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The impact of service-related trauma on those returning from deployment remains a considerable issue among United States service members.   While some veterans experience few to no setbacks upon homecoming, many service members struggle to reintegrate into their stateside lives, families, and communities following deployment. Little is yet understood about how veterans utilize social support to process trauma, the impact of trauma on service members' abilities to access the support available to them, and whether social support may help soldiers with trauma to reintegrate into civilian communities with greater success. The purpose of this study is to add to the body of literature concerning service members' experiences of trauma, social support, and postdeployment reintegration.

Over the past five years, the Veterans Administration has observed a 35% increase in the number of service members receiving mental health care.   Moreover, completed suicides among service members are at an all-time high, with more service member lives lost to suicide than to combat in recent years (Blumenthal, Maliha, & Mathews, 2012; Donnelly, 2011; Pilkington, 2013). Much is now known about the risk and resiliency factors that contribute to a service member's ability to metabolize service-related trauma and reintegrate stateside. Yet, despite the resources devoted to studying these influences and the increased utilization of mental health services, outcomes for many returning veterans continue to be bleak.

As the drawdown of OIF/OEF/OND troops continues and the potential deployment of ground troops to combat ISIS/ISIL looms, the demand for a comprehensive understanding of the unique needs of those service members experiencing reintegration difficulties can be expected to increase. Since stigma surrounding mental health treatment remains high among military service members (Johnson & Faller, 2011; Zoroya, 2010), many veterans will remain untreated for months, or even years, before life becomes uncomfortable or unmanageable enough to press them into treatment (Hoge et al., 2004). Civilian and military counselors, social workers, clergymen, public health educators, psychologists, psychiatrists, and service members themselves need to be better informed about the manifestations of combat-related trauma, the influence of social support on trauma symptomology, and the potential role of social support in ameliorating trauma response and facilitating service member reintegration. Mental health workers with a deeper knowledge of how trauma and social support interact to inform postdeployment experiences will be better suited to facilitate stateside transitions in service members.

Accordingly, a Web-based assessment was deployed to examine the relationships among the variables of service-related trauma, postdeployment social support, and reintegration in a sample of veterans of the conflicts in Iraq and Afghanistan. The purpose of this study was to add to the body of literature concerning the homecoming experiences of present day warriors and increase practitioners' understanding of the role of social support in stateside reintegration for service members with trauma.

THE RELATIONSHIP BETWEEN TRAUMA, SOCIAL SUPPORT, AND

POSTDEPLOYMENT REINTEGRATION AMONG WARRIORS OF

THE IRAQ AND AFGHANISTAN CONFLICTS

by

Kelli Elizabeth Scanlon

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Approved by

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APPROVAL PAGE

This dissertation written by Kelli Elizabeth Scanlon has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

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A journey is a person in itself; no two are alike. And all plans, safeguards, policing, and coercion are fruitless. We find after years of struggle that we do not take a trip; a trip takes us.

~ John Steinbeck

Without a doubt, this doctoral program was a journey…and all plans and safeguards were, ultimately, fruitless. As such, the only way to make it through in one piece is with the love and unwavering support of those who are kind enough to see us through.

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CHAPTER I

INTRODUCTION

The impact of service-related trauma on those returning from deployment remains a considerable issue among United States veterans. A longitudinal study of 88,235 service members who returned from Iraq found that more than 42% of reserve component soldiers required mental health treatment following their tour of duty (Milliken, Auchterlonie, & Hoge, 2007). Another study of veterans of the Iraq and Afghanistan conflicts established that, of those receiving a mental health diagnosis, 29% had two diagnoses and 33% had three diagnoses or more (Seal et al., 2009). Conservative estimates suggest that 18%-20% of active duty service members will return home with, or at some point develop signs and symptoms of, post-traumatic stress disorder (PTSD; Litz & Schlenger, 2009; Center for Military Health Policy Research, 2008). With more than 2.2 million veterans (U.S. Department of Veterans Affairs, 2011) having served in Operation Iraqi Freedom, Operation Enduring Freedom, and Operation New Dawn (OIF/OEF/OND), a sizable portion of the United States' veteran population is thought to be living with trauma-related mental health consequences at any given time (Currier, Holland, & Allen, 2012; Seal et al., 2009).

Although some veterans experience few to no setbacks upon homecoming, many struggle at some point with the process of reintegrating into their stateside lives, families, and communities following deployment (Allen, Rhoades, Stanley, & Markman, 2010;

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Jordan, 2011; Knobloch & Theiss, 2012; Makin-Byrd, Gifford, McCutcheon, & Glynn, 2011; Resnik, Borgia, Ni, Pirraglia, & Jette, 2012; Sayers, 2011). Reintegration difficulties can manifest as depression, anxiety, substance use disorders, domestic violence, sleep disturbance, physical pain, interpersonal conflict, adjustment disorders, marital infidelity, debilitating headaches, and trauma-related illness (Otis, Keane, Kerns, Monson, & Scioli, 2009; Rand Center for Military Health Policy Research, 2008). Undiagnosed and untreated, such psychosocial, behavioral, and mental health issues leave veterans vulnerable to unemployment, marital conflict, homelessness, and violence directed at self or others (Kessler et al., 2001; Price & Stevens, 2009). Perhaps most significant is the fact that completed suicides among service members are at an all-time high and, despite the annual $73 million allocated by the U.S. Department of Veterans Affairs (VA) to suicide education and prevention efforts, more service member lives have been lost to suicide than to combat in recent years (Blumenthal, Maliha, & Mathews, 2012; Donnelly, 2011; Pilkington, 2013).

Consequently, the issue of veteran suicide has been studied extensively in the years since the commencement of the first Gulf War in 1990 and much is now known about the risk and resiliency variables that may predispose service members to, or protect them from, suicidal events (Blumenthal et al., 2012; Bowen, Martin & Mancini, 2013; James, Kampen, Miller & Engdahl, 2013; Kemp & Bossarte, 2012; King, King, Fairbank, Keane, & Adams, 1998; Palmer, 2008; Schnurr, Lunney, & Sengupta, 2004). Yet existing programmatic and educational efforts have proven to be insufficient in stemming the tide of suicidal activity among American veterans. According to a recent report by

the Department of Veterans Affairs, the United States is losing one veteran to suicide every 65-80 minutes (Kemp & Bossarte, 2012) and stakeholders are in agreement with regard to the need for more timely and comprehensive research.

The Suicide Prevention Resource Center (2001) lists the absence of social support as a sociocultural risk factor for suicide among civilians; however, few researchers have considered the specific role social support may have in moderating the effects of service-related trauma among veterans. As a construct, social support often encompasses multiple dimensions such as understanding, assistance, and empathic concern (Whiteman, Barry, Mroczek, & Macdermid-Wadsworth, 2013) and the evidence in favor of social support as a buffer against stress, trauma, and poor mental health outcomes is compelling (Asberg & Renk, 2014; Cohen & Wills, 1985; Michalopoulos & Aparicio, 2012; Olff, 2012; Platt, Keyes, & Koenen, 2014).   For service members, social support, whether through civilian or military relationships, may reduce dependency on alcohol, symptoms of depression and anxiety, indicators of PTSD, and suicidal ideation. Given that females tend to have larger support networks and are more likely to access social support (Antonucci, Akiyama, & Takahashi, 2004; Asberg, Bowers, Renk, & McKinney, 2008; Belle, 1987; Gayer-Anderson et al., 2015; Shumaker & Hill, 1991) and married men are more likely to perceive adequate levels of social support (Gerstel, Riessman, & Rosenfield, 1985; Turner & Marino, 1994), additional research concerning the impact of social support in the post-deployment reintegration.n of single, male service members is warranted.

This study will add to the comparatively limited body of literature concerning the post-deployment experiences of veterans who are experiencing some degree of trauma response as a result of the Iraq and Afghanistan conflicts. This study also will contribute to the evolving understanding of post-deployment reintegration issues as a whole. Finally, this dissertation will lay the foundation for future research and programmatic initiatives concerning the use of social support as a supplemental or substitutive approach for formal, clinical, mental health treatment.

Purpose of the Study

Researchers, practitioners, legislators, and civilians remain equivocal as to why the United States is losing veterans to suicide at such an extreme rate. Moreover, the reasons as to what the most protective factors against such suicide among veterans may be are still evolving and insufficiently supported. What is known is that mental health services continue to be stigmatized among United States service members, particularly among officers and career soldiers (Adler, Castro, & McGurk, 2009; Hoge et al., 2004; Milliken et al., 2007; Stecker, Fortney, & Sherbourne, 2011; Veteran's Health Administration Office of Inspector General, 2012), and many veterans are reluctant to avail themselves of professional mental health services (Hoge et al., 2004; Stecker et al., 2011). For those who do wish to see a therapist, significant delays in the receipt of veteran benefits and long wait times for service members to be seen at the Veterans Administration (Center for Military Health Policy Research, 2008; Veterans Administration Office of Inspector General, 2012) combined with the fact that many service members are disinclined to speak with civilian practitioners (Strom, Gavian,

Possis, Leskela, & Siegel, 2012; Wilson, Leary, Mitchell, & Ritchie, 2009; Woll, 2008),

mean that many veterans who may benefit from professional counseling will go without.

As such, researchers, practitioners, and program developers are pressed to consider

alternative ways of meeting the psychosocial needs that are left unmet by formal

treatment modalities.

Social support in the form of friends, family, and community members may

moderate the impact of service-related trauma on reintegration outcomes, as depicted in

the proposed model in Figure 1. To date, researchers have adequately delineated certain

components of this model. For example, researchers have described comprehensively the

various ways in which trauma responses may manifest in service members and veterans

upon reintegration (e.g., Erbes, Meis, Polusny, & Compton, 2011; Jordan, 2011; Makin-

Byrd et al., 2011; Mattocks et al., 2012; Resnik et al., 2012; Sayer et al., 2011; Sayers,

2011). Also, numerous researchers have identified the many risk and resiliency factors

for suicidality among these veterans (e.g., Blumenthal et al., 2012; Bowen et al., 2013;

James et al., 2013; Kemp & Bossarte, 2012; King et al., 1998; Palmer, 2008; Schnurr et

al., 2004). Such research has added substantively to the common understanding of

predictive and diagnostic markers for trauma among OIF/OEF/OND veterans.

Figure 1

The Potential Influence of Social Support on Reintegration Outcomes

Markers of Reintegration Difficulty		Markers of Reintegration Success
Loss of Purpose	Social Support	Sense of Purpose
Relationship Erosion		Relationship Health
Posttraumatic Symptoms		Posttraumatic Growth
Isolation	Reintegration Period	Connectedness
Mental Illness		Mental Wellness
Suicidal Ideation		
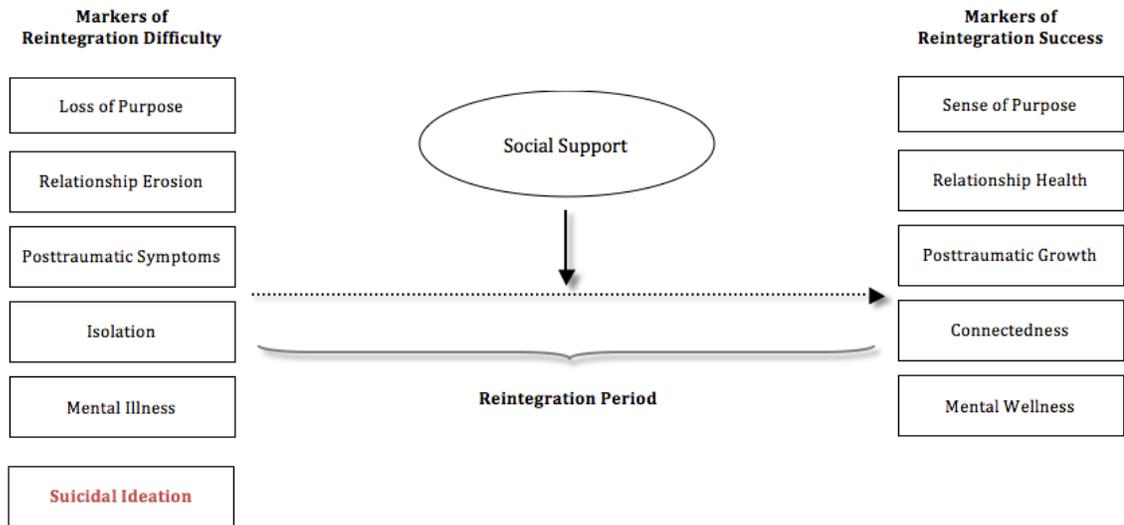
Yet, despite the many important contributions that have been made, there is still insufficient research concerning the reintegration experience of single male soldiers, ongoing confusion among scholars as to the core reasons for high rates of suicide in the military, and a very limited number of studies concerning the uses of social support in ameliorating post-deployment trauma responses. The proposed research begins to test aspects of the model depicted in Figure 1.

Statement of the Problem

This study addresses two primary gaps in the extant literature: the protective role of social support among service members, and a veteran demographic at particular risk for suicidality. With respect to the first gap, it is proposed that social support may be a largely overlooked resource in moderating trauma-related illness among single, male, post-deployed, service members. Consequently, social support may serve as a protective

factor against trauma-related illness and suicidal ideation during the period of reintegration. Insomuch as the second gap is concerned, 84% of all Active Duty and Select Reserve members are male (Office of the Deputy Assistant Secretary of Defense, 2012) and 97% of completed veteran suicides documented to date have been male (Kemp & Bossarte, 2012). Additionally, married service members are less likely to be at risk for suicide (Jakupcak et al., 2010). Moreover, 40.6% of all Active Duty and Select Reserve members are single with no children (Department of Defense, 2012), yet the vast majority of the research has been conducted among service members with dependents.

Research Questions

The following research questions have been crafted to test the relationship between social support and post-deployment reintegration success among veterans with trauma:

Research Question #1: Is post-deployment social support correlated with post-deployment reintegration success among single, male, Iraq and Afghanistan veterans with trauma?

Research Question #2: Is a service member's level of trauma correlated with that service member's experience of post-deployment social support?

Research Question #3: Does post-deployment social support moderate the effects of service member trauma on service member reintegration success?

