Despite the limitations, the findings from this research study still contribute to the existing knowledge of alcohol use, mental health, stress, and help-seeking behaviors of military spouses.

Once this study obtained IRB approval, the researcher shared recruiting materials created during the IRB approval process that could easily be shared via social media platforms to include Facebook, Twitter, and Instagram. These IRB approved materials provided a brief description of the research study and contained a link to the survey website as well. In order to obtain access to the social media groups and pages to advertise the study, the researcher contacted group and page administrators in order to be granted permission to do so. Personal contacts of the researchers were provided the link of the survey webpage and were encouraged to pass on the survey link to their contacts as well.

Research Questions

RQ1: Do deployment cycles affect alcohol use in military spouses?

RQ2: Do deployment cycles affect mental health in military spouses?

RQ3: Do deployment cycles have an effect on stress in military spouses?

RQ4: H_a4: Military spouses who have endured deployments will not utilize appropriate mental health resources.

Hypotheses

H_a1: Military spouses will not report increased alcohol use during the deployment cycle.

H_a2: Military spouses who have endured deployments will report poor mental health.

H_a3: Military spouses who have endured deployments will report increased stress levels.

H_a4: Military spouses who have endured deployments will not utilize appropriate mental health resources.

Participants and Setting

The target population for this study included military spouses from all branches of the military, from various military bases all over the world, and who are at least 18 years of age. One of those military bases being targeted due to the close proximity of the researcher was Fort Bragg, which is in the Sandhills region of North Carolina. Fort Bragg is the largest military installation in the world in reference to population, and is the largest local employer as it provides approximately 15,000 civilians with employment (Fayetteville Population, 2019). The military spouses at Fort Bragg specifically are noted for this study because of the fast-paced operations tempo regarding deployments and because of the size of the installation. While Fort Bragg was the target, spouses from all branches of the active duty military from any military branch and any military installation were invited to participate in this research study, as the survey was accessible online.

The demographic information regarding the sample population consisted of various ages, ethnicities, genders, and levels of education due to the diversity of the military community. The

goal was for both enlisted and officer spouses to participate in the study. Attributable to the fact that the study was conducted using information from military spouses, the military spouses had to be at least 18 years of age.

The type of sampling that was used for this study was convenience sampling. A convenience sample is a subset drawn from a population of interest that includes cases that are readily available, as opposed to cases that are selected randomly (Warner, 2013). The researcher posted the survey link on several social media pages on Facebook, in groups that are geared specifically toward military spouses, such as “Fort Bragg Wives” and “Fort Bragg Wives over 30”, to name a few. It was also hoped that, because the military population is incredibly supportive, that the survey link would be passed on by “word of mouth” as well.

The ideal sample size for this study was determined to be 65 individuals. This number was attained with PowerUp! software designed with the purpose of helping to determine sample sizes for research studies (Causal Evaluation, 2020). The calculations were made using a power of .80, which is considered to be standard, an alpha level of .05, and a two-tailed test (Heppner et al., 2016).

Instrumentation

The instrumentation of this anonymous online survey comprised of 62 questions and took respondents approximately 20 minutes to complete. Eleven demographic information questions were on the survey, as well as 14 questions regarding past and current military experience and status regarding deployment, 20 questions regarding alcohol use, four questions regarding stress, three questions regarding mental health, and six questions regarding help-seeking behaviors. The researcher developed the survey. Example questions for the online anonymous survey included “how long has your spouse served on active duty in the military”, “how much of your spouse’s

active duty time have you been married to them”, “how long have you been married”, and “how many deployments have you endured since you have been married”?

Validity

Internal Validity

Internal validity refers to the degree of certainty researchers have about being able to make statements about a causal relationship between the studied variables. Because the nature of this research study was a survey study, it was expected that this study would be low in internal validity since the variables were being studied as they occur naturally, rather than being manipulated (Heppner et al., 2016).

External Validity

External validity refers to the degree to which research findings are generalizable to other populations (Heppner et al., 2016). The population studied for this research study was taken directly from the population of interest, and because of this, the survey study was expected to have high external validity (Heppner et al., 2016).

Construct Validity

The degree to which the survey for this research study measured what it intended to measure, called construct validity, is extremely important for a survey study such as this one (Heppner et al., 2016). When measuring construct validity, the groups studied should vary along the dimension of interest but should not vary on any other dimension. The group being studied were military spouses who are 18 years of age and older, and as such, the study has strong construct validity.

Procedures

Once the Institutional Review Board approved this research study, the survey for this study was created on the website www.surveymonkey.com. The researcher posted the link for the anonymous survey on the social media platforms such as various groups on Facebook that were created specifically for military spouses, such as “Fort Bragg Wives” and “Fort Bragg Wives Over 30”. The researcher posted the survey link on other such platforms via Facebook as well. The survey was live for approximately one month.

Inclusion and Exclusion Criteria

Participants for this study were assessed for suitability for the purposes of the research questions. This was done within the survey itself as participants had to respond to specific questions. Inclusion criteria for this study included the participant being at least 18 years of age and being married to an active-duty service member. The criteria for exclusion include civilians, National Guard and Reserve military spouses, and spouses of retired military members.

Initial Assessment and Interview Form

Potential participants for this research had to complete a short assessment, which was included with the rest of the questions of the anonymous online survey. The purpose of the assessment was to help ascertain that the inclusion criteria was met, while at the same time, ascertaining that the exclusion criteria were not met.

Consent

Included in the language on the first page of the anonymous online survey was a statement that the participant should be at least 18 years or older and consents to be a part of the study. The statement outlined the risks and benefits of participating in such a study, discussed the

confidentiality of the results, and also gave the participant a chance to opt out of the study if they chose not to give consent.

Collection of Data and Recording Procedures

Once the surveys were completed, all data gathered from the surveys were collected, stored securely, and methodically examined. The data collected from the survey were descriptive in nature and were able to provide quantitative data for this study. The anonymous online survey assessed the alcohol use, mental health, and stress behaviors of military spouses, along with their help-seeking behaviors. With the help of a statistician, it was determined that descriptive statistics would include performing a chi-squared test to determine whether or not categorical variables are related or interdependent (Warner, 2013).

Several screening questions were asked on the initial page of the survey in order to ensure that data collected would come from participants who met eligibility criteria. The questions were multiple choice, and read: 1.) How old are you?; 2.) Is your spouse a member of the U.S. military?, 3.) What is your marital status? Those potential participants who did not meet the eligibility criteria were directed to the final page of the survey and thanked for their time and interest in taking the survey.

Data Analysis

Due to the fact that the research was being conducted using self-reported questionnaires to gather data, there were no data to be collected previous to deployments that could determine alcohol consumption, mental health, stress, and help seeking behaviors during or post deployment. The statistical procedures used to test **H_{a1}**, military spouses did not report increased alcohol use during the deployment cycle, were a correlational design. The reason for choosing this for this particular hypothesis was because the purpose of a simple correlational design is to

examine the relationship between two variables, which in this particular hypothesis were reported alcohol consumption and a deployment cycle (Heppner et al., 2016). A chi-squared test for independence helped to describe this relationship.

The statistical procedures used to test **H_{a2}**, military spouses who have endured deployments will report poor mental health, were also a correlational design. Once again, the researcher intended to use a chi-squared test for independence to determine a correlational relationship between the two variables.

As with the previous two hypotheses, the statistical procedures used to test **H_{a3}**, military spouses who have endured deployments will report increased stress levels, were a correlational design. A chi-squared test for independence helped to determine a correlation between the two variables being studied, which in this case would be deployments and stress.

The statistical procedures used to test **H_{a4}**, military spouses who have endured deployments will not utilize appropriate mental health resources, were also a correlational design. The researcher intended to once again use the chi-squared test for independence to determine a correlation between the variables of deployments and help-seeking behaviors.

Summary

The military population has endured frequent deployment cycles for many years, which can be difficult for the loved ones of the military service members that are left behind to manage the home and family responsibilities. The purpose of this research study was to gather information that would answer the research questions, provide recommendations for future research, and to identify implications for both military policymakers and clinicians working with the military population. The research questions for this study were, “do deployment cycles affect alcohol use in military spouses?”, “do multiple deployment cycles affect mental health military

spouses?”, “do military deployment cycles have an effect on stress in military spouses?” and “do military spouses seek help for mental health, alcohol use, and stress related issues during the deployment cycle?”

A convenience sample was utilized for this study, and the researcher sought participants using social media, specifically Facebook groups that have been created specifically for military spouses. The researcher posted an online survey via www.surveymonkey.com and was “live” for one month, after which data were collected and analyzed with the help of a statistician. The online survey included questions for inclusion and exclusion criteria, with the requirements being that participants must be of at least 18 years of age and must be married to a military service member. Descriptive statistics were used to test each hypothesis. A chi-squared test for independence helped to determine a correlation between the variables being studied.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this chapter was to present an overview of the collected data and the results from the statistical analysis with the intent of answering each of the research questions presented in the study. The beginning of this chapter discusses the survey response rate as well as the prescreening procedures. Following the discussion of the response rate, the researcher discussed the results of the analyses for each research question that guided the study. Finally, the chapter closes with a thorough examination of the quantitative findings.

Response Rate

Recruitment of appropriate military spouses happened over a four-week period in the winter of 2020 using social media to guide them to the online survey using convenience sampling techniques. A total of 424 participants visited the SurveyMonkey link and initiated the anonymous online questionnaire. A series of prescreening questions were utilized as a means to prevent persons who did not meet the study criteria from completing the online survey. To meet the study criteria the participant had to 1.) be an adult 18 years of age or older; and 2.) be a military spouse married to an active duty service member. Any potential participant who selected an item choice that disqualified them to be eligible to participate in the research study was incontrovertibly removed from the online survey and directed accordingly to an information page thanking them for their willingness to participate in the study. After removing the participants who did not meet the qualifying criteria to participate in the research study and participants who failed to submit a completed survey from the data file, the study yielded a sample size of 293 military spouses. Only data for those participants who submitted complete surveys were analyzed for this research study.

Population

Data were gathered via an online survey posted on social media platforms to form a convenience sample. The Table 1 demographic summary shows that of the 293 completed responses, only $n = 2$ were male (0.68%) with the other 291 participants being female (99.32%, $n = 291$). 37.2% of the respondents were ages 25-34 ($n = 109$); 33.11% were aged 18-24 ($n = 97$); 25.26% were aged 35-44 ($n = 74$); 4.10% were aged 45-54 ($n = 12$), and 0.34% were aged 55-64 years old ($n = 1$).

Table 1. also shows that in terms of ethnicity, the majority of the respondents were Caucasian, representing 71.67% of respondents ($n = 210$). The rest of the respondents were Hispanic or Latino (15.36%, $n = 45$), Black or African American (3.75%, $n = 11$), multiracial or multiethnic (3.75%, $n = 11$), Asian or Asian American (2.73%, $n = 8$), Native American or Alaskan Native (1.37%, $n = 4$), Middle Eastern or North African (0.34%, $n = 1$), Native Hawaiian or Pacific Islander (0.34%, $n = 1$), and “other” (0.68%, $n = 2$). 95.90% were citizens of the United States ($n = 281$), 3.41% were not ($n = 10$), and 0.68% stated they were lawful permanent residents of the United States ($n = 2$).

Table 1.*Demographic Characteristics of Total Sample*

Age	<i>N</i>	%
18-24	97	33.11%
25-34	109	37.20%
35-44	74	25.26%
45-54	12	4.10%
55-64	1	0.34%
Sex	<i>N</i>	%
Male	2	0.68%
Female	291	99.32%
Race/Ethnicity	<i>N</i>	%
Asian/Asian American	8	2.73%
Black/African American	11	3.75%
Hispanic/Latino	45	15.36%
Middle Eastern/North African	1	0.34%
Multicultural/Multiethnic	11	3.75%
Native American/Alaskan Native	4	1.37%
Native Hawaiian/Pacific Islander	1	0.34%
White/Caucasian	210	71.67%
Other	2	0.68%
U.S. Citizen	<i>N</i>	%
Yes	281	95.90%
No	10	3.41%
Other	2	0.68%

As could be seen in Table 2, when asked what religion they identified with, the majority of participants responded they were Christian, Protestant, Methodist, Lutheran, or Baptist, at 51.19% ($n = 150$). The rest of the respondents identified as Catholic (17.41%, $n = 51$); Mormon (2.39%, $n = 7$); Buddhist (0.34%, $n = 1$); Hindu (0.34%, $n = 1$); Atheist or Agnostic (9.22%, $n = 27$); and Nothing in Particular (17.75%, $n = 52$). Of the respondents, 1.37% identified as “other” ($n = 4$), stating in the comments they were either “spiritual” or Pagan.

Table 2.*Religious Demographic of Total Sample*

Religion	<i>N</i>	%
Christian/Protestant/Methodist/Lutheran/Baptist	150	51.19%
Catholic	51	17.41%
Mormon	7	2.39%
Buddhist	1	0.34%
Hindu	1	0.34%
Atheist/Agnostic	27	9.22%
Nothing in particular	52	17.75%
Other	4	1.37%

Table 3 shows that in terms of education, 33.45% of the population surveyed stated they had a bachelor's degree ($n = 98$). The rest of the respondents stated they had some college (22.87%, $n = 67$); a master's degree (18.09%, $n = 53$); an associate's degree (10.24%, $n = 30$); a high school diploma (8.87%, $n = 26$); a doctoral degree (4.44%, $n = 13$); a GED (0.34%, $n = 1$). No respondents reported never graduating from high school. A small percentage reported "other" (1.71%, $n = 5$), stating in the comments that they had attended a trade school.

Table 3.*Educational Demographic of Total Sample*

Level of Education	<i>N</i>	%
GED	1	0.34%
High School Diploma	26	8.87%
Some College	67	22.87%
Associate's Degree	30	10.24%
Bachelor's Degree	98	33.45%
Master's Degree	53	18.09%
Doctoral Degree	13	4.44%
Other	5	1.71%

Concerning employment status, Table 4 shows that 46.08% of the population surveyed stated they were employed full-time ($n = 135$). 15.36% reported they were employed part-time (n

= 45); 16.72% stated they were not employed and not looking for work ($n = 49$; 12.63% stated they were not employed but looking for work ($n = 37$), 0.68% of respondents reported they were retired ($n = 2$), 0.68% reported being disabled and not able to work ($n = 2$), and 7.85% reported “other” with many stating they were stay at home mothers, students, or starting their own business ($n = 23$).

Table 4.

Employment Demographic of Total Sample

Employment Status	<i>N</i>	%
Employed, Working Full Time	135	46.08%
Employed, Working Part Time	45	15.36%
Not Employed, Looking for Work	37	12.63%
Not Employed, Not looking for Work	49	16.72%
Retired	2	0.68%
Disabled, Not Able to Work	2	0.68%
Other	23	7.85%

Table 5 shows that the majority of the research participants reporting having children in the home, with 54.98% stating they had one or more children under the age of 18 living in their home ($n = 160$). 37.11% of participants reported they did not have children ($n = 108$), and 4.47% reporting they have adult children 18 years old or older living in their home ($n = 13$). 3.44% of participants reported “other” ($n = 10$). After reading the comments, those respondents have adult children living outside the home, are expecting their first child, have had miscarriages, or have joint custody arrangements.

Table 5.*Children in Household Demographic of Total Sample*

Children in the Household	<i>N</i>	%
Yes, all 18 or older	13	4.47%
Yes, one or more under the age of 18	160	54.98%
I do not have children	108	37.11%
Other	10	3.44%

Military Demographics

Military spouses from all branches, Army, Marines, Air Force, Navy, and Coast Guard, were represented in this survey (See Table 6). Out of the 293 respondents, one participant did not answer the question of which branch their active duty service member served in ($n = 30$; 0.34%). Of the 292 that answered, 25.68% ($n = 75$) of respondents had spouses who were in the Army; 10.27% ($n = 30$) had active duty spouses who were in the Air Force; 49.66% ($n = 145$) were married to active duty spouses in the Marine Corps; 13.01% ($n = 38$) were spouses to active duty Navy personnel; and 1.37% ($n = 4$) were spouses who represented the Coast Guard. There were also representatives from all ranks, to include spouses of enlisted personnel ($n = 220$; 75.60%), spouses of warrant officers ($n = 11$; 3.78%), and officers ($n = 60$; 20.62%). Of the 293 responses, two participants decided not to answer this question ($n = 2$; 0.68%).

Table 6.*Military Demographic Characteristics of Total Sample*

Branch	<i>N</i>	%
Army	75	25.68%
Air Force	30	10.27%
Marines	145	49.66%
Navy	38	13.01%
Coast Guard	4	1.37%
Skipped	1	0.34%
Rank	<i>N</i>	%
Enlisted	220	75.60%
Warrant Officer	11	3.78%
Officer	60	20.62%
Skip	2	0.68%

Deployments

Table 7, the Deployment Demographics Table, shows that the majority of military spouses have experienced at least one deployment (68.27%, $n=200$). Only 31.74% ($n=93$) of participants have not experienced a military deployment. The majority of deployments were to Iraq ($n=95$ 32.87%), Afghanistan ($n=107$, 37.02%), and Other ($n=108$, 37.37%). The Other section consisted of write in comments primarily of spouses of Navy personnel noting their active-duty spouse was away at sea on a ship or a submarine.

Table 7.*Deployment Demographics*

How many combat deployments has Active Duty member experienced?	<i>N</i>	%
1	62	21.16%
2	39	13.31%
3	44	15.02%
4	20	6.83%
5	18	6.14%
6	5	1.71%
More than 6	12	4.10%
None	93	31.74%
Deployment Location	<i>N</i>	%
Iraq	95	32.87%
Afghanistan	107	37.02%
Africa	27	9.34%
Kuwait	72	24.91%
Kosovo	5	1.73%
Bosnia	1	0.35%
N/A – Spouse Never Deployed	59	20.42%
Other	108	37.37%

Alcohol Use

The majority of military spouses ($n=226$, 77.13%) reported they do consume alcohol (See Table 8). Only a small portion of military spouses reported having concerns about their alcohol use ($n=32$, 10.92%), with an even smaller percentage of military spouses reporting they have been diagnosed with an alcohol-related substance use disorder ($n=3$, 1.02%). Most military spouses stated they felt as though their alcohol use did not increase when their active duty spouse was deployed ($n=214$, 73.54%). The majority of military spouses surveyed stated that when their spouse is home, they consume alcohol ($n = 236$, 80.55%), and 79.18% ($n = 232$) of military spouses report consuming alcohol with their active duty spouse. A small percentage of military spouses surveyed stated they felt their alcohol consumption had a negative effect on parenting ($n=17$, 5.80%).

Table 8.*Alcohol Demographics*

Do you drink alcohol?	<i>N</i>	%
Yes	226	77.13%
No	67	22.87%
Do you have concerns about your alcohol use?	<i>N</i>	%
Yes	32	10.92%
No	261	89.08%
Have you ever been diagnosed with an alcohol-related substance use disorder?	<i>N</i>	%
Yes	3	1.02%
No	290	98.98%
Do you feel your alcohol intake increases when your spouse is deployed?	<i>N</i>	%
Yes	77	26.46%
No	214	73.54%
Skip	2	0.68%
Do you feel your alcohol intake increases when your spouse is home?	<i>N</i>	%
Yes	74	25.26%
No	168	57.34%
N/A	51	17.41%
Do you drink with your active duty spouse?	<i>N</i>	%
Yes	232	79.18%
No	33	11.26%
N/A	28	9.56%
Do you drink when your active duty spouse is home?	<i>N</i>	%
Yes	236	80.55%
No	40	13.65%
N/A	17	5.80%
Does alcohol use have a negative effect on parenting?	<i>N</i>	%
Yes	17	5.80%
No	115	39.25%
N/A	161	54.95%

Stress

Table 9 shows the responses military spouses gave when asked about stress. When asked about stress, the majority of military spouses reported feeling stressed when their active duty spouse is deployed ($n=221$, 75.43%). When asked for the reasons that they felt increased stress, many spouses reported they worried about their active duty spouses' well-being ($n=184$, 63.45%). The second most common reason that military spouses reported increased stressors is

lack of support system ($n=163$, 56.21%). Other reasons military spouses gave for increased stress levels were that they did not want to let their active duty spouses down ($n = 117$, 40.34%) and lack of reliable childcare ($n = 74$, 25.52%). The majority of military spouses reported that they felt as though they have the necessary coping skills to be able to manage stress ($n=244$, 83.28%).

Table 9.