Research Question #4: How do the social support experiences of Reservists and Guardsmen differ from those of Active Duty (i.e., Army, Navy, Air Force, Marine Corps, Coast Guard) service members?

<u>Research Question #5</u>: How do the reintegration experiences of Reservists and Guardsmen differ from those of Active Duty (i.e., Army, Navy, Air Force, Marine Corps, Coast Guard) service members?

With respect to Research Question #1, it is hypothesized that social support will be positively correlated with service member reintegration. With respect to Research Question #2, it is hypothesized that level of trauma will be negatively correlated with social support. With respect to Research Question #3, it is hypothesized that social support will temper the effects of trauma and enhance service members' ability to successfully reintegrate post-deployment.

Need for the Study

Little is understood about whether and how veterans utilize social support to process trauma, whether trauma interferes with a veteran's ability to access the support available to him, and whether social support can moderate the effects of trauma during post-deployment reintegration. This research may establish a foundational argument in favor of social support as a primary curative factor for service members, in which case civilian and military-based mental health agencies might formalize, publicize, and expand upon opportunities for veterans to access such support. Moreover, research concerning the moderating effect of social support among service members will enhance professional counselors' understanding of the psychosocial needs of post-deployed veterans, and add to the body of counseling literature devoted to the treatment of soldiers with trauma and reintegration issues. Finally, the work of treating and conducting research among present day veterans has been largely left to psychologists, psychiatrists, general practitioners,

and social workers, with relatively little empirical research originating from the counseling literature. As such, this study adds to the body of research conducted by Licensed Professional Counselors (LPC). This perspective is important since much of the research conducted on present day veterans has been published by proponents of the medical model. Research stemming from strengths-based professionals is critical, especially at a time when existing practices are proving to be insufficient.

Definition of Terms

Several key terms included in this study are described below:

For the purposes of this study, service member is defined as a member of the United States Armed Forces having served at least one tour of duty in support of Operation Iraqi Freedom/Operation Enduring Freedom/Operation New Dawn (OIF/OEF/OND). The term service member may be used interchangeably with veteran, warrior, soldier and includes service in the Army, Navy, Air Force, Marine Corps, or Coast Guard, either in the capacity of Active Duty or Guardsmen/Reservists.

Trauma will refer to a service member's response to an event that "is extremely upsetting and at least temporarily overwhelms the individual's internal resources" (Briere & Scott, 2006, p. 4). The terms trauma, posttraumatic stress disorder, and PTSD may be used interchangeably in this research, and will be defined as having met full Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria for posttraumatic stress disorder. Trauma may have been caused or exacerbated by any service-related experience for which the veteran found himself physically, emotionally, cognitively, or spiritually ill-prepared, including experiences of overwhelming fear, guilt and shame. Subclinical

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trauma will be defined as having met partial DSM-IV criteria for posttraumatic stress disorder (Stein, Walker, Hazsen, & Forder, 1997). For the purposes of this study, trauma will be assessed using the PTSD Checklist - Military Version (PCL-M).

Occasionally defined as the first 12 months following homecoming (Knobloch & Theiss, 2011), post-deployment describes the state of having been discharged from military service and returned to civilian roles and responsibilities. Reintegration refers to the "stage of the deployment cycle …characterized by the service member's reentry into his or her daily life as experienced prior to deployment, or into a new civilian life" (The National Council on Family Relations, https://www.ncfr.org/ncfr-report/focus/military-families/returning-home). In the literature, the terms reintegration and post-deployment occasionally are used interchangeably, and this study will follow suit.

Reintegration success is a multi-dimensional construct that will be defined as "the postdeployment achievement of satisfactory levels of functioning at home, at work, in relationships, and in the community" (Sayer et al., 2011, p. 3). For the purposes of this study, a service member's level of reintegration success will be, in part, measured using the Military to Civilian Questionnaire (M2C-Q).

 Social support will be functionally defined as emotional support (e.g., caring, empathy), tangible support (e.g., assistance with tasks), affectionate support (e.g., expression of positive emotions), or social interaction (e.g., companionship; Sherbourne & Stewart, 1991) offered to the service member by family and friends. For the purposes of this study, social support will be measured using the Postdeployment Social Support Scale (Section O) of the Deployment Risk and Resilience Inventory-2 (DRRI-2).

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Organization of the Study

This study is presented in five chapters. In Chapter One, I have described the focus and rationale of the study, including the study's purpose and significance, definitions of key terms, and research questions. In Chapter Two, I will offer a review and critique of the extant literature concerning the reintegration experience of service members, veteran trauma, and the role of social support in mitigating trauma symptoms. In Chapter Three, I will outline the methodology of the study, including sampling and recruitment protocol, instrumentation, and data analyses. In Chapter Four, I will describe the results and include a discussion of the analyses. Finally, in Chapter Five, I will include limitations of the study, implications for the counseling profession, and suggestions for future research.

CHAPTER II

REVIEW OF THE LITERATURE

In Chapter 1, the rational for a study concerning the role of social support among post-deployed service members with trauma was discussed. In Chapter 2, I review the existing literature concerning the primary variables of interest for this study, specifically, service-related trauma among OIF/OEF/OND veterans, the experience of post-deployment reintegration among present day veterans, and the function of social support for service members with trauma. Additionally, outcomes for traumatized service members, the challenges associated with post-deployment reintegration, and the purportedly cathartic effects of social support in civilian and military communities are presented. Also examined are studies that explored the relationship among two or more of this study's variables. In Chapter 2, I conclude with a discussion as to how the integration of all three variables and the application of the proposed model build on previous research and address important gaps in the literature.

Assessment, Treatment, and Models of Trauma

Trauma has been defined in myriad ways in the clinical literature and is often used to refer to both an individual's emotional response to a deeply distressing event and the event itself. For instance, the psychological response to surviving a detonated roadside bomb is likely to be "trauma," while the agent of war itself may also be termed "trauma." The American Psychological Association (2015) succinctly defines trauma as

an "emotional response to a terrible event like an accident, rape or natural disaster" (http://apa.org/topics/trauma/index.aspx). However, a more fitting definition for service members may be Briere and Scott's (2006) classification of trauma as an event or situation that is "extremely upsetting and at least temporarily overwhelms the individual's internal resources" (p. 4). The latter definition allows that that which is deemed traumatic is often in the eye of the beholder, thereby lending itself well to the ongoing question of differing psychological responses to similar stimuli among veterans. To wit, two soldiers may experience the same traumatic event during deployment, yet only one develops symptoms of trauma.

The psychosomatic illness so often associated with combat has been described in literary works for millennia; however, the earliest attempts at labeling and diagnosing such a phenomenon first occurred in the mid 19th century. Terms such as "soldier's heart," "railway spine," and "nostalgia" were the terms first applied to symptoms such as sleeplessness, anxiety, and sadness following time in military service. Around the time of the first and second World Wars, these terms gave way to "shell shock," "war neuroses," "combat stress fatigue," and "battle fatigue." Treatments varied over the course of time and thinking, but soldiers serving in the first half of the 20th century were generally expected to get back in the fight as soon as possible. In the early 1950's, "gross stress reaction" was included in the first DSM (DSM-I), and subsequently removed from the second edition (DSM-II). Thus, there was no such clinical term or understanding available for the traumatized veterans of the Vietnam War. In 1980, the DSM-III first included the term "post-traumatic stress disorder" after empirically establishing common

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psychological responses among survivors of war, rape, and genocide. Ongoing research

prompted revision to the criteria in the DSM-III-R, DSM-IV, and DSM-IV-TR. The

DSM-V now lists PTSD as its own category, removed from the umbrella of anxiety

disorders, which allows for the fact that PTSD may manifest not only as anxiety but also

as depression or rage. (For more details see http://www.ptsd.va.gov/public/PTSD-

overview/basics/history-of-ptsd-vets.asp).

  As researchers' understandings of trauma have developed, so too have the sub-

categorizations and definitions of trauma. According to the Veterans Administration

National Center for PTSD (2015), psychological responses to distressing events generally

fall into one of five categories, increasing in severity of response: normal stress response,

acute stress disorder, uncomplicated posttraumatic stress disorder, comorbid

posttraumatic stress disorder, and complex posttraumatic stress disorder. For the

purposes of this study, PTSD will refer to uncomplicated PTSD and comorbid PTSD but,

as is common in much of the published literature, will not differentiate between the two,

and will refer to the both as posttraumatic stress disorder or PTSD.

  Clinically defined, posttraumatic stress disorder develops following exposure to,

or experience of, a life-threatening event. The emotions that occur following this

extreme kind of stressor are the cause of changes in the brain that may lead to PTSD.

The DSM-IV (American Psychiatric Association, 2000) states that individuals must meet

criteria in six different categories in order to be diagnosed with PTSD:

- Criterion A: individual witnessed/experienced an event threatening death or serious injury and exposure to traumatic event caused feelings of fear, helplessness, or horror;

- Criterion B: re-experiencing the traumatic event via nightmare, intrusive thoughts, flashbacks, distressful response to cues;

- Criterion C: avoidance of stimuli which may be associated with the trauma by detaching, dissociating, avoiding certain thoughts/feelings/conversations /activities/places/people;

- Criterion D: heightened arousal as demonstrated by sleep difficulties, trouble managing anger, issues with concentration, startle response;

- Criterion E: symptoms persisting longer than one month;

- Criterion F: clinically significant distress, impacting social, occupational or other key areas of functioning.

Trauma caused by service in the Armed Forces shares many defining traits with other commonly known forms of trauma. Consequently, survivors of natural disasters, mass interpersonal violence, rape and sexual assault, transportation accidents, fires, and vicarious trauma are often assessed and diagnosed in similar fashions (Briere & Scott, 2006). Following any one of these experiences, PTSD symptoms can include nightmares, hypervigilance, situational avoidance, and restricted or labile affect (American Psychiatric Association, 2000), and often lead to poor cognitive, somatic, affective, and interpersonal outcomes. Traumatized individuals presenting for treatment are assessed for course and severity of the symptoms outlined above and diagnosed using

common DSM criteria. Moreover, the array of interventions most commonly applied to veterans with trauma, such as Prolonged Exposure Therapy (Yoder, Tuerk, Price, Grubaugh, Strachan, Myrick, & Acierno, 2012), Cognitive Processing Therapy (Monson, & Shnaider, 2014), Stress Inoculation Therapy (Rothbaum, Meadows, Resick, & Foy, 2000), group therapy (Creamer & Forbes, 2004), biofeedback (Russoniello, Fish, Parks, Rhodes, Stover, Patton, Gold, & Maes, 2009), and any number of pharmaceutical interventions (http://www.apa.org/monitor/jan08/ptsd.aspx) may be applied to many forms of civilian trauma.

Yet, despite the commonalties shared with civilian trauma, trauma that is experienced in the course of military service presents idiosyncrasies that warrant distinct assessment, diagnosis, and treatment. Sherman and Bowling (2011) offered that recurrent geographic moves, limited down time between multiple deployments, and the consistent impact of service on the family unit, warrant unique interventions for service-related stress. As such, new treatment protocols for service members, couples, and families are being developed and tested (Sherman & Bowling, 2011). However, many yet lack the empirical support necessary for widespread application.

The U.S. Department of Veterans Affairs' National Center for PTSD endorses more than 60 self-report and clinician-administered trauma instruments crafted by PTSD researchers affiliated with the Center (http://www.ptsd.va.gov). While some instruments have been designed to be diagnostic in nature, others are intended to assess level of trauma exposure or symptomatic response. Instruments also vary by intended population, participant burden, and mode of administration. With respect to veterans, the most

commonly applied assessments have historically included the following: the Posttraumatic Stress Diagnostic Scale, the Trauma Symptom Inventory, the Life Events Checklist, the Clinician-Administered Posttraumatic Stress Disorder (PTSD) Scale, the PTSD Checklist, and the Impact of Event Scale—Revised (Elhai, Gray, Kashdan, & Franklin, 2005). Given its ease of administration, low participant burden, availability in the public domain, and specificity for the military experience, the PTSD Checklist (Military Version) has been selected to assess level of service-related trauma for participants in this study.

Deployment experiences that are generally thought to overwhelm function and predispose soldiers to traumatic response may include enemy fire; sexual assault; traumatic brain injury; friendly fire; physical disability; ambush; loss of friends, subordinates, and command leaders; and capture and imprisonment (Jordan, 2011). Bioecological models (Hoffman & Kruczek, 2011), interactional models (Nugent, Amstadter, & Koenen, 2011), and sociocultural and ecological models (Hobfoll & de Jong, 2014) have all been proposed as theories for understanding the specific ways in which events may overly tax one's capacity for metabolizing distress. Modern trauma theory is an umbrella concept encompassing a number of models and schemas that examine the effects of overwhelming distress on an individual's capacity to function. As is the case with assessments and treatments, models are regularly being proposed to help researchers and clinicians understand the development of trauma in veterans.

One such model, the diathesis-stress model, has been proposed to explain how individuals' predisposing risk factors interact uniquely with the degree to which stressors

are experienced (McKeever & Huff, 2003). When the encountered stressor is severe

enough, it triggers the diathesis, creating a psychological environment suitable for the

development of a trauma disorder. Relatedly, much has been published of late with

respect to the risk (i.e., diathesis) and resiliency factors that may explain the etiology of

PTSD in service members (King, King, Fairbank, Keane, & Adams, 1998; McKeever &

Huff, 2003; Palmer, 2008; Schnurr, Lunney, & Sengupta, 2004; Seal, Metzler, Gima,

Bertenthal, Maguen, & Marmar, 2009). Factors such as pre-existing depression,

possessing only a high school degree, severe childhood punishment, negative affect, level

of perceived threat in combat, harassment, and instability in family of origin have all

been shown to predispose service members to maladaptive trauma responses (Herman,

1992; King et al., 1998; Rademaker, van Zuiden, Vermetten, & Geuze, 2011; Schnurr,

Lunney, & Sengupta, 2004). Conversely, factors such as positive parental support, a

college education, active coping styles, and older age at enlistment have been

demonstrated to buffer service members from the development or worsening of PTSD

symptoms (Herman, 1992; King, et al., 1998; Schnurr, Lulnney, & Sengupta, 2004).

Yet, the risk and resiliency factors identified to date seem insufficient for explaining how

it is that many service members return home from deployments with little in the way of

residual trauma, while others struggle significantly with PTSD symptomology.