Stress Demographics

Do you feel more stressed when spouse is deployed? (Total Sample)	<i>N</i>	%
Yes	221	75.43%
No	30	10.24%
N/A	42	14.33%
What are your reasons for increased stress? (Out of 290)	<i>N</i>	%
Lack of support system	163	56.21%
Lack of reliable childcare	74	25.52%
Don't want to let my spouse down	117	40.34%
I worry about my spouse's well-being	184	63.45%
Difficulty parenting without spousal support	61	21.03%
Lack of support from command	53	18.28%
Difficulty managing household and finances on my own	50	17.24%
Lack of information from the Family Readiness Group	43	14.83%
Lack of affordable childcare	42	14.48%
Lack of support from the Family Readiness Group	40	13.79%
My spouse and I argue a lot when deployed	39	13.45%
N/A	53	18.28%
Other	23	7.93%
Do you feel you have coping skills to be able to manage stress? (Total Sample)	<i>N</i>	%
Yes	244	83.28%
No	49	16.72%

Mental Health

As can be seen in Table 10, the majority of military spouses reported they have never been diagnosed with a mental health disorder ($n=166$, 56.66%), with 41.64% reporting they have been diagnosed with a mental health disorder ($n=166$). A small number of participants chose not

to disclose such information ($n=5$, 1.71%). Most of the military spouses surveyed stated that they did not have concerns about their mental health ($n=184$, 62.80%). Out of the 292 participants who chose to answer the question, over half of the population had answered that they do feel as though their mental health worsens when their active duty spouse is deployed ($n=151$, 57.71%).

Table 10.

Mental Health Demographics

Have you ever been diagnosed with a mental health disorder? (Total Sample)	<i>N</i>	%
Yes	122	41.64%
No	166	56.66%
I do not wish to disclose	5	1.71%
Do you have concerns about your mental health? (Total Sample)	<i>N</i>	%
Yes	109	37.20%
No	184	62.80%
Do you feel that your mental health worsens when your spouse is deployed? (Out of 292)	<i>N</i>	%
Yes	151	57.71%
No	95	32.53%
N/A	46	15.75%
Skip	1	.034%

Help-Seeking

In reference to help-seeking behaviors, when the participants were asked if they had ever sought help for alcohol, mental health, or stress-related concerns, over half of the participants stated they indeed had sought help for such concerns ($n=165$, 56.31%). When asked what might prevent them from seeking help, 231 participants responded stating that they have no concerns ($n=111$, 48.05%), they do not want to be seen as “weak” ($n=36$, 15.58%), they are too embarrassed to seek help ($n=35$, 15.15%), they do not want their active duty spouse to worry ($n=33$, 14.29%), they are concerned that doing so might affect their service-member’s career ($n=32$, 13.85%), and negative stigma due to military culture ($n=29$, 12.55%).

Table 11.*Help Seeking Demographics*

Have you ever sought help for alcohol, mental health, or stress related concerns? (Total Population)	<i>N</i>	%
Yes	165	56.31%
No	125	42.66%
I do not wish to disclose	3	1.02%
If you do have concerns, what prevents you from seeking help? (Out of 231)	<i>N</i>	%
No Concerns	111	48.05%
I don't want to be seen as weak	36	15.58%
I'm too embarrassed	35	15.15%
Concerned it might affect my service member's career	32	13.85%
I don't want my spouse to worry	33	14.29%
Negative stigma due to military culture	29	12.55%
Other	27	11.69%

Prescreening Procedures

A prescreening of the data set was done before the statistical analyses were conducted. IBM Statistical Package for Social Sciences Statistics Data Editor (SPSS version 25.0) was used to polish the data and check for both completeness and errors. In instances where a survey was not finished in its entirety, that particular set of data was omitted from the analyses.

Hypotheses

- H_{a1}:** Military spouses will not report increased alcohol use during the deployment cycle.
- H_{a2}:** Military spouses who have endured deployments will report poor mental health.
- H_{a3}:** Military spouses who have endured deployments will report increased stress levels.
- H_{a4}:** Military spouses who have endured deployments will not utilize appropriate mental health resources.

Descriptive Statistics

A chi-square test for independence is a test that is used when a researcher wishes to investigate a relationship between two variables that are categorical in nature (Pallant, 2016). The purpose of the chi-square test is to compare observed frequencies or proportions of cases that occur in each of the categories presented with the values that would be anticipated if no association existed between the two variables that are to be measured, and is performed when researchers have two categorical data types: nominal and ordinal (Pallant, 2016). With the help of a statistician, it was determined that a chi-square test for independence was to be the most suitable statistical procedure for each hypothesis tested, and was performed on cases which were not missing. The alpha level used for the statistical analyses is $\alpha = .05$. A low value for the chi-square test indicates a strong correlation between the two sets of data. A p-value is used to determine whether or not the null hypothesis should be accepted or rejected (Warner, 2013). The smaller the p-value, the more evidence exists that the null hypothesis should be rejected. For this research, the p-value used was .05, meaning that there was a 5% chance that the results were due to random occurrence.

Results

H_{a1}: Military spouses will not report increased alcohol use during the deployment cycle.

A chi-squared test was performed on question 26 of the survey “how many combat deployments has your active duty service member experienced?” and question 30 “do you drink alcohol?” Table 12 shows the observed cell frequencies for military service member deployments and alcohol use. The chi-squared test for independence indicated no statistically significant association between alcohol consumption among military spouses and the number of

combat deployments the active duty service member has served $\chi^2 (1, n=293) = .154, p = .433, phi = .154$.

A chi-squared test was performed on question 27 of the survey “how many combat deployments have you experienced as a military spouse in support of your active duty service member?” and question 30 “do you drink alcohol?” Table 13 shows the observed cell frequencies for deployments military spouses experienced and alcohol use. The chi-squared test for independence indicated no statistically significant association between alcohol consumption in military spouses and the number of deployments they experienced in supporting their active duty spouses $\chi^2 (8, n=293) = .172, p = .367, phi = .367$.

A chi-squared test for independence was performed on question 25 of the survey “is your active duty spouse currently deployed?” and question 30 “do you drink alcohol?” Table 14 shows the observed cell frequencies for deployments and alcohol use. The chi-squared test for independence indicated an existence of a statistically significant association between alcohol consumption in military spouses and current deployments $\chi^2 (8, n=293) = .115, p = .049, phi = .115$. Although a statistically significant association was indicated, it is not possible to make a causal inference because this study was not experimental in nature.

Table 12.*Observed Cell Frequencies of Military Service member Deployments and Alcohol Use*

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.957 ^a	7	.433
Likelihood Ratio	7.503	7	.378
Linear-by-Linear Association	1.996	1	.158
N of Valid Cases	293		

a. 5 cells (31.3%) have expected count less than 5. The minimum expected count is 1.14.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.154	.433
	Cramer's V	.154	.433
N of Valid Cases		293	

Table 13.*Observed Cell Frequencies of Deployments Military Spouse Experienced and Alcohol Use*

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8.709 ^a	8	.367
Likelihood Ratio	10.356	8	.241
Linear-by-Linear Association	1.574	1	.210
N of Valid Cases	293		

a. 6 cells (33.3%) have expected count less than 5. The minimum expected count is .69.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.172	.367
	Cramer's V	.172	.367
N of Valid Cases		293	

Table 14.*Observed Cell Frequencies of Current Deployment and Alcohol Use*

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	3.884 ^a	1	.049		
Continuity Correction	3.155	1	.076		
Likelihood Ratio	4.422	1	.035		
Fisher's Exact Test				.052	.032
Linear-by-Linear Association	3.871	1	.049		
N of Valid Cases	293				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 10.06.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.115	.049
	Cramer's V	.115	.049
N of Valid Cases		293	

H_{a2}: Military spouses who have endured a deployment will self-report poor mental health.

A chi-squared test was performed on question 26 of the survey “how many combat deployments has your active duty service member experienced?” and question 54 of the survey “have you ever been diagnosed with a mental health disorder?” Table 15 shows the observed cell frequencies for deployments and mental health. The chi-squared test for independence indicated no statistically significant association between number of deployments the active duty service member has experienced and mental health in military spouses $\chi^2 (14, n=293) = .120, p = .865, phi = .170$.

A chi-squared test was performed on question 25 of the survey “is your active duty spouse currently deployed?” and question 54 of the survey “have you ever been diagnosed with a mental health disorder?” Table 16 shows the observed cell frequencies for deployments and mental health. The chi-squared test for independence indicated no statistically significant association between current deployment and mental health in military spouses $\chi^2 (2, n=293) = .093, p = .278, phi = .093$.

A chi-squared test was performed on question 27 of the survey “how many combat deployments have you experienced as a military spouse in support of your active duty service member?” and question 54 of the survey “have you ever been diagnosed with a mental health disorder?” Table 17 shows the observed cell frequencies for deployments and mental health. The chi-squared test for independence indicated no statistically significant association between deployments the military spouse experienced in support of their active duty service member and mental health $\chi^2 (16, n=293) = .149, p = .676, phi = .210$.

Table 15.

Observed Cell Frequencies of Military Service Member Deployments and Mental Health Diagnosis

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8.437 ^a	14	.865
Likelihood Ratio	9.851	14	.773
Linear-by-Linear Association	.345	1	.557
N of Valid Cases	293		

a. 11 cells (45.8%) have expected count less than 5. The minimum expected count is .09.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.170	.865
	Cramer's V	.120	.865
N of Valid Cases		293	

Table 16.*Observed Cell Frequencies of Current Deployments and Mental Health Diagnosis*

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.558 ^a	2	.278
Likelihood Ratio	1.945	2	.378
Linear-by-Linear Association	.642	1	.423
N of Valid Cases	293		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is .75.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.093	.278
	Cramer's V	.093	.278
N of Valid Cases		293	

Table 17.*Observed Cell Frequencies of Deployments Military Spouse Experienced and Mental Health Diagnosis*

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12.962 ^a	16	.676
Likelihood Ratio	14.389	16	.570
Linear-by-Linear Association	1.368	1	.242
N of Valid Cases	293		

a. 14 cells (51.9%) have expected count less than 5. The minimum expected count is .05.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.210	.676
	Cramer's V	.149	.676
N of Valid Cases		293	

H₃: Military spouses who have endured deployments will report increased stress levels.

A chi-squared test was performed on question 26 of the survey “how many combat deployments has your active duty service member experienced?” and question 51 of the survey “when your spouse is deployed, do you feel more stressed than when your spouse is not deployed?” Table 18 shows the observed cell frequencies for deployments and stress. The chi-squared test for independence indicated a statistically significant association between stress levels in military spouses and the number of deployments the active duty service member has experienced $\chi^2 (1, n=293) = .456, p = .000, \phi = .645$. Although a statistically significant association was indicated, it was not possible to make a causal inference because this study was not experimental in nature.