Meaningful models explaining why "certain warfighters exposed to bombings and

bloodshed develop paralyzing stress symptoms while others who witness the same

trauma shake it off" (Chang, 2009, para. 6) are still being sought. Moreover, much is still

unknown about factors that may mediate existing trauma and facilitate service member reintegration following deployment.

Trauma-Related Outcomes

The impact of OIF/OEF/OND service on veterans of every service branch is well-documented and the effect of these conflicts on service members, their families, and stateside communities is significant (Allen et al., 2011; Chandra et al., 2010; Erbes et al., 2011). Milliken, Auchterlonie, and Hoge (2007) found that more than 66% of the 88,235 soldiers in their study had experienced potentially traumatic events (e.g., witnessing someone wounded or killed, fearing for one's own life, discharging a weapon) while deployed. In their study of 289,328 Iraq and Afghanistan veterans, Seal et al. (2009) discovered that more than 17% of the veterans in their study met the diagnostic criteria for major depressive disorder, nearly three times the 12-month prevalence in the civilian population. In the same study, the prevalence of PTSD was more than double in soldiers under the age of 25, with younger soldiers at twice the risk for alcohol use disorders and five times the risk for drug use disorders (Seal et al., 2009). Although mental health concerns among active duty soldiers are of great concern, National Guard and Reserve soldiers consistently report even higher rates of PTSD, depression, and interpersonal conflict (Milliken, Auchterlonie, & Hoge, 2007). What's more, for those experiencing multiple deployments, the risk of psychological issues such as these is even higher (Department of Defense Task Force on Mental Health, 2007). Since the data concerning PTSD among veterans generally represents only those service members seeking treatment

within the Veterans Affairs health system, the number of veterans experiencing some combination of the above-listed symptoms conceivably could be much higher.

The outcomes of trauma for veterans of the Iraq and Afghanistan conflicts continue to be made obvious, with many service members returning from deployment in qualitatively worsened cognitive, emotional, and physical states (Hoge, Castro, Messer, McGurk, Cotting, & Koffman, 2004; Milliken, Auchterlonie, & Hoge, 2007; Seal, Metzler, Gima, Bertenthal, Maguen, & Marmar, 2009). Rates of domestic violence in which OIF/OEF/OND veterans or active duty service members abuse their spouse and/or children have continued to rise since 2008 (Montgomery, 2011). The incidence of drug and alcohol use and abuse among service members has escalated since 2003 (Zoroya, 2009). Undiagnosed and untreated, these psychosocial, behavioral, and mental health issues leave veterans vulnerable to underemployment/unemployment, marital conflict, homelessness, and violence directed at self or others (Price, 2007). Military deaths as a result of suicide have outnumbered those attributed to combat in Iraq and Afghanistan in recent years despite the fact that reported figures are believed to be grossly underestimated (Donnelly, 2011). Completed suicides among service members are at an all-time high and, despite the annual $73MM allocated to education and prevention by the U.S. Department of Veterans Affairs, more lives have been lost to suicide than to combat in recent years (Blumenthal, 2012).

Recently released figures have generated national media attention for the issue of suicide in the military. In September 2013, The Huffington Post commented that veteran suicides had reached a 30-year high and labeled the issue a public health crisis

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(Blumenthal, Maliha, & Mathews, 2014). In 2012, media outlets reported that 349

United States service members lost their lives to suicide in the reported year, thereby

exceeding the 295 deaths due to combat (Pilkington, 2013). Yet the difficulties

associated with comprehensively tracking veterans makes it likely that the numbers are

much higher. The Department of Veterans Affairs (2010) has suggested that a United

States veteran dies by suicide every 65-80 minutes. And, despite the fact that males

make up just 81-85% of the U.S. Armed Forces (Office of the Deputy Assistant Secretary

of Defense, 2012), the Department of Veterans Affairs reported that males accounted for

more than 96% of all veteran suicides (Kemp & Bossarte, 2012), signifying the

importance of additional research concerning suicide among male service members.

Given the crisis of the increase in suicides and poor reintegration results for many

veterans, numerous studies have been conducted to determine the most effective and

empirically-supported treatments available to traumatized warriors. For married or

otherwise partnered service members, treatments such as Traditional Behavioral Couples

Therapy, Integrative Couples Therapy, and Community Reinforcement and Family

Training, (Makin-Byrd, Gifford, McCutcheon, Glynn, & Shirley 2011) offer the primary

benefit of improving couples' relationships and the secondary benefit of reducing PTSD

markers. Other treatment protocols such as Cognitive-Behavioral Conjoint Therapy have

been designed specifically to be effective not only at reducing trauma symptoms, but also

helping couples to work through issues of separation, communication, and roles and

responsibilities post-deployment (Sayers, 2011). Warriors who present with

comorbidities such as addiction, corporal pain, or traumatic brain injury may be enrolled

in other more tailored treatments. Cutting edge neurobiological approaches in the treatment of PTSD, such as anesthetic injections at the base of the neck, are also being tested (NeuroScientistNews, 2014) Yet, despite scientific initiative and government support for such programs, barriers such as access to care, prompt distribution of benefits, and ongoing misunderstandings as to the nature and prevalence of PTSD (Hoge, Auchterlonie, & Milliken, 2006; Milliken et al., 2007; Veteran's Health Administration Office of Inspector General, 2012) continue to stand in the way of many service members receiving care necessary for the treatment of trauma. Long wait times for critical care appointments at the VA (Veteran's Health Administration Office of Inspector General, 2012) and persistent stigma surrounding access to mental health care (Hoge, Castro, Messer, McGurk, Cotting, & Koffman, 2004) mean that fewer veterans are being seen when most needed.

Research conducted over the past 20 years has increased both the clinical and civilian understanding of trauma among service members and the differences that may be evident between subgroups of veterans.   Nearly two decades ago, researchers began studying gender differences among male and female warriors (King et al., 1998), and over time it has become apparent that, while male and female service member report many common experiences of service-related trauma, female veterans warrant separate studies. In addition to stressors common to deployment and combat, female service members often encounter sexual harassment and rape (LeardMann et al., 2013; Lehavot & Simpson, 2014; Scott et al., 2014), lack of support (VA National Center for PTSD, 2014), and civilian-sourced shame for leaving their children (Scott, 2010). Current

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research is also examining the different ways in which trauma response manifests among married service members versus single or unattached veterans. Another phenomenon is the difference in trauma responses reported among the members of the various service branches and capacities. Scholars are investigating whether clinical levels of PTSD are higher among members of the National Guard and Reserves than they are among full-time members of the Army, Navy, Air Force, Marine Corps, or Coast Guard.

In the past five years, the Veterans Administration has observed a 35% increase in the number of service members receiving mental health care. Much is now known about the risk and resiliency factors that contribute to a service member's ability to metabolize service-related trauma and reintegrate stateside. Yet, despite the resources devoted to studying these influences and the increased utilization of mental health services, outcomes for many returning veterans continue to be bleak. Little is understood about how veterans utilize meaningful attachments (e.g., battalion buddies, partners, civilian friends) to process trauma, how trauma interferes with a service member's ability to access the support available to them through significant relationships, and how such utilizations and capacities change between deployment and reintegration.

Theories of Social Support and Mental Health Correlation

Social support may be broadly defined as "resources, including material aid, socioemotional support, and informational aid, provided by others to help a person cope with stress" (American Psychological Association, 2015, para. 55). The specific constructs that make up social support may vary greatly by theory and can include variables such as conflict, intimacy, availability, social network, relationship satisfaction,

roles, function, and perception of support.   Commonly, social support researchers focus on various dimensions of the construct such as structural support, functional support, perceived support, emotional support, etc.

As a whole, the ways in which social support and mental health mutually influence one another have been the subject of much study (Blazer & Hybels, 2005; Bosworth & Schaie, 1997; Jakupcak et al., 2010; Klanecky, et al., 2014; Knobloch & Theiss, 2012; King et al., 1998; Krause, 1997; Krause, Liang, & Yatomi, 1989; Milgram, Orenstein, & Zafrir, 1989; Olff, 2012; Platt, Keyes, & Koenen, 2014; Whiteman et al., 2013). Many theorists of social support suggest that socioemotional sustenance, however it may be defined, has the capacity to influence behaviors, emotions, thoughts, and physiology (Lakey & Cohen, 2000). For example, in their review of the research concerning the salubrious effects of social support on stress, Cohen and Wills (1985) proposed the buffering model, adding to the evidence that social support impacts mental wellness. Conversely, outcomes such as health and personal wellbeing may be greatly influenced by individuals' perceptions of belonging, companionship, and sense of interpersonal connection.   In their study of 128 male veterans with trauma, Laffaye, Cavella, Drescher, and Rosen (2008) found that PTSD had the capacity to erode social support over time. Similarly, King et al. (1998), in their national study of 1,632 Vietnam veterans, found that service members' abilities to reach out to others for assistance in times of duress was predictive of their PTSD symptomology. Irrespective of the direction of the influence, social and support and mental health are inextricably intertwined.

One of the more influential theories concerning the buffering effects of social support against the effects of stress and trauma is the Stress and Coping Perspective, which suggests that social support – whether actual support or the perception that such support is available to the individual – serves to temper the effects of a stressful event (Lakey & Cohen, 2000).   The Stress and Coping Perspective finds its root in the works of psychologists Albert Bandura and Arnold Lazarus (Schwarzer, 1998) and indicates that the type of support must correspond appropriately to the stressor. As such, cooking meals for a newly returned veteran who is healing from injuries sustained during deployment would be an appropriate form of social support. Cooking meals for a newly returned veteran who is struggling with the death of a military comrade may be a less fitting form of social support. Higher levels of appropriate and meaningful social supportive actions purportedly lead to better coping, which in turn leads to lower levels of stress (Lakey & Cohen, 2000).

Although researchers have been somewhat divided with respect to the eroding effects of stress and trauma on social support, there are a number of studies that provide evidence in favor of the theory. Price, Gros, Strachan, Ruggiero, and Acierno (2013) conducted preliminary research among 69 OIF/OEF veterans with PTSD and found "the relation between positive social support and pretreatment severity was significant such that decreased support was associated with greater symptom severity, $\beta_{01} = 0.45$, $p < .05$" (p. 96). A longitudinal study conducted among National Guardsmen by Gewirtz, Polusny, DeGarmo, Khaylis, and Erbes in 2010 found that chronic, ongoing PTSD led to the erosion of social support. Similarly, in their longitudinal civilian research of

disaster victims, Kaniasty and Norris (2008) evidenced that participants with significant

PTSD symptomology at initial assessment were likely to report reduced social support at

follow-up assessment six months later. Since one of the diagnostic criteria of PTSD may

be isolation, tapping into the curative effects offered by meaningful social support can be

challenging.

As noted above, some theorists subcategorize and distinguish social support by

construct, such as actual help received or perceived social support available. Other

researchers have examined the characteristics of and satisfaction with one's social

support network (Lakey & Cohen, 2000).   Still others have considered the facets of

social support to be dimensional, including such constructs as emotional support (e.g.,

caring, empathy), tangible support (e.g., assistance with tasks, offerings of money or

meals), affectionate support (e.g., expression of positive emotions), or social interaction

(e.g., companionship; Sherbourne & Stewart, 1991).

Measuring social support among service members depends largely upon the way

in which social support has been defined.   For the purposes of this dissertation research,

social support has been defined as emotional support (e.g., caring, empathy), tangible

support (e.g., assistance with tasks), affectionate support (e.g., expression of positive

emotions), and/or social interaction (e.g., companionship; Sherbourne & Stewart, 1991)

offered to the service member by family and friends. This construct will be measured

using the Postdeployment Social Support Scale, a subscale of the newly revised

Deployment Risk and Resilience Inventory-2 (DRRI-2; Vogt, Smith, King, King, Knight,

& Vasterling, 2013). Authors suggest the inventory, a 10-item instrument that measures

warrior-specific experiences of postdeployment social support, be used to "examine the role that psychosocial factors play in postdeployment health and inform interventions aimed at reducing risk and enhancing resilience among war veterans" (Vogt et al., 2013, p. 710).

One form of social support often called upon for service members is that of spousal support. Nearly 60% of active duty service members are married (Department of Defense, 2012) and, consequently, a great deal of the published research concerning veterans includes the role of spousal support in safeguarding service members' mental health. In one study of OIF/OEF veterans, Klanecky, Cadigan, Martens, and Rogers (2014) determined that the support of a partner/spouse was protective against alcohol abuse in service members with depression. Likewise, Jakupcak et al. (2010) were able to demonstrate, among a sample OIF/OEF veterans, that being married proved to be a buffer against suicidal ideology. Given the critical role of spousal support, we may be able to infer that service members without the social support often provided by a partner may be at greater risk for mental health consequences following deployment.

Yet social support for post-deployed service members may come in many forms, and the literature substantiates the importance of non-spousal support for warriors. Lafayye et al. (2008) included relatives, nonveteran friends, and veteran peers in their list of non-spousal support sources and indicated that service members favoring veteran peers was "consistent with clinical reports that veterans who have sought PTSD treatment tend to seek support from other veterans more than they do from nonveteran friends and even from their families" (p. 399). Additionally, following their research among 164 newly

postdeployed OIF/OEF veterans, Tsai, Harpaz-Rotem, Pietrzak, and Southwick (2012) suggested that insufficient social support from the community may be correlated with PTSD symptomology and traumatized veterans could benefit from peer support groups. As a result of their interviews with 20 National Guardsmen and Reservists, Hinjosa and Hinjosa (2011) offered that "clinicians should build on the interpersonal and deep connections veterans have with other veterans" (p. 1153).   According to Wilson, Leary, Mitchell, and Ritchie (2009), veterans who are provided with nothing more than a venue to tell their stories experience normalization, validation, and transformative healing. They concluded that storytelling is a "small-scale local practice or ritual that can help Veterans heal the emotional wounds of war" and "can provide a Veteran who is coping with psychological injuries related to wartime conflicts a pathway back home that promotes connection, healing, and social vindication" (p.424).

The Need for Social Support Among Veterans

One of the most significant stressors for service members can be the experience of loneliness and overall lack of social support upon homecoming. Hinojosa and Hinojosa (2011) noted that many veterans experience a "sense of loss immediately after deployment when demobilization breaks up the unit" and "coming home means losing the intimacy with valued friends who have shared the unique strains of combat deployment" (p. 1152). In one study of social support among veterans enrolled in college, Whitman, Barry, Mroczek, and Macdermid-Wadsworth (2013) demonstrated that college students who had been deployed experienced difficulties with interpersonal relationships during the period of postdeployment reintegration. What's more, a report

by the Institute of Medicine (2013), titled "Assessment of Readjustment Needs of Veterans, Service Members, and Their Families," highlighted that concurrent with the loss of support are complex and compounding stressors largely uncommon to civilians. Consequently, more research is needed to understand and bolster veterans' unique connectedness to military and civilian forms of social support, as well as to reduce the sense of isolation common to returning service members.

A primary aim of decreasing service members' sense of loneliness is that isolation is a primary risk factor for suicidality (Centers for Disease Control and Prevention, 2012). As noted above in Chapter 1, analyses have shown that more service member lives have been lost to suicide than to combat in recent years of conflict (Blumenthal, Maliha, & Mathews, 2012; Donnelly, 2011; Pilkington, 2013). In their coverage of the War on Terror in Iraq and Afghanistan, popular news outlets have often cited the recent report by the Department of Veterans Affairs, which suggests that the United States continues to lose one veteran to suicide every 65-80 minutes (Kemp & Bossarte, 2012). Strong interpersonal connections, on the other hand, have been shown to be protective against trauma response and suicidal ideation in particular (U.S. Department of Health and Human Services, 2001). In Dikel, Engdahl, and Eberly's (2005) study of 160 former prisoners of war (POW), posttraumatic social support was a significant buffer against the development of Full-Blown PTSD, and its absence effectively predicted the severity of a POW's trauma response. Similarly, social support was shown to be associated with OIF/OEF veterans' responses to PTSD treatment and severity of PTSD symptoms (Price, Gros, Strachan, Ruggiero, & Acierno, 2013). Furthermore, in one study of 431 Iraq and

Afghanistan veterans seeking routine care at the Veterans Administration, Jakupcak et al.

(2010) noted that veterans reporting greater satisfaction with their social support had

reduced risk of suicide.

Social support is a standard component of daily life within the Armed Forces.

Authors of one study, published by several officers of the United States Army, noted in

its discussion:

> When assigned to a military unit, especially in a stressful combat environment, relationships with others within the unit are vital to enabling a cohesive effort towards a collective goal. Many view the others within their unit as their 'military family,' and are encouraged to always have a battle buddy or a 'wingman' and support each other, establishing positive relationships throughout their career in the military (Escolas et al., 2012, p. 59).

Within every branch of the military, the tenets of social support are instinctive, stitched

into the training of new recruits, and contribute to the lexicon, whether it be 'battle

buddy,' 'wingman,' 'comrade,' or 'brothers-in-arms.' Soldiers are trained to rely on their

unit and the skills of offering and receiving social support are integral to interpersonal

well-being during deployment. In a 2007 article in the journal Army, retired U.S. Army

General Major Guy S. Meloy opened his editorial with the statement, "I would bet the

farm that every officer has fond, sharp and gratifying memories of noncommissioned

officers who taught him how to soldier and to whom he often turned for advise" (p. 15).

When warriors separate from service and return to civilian life, their built-in

support network largely evaporates. Goodwin (2010) noted, "The returning soldier is no

longer part of a group bound together by a clear sense of purpose, familiar rituals, and

shared experiences. Relationships forged under fire cannot be easily recreated in the

modern world or even understood by anyone who has not been in combat…feelings of isolation and the absence of camaraderie combined with the loss of clear purpose weigh as heavily as the memories of the bodies, bombs, and bullets" (p. 67). As a result, at a time when many service members may be feeling most vulnerable, the protective elements associated with social support may be most elusive.

Finally, another important finding in the literature concerns those commonly known as "weekend warriors." While the loss of social support may be experienced by any post-deployed service member, such a loss may be felt more keenly by those "not enlisted" to active duty. A well-documented phenomenon is the fact that social and emotional support is more elusive for National Guardsmen and Reservists. In their study of National Guardsmen, Hinojosa and Hinojosa (2011) offered, "Military unit members should be thought of as a resource for family reintegration" (p. 1153). This is a critical recommendation, given that nearly three in four active duty military families live in civilian communities, with National Guard and Reserve families generally living great distances from military installations (Martin, Mancini, Bowen, Mancini, & Orthner, 2004). Living far from sources of social support combined with a continued disconnect between members of the civilian and military communities (Kirby, 2013) could mean that post-deployed service members experience an increased sense of isolation and loss of social support when reintegrating back into stateside communities, increasing service members' risk for depression, substance abuse, and suicidality. When considered alongside statistics that show rates of suicide being higher among Guardsmen and

Reservists, a case for additional research examining the role of social support in moderating trauma and reintegration difficulties can be made.

In sum, the foundation for research that posits social support as a moderator for trauma is well established. Anecdotal evidence and civilian studies substantiate the theory that meaningful support may be highly restorative for those service members struggling with post-deployment reintegration.

Theories and Conceptualizations of Reintegration

The dictionary defines reintegration as "restoration to a unified state" (http://dictionary.reference.com/browse/reintegration). In most empirical literature, the term is generally used in one of two manners: 1) to describe a restoration of the mind following derangement caused by a psychotic break, or 2) to describe the act of reassimilating into one's home culture after considerable time spent elsewhere (e.g., as a former prisoner, traveler, refugee). For most postdeployed members of the Armed Forces, the latter definition is what is normally implied concerning homecoming experiences.

Although several meaningful models exist for the reintegration of refugees, convicts, or expatriates, fewer empirically supported theories are available for the purposes of understanding the return of service members to civilian society. The Relational Turbulence Model (Theiss & Knobloch, 2013) is one model available to researchers as it describes some of the relational struggles often experienced during the post-deployment period. In their model, Knobloch and Theiss framed relational uncertainty, relational communication, and relational interferences (e.g., affiliation and

dominance) during the post-deployment transitional period. They have conducted several

studies among recently discharged OIF/OEF service members (Knobloch & Theiss,

2011; Knobloch & Theiss, 2012; Theiss & Knobloch, 2013), the results of which

suggested that "the transition from deployment to reunion corresponds with upheaval in

how service members communicate with a romantic partner and make judgments about

their relationship" (p. 1109). Although this model corresponds effectively with many of

the theories of social support for postdeployed service members, it overlooks the

experience of the single veteran.

Assessing reintegration success or distress can be challenging since the process of

reintegration itself is an ongoing progression. However, strides have been made in recent

years with respect to the development of tools that, at least rudimentarily, gauge levels of

homecoming satisfaction, ease, function, and connectedness, for example. One such

multidimensional instrument, the Army Post-Deployment Reintegration Scale, was

designed to measure participants' feelings about their military career, the quality of their

lives, and the nature of their close relationships (Blais, Thompson, & McCreary, 2009).

Following the development of this 36-item inventory, Blais et al. noted their study

substantiated that "reintegration is not solely about returning to a garrison environment,

but it also is about returning to one's family and integrating one's personal experiences

into an overarching view of the world" (p. 379), underscoring the notion that

reintegration may be much less about physical relocation than it is about an upheaval of

relationships, purpose, and identity. A second inventory, the Community Reintegration

of Injured Service Members (Resnik et al., 2012), measures the degree of relative success

a veteran may be experiencing in eight distinct roles (e.g., learning and applying

knowledge, general tasks and demands, communication, mobility, self-care, domestic

life, interpersonal relationships, major life areas, community, social and civic life).

Empirical application of the instrument outside of the authors' own work was difficult to

locate and the inventory did not appear to be in the public domain; however, it may

provide researchers an additional option for assessing veteran satisfaction with and

perception of community reintegration while keeping participant burden low (i.e., 10-20

items). A third, newly-developed assessment, the Military to Civilian Questionnaire,

offers a 16-item inventory designed to "assess difficulty in areas hypothesized as

providing the basis for postdeployment community reintegration: (a) inter-personal

relationships with family, friends, and peers; (b) productivity at work, in school, or at

home; (c) community participation; (d) self-care; (e) leisure; and (f) perceived meaning in

life" (Sayer et al., 2011, p. 5). In their discussion, study authors offered, "Although State

and Federal programs focus on postdeployment community reintegration of OEF/OIF

combat veterans, this is the first inventory to measure postdeployment community

reintegration difficulty that has been tested in a relatively large and diverse random

sample of veterans" (Sayer et al., 2012, p. 9), making it the most desirable reintegration

instrument available in the public domain and the assessment of choice for this

dissertation research.

Reintegration programs are also undergoing a period of overhaul (Center for

Military Health Policy Research, 2008). Just as the experience of combat and

deployment changed drastically from World War II to the Vietnam Conflict, so too have

the experiences of warfare, disabilities, outcomes, services, veterans' needs, and

community perspectives changed from the time of Gulf War 1 (1990) to the current

Global War on Terror. Despite exponential increases in the funds allocated for the

treatment of service-related injuries and illness, the Department of Defense and the

Veterans Administration appear to be struggling to remain abreast of the needs of

discharged soldiers (Winston, August, 2013). So critical is this transitional period that the

Army addresses it in reintegration trainings such as the Soldier for Life program, during

which soldiers are taught to "start strong, serve strong, reintegrate strong, and remain

strong" (http://soldierforlife.army.mil/about).

Reintegration Hurdles

A vast body of literature, both empirical and anecdotal, suggests that reintegration

difficulties among service members are not uncommon. Such struggles may be

behavioral, emotional, or psychological in nature and may include obstacles such as

reconnecting with spouse or children, dashed expectations about the bliss of

homecoming, dissatisfaction with civilian roles and responsibilities, and lack of perceived

or actual support on behalf of the American people (Pisano, 2010).   For example, in their

study of 300 active duty Army couples, Allen et al. (2011) found that for veterans

returning home disillusioned by their service, burdened by financial stress, uncertain as to

where to turn for support, or embroiled in marital discord, the reintegration process

would be all the more stressful. To wit, increasing numbers of returning service members

are in need of couples and family therapy to deal with relational degeneration brought

about by deployment (Makin-Byrd, Gifford, McCutcheon, & Shirley, 2011). Moreover,

in her review of the challenges faced by returning service members, Jordan (2011) highlighted the hypothesis that there are untold numbers of warriors returning home with undiagnosed traumatic brain injuries (TBI), which may manifest with some of the same symptomology as PTSD. Taking all of these issues into account, one school psychologist working out of the Fort Bragg school system in North Carolina notes what many in the field routinely observe in that "reintegration is surprisingly stressful and may be painfully disappointing" (Pisano, 2010). Consequently, many service members return home to a dangerous trifecta of unresolved combat-related trauma, a lack of appropriate social support, and difficulties with reintegration.

It is unsurprising, then, that the number of veterans reporting mental health consequences is at an historical high. In their study of Iraq and Afghanistan veterans between the years of 2002 and 2008, Seal et al. (2009) found that the number of service members receiving mental health diagnoses had increased six fold over the seven-year study period. Study authors went on to note that of those veterans utilizing Veterans Health Administration (VHA) facilities for the first time following separation from service ($N = 289,328$), approximately 40% "received mental health diagnoses or were found to have psychosocial and behavioral problems or both" (p. 1654). Although increases in diagnoses and services rendered could be attributable to several factors (e.g., an evidential increase in trauma responses, improved screening measures for mental health consequences, decreasing stigma concerning PTSD), it is likely that there has also been an increase in the incidence of mental health issues and reintegration struggles.

In addition to mental health distress reported by service members, many postdeployed veterans face issues of a more behavioral ilk upon return to civilian society. A host of the ingrained skills and attitudes, designed to keep soldiers safe while at war, prove to be maladaptive post-deployment. Researchers such as Basham (2008), Foran, Adler, McGurk, and Bliese (2012), Jordan (2011), and Sayers (2011) have focused on the military's B.A.T.T.L.E.M.I.N.D. concept (an acronym for a set of combat-appropriate, civilian-inappropriate mindsets) as a means of bridging the gap in the current understanding of the significant cognitive shifts that must take place for transitioning soldiers. Anecdotal evidence alone confirms the fact that the soldier deployed is very often not the same individual when he returns home (Jolicouer, September, 2014). Combat-appropriate aggression may lead to overreactions at home, hypervigilance can lead to service members' inability to relax in the presence of civilians, and mission-level secrecy can result in a breakdown in communication between the veteran and his civilian supports (Jordan, 2011; Sayers, 2011). Additional issues include service members' need to be in control of the spaces and things around them at home, their desire to be armed while among civilians, and their expectation that the people around them will be disciplined and obey orders at all times (Jordan, 2011; Sayers 2011). Many veterans struggle to make meaning of the events that were experienced while deployed (Basham, 2008) but many will also struggle with making meaning of the mundane responsibilities associated with being a civilian once more. Having to readjust to a civilian-appropriate set of behaviors can impede a veteran's return to previous homefront roles and responsibilities.

In one study of Canadian veterans returning from OIF/OEF deployments (Black, 2007), more than three-quarters of the sample reported that reintegration was "difficult", with approximately 21% noting that it was "very difficult". The reasons for reintegration difficulties are varied and may differ based upon a service member's personality, trauma history, length of deployment, combat experiences, and a myriad other variables. Yet not nearly enough has been done to bring light to this issue. Ray and Heaslip (2011), in their review of the literature concerning the reintegration of Canadian service members, reported "no studies found in the Canadian literature on interpersonal readjustment for veterans … transitioning to civilian life" (p. 200), and little more has been done with respect to U.S. veterans.

Trauma, Social Support, and Reintegration

Researchers are beginning to study the relationship between social support and combat-related trauma insomuch as it contributes to service members' abilities to function following deployment (Dieperink, Leskela, Thuras, & Engdahl, 2001; Escolas, Arata-Maiers, Hildebrandt, Maiers, Mason, & Baker, 2012; Ghafoori, Hierholzer, Howsepian, & Boardman, 2008; Harari, Bakermans-Kranenburg, de Kloet, Geuze, Vermetten, Westenberg, & van IJzendoorn, 2009; Jordan, 2011; King et al., 1998; Tsai et al, 2012;). In both the civilian and military literature, researchers have conducted studies that examine the correlation between pairings of the above-mentioned variables, the predictive power of these constructs, and the interrelatedness of these issues with respect to how they influence the physical and emotional well-being of service members

as well as treatment adherence and outcomes. This section discusses some of the studies integral to this research.