A chi-squared test was performed on question 27 of the survey “how many combat deployments have you experienced as a military spouse in support of your active duty service member?” and question 51 of the survey “when your spouse is deployed, do you feel more stressed than when your spouse is not deployed?” Table 19 shows the observed cell frequencies for deployments and stress. The chi-squared test for independence indicated there is indeed a statistically significant association between stress levels and number of deployments the military spouse experiences in support of their active duty service member $\chi^2 (16, n=293) = .601, p = .000, \phi = .849$. Although a statistically significant association was indicated, it was not possible to make a causal inference because this study was not experimental in nature.

A chi-squared test was performed on question 25 of the survey “is your active duty spouse currently deployed?” and question 51 of the survey “when your spouse is deployed, do you feel more stressed than when your spouse is not deployed?” Table 20 shows the observed cell frequencies for deployments and stress. The chi-squared test for independence indicated

there is a statistically significant association between stress levels in military spouses and current deployments $\chi^2 (2, n=293) = .174, p = .012, phi = .174$. It was not possible to make a causal inference due to the fact that this study was not experimental in nature.

Table 18.

Observed Cell Frequencies of Military Service Member Deployments and Stress

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	122.021 ^a	14	.000
Linear-by-Linear Association	54.656	1	.000
Likelihood Ratio	108.999	14	.000
N of Valid Cases	293		

a. 11 cells (45.8%) have expected count less than 5. The minimum expected count is .51.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.645	.000
	Cramer's V	.456	.000
N of Valid Cases		293	

Table 19.*Observed Cell Frequencies of Deployments Military Spouse Experienced and Stress*

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	211.357 ^a	16	.000
Likelihood Ratio	168.810	16	.000
Linear-by-Linear Association	75.360	1	.000
N of Valid Cases	293		

a. 14 cells (51.9%) have expected count less than 5. The minimum expected count is .31.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.849	.000
	Cramer's V	.601	.000
N of Valid Cases		293	

Table 20.*Observed Cell Frequencies of Current Deployment and Stress*

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8.826 ^a	2	.012
Likelihood Ratio	14.997	2	.001
Linear-by-Linear Association	6.284	1	.012
N of Valid Cases	293		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.51.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.174	.012
	Cramer's V	.174	.012
N of Valid Cases		293	

H_a4: Military spouses who have endured deployments will not utilize appropriate mental health resources.

A chi-squared test was performed on question 26 of the survey “how many combat deployments has your active duty service member experienced?” and question 57 of the survey “have you ever sought help for alcohol, mental health, or stress related concerns?” Table 21 shows the observed cell frequencies for deployments and mental health. The chi-squared test revealed no statistically significant association between the number of deployments the active duty service member has endured and the utilization of mental health resources among military spouses $\chi^2 (1, n=293) = 142, p = .624, phi = .201$.

A chi-squared test was performed on question 27 of the survey “how many combat deployments have you experienced as a military spouse in support of your active duty service member?” and question 57 of the survey “have you ever sought help for alcohol, mental health, or stress related concerns?” Table 22 shows the observed cell frequencies for deployments and mental health. The chi-squared test for independence indicated no statistically significant association between number of deployments the military spouse has supported their service member in and the utilization of mental health resources $\chi^2 (16, n=293) = .144, p = .728, phi = .204$.

A chi-squared test was performed on question 25 of the survey “is your active duty spouse currently deployed?” and question 57 of the survey “have you ever sought help for alcohol, mental health, or stress related concerns?” Table 23 shows the observed cell frequencies for deployments and mental health. The chi-squared test for independence indicated no statistically significant association between current deployments and the utilization of mental health resources $\chi^2 (2, n=293) = .053, p = .663, phi = .053$.

Table 21.*Observed Cell Frequencies of Military Servicemember Deployments and Help Seeking*

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.779 ^a	14	.624
Likelihood Ratio	12.168	14	.593
Linear-by-Linear Association	3.862	1	.049
N of Valid Cases	293		

a. 10 cells (41.7%) have expected count less than 5. The minimum expected count is .05.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.201	.624
	Cramer's V	.142	.624
N of Valid Cases		293	

Table 22.*Observed Cell Frequencies of Deployments Experienced by Military Spouse and Help Seeking*

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12.225 ^a	16	.728
Likelihood Ratio	13.316	16	.650
Linear-by-Linear Association	1.812	1	.178
N of Valid Cases	293		

a. 14 cells (51.9%) have expected count less than 5. The minimum expected count is .03.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.204	.728
	Cramer's V	.144	.728
N of Valid Cases		293	

Table 23.*Observed Cell Frequencies of Current Deployment and Help Seeking*

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	.821 ^a	2	.663
Likelihood Ratio	.656	2	.720
Linear-by-Linear Association	.176	1	.675
N of Valid Cases	293		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is .45.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.053	.663
	Cramer's V	.053	.663
N of Valid Cases		293	

Summary

This chapter presented an overview of the collected data and the results from the statistical analysis with the intent of answering the research questions of the study. Military spouses were recruited over a four-week period in the winter of 2020 using social media to guide them to the online survey using convenience sampling techniques. A total of 424 participants visited the SurveyMonkey link and initiated the online questionnaire. A series of prescreening questions were utilized in an effort to prevent persons who did not meet the study criteria from completing the anonymous online survey. In order to meet the study criteria, the participant had to 1.) be an adult 18 years of age or older; and 2.) be a military spouse married to an active duty service member. Any potential participant who selected an item choice that deemed them as being ineligible to participate in the research study was guided away from the online survey and directed accordingly to an information page thanking them for their willingness to participate in

the study. After removing the participants who did not meet the qualifying criteria to be able to participate in the research study and participants who failed to submit a completed survey from the data file, the study yielded a sample size of 293 military spouses. Only data for those participants who submitted a completed survey were analyzed for this research study.

The purpose of this research was to address concerns regarding the lack of information pertaining to the alcohol use, mental health, stress, and help-seeking behaviors of the military spouse population in reference to stressors endured from deployments. The study aimed to fill in the gaps of the literature in existence by gathering the data from a population of military spouse that is representative of the larger military population, to include enlisted spouses, spouses of officers, male military spouses, and spouses of same-sex couples where results can be generalized. Additionally, this study may add to the existing literature to help determine which stressors may contribute to alcohol use of military spouses, if any. Very little is known about alcohol misuse as it pertains specifically to the military spouse population, and there is a need to determine areas in which the military spouse population might be vulnerable to alcohol abuse as they learn to manage stressors related to deployments (Blow et al., 2013). Finally, this study sought to determine the help-seeking behaviors of military spouses as it pertains to alcohol use, which to the researcher's knowledge, no other study has done.

This study is of particular significance because the intent of the study was to add to the existing research concerning the effects of deployments on military spouses in reference to alcohol use, mental health, stress, and the help-seeking behaviors of military spouses during the deployment cycle. Subsequently, very little is known concerning alcohol use among military spouses; so, it is imperative to gain knowledge of vulnerable areas for military spouse to develop and implement support programs (Blow et al., 2013). There are correlations between the health

of the parent who remains home and the health and well-being of the children (Blow et al., 2013). Therefore, deployment stress has the potential to have long-lasting negative effects on parenting that potentially increases the risk of mental and emotional health issues for the children of these families. In addition, the risk for these children experiencing abuse and neglect is greater. Military spouses who are experiencing mental health issues or alcohol misuse due to stressors identified as related to deployment of active duty spouse may potentially have a negative impact on their children, including increase in psychological distress (White et al., 2011). According to Mansfield et al. (2010), stigma against seeking support for mental health and substance disorders in the military is well documented. Consequently, the stigma of not seeking support may carry over to military spouse, though there is limited information in the literature. Therefore, studying alcohol misuse, mental health, stress, and help-seeking behaviors among military spouses may have long-term implications on not only the health of the military spouse, but also on all members within the military family.

In this research study, there was only one statistically significant finding among military spouses that reported increase stress during active duty spouse's deployments. The other associations though are not statistically significant, they do contribute to the existing research. For example, the question relating to military deployments and alcohol use was not statistically significant, however, the findings were consistent with findings of similar research studies and, therefore, contribute to the existing body of research by validating that research. Results from this study provide information that may benefit and guide military commanders, policy makers, and clinicians working with the military population in determining best practices to effectively support military spouses during all phases of the deployment cycle. In addition, the findings and

implications of this study may increase the health and well-being of military children and the overall military family system.

CHAPTER FIVE: CONCLUSIONS

Overview

This final chapter presents an overview of the collected data and the results from the statistical analysis with the intent of answering the research questions of the study. The beginning of this chapter discusses the survey response rate as well as the prescreening procedures. Following the discussion of the response rate, the researcher discussed a presentation of the results of the statistical analyses for each research question that guided this study. Finally, a comprehensive examination and discussion of the quantitative findings concludes this chapter.

Discussion

The operations tempo of the United States military has been higher than it has ever been in the history of the nation, and military service members are more likely to have a family during our current time period than any other timeframe in history. The high operations tempo may affect military families as they are at an elevated risk of experiencing both direct and indirect consequences of armed conflict. The distress that military families experience as a result can have an effect on military readiness, as the well-being of the family unit has a direct influence on the well-being of the military service member.

Although there are many positive aspects of belonging to a military family, military spouses also endure many hardships associated with military life. There is a growing body of literature that suggests a possible link between stress and addiction (Brady & Sonne, 1999; Goeders, 2003; Sillaber & Henniger, 2004; Schumm et al., 2015; Sinha, 2001, 2008). Alcohol use among military spouses holds with the ability to affect their active duty spouse and their children. Studies have also shown that higher levels of perceived stress have a negative impact on mental health and help-seeking behaviors.

The success of the military as a fighting force depends on the well-being of the military spouse. There has been much research conducted documenting the effects of alcohol misuse on active duty service members, but little research has been done on the effects of alcohol misuse on military spouses (Fernandez et al., 2006; Jacobson et al., 2008; Mattiko et al., 2011; Osilla et al., 2018; Trail et al., 2019). As a result, little is known about whether deployments are associated with alcohol misuse among the military spouse population. What limited research there is on the topic demonstrates contradicting results on how deployments may or may not have an effect on alcohol misuse, mental health, stress, and help-seeking behaviors among the military spouse population.

This study is significant in that it aimed to build off of and add to the existing knowledge base and research concerning deployments, military spouses, alcohol use, mental health, stress, and the help-seeking behaviors of military spouses during the deployment cycle. Little is known concerning alcohol misuse among spouses of military service members in order to better understand why military spouses are vulnerable to alcohol misuse as they manage deployments and stressors associated with deployments. This study built upon the existing literature to address gaps in knowledge operating under a family systems paradigm and other complimenting theories to include the social learning theory, stress and coping theory, and the social-ecological perspective to explore the effects of deployments on military spouses and the impacts that military spouses have on military readiness.