Numerous research initiatives are currently directed at the ability to predict not only the onset of PTSD (Blumenthal, Maliha, & Mathews, 2012; Bowen, Martin & Mancini, 2013; Dikel et al., 2005; Escolas et al, 2012; James, Kampen, Miller & Engdahl, 2013; Kemp & Bossarte, 2012; Palmer, 2008; Rademaker et al, 2011; Schnurr et al, 2004), but also its course following a service-related stressful event (Elwood, Mott, Williams, Lohr, & Schroeder, 2009; Laffaye et al, 2008; Schnurr et al., 2004). Studies examining risk and resiliency factors associated with trauma response reflect researchers' growing understanding of the etiology of trauma among veterans. One such study conducted by King, King, Fairbank, Keane, and Adams (1998) included social support in their path analyses of more than 1,600 Vietnam veterans. The researchers were able to support the hypothesis that social support plays a large role in predicting PTSD. In fact, in their final structural model of the associations among war zone stressors, resilience-recovery factors, and post-traumatic stress disorder (PTSD), functional social support had the largest effect on PTSD. Moreover, factors such as cohort support within the military unit, non-shaming military leadership, and ongoing social support have all been shown to be protective against the development of trauma symptoms (King et al., 1998). Although the data analyzed were collected 25 years ago from a sample of Vietnam veterans, its robust analyses and focus on resiliency-recovery variables render this study one of the oft-cited articles concerning the prediction of service-member PTSD.

In their study of 538 OIF/OEF veterans based in Michigan and Ohio, Duax, Bohnert, Rauch, and Defever (2014) established that the degree to which service members "emotionally hid" (defined loosely as holding back on feelings) was directly correlated with a diagnosis of PTSD. Of interest in this study is the fact that those participants who were married were actually more likely to endorse PTSD symptomology than their single counterparts, with 44% of married participants and 45% of single participants screening positive for PTSD. The authors acknowledged that any future iterations of this study should include a differentiation between civilian support and military support, since service members experience the two so distinctly. The Military to Civilian Questionnaire to be employed in this dissertation differentiates between the two forms of support to a degree, yet, given the complexities of social support, a separate study to discern exactly how the various forms of social support differ between civilian and military relationships is warranted.

Social support in the form of military friendships is unquestionably an important part of stateside rehabilitation and reintegration for traumatized service members. In their analyses of interviews conducted with postdeployed Reservists and Guardsmen, Hinojosa and Hinojosa (2011) examined the interplay of social support, trauma, and postdeployment reintegration. Their findings suggested that the role of military support is not to be diminished and an "emergent approach to therapy within the VHA regarding the effect of veteran support groups certainly accounts for these connections" (p. 1153). The authors used grounded theory method, lending rich perspective to the data surrounding the homecoming experience, and asked a series of questions about the participants'

predeployment, deployment, and postdeployment experiences. Although the sample size

was relatively small (*n* = 20) and the responses were restricted to National Guardsmen

and Reservists, the authors' analyses of themes furnished researchers with information

concerning the roles of military friendships according to the various stages of

deployment. The authors' findings underscored the fact that the postdeployed veteran

who has experienced service-related stress or trauma is often left to process the

experience either on his own or with civilian counterparts who have never known the

experience of combat. Hinojosa and Hinojosa concluded, "this transition home is when

maintaining the strong bond with military friends would be most beneficial to the men"

(p. 1151), and "reintegration interventions could routinely provide veterans with access to

other veterans during the reintegration process" (p. 1154). In support of these

conclusions is a study conducted by Smith et al. (2013) with 1,571 Marines which found

that military support alone was protective against posttraumatic stress symptoms that may

develop as a result of exposure to a stressful military event. Civilian support did not

provide a significant buffer. Since some trauma theorists have hypothesized that

traumatic experiences are stored largely within non-verbal areas of the human brain

(Mészáros, 2010), it makes sense that veterans may prefer the company of those who can

appreciate their experiences intuitively (i.e., other service members) as opposed to

civilians. To wit, Jordan (2011) noted, "In combat, veterans develop close cohesive

bonds with other veterans that will often last a lifetime. At home, combat service veterans

might prefer being with their buddies who understand, rather than with family and friends

who cannot relate" (p. 265).

As noted above "the connection between depressive symptoms and relationship distress is bidirectional in nature" (Knobloch and Theiss, 2011, p. 471). In one study of 164 veterans of the Iraqi and Afghan conflicts, Tsai et al. (2012) found that those service members who screened positive for PTSD had, among other things, substantially poorer social functioning and less overall social support at their disposal. The authors looked only at service members who had been home for less than a year -- the period when reintegration struggles are most evident -- and deployed two of the instruments (the PCL and the DRRI) selected for this dissertation study. They found PTSD to be significantly correlated with social support scores ($r = .59$, $p < .01$; Tsai et al., 2012). One critique of this study, common to many studies of veterans, is that its sample was drawn entirely from service members who presented themselves to the VA for primary care or mental health services. Given the ongoing mental health stigma among service members (Adler, Castro, & McGurk, 2009; Hoge et al., 2004; Milliken et al., 2007; Stecker, Fortney, & Sherbourne, 2011; Veteran's Health Administration Office of Inspector General, 2012), the fact that many veterans are reluctant to avail themselves of professional mental health services (Hoge et al., 2004; Stecker et al., 2011), and long wait times for service members to be seen at the Veterans Administration (Center for Military Health Policy Research, 2008; Veterans Administration Office of Inspector General, 2012), the generalizabilty of the sample to the greater population of veterans may be in question.

Since service members frequently report a mistrust of civilian mental health providers (Strom, Gavian, Possis, Loughlin, Bui, Linardatos, Leskela, & Siegel, 2012), an inability to process trauma experiences with civilian friends and family members

(Varanelli, 2009), and an overall sense of stateside disconnectedness postdeployment (Bowman, 2011), research that addresses the role of social support among service members in the prevention of poor reintegration outcomes is critical. As Mészáros (2010) noted, "The role of the trusted person is of key importance in terms of the later fate of the traumatized individual" (p. 338); she went on to posit that "the presence or lack of the trusted person decides the extent to which the traumatic experience affects the person and influences his or her fate in the long run" (p. 338).

Many PTSD symptoms, such as restricted range of affect, feelings of detachment, numbing, and markedly diminished interest or participation in significant activities, inherently compromise the quality of service members' interpersonal connections. Another study that looked at the corrosive properties of PTSD on social support was conducted among a sample of 431 present day veterans (Jakupcak et al., 2010). This study is important in that 55% of the sample were single veterans (whereas much of the published research pertains primarily to married veterans) and it assessed for suicidal ideation. The authors reported that "married Veterans were 53% less likely to be in the elevated suicide risk group relative to unmarried Veterans" and "marital status and Veterans' ratings of satisfaction with social networks were independently protective for suicide risk" (p. 1003). As noted above, studies that capture only those veterans using VA services at the time of enrollment necessarily exclude those service members who are either being seen in the private sector or who may be going without primary care or mental health services altogether.

The critical relationship between social support, PTSD, and reintegration is evident in the treatment and adjustment literature as well. For example, Price, Gros, Strachan, Ruggiero, and Acierno (2013) substantiated the favorable effects of social support on trauma treatment outcomes among a sample of 69 OEF/OEF veterans with PTSD or subthreshold PTSD. Thus, it can be inferred that social support not only buffers against the development and worsening of PTSD symptoms, but also serves to facilitate and predict treatment response in service members.

As the above research indicates, interpersonal connections are significant for service members, particularly those with service-related trauma experiences. The conditions of postdeployment relational difficulties and service-related trauma have been shown to exacerbate one another, creating an incessant, adverse feedback loop. Moreover, unresolved trauma has the capacity to worsen relationship difficulties, which in turn compound the service member's vulnerability to isolation, which in turn contributes to poor mental health and diminished quality of life. Thus, appropriate, dependable, and meaningful social support is a critical component of the veteran's stateside reintegration processes, especially when trauma is present.

An overall critique of most military-sponsored research published today is its sampling method. Recent research concerning veterans' experiences of reintegration, transition, and adjustment is most commonly conducted with warriors who are seen for services at the U.S. Department of Veterans Affairs. As noted above, the exclusion of veterans who do not utilize government-sponsored services for their physical or mental health needs marks a significant limitation in these studies' applicability to the veteran

population as a whole. Since many veterans may wait years before seeking treatment for PTSD (Sayer, Clothier, Spoont, & Nelson, 2007), data collection efforts that survey only those veterans who present themselves for treatment necessarily exclude precontemplative (Prochaska & DiClemente, 1986) and/or undiagnosed individuals who may be experiencing service-related trauma. As such, it is hoped that Web-based, word-of-mouth research will reach a sample of the veteran population that may not be as well-represented in the extant literature.

There are several ways in which this dissertation research endeavors to add to the current body of literature concerning veterans of the wars in Iraq and Afghanistan. First, data collection will be restricted to single (e.g., unpartnered) male service members. Single, male service members are hypothesized to have less access to social support than their married counterparts (Jakupcak et al., 2010) and thus in order to test this assumption, recruitment efforts will focus solely on single male veterans. Second, researchers in many of the existing data collection efforts primarily culled their samples from postdeployed service members seeking services at the Veterans Health Administration. Although there is no guarantee that participants in this dissertation are not being seen at the VHA, it is hypothesized that a snowball sampling that begins with service members who are not recruited through the Veterans Health Administration will draw a more varied pool of veteran participants. The assumption is that service members not in the care of the VHA may be more likely to be living with undiagnosed PTSD and, consequently, may be faring worse with respect to social support and reintegration (Sayer, Clothier, Spoont, & Nelson, 2007).

CHAPTER III

METHODS

In Chapter 2, the most recent and relevant literature concerning trauma among service members, the role of social support in ameliorating trauma symptoms, and the reintegration experiences of U.S. veterans was reviewed. In Chapter 3, the study design for testing the relationship between social support and post-deployment reintegration success among veterans with trauma is outlined. Specifically, in this chapter, I present the proposed research questions and hypotheses, participant inclusion criteria, measures selected or designed for this study, and preliminary plans for data analyses. I conclude Chapter 3 with results of the pilot study and a discussion of the limitations of the proposed research.

Research Questions and Hypotheses

The research questions and hypotheses for the proposed dissertation are as follows:

Research Question #1: Is post-deployment social support correlated with post-deployment reintegration success among single, male, Iraq and Afghanistan veterans with trauma?

> Hypothesis 1: Post-deployment social support will be shown to be positively correlated with post-deployment reintegration success among single, male, Iraq

and Afghanistan veterans with trauma. As levels of social support increase, service members will experience greater reintegration success.

Research Question #2: Is a service member's level of trauma correlated with his experience of post-deployment social support?

Hypothesis 2: A service member's level of trauma is expected to be negatively correlated with his experience of post-deployment social support. Service members with higher levels of trauma are expected to report poorer experiences of post-deployment support.

Research Question #3: Does post-deployment social support moderate the effects of service member trauma on service member reintegration success?

Hypothesis 3: Post-deployment social support is expected to moderate the effects of the service member's trauma on his ability to reintegrate with success. In other words, post-deployment social support will temper the effects of trauma and enhance service members' abilities to successfully reintegrate into their civilian communities. As social support increases, the effects of trauma for veterans will be moderated and they will experience more satisfactory reintegration outcomes.

Research Question #4: How do the social support experiences of Reservists and Guardsmen differ from those of Active Duty (i.e., Army, Navy, Air Force, Marine Corps, Coast Guard) service members?

Hypothesis 4: Those who deploy from Reserve and National Guard units are generally expected to report poorer experiences of social support. In other words, those who deploy from Active Duty units are expected to report higher levels of

social support given the daily, ongoing relationship with other members of their
unit.

Research Question #5: How do the reintegration experiences of Reservists and
Guardsmen differ from those of Active Duty (i.e., Army, Navy, Air Force, Marine Corps,
Coast Guard) service members?

Hypothesis 5: Those who deploy from Reserve and National Guard units are
generally expected to report better experiences of reintegration. Given their
"weekend warrior" status, Reservists and Guardsmen are expected to more readily
return to their civilian lives post-deployment.

Participants

The population under study is single, male veterans returning home from recent
(i.e., within the past 12 months) military tours in Iraq or Afghanistan. Participants must
not be anticipating re-deployment within the next 12 months, given that the experience of
reintegration may be delayed in service members for whom re-deployment is imminent.
Thus, in order to be included in the study, all participants must be unpartnered males (i.e.,
no significant other at the time of enrollment), who have served in the United States
Army, Navy, Air Force, Marine Corps, Coast Guard, National Guard, or Reserves, and
are recently returned home with no plans for redeployment within the coming year.
Participants must have served at least one tour of duty in Iraq or Afghanistan and self-
identify as having experienced some service-related trauma signs or symptoms. Finally,
all participants must be 18 years of age and read English with fluency. Given the purpose
of this study, those excluded from enrollment will be the following: female service

members; married or otherwise partnered service members; those veterans who do not self-identify as having experienced some form of service-related trauma; those currently incarcerated, hospitalized, or enrolled in a residential treatment program; and those anticipating re-deployment within the next 12 months.

For the first two research questions, an a priori power analysis (G*Power 3.1) for bivariate correlations suggests a sample size of 23 for medium effect size (.50), alpha of .05, and power of .80. For the third research question, an a priori power analysis (Statistics Calculators, http://www.danielsoper.com/statcalc3/) for multiple regression with two predictors, medium effect size (.15), alpha of .05, and power of .80 suggests a sample size of 67 is required. The fourth and fifth research questions call for Analyses of Variance (ANOVA). An a priori power analysis (G*Power 3.1) for ANOVA (fixed effects, omnibus, one-way) suggests a sample size of 128 for an effect size of .25, alpha of .05, and power of .80. In order to account for any respondents with incomplete data, the research will collect a total of 150 responses.