The methodology of this study utilized a web-based survey design. Military spouses of active-duty service members were recruited through social media postings on Facebook and Facebook groups that cater specifically to this population over an approximate four-week period to reach the study's sample size of 293 military spouses. With the aid of a statistician, the results

of this research study were analyzed using descriptive statistics, particularly the chi-squared test for independence. The study described the characteristics of the sample studied as well as the statistically significant associations among research variables that were tested for.

The sample for this study included military spouse participants that represented all military branches and all ranks, and included participants living both stateside and abroad. The participant sample from this research study holds a multitude of demographic similarities to the military spouse population, however, because the sample was collected via convenience sampling methods, the sample should not be considered representative of this population (Department of Defense, 2018a).

Summary of the Findings

This portion of the dissertation showcases the statistically significant associations based on the presented hypothesis and findings that were unanticipated but significant. The findings of this research study were interpreted according to the frameworks discussed in the literature review in Chapter 2. A summary list of hypotheses for future research acquired from this study's results concludes this section.

Military Spouses will not Report Increased Alcohol Use during the Deployment Cycle

With one exception, the results from the statistical analyses of this question indicated that there was no statistically significant association between alcohol consumption and deployment. These findings suggest deployments appear to have no bearing on how much alcohol military spouses consume, with the exception of spouses whose active duty service members were currently deployed. In that case, a statistically significant association was discovered between alcohol use in military spouse and current deployment.

These findings mirror that of the Millennium Cohort Study conducted by Trone et al. (2018) indicating that deployments have no bearing on the prevalence of alcohol use in the population of military spouses who participated in the study. Steenkamp et al. (2018) reported similar findings, stating that alcohol use in military spouses was not related to the deployment of service members. However, conflicting research does exist. Stressful events such as the loss of a parent, parental divorce and conflict, physical abuse, unfaithfulness in a relationship, neglect, isolation, and single parent family structure have been associated with an increased risk of alcohol use (Sinha, 2008). Furthermore, Joseph (2014) found that due to lengthy deployments and the perceived lack of social support, along with feeling forced to take on the role of the single parent, military spouses experience an increase in stress and are, therefore, more vulnerable to substance abuse. Sinha (2008) stated that high emotional stress is associated with loss of impulse control, inability to delay gratification, and inability to inhibit behaviors that might be deemed inappropriate. All of these factors can have an effect on alcohol use and military spouses, though more research needs to be conducted on this population.

Stress and coping theory proposes that stressful circumstances are a common experience in life, and these experiences have the potential to lead a person to feel distressed, alienated, and possibly alcohol abuse (Moos, 2007). A compliment to stress and coping theory, social learning theory, surmises that behaviors such as substance use are learned behaviors that stem from social influences, places a significant importance on the influence of peers and people who hold significance to the individual, and proposes that an individual will perform any behavior they are rewarded for (Moos, 2007). A limited body of research exists concerning the alcohol use among the military spouse population, although a growing body of evidence suggests the existence of a link between stress, mental health, and substance abuse (Brady & Sonne, 1999; Goeders, 2003;

Sinha, 2008). Alcohol misuse in the military spouse population has been on the rise since 2001, and although deployments are indeed a stressful experience, the research suggests that deployments are not responsible for the increase in alcohol use and misuse. Trone et al. (2018) found in their body of research that military spouses who considered their deployments to be at least moderately stressful in nature were more likely to use alcohol. In addition, it was found that military spouses who experience stress were more likely to consistently engage in alcohol use. From a social learning theory framework, a military spouse might be more likely to consume alcohol during deployment if their peers do so, even if the deployment is not the direct reason or cause for alcohol consumption.

The number of military spouses who self-reported alcohol use behaviors in this study is slightly elevated when compared to that of other studies. For example, SAMHSA (2016) reported in their research that 67.8% of military spouses have reported consuming alcohol at least one time within the previous 30 days. The self-report survey offered to research participants for this particular study and did not give participants a time-frame, but simply asked “do you drink alcohol?”, to which 77.13% of respondents ($n=226$) answered “yes”.

Compared to the civilian population, the number of military spouses who self-reported they consume alcohol is a bit elevated, which is similar to the findings of Lipari et al. (2016). They reported that military spouses are more likely than their civilian counterparts to consume alcoholic beverages. Castelo-Branco et al. (2014) reported estimated alcohol use among females of European decent to be approximately 30%. In contrast, Tebeka et al. (2020) reported that an estimated 53.6% of women who were of childbearing age have consumed alcohol within the previous 30 days, with the prevalence of women who reported at least one drink in the past 12 months to be an estimated 75.48%. When compared to the SAMHSA statistic of military

spouse's alcohol consumption in the past 30 days of 67.8%, the statement that military spouses consume more alcohol than their civilian counterparts holds true. No statistics about military spouses consuming alcohol at least once in the past 12 months could be found, although this might be considered for future research.

In terms of developing a substance use disorder, Zilberman et al. (2003) reported that the lifetime prevalence of substance use disorders in North American women was an estimated 5% to 8%. This research asked military spouses "have you ever been diagnosed with an alcohol-related substance use disorder?", to which 1.02% ($n = 3$) responded they have indeed been diagnosed with a substance use disorder. This is far less than the estimated 5% to 8% reported by Zilbermann et al. There could be several reasons for this disparity. One reason might be that respondents were reluctant or even embarrassed to self-report they have been diagnosed with an alcohol-related substance use disorder despite the fact it was an anonymous survey. Another reason might be that because there is a known stigma toward help-seeking in the military population, military spouses are not getting the help they need and are not receiving a diagnosis. When keeping these statistical comparisons in mind, it is important to note that because the majority of the research sample for this study consisted of women, with 291 (99.32%) of respondents being comprised of women and 2 (0.68%) being comprised of men, when comparing this sample to the civilian population, the sample is being compared to the female population for comparison. This is a limitation of this study, which will be discussed in kind.

While research has found that military spouses consume more alcohol than their civilian peers, to date, there have been no other research studies that have presented results with a statistically significant correlation of alcohol use and military spouses and any part of the deployment cycle (Lipari et al., 2016). No causal inferences can be made from the data collected

for this study due to the fact that this research study was not experimental in nature. However, there may be several reasons that the results of this particular study showed a correlation between alcohol use in military spouses and their active duty service members currently being deployed. It could be that the military spouses in this study whose active duty service members were deployed are indeed consuming more alcohol. However, the correlation could also be present because those military spouses who are currently experiencing a deployment are in the moment, so to speak, and their experiences are recent and easier to recall. Military spouses who have been through deployment in years past might not accurately remember how much alcohol was consumed in previous deployments, or they might even underestimate how much alcohol was consumed during deployments.

Military Spouses who have endured a Deployment will Self-Report Poor Mental Health

The results from the statistical analyses of this question indicated that there was no statistically significant association between mental health and deployment. This indicates that service member deployments have no bearing on the spouse's mental health left behind during the deployment. As previously mentioned, military spouses experience a lot of hardship in reference to deployments and frequent relocations, separations from loved ones and their active duty service members, and issues with the finding and maintaining employment and caregiving roles. Mental health issues can continue through all parts of the deployment cycle and do not necessarily get better immediately upon return of the service member (Quinn, 2017). However, the finding in this study is contrary to results from existing research, as research has determined that military spouses are at an elevated risk for a variety of mental health illnesses during all phases of the deployment cycle (De Burgh et al., 2011; Erbes et al., 2017).

The findings from this research reported no such elevated risk of mental health issues. This research study asked participants “have you ever been diagnosed with a mental health disorder?” to which 41.64% ($n=122$) stating they have been diagnosed with a mental health disorder, 56.66% ($n=166$) stating that they have not been diagnosed with a mental health disorder, and 1.71% ($n=5$) stating they did not wish to disclose such information. Out of those participants who have experienced deployment, 57.71% ($n=151$) stated they felt that their mental health worsens during a deployment, 32.53% ($n=95$) stated that their mental health does not worsen during a deployment, and 15.75% ($n=46$) stated this question was not applicable to them. One person decided to skip the question.

The Family Systems theory surmises that because a family unit is greater as a collective than its individual members, individual family members constantly influence one another (Gurman & Kniskern, 2014). Viewed from the Family Systems perspective lens, the mental health of both the service member and the military spouse are linked to the couple as a dyad. If one family member experiences any sort of dysfunction, the family as a unit experiences dysfunction; if one family member finds healing, then the entire family will benefit as well (Paley et al., 2013). Depressive symptoms have been found to be common in both the military spouse and the returning service member during reunion following a deployment, with both deployment and the length of deployment having been found to be associated with a mental health diagnosis (Knobloch et al., 2013; Mansfield et al., 2010). The impact of deployments, mental health of the military spouse, and mental health on the marital dyad has been the subject of far less research than the service member’s mental health (Mallonee et al., 2020).

The results from this research study, with 41.64% of military spouse participants stating they have been diagnosed with a mental health disorder at some time in their lifetime, coincides

with the research of Dimiceli et al. (2010). In this particular study, military spouses were surveyed during a period of time when their active duty service members were deployed. They found 44.2% of the military spouse participants indicated moderate to severe levels of depressive symptoms. One third of those individuals were found to have more than one mental health diagnosis. Sullivan et al. (2021) reported similar findings, stating that more than 41% of military spouses had been diagnosed with mental health disorder during one year.

Steenkamp et al. (2018) reported differing results, stating that 35.90% of the military spouses in their research met criteria for a mental health disorder, and one-third of military spouses married to junior enlisted soldiers screened positive for a mental health disorder. Steenkamp and colleagues also reported that having a partner who deployed to a combat zone had a higher likelihood of developing an anxiety disorder, a somatization disorder, or insomnia. Gorman et al. (2011) reported similar findings, stating that 34% of military spouses married to National Guard service members met the screening criteria for one or more mental health disorders. The percentages of military spouses who have been diagnosed with a mental health disorder in these studies are slightly less than reported from both this research study and the Dimiceli et al. study.

When compared to their civilian counterparts, military spouses typically report higher rates of distress than their civilian peers (Quinn, 2017). Depression has been found to be one of the most prevalent mood disorders (Kessler et al., 2012). Farr et al. (2010) reported that almost 30% of women in their research currently had a diagnosis of depression or had ever received a clinical diagnosis of a depressive or anxiety disorder. Subsequently, Ettman et al. (2020) conducted a study on the civilian population both before and after the COVID-19 pandemic, reporting that 10.1% of women reported a diagnosis of depression before the pandemic, and

33.3% of civilian women reported a diagnosis of depression since the COVID-19 pandemic started. Both percentages are lower than the percentage of military spouses reported to have a mental health diagnosis in this research and other literature, therefore, validating the statement that military spouses typically report higher distress rates than their civilian counterparts.