Instruments

The instruments to be used in this study include a set of demographic questions, the Posttraumatic Stress Disorder Checklist – Military Version (PCL-M), the Postdeployment Social Support Scale (Section O) of the Deployment Risk and Resilience Inventory-2 (DRRI-2), the Military to Civilian Questionnaire (M2C-Q), and the Alcohol Use Disorders Identification Test Alcohol Consumption Questions (AUDIT-C). All items will be formatted for Web-based administration via Qualtrics™ and the

assessments will be administered in the order specified below. The total number of

questions for the proposed study will not exceed 62.

Demographics

The first instrument following the consent form will be a 14-item demographic

assessment. Questions used to confirm participant inclusion criteria will require

responses. These items include questions of age, gender, relationship status, parental

status, family history of military service, date of military discharge, number of tours

completed, and plans for redeployment within the next 12 months.   Due to the ongoing

stigma concerning service-related trauma within the military, participants will be

permitted to opt out of any remaining demographic items including questions of race,

ethnicity, branch of service, and rank. Responses to demographic items will be used to

generate frequencies as well as to establish that all respondents meet study criteria

without soft-exiting those participants who do not.

Posttraumatic Stress Disorder Checklist - Military Version

In order to assess participants' level of trauma, the Posttraumatic Stress Disorder

Checklist - Military Version (PCL-M; www.ptsd.va.gov) will be administered. The PCL-

M is a 17-item, self-report measure designed to assess an individual's level of service-

related trauma by gauging how much the veteran has been troubled by trauma-related

symptoms during the past month. Responses fall on a 5-point Likert scale ranging from

"not at all" to "extremely" and produce total interval scores ranging from 17 (i.e., no

trauma) to 85 (i.e., severe trauma). A sample item reads, "Please indicate how much you

have been bothered in the past month by repeated, disturbing memories, thoughts, or

images of a stressful military experience?" Service members will be considered as having Full-Blown PTSD if they endorse at least one B criterion (i.e., items 1-5), three C criterion (i.e., items 6-12), and two D criterion (i.e., items 13-17) of posttraumatic stress disorder as defined by the <u>Diagnostic and Statistics Manual of Mental Disorders IV (DSM-IV)</u>. Service members will be considered as having Subclinical service-related trauma if they endorse at least one question in each of the above-mentioned categories on the PCL-M.

The PCL-M offers solid test-retest reliability (.96), internal consistency (.92-.97), and convergent validity (.46-.93), and is highly correlated with clinician-administered measures (Norris & Hamblen, 2003; VA National Center for PTSD, 2010). The instrument was specifically designed to measure trauma response among U.S. service members and has been used by clinicians and researchers to diagnose PTSD since its creation in 1993 (Fissette et al., 2014; Richardson et al., 2012; Wilkins, Lang, & Norman, 2011). The PCL-M is in the public domain and available through the Veterans Affairs National Center for PTSD at http://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp.

Alcohol Use Disorders Identification Test

The AUDIT-C (Bush, Kivlahan, McDonell, Fihn, & Bradley, 1998) was developed in 1998, shortening the original 10-item AUDIT instrument to just three items for the purposes of quickly screening for hazardous or disordered drinking. A sample item reads, "How often do you have six or more drinks on one occasion?" and a total interval score of 4 or more is suggestive of hazardous drinking or active alcohol use

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disorder in men (Bush, Kivlahan, McDonell, Fihn, & Bradley, 1998). Validation for use

of the AUDIT-C with veteran populations was conducted among samples of 393 female

veterans (Bradley et al., 2014), 625 male and female civilians in the Southeastern United

States (Johnson, Lee, Vinson, & Seale, 2013), and 1,775 Iraq and Afghanistan veterans

(Crawford, Fulton, Swinkels, Beckham, & Calhoun, 2013). Psychometric studies suggest

that for men the AUDIT-C's sensitivity ranges from .79-.95 and its specificity ranges

from .45-.72 (Bush et al., 1998). The instrument is in the public domain and available for

research and clinical administration through the Substance Abuse and Mental Health

Services Administration (SAMHSA) at

(http://www.integration.samhsa.gov/images/res/tool_auditc.pdf).

Postdeployment Social Support Scale

The Postdeployment Social Support Scale is a subscale (Section O) of the

Deployment Risk and Resilience Inventory-2 (DRRI-2; Vogt, Smith, King, & King,

2013) and will be used to assess the extent to which family, friends, and the community

provide emotional sustenance and instrumental assistance for survey respondents. The

DRRI-2 was created in 2008 specifically for the postdeployed population of present day

military conflicts and was normed on samples of Gulf War I veterans in three distinct

psychometric studies (Vogt et al., 2013). The social support referenced in items such as,

"My family and friends understand what I have been through in the Armed Forces," was

tailored expressly to the experiences of veterans of recent international conflicts. The

Postdeployment Social Support Scale is a 10-item subscale of the DRRI-2 and uses a 5-

point response scale (1 = strongly disagree, 5 = strongly agree) producing a total possible

interval score of 10 to 50; higher scores suggest greater perceived social support. In

order to establish consistency among all instrument scores in this study, the PSSS

responses will be recoded so that higher scores indicate poorer outcomes. Research

conducted on the original DRRI demonstrated strong factorial validity (α = .90; r = -.46),

high internal consistency reliability, and low social desirability (King, King, & Vogt,

2003). The revised instrument is currently available free of charge for research purposes

only through the National Center for PTSD at

http://www.ptsd.va.gov/PTSD/professional/assessment/deployment/index.asp.

Military to Civilian Questionnaire

The Military to Civilian Questionnaire (M2C-Q) (Sayer et al., 2011) is a newly

developed, 16-item measure designed to assess postdeployment community reintegration

difficulty among veterans. Responses correspond with a 5-point Likert scale (i.e., 0 = no

difficulty, 1 = a little difficulty, 2 = some difficulty, 3 = a lot of difficulty, and 4 =

extreme difficulty) producing total scores ranging from zero to 64; higher scores suggest

significant reintegration struggles over the past 30 days. The instrument was designed for

and normed on a sample of 1,226 Iraq and Afghanistan veterans who were using U.S.

Department of Veterans Affairs medical services (Sayer et al., 2011). A sample item

reads, "Over the past 30 days, have you had difficulty with feeling like you belong in

civilian society?" The assessment offers high internal consistency (Chronbach's α =

.95). The M2C-Q was created by members of the VA Health Care System and can be

found in their 2011 article, "Military to Civilian Questionnaire: A measure of

postdeployment community reintegration difficulty among veterans using department of veterans affairs medical care" (Sayer et al., 2011).

Procedures

Prior to implementation, the study's processes and instrumentation will be piloted with up to 15 members (i.e., 10% of the study's sample) of the United States Armed Forces who meets all recruitment criteria for the study. Following analyses of data and the receipt of feedback from pilot participants, any necessary edits to the study will be made, a modification will be submitted to the Institutional Review Board (IRB) for approval, and the full study will be deployed.

All aspects of the study's recruitment and data collection procedures will be electronic. In order to collect responses from 150 participants meeting the specified inclusion criteria, a snowball sampling method (Goodman, 1961) will be employed. It is anticipated that word-of-mouth will be the most effective way to reach the desired population of service members and accordingly the Principal Investigator will distribute invitational emails to personal contacts embedded within or recently separated from the Armed Forces. An invitational script to be used in email solicitations may be found in Appendix F. All recruitment communication will contain an embedded link to the study's online survey deployed by Qualtrics™.

The first page of the online survey will contain a welcome message to participants and introductory remarks about the survey, including inclusion and exclusion criteria. The second page will include the study's informed consent as approved by The University of North Carolina at Greensboro's IRB (Appendix C). Participants will

acknowledge their comprehension of and agreement with the informed consent by clicking the "Next" button at the bottom of the consent page. The third page of the survey will include demographic questions. Questions pertaining to age, gender, relationship status, parental status, date of discharge, number of tours completed, and plans for redeployment within the next 12 months will all require responses in order to progress to the assessments. Questions pertaining to race, ethnicity, branch of service, rank, and role may be skipped if participants elect to do so.

Following the demographic questions, the survey's four distinct assessments will be administered in the following order: 1. Posttraumatic Stress Disorder Checklist, 2. Alcohol Use Disorders Identification Test Alcohol Consumption Questions, 3. Postdeployment Social Support Scale, and 4. Military to Civilian Questionnaire. Responses are required for all quantitative items; no items or assessments may be skipped. A final qualitative question will ask participants if there is anything else about their post-deployment reintegration experience that is of relevance to the study; this item is optional. The total number of items, including demographic questions, is 62 and the entire survey is expected to take 20-25 minutes. The penultimate page of the survey will contain words of thanks from the researcher and a list of web-based resources for service members who may be struggling with issues of trauma and/or post-deployment reintegration. The final page will offer participants the opportunity to provide contact information to be entered into a drawing to win one (1) of four (4) $25 Visa gift cards. Data for the drawing will be stored separately by Qualtrics™ and sent to the Principal Investigator by via email. Both sets of data will be stored in separate databases on a

password-protected computer, ensuring confidentiality. All data for the study will be

erased seven years from the completion of the study.

Data Analyses

Research Question #1: Is post-deployment social support correlated with post-

deployment reintegration success among single, male, Iraq and Afghanistan veterans with

trauma?

In order to test the strength of relationship between the continuous variables of

post-deployment social support and post-deployment reintegration success, a Pearson

product-moment correlation will be used. Individual associations will be represented

with a bivariate scatterplot and the overall sample's correlation coefficient (r) will be

represented by Pearson's correlation.

Research Question #2: Is a service member's level of trauma correlated with his

experience of post-deployment social support?

In order to test the strength of relationship between the continuous variables of

service member trauma and post-deployment reintegration success, a Pearson product-

moment correlation will be used. Individual associations will be represented with a

bivariate scatterplot and the overall sample's correlation coefficient (r) will be

represented by Pearson's correlation.

Research Question #3: Does post-deployment social support moderate the effects of

service member trauma on service member reintegration success?

In order to describe the relationship among the two continuous IVs (i.e., trauma,

social support) and the DV (i.e., reintegration outcomes) as well as identify the

moderating effects of social support, a multiple regression analysis will be used. Both

independent variables (i.e., trauma, social support) will be entered into the regression

equation to produce an initial R^2 depicting the amount of variance in post-deployment

reintegration outcomes explained by the predictor and moderator. Then, the interaction

variable (i.e., trauma x social support) will be entered into the regression equation to

create a new R^2 depicting the amount of variance in post-deployment reintegration

outcomes explained by trauma plus social support plus the interaction variable combined.

Finally, the new R^2 will be subtracted from the initial R^2 to determine the amount of

variance predicted by the interaction, or the moderating effect of social support on

trauma. If the difference is significant, it may be said that a moderating effect is taking

place.

Research Question #4: How do the social support experiences of Reservists and

Guardsmen differ from those of Active Duty (i.e., Army, Navy, Air Force, Marines

Corps, Coast Guard) service members?

In order to compare the mean scores of social support experiences between

Reservists/Guardsmen and those service members designated as Active Duty, an

Analysis of Variance (ANOVA) will be conducted. Reservists and Guardsmen will be

coded as group 2 and those listed as Active Duty will be coded as group 1. Then a one-

way ANOVA will be conducted to determine any significant differences between groups'

scores on the Post Deployment Social Support Scale.

Research Question #5: How do the reintegration experiences of Reservists and Guardsmen differ from those of Active Duty (i.e., Army, Navy, Air Force, Marine Corps, Coast Guard) service members?

In order to compare the mean scores of reintegration experiences between Reservists/Guardsmen and those service members designated as Active Duty, an Analysis of Variance (ANOVA) will be conducted. Reservists and Guardsmen will be coded as group 2 and those listed as Active Duty will be coded as group 1. Then a one-way ANOVA will be conducted to determine any significant differences between groups' score on the Military to Civilian to Questionnaire.

Pilot Study

Purpose

A pilot study was conducted in two waves. The purpose of the first wave was to test the protocol, processes, and instrumentation in advance of the dissertation's full study, while the purpose of the second wave was to collect responses from a small group of service members for data analyses. As such, an IRB-approved recruitment email (Appendix B) with a link to the study's survey was distributed to personal contacts of the principal investigator, inviting individuals to forward the survey to service members meeting the inclusion criteria. Data were collected over a seven-day period in February 2015 and examined. Descriptive statistics of the participants and observations of the pilot study data are presented. Implications for the full study, such as recommendations for changes in wording or recruitment strategy, are also discussed.

Procedures

In the first phase of pilot testing, military and civilian participants were asked to thoroughly review and respond to all components of the survey. Participants ($N = 4$) were to comprehensively appraise the wording, grammar, and format of the instrumentation; test the functionality of all embedded links; note the amount of time the survey required, and test the survey's ability to prevent multiple responses from the same IP address. Respondents furnished all feedback via email.

In the second phase of pilot testing, participants ($N = 6$) connected to the Qualtrics™ survey using a link provided in the recruitment email. Following the introductory screen, consent was indicated by scrolling through the IRB-approved informed consent and proceeding to the first set of quantitative questions. Respondents completed 14 demographic questions, 17 questions for the assessment of trauma, three questions for the assessment of alcohol use, 10 items concerning social support, and 16 items concerning postdeployment reintegration. A final, qualitative question asked participants "Is there anything else about your post-deployment reintegration experience that might be helpful for us to know?" The penultimate screen invited participants to furnish their email address in order to be included in a drawing for one of four $25 Visa gift cards. The final screen directed participants to a list of resources and referrals (http://www.ptsd.va.gov/public/web-resources/web-military-resources.asp) in the event additional support was needed following participation in the research.

Participants

Participants for the second phase of pilot testing were recruited from the military staff at Oak Ridge Military Academy (Oak Ridge, NC). Participants were single males, age 18 and older, having served at least one tour of duty in Iraq or Afghanistan. Pilot participants were excluded from participating if they were married, female, or planning to re-deploy within the next 12 months. Respondents were invited to forward the survey link along to friends or family who also met the inclusion criteria. Although 12 individuals began and completed portions of the survey, the final, valid N for the pilot was 6. Participants were single, male veterans ranging in age from 18 to 64 years. The majority of respondents were Caucasian ($n = 4$), Caucasian; one participant identified as Black and one identified as Other. Two participants were Latino. Three participants had some college, two held Bachelor's degrees and one was a high school graduate. Three (50%) of the six participants had children. Pilot respondents represented the service branches of Army, Air Force, Marine Corps, and National Guard; no participants had served in the Navy, Air Force, or Coast Guard. Two thirds ($n = 4$) were enlisted; two of the six were officers. The majority ($n = 5$) had no strong family history of military service. All respondents had completed two or three tours of duty in service of OIF/OEF/OND. No pilot respondents elected to enter into the drawing for the $25 gift card.