Military Spouses who have endured Deployments will Report Increased Stress Levels

The results from the statistical analyses of this question indicated that there exists statistically significant association between military deployment and stress in military spouses. When conducting the statistical analysis, a statistically significant correlation was found between military spouses married to someone who has deployed and stress, military spouses having gone through one or several deployments and stress, and enduring a current deployment and increased stress levels. This particular research study was not experimental in nature; therefore, caution had to be exercised in interpreting these results.

This research study asked participants “do you feel more stressed when your spouse is deployed?” to which 75.43% ($n=221$) responding with “yes”, 10.24% ($n=30$) responding with “no”, and 14.33% ($n=42$) stating the question was not applicable to them. The majority of military spouses have reported that they feel an increase in stress when their active duty spouses are deployed.

Stress and coping theory, discussed earlier, asserts that stressful circumstances have the potential to lead to distress (Moos, 2007). Stress and coping theory relate to the results in that military deployments place considerable stress on military families (Leroux et al., 2016). Stressful events cause the most distress when it is necessary for a person to make considerable changes in order to successfully adapt to their environment (Dimiceli et al., 2010; Goeders,

2003; Reyes et al., 2008; Sinha, 2001). Continued stress, such as the stress incurred over long and repeated deployments, can be debilitating.

This finding is similar to findings of another research study. The findings from the research of Padden et al. (2011) indicated that military spouses experience stress at higher levels than do their civilian peers, and these high levels of stress were even found in military spouses whose active duty partners deployed to even peacetime operations. Building on previous research, these findings were expected, and it is not surprising that the majority of military spouses reported being under a great deal of stress.

Military Spouses who have endured Deployments will not Utilize Appropriate Mental Health Resources

The results from the statistical analyses of this question indicated that there was no statistically significant association between help seeking behaviors and deployment. This indicates that service member deployments have no bearing on the help seeking behaviors of military spouses during a deployment. However, because the nature of this study was not experimental, any causal inference must be made with caution.

Previous research on this topic have had mixed results. For example, researchers have reported that 88.5% of military spouses reported being willing to seek help, while others have touted the barriers to care that military families regularly face (Eaton et al., 2018; Quinn, 2017; Terplan et al., 2015). In the literature, one of the most discussed barriers to care is the negative stigma associated with seeking and receiving help for substance use, mental health, and stress issues (Link & Palinkas, 2013; Mailey et al., 2018; Mansfield et al., 2010; Melamed & Castro, 2011; Melamed & Cubic, 2011; Verdelli et al., 2012; Wolf et al., 2018). It has been documented

that military spouses may have difficulty viewing their well-being as being significant, putting the needs of their family before their own (Mailey et al., 2018).

The majority of participants for this research reported that they did, in fact, seek help for alcohol, mental health, or stress-related concerns at some point in time ($n=165$, 56.31%). This is far less than the 88.5% of military spouses who stated they would be willing to seek care if needed. There appears to be a disconnect as to what military spouses say they would do and what they actually do when it comes to help-seeking behaviors. When asked about barriers to care, military spouses mentioned that they did not want to be seen as “weak” ($n=36$, 15.58%), they are too embarrassed to seek help ($n=35$, 15.15%), they do not want their active duty spouse to worry ($n=33$, 14.29%), they are concerned that doing so might affect their service-member’s career ($n=32$, 13.85%), and negative stigma due to military culture ($n=29$, 12.55%).

The social-ecological perspective suggests that not only do transactions with one’s family have an effect on individual members of the family, but it is also the larger systems within which these families belong to and interact with that shape the way individuals view events (Paley et al., 2013). Viewing behavior from the social-ecological perspective while keeping the well-documented stigma concerning the military and help-seeking behaviors in mind, one might presume that the military culture in which these military families are embedded influences the behaviors of the individual members of military families. This is evident in this research study as well, with participants mentioning not wanting to be seen as “weak”, being embarrassed to seek help, and fearing a negative impact on the career of their active duty spouses.

Significant Additional Findings

There were additional statistical analyses of the data conducted during an exploration of the data. During this exploration, several significant additional findings were discovered. This

particular section aims to discuss the significant additional findings that were revealed through the research and statistical analysis. A chi-squared test was performed on question 54 of the survey “have you ever been diagnosed with a mental health disorder?” and question 57, which asked “have you ever sought help for alcohol, mental health, or stress related concerns?” The results from the statistical analyses of this question indicated that there exists statistically significant association between mental health and help-seeking in military spouses $\chi^2 (4, n=293) = .569, p = .000, phi = .805$. Table 24 shows the observed cell frequencies for deployments and mental health. While a causal inference cannot be made due to the fact that this study was not experimental in nature, these findings do indicate that there exists a relationship between being diagnosed with a mental health disorder and help-seeking behaviors. As previously stated, the research regarding military spouses and help-seeking behaviors is mixed, however, it does appear that those military spouses who have sought help and received a diagnosis do utilize the appropriate mental health resources. One possible explanation for these findings could be that the military spouses who have sought a diagnosis are already knowledgeable about the resources available to them through the military and have worked through any potential barriers to care.

Table 24.*Observed Cell Frequencies of Mental Health Diagnosis and Help Seeking*

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	190.018 ^a	4	.000
Likelihood Ratio	144.387	4	.000
Linear-by-Linear Association	95.212	1	.000
N of Valid Cases	293		

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .05.

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.805	.000
	Cramer's V	.569	.000
N of Valid Cases		293	

Another statistically significant association was found when a chi-squared test was performed on question 12 of the survey “do you have children living in your household?” and question 51, which asks “when your spouse is deployed, do you feel more stressed than when your spouse is not deployed?” The chi-squared test results indicated a statistically significant association between having children and stress that military spouses experience during deployments $\chi^2(4, n=293) = .169, p = .011, phi = .239$. Table 25 shows the observed cell frequencies for stress incurred during deployment and children in the home. Naturally, a causal inference cannot be made due to the fact that this study was not experimental in nature, however, the findings do indicate a relationship between the two variables. These findings are similar to the findings of previous research, where it has been documented that military spouses with children in the home experience more stress than those military spouses with no children present in the home.

Table 25.*Observed Cell Frequencies of Children in Household and Stress*

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.617 ^a	6	.011
Likelihood Ratio	15.815	6	.015
Linear-by-Linear Association	.285	1	.594
N of Valid Cases	291		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is 1.03.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.239	.011
	Cramer's V	.169	.011
N of Valid Cases		291	

A chi-squared test was performed on question 24 of the survey “what rank is your active duty service member?” and question 51, which asked “when your spouse is deployed, do you feel more stressed than when your spouse is not deployed?” The results of the chi-squared test indicated there is a statistically significant association between the rank of the active duty service member and stress that military spouses experience while their active duty service members are deployed $\chi^2(4, n=291) = .155, p = .008, phi = .291$. Table 26 shows the observed cell frequencies for stress incurred during deployment and the rank of the active duty service member. A causal inference cannot be made due to the nature of this study, however, there is an association between the two variables. It is not known which ranks of the service member such as lower enlisted, senior enlisted, officer, or warrant officer have an effect on the stress of the military spouse during the deployment.

Table 26.*Observed Cell Frequencies of Rank and Stress*

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.914 ^a	4	.008
Likelihood Ratio	15.975	4	.003
Linear-by-Linear Association	9.054	1	.003
N of Valid Cases	291		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 1.13.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.219	.008
	Cramer's V	.155	.008
N of Valid Cases		291	

A chi-squared test was performed on question 04 of the survey “what is your age?” and question 51, which asked “when your spouse is deployed, do you feel more stressed than when your spouse is not deployed?” The results of the chi-squared test indicated there is a statistically significant association between age and stress that military spouses experience while their active duty service members are deployed $\chi^2(4, n=293) = .267, p = .000, phi = .378$. Table 27 shows the observed cell frequencies for stress incurred during deployment and the age of the military spouse. A causal inference could not be made due to the nature of this study, however, an association between the variables of age and stress does exist. This finding is reflected in the work of Farr et al. (2010), where findings depicted that age, ethnicity, employment status, and education were associated with stress.

Table 27.*Observed Cell Frequencies of Age and Stress*

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	41.763 ^a	8	.000
Likelihood Ratio	40.432	8	.000
Linear-by-Linear Association	16.552	1	.000
N of Valid Cases	293		

a. 5 cells (33.3%) have expected count less than 5. The minimum expected count is .10.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.378	.000
	Cramer's V	.267	.000
N of Valid Cases		293	

Implications

The well-being of the military spouse is critical to their active duty service member and children along with the military readiness. Unfortunately, there is limited research to guide and direct military policymakers, clinicians, and others designated to create and implement best practices to effectively meet the needs of this population. Therefore, the results of this study add to the literature to address the needs and provide more comprehensive support to this unique population during the deployment cycle.

Implications for Military

Researchers who study the military population have come to recognize the importance of the well-being of the military spouse in retention, as it is a key factor in keeping a well-trained and experienced military force. Addressing mental health, substance abuse, stress, and help-seeking behaviors of military spouses and service members appears to be a key component in

reducing stress in military couples, which holds possibilities in improving retention (Mallonee et al., 2020). It is for this very reason that military leaders and policy makers have already implemented many programs and resources with the intention of providing support and enhance the quality of living for military spouses and their families. With that in mind, it is important to understand there are gaps and inconsistencies in providing for the needs of military spouses that need to be addressed (Corry et al., 2019).

It has been found that there is an association between military spouses experiencing a lack of support or a perceived lack of support from the military and their overall health and well-being (Corry et al., 2019). Perhaps, it would be beneficial to implement more social programs for military spouses to connect with their active duty spouse's unit, command team, rear detachment team, or other military spouses within the unit. There already exists a program called Family Readiness Groups which can be effectively used for this purpose. However, many military spouses choose not to participate due to the fact there is a negative connotation associated with such groups. Perhaps revamping the current program with a fresh marketing approach to better encourage military spouses to attend such functions would be effective. Unit leaders might also encourage opportunities for social engagement among military spouses during deployment.