Results, **Discussion, and Implications**

Phase one of pilot testing was designed to test the protocol, processes, and instrumentation itself. Participants took between 10 and 16 minutes to complete the

survey and indicated that all items were clear and easy to understand. It was confirmed that the survey would not permit more than one entry from the same IP address and that respondents were permitted to skip individual items or complete assessments, if desired. One participant identified a glitch in the AUDIT-C (i.e., there was no way for survey participants to select "0" in response to the question "How many standard drinks containing alcohol do you have on a typical day?") and a change was made in the main study survey to correct this error.

Since the overall N of pilot phase two was insufficient for the statistical analyses proposed and no significant changes were made to the main study's survey, the decision was made to incorporate the pilot data into the main study data. However, Table 1 outlines pilot participants' scores on the primary assessments. Two thirds ($n = 4$) of the respondents met the full criteria for posttraumatic stress disorder and one met the criteria for subclinical trauma. Similarly, four respondents met the criteria for high-risk alcohol use. Although there are no empirical subcategorizations for the social support inventory, four participants scored above the assessment's median score of 30, suggesting poorer experiences of postdeployment social support. Similarly, four participants scored above the M2CQ's median score of 32, suggesting poorer experiences of postdeployment reintegration.

Table 1

Assessment Scores of Pilot Study Participants

ID	PCL-M	AUDIT-C	PSSS	M2CQ
1	Full-Blown PTSD (53)	Low Risk (2)	(47)	(34)

2	Full-Blown PTSD (60)	High Risk (6)	(24)	(42)
3	Subclinical Trauma (32)	Low Risk (3)	(36)	(22)
4	No Trauma (20)	High Risk (7)	(31)	(18)
5	Full-Blown PTSD (64)	High Risk (5)	(29)	(64)
6	Full-Blown PTSD (59)	High Risk (6)	(22)	(60)

Note: PCL-M = Posttraumatic Stress Disorder Checklist – Military Version; AUDIT-C = Alcohol Use Disorders Identification Test Consumption Questions; PSSS = Postdeployment Social Support Scale; M2CQ = Military to Civilian Questionnaire. High scores indicate poorer outcomes.

Given the small sample size of the pilot and inability to conduct statistical analyses, conclusive interpretations are not possible. However, observations of the participants' score suggest several possible findings. Those participants with high PCL-M scores had the highest M2CQ scores, suggesting a link between level of trauma and the ability to successfully reintegrate postdeployment. Also, the ongoing concern of substance abuse among service personnel is evidenced in this sample by the four participants who met the AUDIT-C's criteria for high-risk alcohol use disorder.

Most changes made to the full study were either minor in nature or expanded upon the existing question base. First, with respect to the question of age, participants in the full study will be invited to manually enter their age instead of selecting one of the seven pre-designated age ranges used in the pilot. Second, a question will be added to distinguish participants who have served in a full-time Armed Forces capacity versus a National Guard or Reservist capacity. Third, a formal assessment will be added to assess for suicidal ideation and risk behaviors (i.e., the Suicide Behaviors Questionnaire-Revised). Fourth, specific verbiage and resource links will be added to the screens assessing for alcohol use and suicidal risk for those participants who might need additional support. Fifth, additional quantitative questions will be added to the end of the

survey to assess for six specific mental or physical injuries (i.e., physical injury or disability; ongoing physical pain; traumatic brain injury (TBI); ongoing sleep issues; posttraumatic stress disorder; emotional distress, depression, anxiety) respondents may have experienced as a result of their service. Sixth, two quantitative items will be added concerning participants' use of professional therapeutic services and mental health pharmaceuticals over the past 12 months. Seventh, the survey will close with the following three qualitative items: 1) "Is there anything you wish had been different about your homecoming experience? Were there ways in which friends, family, the civilian community, the Veterans Administration, etc., could have done a better job of meeting your postdeployment needs?" 2) "To what degree do you feel you can talk about deployment-related experiences with civilian friends and family? To what degree is it helpful for you to talk with civilian friends and family? How does the experience of talking with civilian friends differ from talking with military friends?" and 3) "Is there anything else about your postdeployment reintegration experience that might be helpful for us to know?" Finally, changes will be made to the incentive offered as a result of no participants opting in to the gift card drawing. For the main study, $2 will be donated to the Wounded Warriors Project for every survey completed.

CHAPTER IV

FINDINGS

In Chapter 1, the study was introduced with a focus on the purpose of and need for this research. In Chapter 2, a review of the literature concerning service member trauma, experiences of post-deployment social support, and reintegration experiences upon homecoming was discussed. In Chapter 3, the methodology used in the current study, including the data collection protocol, research questions, hypotheses, and proposed data analyses, was presented. In this chapter, the results of the study are presented using descriptive statistics, correlations, regression analyses, chi-square analyses, and analyses of variance (ANOVA). First, the characteristics of the sample will be described in detail. Then, the results of preliminary and exploratory analyses are provided. Finally, the results of the analyses for each hypothesis will be presented.

Description of Recruitment Efforts and Participants

Participants were recruited via convenience sampling with an emphasis on snowball sampling (Goodman, 1961). Particular recruitment efforts included hundreds of personal email and social media messages, letters to university-based veteran groups, appeals to service-based clergy, fliers posted in fitness centers, meetings with local non-profit agencies serving veterans, in-person recruitment at various North Carolina National Guard units, and a paid Facebook advertisement. Web-based survey responses were collected via Qualtrics™ over a period of approximately eight months (03/14/15 through

11/20/15). Given the widespread distribution of the survey and the snowball

methodology used, it was impossible to calculate a definitive response rate; however, it is

estimated that the survey was seen by 3,000-4,000 individuals. A substantial number of

individuals entered the survey and immediately withdrew themselves. Participants were

permitted to skip individual questions and entire assessments if they chose, resulting in a

large number of partially-completed surveys. A total of 202 individuals clicked through

the entire survey to the final screen. Twenty-eight participants exited the survey at the

point of consent, 50 stopped responding at the first demographic question, and 17

disengaged at questions pertaining to trauma.   One response was deemed to be invalid

(i.e., participant provided the same response to every question) and so was removed from

the data set. Moreover, five respondents indicated they had served prior to September 11,

2001 (i.e., prior to OIF/OEF/OND efforts) and thus were excluded from analyses. Given

the fact that the pilot study produced an insufficient number of responses for statistical

analyses and no substantive changes were made to the full study, the pilot data ($N = 8$)

were included in the full study's data, resulting in a final, valid N of 109.

The original intent of the study was to collect responses from single, male

veterans returning home from recent (i.e., within the past 12 months) tours of duty in Iraq

or Afghanistan. Investigators had hoped to collect data exclusively from unpartnered,

recently post-deployed males who were not anticipating re-deployment within the next 12

months. Given the difficulties associated with such recruitment parameters during the

pilot phase of this study, researchers decided to open up recruitment to any service

member (e.g., male or female, married or single) who had deployed in service to the

Global War on Terror (i.e., since 09/11/01). Thus, female service members ($n = 18$), married service members ($n = 64$), and all veterans having served since the attacks on the World Trade Center and the Pentagon were welcome to participate in this study. Moreover, the decision was made by the research team to allow responses from those who might redeploy within the next 12 months ($n = 30$) as well as those who met the criteria for subclinical trauma ($n = 35$) versus Full-Blown PTSD.

Demographic characteristics were calculated for the sample and are presented in Table 2. The age of study participants ranged from 21 to 59 years of age and the average participant age was 35 years of age ($SD = 8.05$). Of the participants who answered the question of race, 84% identified as White, 6% identified as Black, and 5% identified as either American Indian, Alaska Native, Asian, or Native Hawaiian. Nearly twelve percent were of Hispanic, Latino, or Spanish origin. The majority of respondents (53%) had a bachelor's degree or higher. More than half (59%) were married at the time of data collection and a nearly equal number (56%) had children. (Given that the majority (82.6%) of participants were male, the research team elected to continue with the use of the male pronoun.)

Table 2

Demographics of Main Study Participants

Demographic Characteristic	*n*	%
GENDER		
Male	90	82.6
Female	18	16.5
MISSING	1	0.9
TOTAL	109	100

Demographic Characteristic	*n*	%
RACE		
American Indian or Alaska Native	2	1.8
Asian or Asian-American	2	1.8
Black or African-American	6	5.5
Native Hawaiian or Other Pacific Islander	1	0.9
White or Caucasian	91	83.5
Other	7	6.4
MISSING	0	0
TOTAL	109	100
HISPANIC ETHNICITY		
Yes	13	11.9
No	94	86.2
MISSING	2	1.8
TOTAL	109	100
EDUCATION		
High School or GED	8	7.3
Some College	26	23.9
Associate's Degree or Trade Certificate	14	12.8
Bachelor's Degree	31	28.4
Master's Degree	27	24.8
Post Graduate Degree	2	1.8
MISSING	1	0.9
TOTAL	109	100
RELATIONSHIP STATUS		
Married	64	58.7
Divorced	17	15.6
Widowed	1	0.9
Separated	2	1.8
Engaged or Cohabitating	6	5.5
Dating	8	7.3
Never Married	9	8.3
Single	17	15.6
MISSING	1	0.9
TOTAL	109	100
HAVE CHILDREN		
No	47	43.1
Yes, and they live with me full-time	42	38.5

Demographic Characteristic	n	%
Yes, and they live with me part-time	9	8.3
Yes, and they do not live with me	10	9.2
MISSING	1	0.9
TOTAL	109	100

Demographics related to participants' military service were also calculated and are presented in Table 3. Nearly half (49%) had served in the Army, 18% in the Air Force, 18% in the Marine Corps, and 8% in the Navy.   Three out of four (75%) had served in the Armed Forces and 20% had served in the National Guard or Reserves at some point. The majority of respondents were enlisted service members (62%) as opposed to officers (28%). Nearly one in two (49%) service members had completed two or more tours of duty in service to OIF/OEF/OND. A strong family history of military service was reported by 46% of respondents.

Table 3

Service-Related Demographics of Main Study Participants

Service Description	n	%
BRANCH OF SERVICE		
Air Force	20	18.3
Army	53	48.6
Coast Guard	2	1.8
Marine Corps	20	18.3
Navy	9	8.3
Other	2	1.8
MISSING	10	9.2
TOTAL	109	100
CAPACITY OF SERVICE		
Armed Forces	82	75.2
National Guard	13	11.9

Service Description	*n*	%
Reserves	9	8.3
MISSING	11	10.1
TOTAL	109	100
FIELD STATUS		
Enlisted	67	61.5
Junior Officer	16	14.7
Senior Officer	14	12.8
MISSING	12	11.0
TOTAL	109	100
TOTAL OIF/OEF/OND DEPLOYMENTS		
One	47	43.1
Two	21	19.3
Three	15	13.8
Four or more	17	15.6
MISSING	9	8.3
TOTAL	109	100
STRONG HISTORY OF FAMILY MILITARY SERVICE		
Yes	50	45.9
No	58	53.2
MISSING	1	0.9
TOTAL	109	100
LENGTH OF TIME HOME FROM DEPLOYMENT		
Actively serving	24	22.0
Home for less than 12 months	21	19.3
Home for one to five years	39	35.7
Home for longer than 5 years	23	21.1
MISSING	2	1.8
TOTAL	109	100
PLANS TO RETURN TO ACTIVE DUTY		
Yes	24	22.0
No	70	64.2
Maybe	6	5.5
MISSING	9	8.3
TOTAL	109	100

Participants were asked whether they had suffered from six common postdeployment outcomes and the frequencies are presented in Table 4. Nearly one in three (27.5%) were living with physical injury or disability due to their service. Almost one third (29.4%) experienced deployment-related ongoing physical pain and 9% reported having been diagnosed with a traumatic brain injury (TBI). Thirty-two (29.4%) respondents reported ongoing sleep issues. Nearly one in two (45%) suffered from posttraumatic stress disorder and 44 (40.4%) indicated they were living with emotional distress, depression, or anxiety. Of note, the number of participants with diagnosable PTSD (56%) per responses on the PCL-M was notably higher than the frequency of respondents who indicated they suffered from posttraumatic stress disorder (45%).

Table 4

Service-Related Injuries of Main Study Participants

Service Descriptive	*n*	%
Physical injury or disability	30	27.5
Ongoing physical pain	32	29.4
Traumatic brain injury (TBI)	9	8.3
Ongoing sleep issues	32	29.4
Posttraumatic stress disorder	49	45.0
Emotional distress, depression, anxiety	44	40.4

Participants' latitude and longitude were gathered from their computers' IP addresses at the time of survey completion and used to estimate respondent location. Figure 2 includes a Qualtrics™ map detailing the geographic distribution of the sample's participants.

Figure 2

**Geographic Distribution of Main Study Participants**

Description of Preliminary Analyses

Several items were re-coded from their Qualtrics™ assigned numerical value in order to assist with meaningful interpretation of assessment scores. In order to establish consistency among instrument scores, the PSSS responses were recoded so that higher scores indicated poorer social support outcomes. Also, several new variables were created for the purposes of computing assessment scores, transforming variables into binomial responses, or grouping respondents into subcategories (e.g., enlisted, junior officer, senior officer). Additionally, pilot data asked for participant age in terms of ranges (e.g., 25-34). In order to analyze pilot responses with the full study data, each pilot respondent was assigned the median age of the age bracket (e.g., 25-34 years) he had selected.

Prior to hypothesis testing, assessments of the normality of the data were conducted. First, to test for independence of observations, the Durbin-Watson statistic was calculated. For this sample, the statistic ($d = 2.17$) was between the two critical values ($1.5 < d < 2.5$), suggesting there is no first order linear auto-correlation in the multiple linear regression. Second, analysis of partial regression scatterplots indicated a linear relationship between the dependent variable of post-deployment reintegration outcomes and the independent variables of trauma and social support (Figures 3 and 4).