This study has shown an association between deployments and stress in military spouses. One possible implication for this finding is to provide education on stress, stress-reducing strategies, and coping skills to both military spouses and service members before the deployment occurs. Another similar approach would be to teach military spouses to view their own well-being as a priority and the reason it should be viewed as such (Mailey et al., 2018). Perhaps, units can implement an annual or bi-annual "Wellness Day" where military spouses are taught how their overall wellness impacts the well-being of their children, their spouses, and ultimately,

the readiness of the military. Teaching military spouses what resources are available to them as well as how to access services could be done as well. This can easily be implemented with other programs the military has in place for its service members, as Military OneSource, the chaplains, Military and Family Life Counselors, and community mental health resources the military already utilizes can implement such psychoeducation into the work they are already performing within the military community.

Implications for Mental Health Professionals

Since military spouses are at an elevated risk of mental health risk factors, mental health clinicians are to play an essential role in helping this population. For mental health professionals providing services to the military population, it is absolutely essential they keep abreast of the most updated research concerning this population and their unique needs. Therefore, it would be beneficial for mental health professionals working with this population to take continuing education or study military and military culture to have an understanding of the population. Clinicians working with military families might also aim to support military spouses by teaching them applicable coping skills, helping military spouses learn to cultivate social connections and meaningful relationships, and help military spouses develop a sense of meaning and purpose in the support of their service member (Sullivan et al., 2021).

Implications from a Christian Worldview

It is a requirement of Liberty University that there be an exploration of how a Christian worldview has informed an interpretation of the findings of this study, which is the purpose of this section. As such, a Christian worldview as it relates to the findings of this study and how the findings were interpreted was discussed. This study has supported existing research in finding an association between deployment and stress; military spouses tend to experience more stress

during a deployment. Throughout the duration of life, it is inevitable that human beings will experience stressful situations. It is the perspective of this situation a person holds that might be important in managing that stress. James 1:2-4 states that Christians are to “consider it pure joy, my brothers and sisters, whenever you face trials of many kinds, because you know that the testing of faith produces perseverance (New International Version). Notice that this verse says “whenever you face trials”, not “if you face trials”. Experiencing trials and tribulations is inevitable, and such trials are to be looked upon as an opportunity for growth. While experienced as stressful event for many, deployments might also be considered an opportunity for growth for both the service member and their spouse.

It has been suggested that the military and even individual military units make effort to help military spouses connect on a more social level with other military spouses, the command team, and rear detachment before, during, and after the deployment cycle. According to the Bible, Christians are to come together in community with one another and share one another’s burdens. Galatians 6:2 states “Carry each other’s burdens, and in this way, you will fulfill the law of Christ” (New International Version). Community is important for the human race – God’s creation. Ellicott (1897) suggested in his commentary on Galatians 6:2 that Christian society fulfills God’s law by showing sympathy to those in distress; it is our duty to help one another. As a part of God’s design; human beings are social by nature. Not only will community help people not become lonely, but helping one another to shoulder burdens will help those burdens feel a little bit lighter than having to share those burdens alone.

This study has found that military deployments do not have an effect on the alcohol use patterns of military spouses, with one exception being an association found between alcohol use and military deployments. As previously stated, alcohol abuse among military spouses,

especially military spouses with children, can have a negative effect on the entire family and possibly for generations to come. Ephesians 5:18 cautions Christians against alcohol abuse, stating “do not get drunk with wine, for that is debauchery, but be filled with the spirit” (English Standard Version). The Bible also teaches us that curses can be generational, stating that “the Lord is slow to anger and abounding in steadfast love, forgiving iniquity and transgression, but he will by no means clear the guilty, visiting the iniquity of fathers on children, to the third and fourth generation” (Numbers 14:18, English Standard Version). The implementation of programs teaching military spouses how to cope with deployments in a healthy way will not only benefit military spouses, but will benefit military families as a whole and possibly even generations to come.

Limitations

There were several notable limitations of this study that needed to be explored. The limitation that must be noted above all is that this study was exploratory in nature. Because of this, the researcher did not seek for the findings to be generalized to the military spouse population. In addition, the primary goal of this dissertation study was to collect information from a wide demographic of military spouses to test the hypotheses relating to the effects of deployments on alcohol use, stress, mental health, and help-seeking behaviors of military spouses. The sample population of this study yielded information from all but one branch of the military, locations throughout the world, and spouses married to military members of various ranks. However, despite this, there is an unacceptable lack of diversity in the sample population as male military spouses are very much underrepresented, as are participants who are non-Caucasian.

Another limitation for this study was the sampling technique used to seek out participants for this research. The convenience sampling technique used to gather participants made the study vulnerable to sample bias and possibly contributed to the exclusion of military spouses who did not have internet access, who were not on social media, who were not in the groups on social media that this study was advertised to, and those military spouses who were not able to speak, read, or write in English. An added limitation was the fact that by using web-based self-report questionnaires, the study becomes liable to responses that are fraudulent in nature, as well as possible technical problems due to equipment malfunction or even poor internet connection.

A further limitation of this study was the retrospective, self-report design of the study used to collect data from research participants. For example, military spouses were asked to recall alcohol consumption, mental health, and help-seeking behaviors from previous deployments. For many military spouses, some of these deployments may have happened many years ago, or there may have been numerous deployments for the military spouses to think through. Asking participants to reflect on past events holds the potential for significant memory bias, which may impact the answers' accuracy.

Another limitation of this study was that the terms "deployment" and "combat deployment" were not properly defined for the research participants, which may have impacted research results. A deployment to a combat zone such as Iraq or Afghanistan might have very different effects on the overall well-being of the spouse than would a peacekeeping mission to Australia. A deployment for naval personnel might look very different and have different stressors than a deployment for an infantryman in the Marines. Due to the variance in the definition of what a deployment is among military branches, the terms used needed to be clearly defined for research participants.

A final limitation of this study was the fact that the variables in the study were assessed with a web-based questionnaire that had not been tested for reliability and validity. Using variables that were not tested for validity and reliability may impact the outcome of this study. Reliability and validity are important in ensuring that the results from the study can be reproduced in further research, and to ensure that the results measure what they are supposed to measure (Warner, 2013).

Despite the limitations noted, this dissertation research offers significant contributions to existing research in the field and should be closely assessed for their influence on practice within the military community, military policy, and future research on the military spouse population. This study offers plenteous detail on the inner workings of military spouses and contributes to the current research literature on the topic through the investigation of the effects of deployments on alcohol use, mental health, stress, and help-seeking behaviors in the population of active duty military spouses.

Recommendations for Future Research

The results discovered in this research study help to establish an infrastructure of information for future studies concerning the effects of deployments on military spouses. Therefore, there are some recommendations should researchers choose to continue with research on this population or even replicate this research study. The following are some of the recommendations:

Further studies on this particular topic might venture to improve instrumentation. As previously mentioned, this study used a web-based questionnaire where the variables studied were not tested for reliability and validity, which could potentially have an effect on the outcome of the research results. It is a recommendation that future additional research on this topic should

be conducted with measures of the constructs examined that have been tested to ensure the measures are both valid and reliable.

As stated in the limitations section, certain terms such as “deployment” and “combat deployment” were not properly defined for the research participants and purposes. A deployment to a combat zone might have very different effects on the overall well-being of the spouse than would a peacekeeping mission. For example, Steenkamp et al. (2018) found that having a partner deployed to a combat environment was correlated with a higher prevalence of anxiety, insomnia, and somatization. Due to the variance in the definition of what a deployment is among military branches, the terms used need to be clearly defined for research participants. Furthermore, future researchers might consider combat versus non-combat deployment and the effects on alcohol, stress, mental health, and help-seeking behaviors.

Future research might also consider the length of time the web-based survey is “live” to reach more active duty military spouses and hopefully obtain a research sample that is more representative of the military spouse population. In Chapter 3, the researcher discussed the disadvantages of using a web-based design, however, the fact remains that a web-based design is still the most cost-effective method to reach a population that is as geographically dispersed as the population the military spouses is. The suggested timeframe adjustments may aide in yielding a diverse sample population that might allow researchers to make generalizations to the larger military spouse population as a whole.

Researchers who choose to study the military population in any capacity in the future might consider adding the Space Force to the branches of the military being studied. The reason the researcher excluded the Space Force from this particular study was due to the fact that the Space Force is a relatively new branch of the military, having been formed in December of 2019

and established during the fiscal year of the year 2020 (U.S. Space Force, n.d.). The survey was launched during the latter end of 2020, at which time the Space Force was only established for several months and at that time, not having the longevity for military spouses to having had to endure deployments with their active duty spouses who belong to that particular organization.

The deployment cycle does not only consist of the period of separation when the service member is away from home. Rather, a deployment cycle is an ongoing process in which the military spouse anticipates and prepares for the service member's departure, adjusts to the service member being away, anticipates the return of the service member, and adjusts to the service member being home again (Paley et al., 2013). With the concept of the deployment cycle being a continuous cycle in mind, a further suggestion for future research is to, perhaps, keep the various parts of the deployment cycle in mind while studying military spouses, as there may be variations in stressors and how military spouses respond to such stressors in the variables being studied throughout the deployment cycle. Future research might also place emphasis on the number of deployments experienced, as research has shown a significant correlation between previous separation and overall well-being, meaning that over time and no matter how much experience the military spouses have in enduring deployments, they still experience deployments as being stressful in nature (Padden, 2006).

Alcohol use among military spouses is an area that requires further study and research as current literature has shown mixed results. Padden (2006) stated that alcohol use may not be an indicator of well-being in this population, while at the same time, Gray (2016) reported in her research that alcohol use has the potential to have a positive effect on social well-being. Due to the conflicting results of the research findings on the topic of alcohol use among military spouses, future research on the alcohol use patterns of military spouses is warranted.

Approximately one-third of military spouses were found to demonstrate symptoms of post-traumatic stress disorder, for example, with other spouses experiencing secondary traumatic stress, which can affect marital functioning (Quinn, 2017). Many other spouses struggle with anxiety, depression, insomnia, somatization symptoms, and other mental health disorders (Steenkamp et al., 2018). As mentioned previously, the mental health of the military spouse has the potential to positively or adversely affect their entire family and, ultimately, the retention potential of the military. Future research on the mental health of military spouses might consider categorizing the various types of mental health issues military spouses are experiencing, particularly posttraumatic stress and secondary posttraumatic stress, as well as the effects the mental illness has on marital functioning and the family.

Another suggestion for future research is to study the effects of knowledge of resources and how this knowledge of accessible resources impacts the alcohol use, mental health, stress, and help-seeking behaviors of military spouses. There exist gaps in the current literature on this topic, although Ettman et al. (2020) found that in general, having access to more resources was associated with a lower prevalence of depressive symptoms. More research is needed in this area of study.

This study was conducted in the midst of the COVID-19 pandemic, which, for many, has been considered to be an additional stressor. One study found that before the COVID-19 pandemic, 10.1% of civilian women had been diagnosed with depression, for those numbers to increase during the COVID-19 pandemic to 33.3% (Ettman et al., 2020).

Those considering conducting research on the military spouse population might consider studying COVID-19 as a stressor in addition to the variables discussed in this research.

Comparing the statistics with data from before the pandemic to data gathered since pandemic

would be beneficial to the literature as the COVID-19 pandemic might have affected the well-being of military spouses.

Variables such as age and education might also be a factor in how military spouses respond to perceived stressors (Padden et al., 2013a). Farr et al. (2010) also found that age, ethnicity, employment status, household income, and education were found to be factors associated with various effects of stress on the military spouse population. Future researchers might consider studying the age and education of military spouses with mental health, alcohol use, stress response, and help-seeking behaviors for statistical correlations. Future research might also consider exploring whether or not the military branch the spouse is affiliated with may experience deployments differently, and if that is the case if that would have an effect on the variables explored in this research study.

To the knowledge of this researcher, this study is the only research of its kind to find a statistically significant association between current deployment and increased alcohol use in military spouses. No other research has depicted this finding. Future research might consider duplicating this study in an effort to validate the findings. In addition, future research might consider focusing research efforts on military spouses whose partners are currently deployed to study the effects of deployment on various aspects of well-being in this population.

Trone et al. (2018) mentioned that the prevalence rates for all outcomes in their study were higher among male military spouses who are not service members, which highlights the need for further research on populations of military spouses who are typically under-represented in the research. Other under-represented populations in need of further research include same-sex couples and spouses of National Guard and Reserve component service members.

Summary

Due to the increased operations tempo of the United States armed forces since the terrorist attacks on the World Trade Center in New York City on September 11th, 2001, the United States military has experienced more deployments than ever before in history. Not only are active duty service members affected by the high operations tempo and frequent deployment cycles, but their families are as well as more active duty service members are married and have families than ever before in history. Military spouses experience more stressors than their civilian counterparts due to the nature of the military lifestyle, and often feel even more stressed when their active duty service members are deployed. There has not been a great deal of research conducted on the effects of deployment on alcohol use, mental health, stress, and help-seeking behaviors in military spouses, although the effects of these variables on active duty service members have been well-studied. The purpose of this research was to address this gap in the current literature pertaining to alcohol use, mental health, stress, and help-seeking behaviors related to deployments and other stressors military spouses endure.

There is very little research in existence on the alcohol use, mental health, stress, and help-seeking behaviors of military spouses, as the primary focus for researchers in the past has been on the active duty service members. The current literature available concerning military spouses offers beneficial insight into the stressors that military spouses face during the deployment cycle, but because this population is understudied, gaps in the current knowledge base exist. This dissertation research study built upon the work of the current literature in order to fill those gaps.

This current research study has helped fill in the gaps that exist in the current literature. This research supported existing data in that these findings have determined that military

deployments do not, in fact, impact the alcohol use of military spouses. One exception to this would be a correlation between alcohol use and current deployment. The current research study also supported the existing body of research in that deployments do not have an impact on the mental health or help-seeking behaviors of the military spouse population. Deployments do, however, exert influence on the stress levels of military spouses.

In comparing variables in the data set, the researcher discovered other significant findings as well. For example, there was a correlation between having a mental health diagnosis and help-seeking behaviors. There was also a correlation between military spouses who had children and stress levels. Rank of the service member and the age of the military spouse were also found to have a correlation with stress.

Due to the amount of stress placed on military spouses due to deployments, it is recommended that civilian clinicians become familiar with military lifestyle, culture, and terminology in order to better understand this population. Civilian clinicians can also be used to fill the gaps in care that they can teach military spouses applicable coping skills and provide psychoeducation on the nature of stress. It is recommended that military commanders work to increase social connections within the unit, and invite current resources the military has at their disposal such as the military chaplains, military and family life counselors to provide psychoeducation on the nature of stress, and teach military spouses coping skills in order to manage increased stress levels.

In conclusion, the quantitative findings of this dissertation research project support previous research that suggests that deployments do not impact alcohol use in military spouses, although a correlation was discovered between alcohol use and current deployment. This research project also supported previous research that suggests deployments do not influence the

mental health and help-seeking behaviors of military spouses but that deployments do have an effect on the stress that military spouses experience.

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APPENDICES

Appendix A: IRB Approval Letter

LIBERTY UNIVERSITY

INSTITUTIONAL REVIEW BOARD

November 25, 2020

Joanne Coddington
Mario Garcia

Re: IRB Exemption - IRB-FY20-21-218 The Effects of Deployments on Alcohol Use, Mental Health, and Help Seeking Behaviors in Military Spouses

Dear Joanne Coddington, Mario Garcia:

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Your stamped consent form can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. This form should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP

Administrative Chair of Institutional Research
Research Ethics Office

Appendix B: Online Recruitment Memo

Hello! My name is Joanne Coddington. As a doctoral candidate in the School of Behavioral Sciences at Liberty University I am conducting research as part of the requirements for a doctoral degree. The purpose of my research is to better understand the effects of deployments on alcohol use, mental health, stress, and help-seeking behaviors in the military spouse population, and I am writing to invite eligible participants to join my study. If you are 18 years old or older and are the spouse of a U.S. service member on Active Duty, you are eligible to complete a survey about your thoughts and experiences. Participants, if willing, will be asked to take an online survey, which will take approximately 20 minutes to complete. This survey is completely anonymous, and no personal identifying information will be collected.

For more information on how to participate in the survey, please follow this link:
<https://www.surveymonkey.com/r/KDSGGW5>

A consent document is provided at the first page of the survey and contains additional information about my research. After you have read the consent form, please click the button to proceed to the survey. Doing so will indicate that you have read the consent information and would like to take part in the survey.

Sincerely,

Joanne Coddington
Doctoral Candidate, MA, LCMHC, LCAS, NCC, RYT
jlcoddington@liberty.edu

Appendix C: Targeted Facebook Pages

Fort Bragg Wives Over 30: <https://www.facebook.com/groups/304215483366528>

Fort Bragg Military Wives: <https://www.facebook.com/groups/147062648969724>

Fort Bragg Spouses: <https://www.facebook.com/FortBraggSpouses>

Young Fort Bragg Wives: <https://www.facebook.com/groups/259873404359844>

U.S. Army wives, fiances', and Girlfriends Support group:

<https://www.facebook.com/groups/154506471784348>

US Army Spouse Support: <https://www.facebook.com/groups/660774237347316>

Military Wives: https://www.facebook.com/Military-Wives-233507290334455/?ref=page_internal

Military Spouse Career and Education Support:

https://www.facebook.com/groups/militaryspousenetworking/?notif_id=1607543685848402¬if_t=group_r2j_approved&ref=notif

MilSpouse Network for Mental Health Professionals:

https://www.facebook.com/groups/MentalHealthMilSpouseNetwork/?notif_id=1607543861261217¬if_t=group_r2j_approved&ref=notif

Friends of Fort Bragg:

https://www.facebook.com/groups/279371649369962/?notif_id=1607544297027971¬if_t=group_r2j_approved&ref=notif

Fort Bragg Military Spouses UNCENSORED:

https://www.facebook.com/groups/544205446467509/?notif_id=1607545458675099¬if_t=group_r2j_approved&ref=notif

Career Military Spouses:

https://www.facebook.com/groups/CareerMilitarySpouses/permalink/4097535483607803/?notif_id=1608239918144890¬if_t=group_post_approved&ref=notif

Appendix D: Consent Document

Consent

Title of the Project: The Effect of Deployments on Alcohol Use, Mental Health, Stress, and Help-Seeking Behaviors in Military Spouses

Principal Investigator: Joanne Coddington, MA, LCMHC, LCAS, NCC, RYT, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. In order to participate, you must be at least 18 years of age or older and be married to an Active Duty service member. Taking part in this research project is voluntary.

Please take time to read the entire consent form and ask questions before deciding whether to take part in this research project.

What is the study about and why is it being done?

The purpose of the study is to address concerns regarding the lack of research pertaining to alcohol use, stress, mental health, and help-seeking behaviors related to deployments and other stressors that military spouses experience. Little is known about alcohol use as it pertains to the military spouse population, and there is a need to determine where military spouses might be vulnerable to alcohol abuse as they learn to manage stressors related to deployments.

What will happen if you take part in this study?

If you agree to take part in this study, you will be asked to complete a survey which should take approximately 15-20 minutes.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include potentially helping military commanders, policy makers, and clinicians working with the military and military spouses during the deployment cycle.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life. Several questions in the survey will ask you about things that have happened to you or your family that may have been unpleasant. If you experience any emotional stress or are in need of immediate support, please contact the Military Crisis Line at 800-273-TALK (8255) then press 1. You can also access online chat by texting 838255 or visit their website at <https://www.militaryonesource.mil/health-wellness/mental-health/suicide>. This resource is confidential, help is immediately available 24/7, and is of no cost to Active Duty, Guard and Reserve members, and their families.

I am mandated reporter, and because I am a mandated reporter if incidents of child abuse, child neglect, elder abuse, or intent to harm yourself or others are disclosed I will be legally obligated to disclose such information to the appropriate authorities.

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to records.

- Participant responses will be anonymous, as no personally identifying information will be disclosed.
- Any data collected from this study will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Joanne Coddington. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at jlcoddington@liberty.edu You may also contact the researcher's faculty sponsor, Dr. Mario Garcia at mariogarcia3@liberty.edu

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu

Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. The researcher will keep a copy of this consent form with the study records. If you have any questions about the study later, you can contact the researcher/study team using the information provided above.

I give my consent to participate in this research study

I DO NOT give my consent

VITA

Joanne Lorraine Coddington was born on December 14th, 1981 in Eau Claire, Wisconsin. She graduated from Stanley-Boyd High School, Stanley, Wisconsin in 2000. She then enlisted in the United States Army, where she served as an air traffic controller for five years. She received her Bachelor of Arts in Psychology from Northcentral University in 2010, and a Master of Arts in Professional Counseling from Liberty University in 2013. After graduation, Mrs. Coddington worked as a mental health and addictions counselor at a small private practice agency providing individual, family, and group therapy services to underserved populations in her community. After working in that setting for several years, Mrs. Coddington accepted a position as a Military and Family Life Counselor in 2018. While working on her doctorate, she began teaching as an adjunct professor with Grand Canyon University's School of Humanities and Social Sciences in 2020.