Figure 3

Scatterplot of Level of Trauma by Reintegration Outcomes
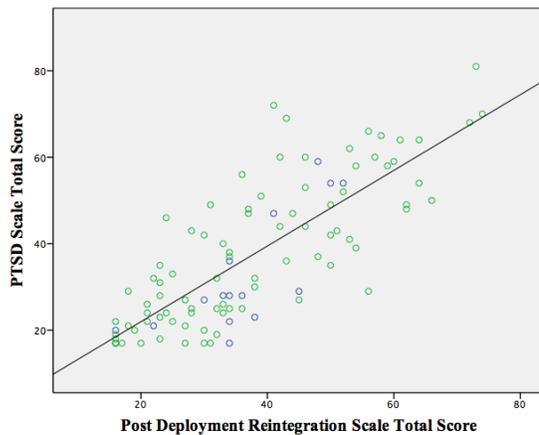
Figure 4

**Scatterplot of Social Support by Reintegration Outcomes**
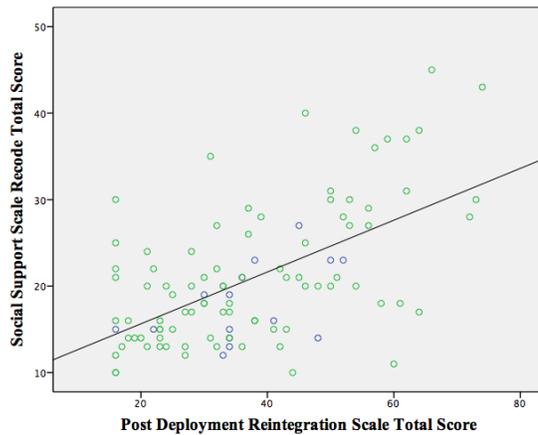
Third, analyses evidenced homeoscedacity as seen in Figure 5. Fourth, tests to see if the

data met the assumptions of collinearity indicated that multicollinearity was not a concern

within the dataset (*VIF* = 1.27). Fifth, outliers were individually investigated and

addressed; assessment scores falling more than two standard deviations outside of the

norm were removed from analyses. Finally, a histogram with a superimposed normal

curve (Figure 6) suggested that the residuals were approximately normally distributed.

Figure 5

**Normal P-P Plot of Regression Standardized Residual**

Dependent Variable: Post Deployment Reintegration Scale Total Score
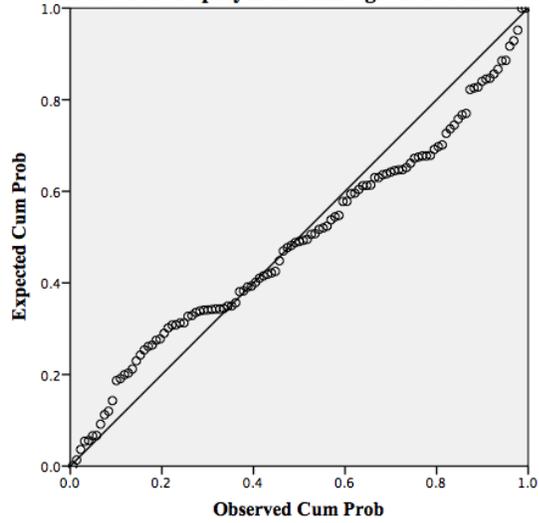
Figure 6

Histogram Evidencing Approximate Normal Distribution of Data

Dependent Variable: Post Deployment Reintegration Scale Total Score
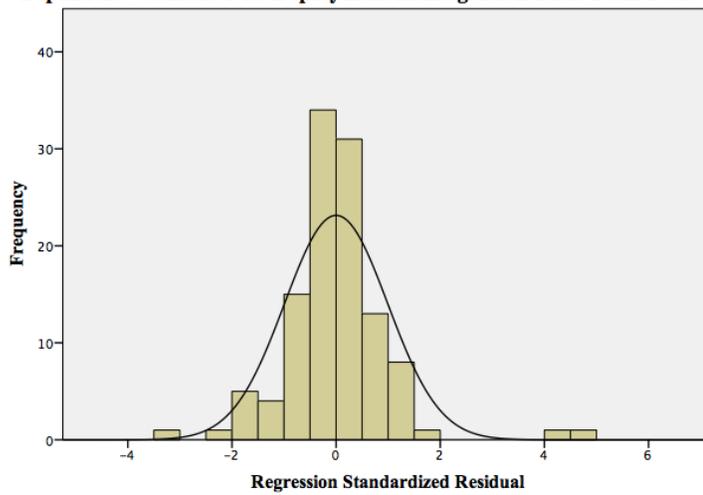
ANOVAs were conducted in order to determine whether the responses of those who met the original criteria for exclusion from this study (i.e., female service members, married service members, those without clinically evident levels of trauma, those who were post-deployed for longer than 12 months' time, those who were considering redeploying) differed substantively from those participants who met all original inclusion criteria. With respect to the variables of trauma, social support, alcohol use, suicidality, and post-deployment reintegration outcomes, there were no significant differences between male and female service members. Non-married service members reported significantly higher levels of trauma ($M = 41.93$, $SD = 16.30$) and suicidality ($M = 7.43$, $SD = 3.70$), and significantly poorer experiences of social support ($M = 23.05$, $SD = 8.01$) and post-deployment reintegration ($M = 43.81$, $SD = 14.4$). Participants who met DSM criteria for PTSD fared significantly worse on measures of social support ($M = 23.62$, $SD = 8.39$), post-deployment reintegration outcomes ($M = 46.00$, $SD = 13.07$), alcohol abuse ($M = 4.17$, $SD = 2.97$), and suicidality ($M = 7.87$, $SD = 3.46$), than participants with subclinical trauma or no trauma (Table 5).

Table 5

Assessment Score Mean Differences by Level of Trauma

PTSD Diagnosis		PSSS Score	M2CQ Score	AUDIT-C Score	SBQ-R Score
No PTSD	*Mean*	16.50	23.16	2.50	4.84
	N	22	19	20	19
	Std. Deviation	5.423	7.244	2.259	1.803
Subclinical	*Mean*	17.08	26.54	4.08	4.65
	N	25	24	24	23
	Std. Deviation	5.220	7.277	2.501	1.335
Full-Blown	*Mean*	23.62	46.00	4.17	7.87

PTSD Diagnosis		PSSS Score	M2CQ Score	AUDIT-C Score	SBQ-R Score
	N	60	60	60	53
	Std. Deviation	8.393	13.072	2.970	3.464
Total	*Mean*	20.63	37.25	3.83	6.48
	N	107	103	104	95
	Std. Deviation	7.922	15.135	2.795	3.182

An examination of the mean differences in assessment scores by length of time home indicated that those who had been home between one and five years reported significantly higher levels of trauma (*M* = 41.31, *SD* = 15.87) than those who were currently serving (*M* = 29.29, *SD* = 13.58), those who had been home less than 12 months (*M* = 32.48, *SD* = 15.39), or those who had been home longer than five years (*M* = 39.21, *SD* = 18.52). Finally, those service members who were unsure as to whether or not they would redeploy within the next twelve months reported significantly poorer outcomes with respect to suicidality (*M* = 11.20, *SD* = 3.56), trauma (*M* = 57.00, *SD* = 8.25), or postdeployment reintegration (*M* = 54.83, *SD* = 3.43) than their counterparts who were certain about whether or not they would redeploy.

In order to determine possible generalizability of the sample to the overall population of United States veterans, key demographics of the sample were compared to current Armed Forces demographic data (U.S. Department of Defense, 2014). A Chi-square test of independence was performed to examine the relationship between the sample's observed frequencies of female participants and the expected frequency of females given Department of Defense data. The difference between these variables was not significant, χ^2 = .002, (*df* = 1, *N* = 108); the number of females in this sample is representative of the United States female service member population as a whole.

Similar tests were conducted to compare the proportion of participants who are married to the number of married veterans as a whole. The difference between these variables was significant, $\chi^2 = 2.35$ ($df = 1$, $N = 109$); the percentage of married service members in this study's sample (58.7%) was significantly higher than that of the nation's military community (51.3%). Finally, the proportion of Reservists and Guardsmen in this sample (20.2%) was compared to the proportion represented in the Armed Forces as a whole (33.4%). The difference was significant, $\chi^2 = 20.28$ ($df = 1$, $N = 97$); the proportion of Reservists and Guardsmen in the sample was not representative of the larger military community.

Although not a formal research question, analyses were run to determine if any of the variables examined were significant predictors of suicide in this sample (Table 6). Although trauma and social support were highly correlated with level of suicidality, stepwise regression indicated that a participant's postdeployment reintegration outcomes was most predictive of level of suicide risk ($R^2 = .220$, $p < .01$).

Table 6

Stepwise Regression Analysis Predicting Suicide Risk from PTSD, Social Support, and Reintegration

Model	t	*Sig.*	Partial Correlation	R	R^2	Sum of Squares	F
PTSD	1.488	.140	.154	-	-		-
Social Support	-.209	.835	-.022	-	-		-
Reintegration	5.095	.000	.469	.469	.220	208.065	25.958

a. Dependent Variable: SBQ-R = Suicidal Behaviors Questionnaire-Revised

Description of Assessment Data

The assessments utilized in the study included the Posttraumatic Stress Disorder Checklist – Military Version (PCL-M; www.ptsd.va.gov), Postdeployment Social Support Scale of the Deployment Risk and Resilience Inventory-2 (DRRI-2; Vogt, Smith, King, & King, 2013), Military to Civilian Questionnaire (M2C-Q, Sayer et al., 2011), Alcohol Use Disorders Identification Test Alcohol Consumption Questions (AUDIT-C, Bush et al., 1998), and the Suicide Behaviors Questionnaire-Revised (SBQ-R, Osman, Bagge, Guitierrez, Konick, Kooper & Barrios, 2001). Scale directions were standardized across all five assessments; higher scores denote poorer outcomes. The means and standard deviations for each scale were calculated and are included in Table 7. The mean value for the PCL-M, measuring the variable of trauma, was 36.45 ($SD = 16.49$). The mean value for the PSSS, measuring social support, was 20.63 ($SD = 7.92$). The mean value for the M2CQ, measuring postdeployment reintegration, was 37.25 ($SD = 15.13$). The mean value for AUDIT-C, measuring high-risk alcohol behaviors, was 3.83 ($SD = 2.80$). The mean value for the SBQ-R, assessing level of suicide risk among this sample, was 6.48 ($SD = 3.18$).

Table 7

Descriptive Statistics for Participant Assessment Scores

Instrument	*n*	*M*	*SD*	Possible Range	Observed Range
PCL-M	108	36.45	16.49	17-85	17-81
PSSS	107	20.63	7.92	10-50	10-45
M2CQ	103	37.25	15.13	16-74	16-74
AUDIT-C	104	3.83	2.80	0-12	0-11
SBQ-R	95	6.48	3.18	3-18	4-19

Note: PCL-M = Posttraumatic Stress Disorder Checklist – Military Version; AUDIT-C = Alcohol Use Disorders Identification Test Consumption Questions; PSSS = Postdeployment Social Support Scale; M2CQ = Military to Civilian Questionnaire. High scores indicate poorer outcomes.

The internal consistency of each instrument was calculated and is presented in Table 8. The PCL-M performed well and as expected with a Cronbach's alpha of .96. The PSSS and M2CQ also demonstrated high reliability with respective alphas of .89 and .92. Reliability of the AUDIT-C (α = .72) was consistent with published norm alphas and just above the .70 cutoff. The SBQ-R performed less reliably (α = .65) than its published norm.

Table 8

Reliability Coefficients for Instruments

Instrument	# Items	N	Norm Alpha	Study Alpha
PCL-M	17	108	.97	.96
PSSS	10	107	.90	.89
M2CQ	16	103	.95	.92
AUDIT-C	3	104	.77-.80	.72
SBQ-R	4	95	.74	.65

Note: PCL-M = Posttraumatic Stress Disorder Checklist – Military Version; AUDIT-C = Alcohol Use Disorders Identification Test Consumption Questions; PSSS = Postdeployment Social Support Scale; M2CQ = Military to Civilian Questionnaire. High scores indicate poorer outcomes.

Respondents were assigned to a trauma category using the scoring criteria provided in the Posttraumatic Stress Disorder Checklist - Military Version (PCL-M) manual. Consequently, each respondent was determined to either have No PTSD, Subclinical PTSD, or Full-Blown PTSD. Also, respondents were assigned an alcohol category using the scoring criteria specific to the Alcohol Use Disorders Identification Test Alcohol Consumption Questions (AUDIT-C). Participants were assigned to an At Risk Alcohol category (i.e., suggestive of hazardous drinking or active alcohol use disorder) if they had a total interval score of four or more on the AUDIT-C. Finally, respondents were assigned to an At Risk Suicide category if their total interval score was greater than or equal to seven on the Suicide Behaviors Questionnaire-Revised (SBQ-R) assessment. The Military to Civilian Questionnaire (M2C-Q) and Postdeployment Social Support Scale offer no empirical cut points for subcategorizations and were thus left as total interval scores for the purposes of analyses.

Table 9 details the frequencies and percentages of at-risk participants with respect to trauma, suicidality, and alcohol use. Of the 109 respondents, 56% met the DSM-IV criteria for Full-Blown PTSD; 22.9% met partial criteria and were categorized as having sub-clinical posttraumatic stress disorder. With respect to alcohol, 55% of respondents met the criteria for alcohol use disorder, signifying high-risk alcohol use behaviors. In terms of suicidal risk, 29.4% reported suicidal ideation or behaviors at a rate high enough to be considered concerning clinically.

Table 9

Participant Frequencies for High-Risk Assessments

Variable	*n*	%
Trauma Risk Level		
No PTSD	22	20.2
Subclinical PTSD	25	22.9
Full-Blown PTSD	61	56.0
MISSING	1	0.9
TOTAL	109	100
Suicide Risk Level		
Low/No Suicide Risk	65	59.6
At Risk for Suicide	32	29.4
MISSING	12	11.0
TOTAL	109	100
Alcohol Risk Level		
Low/No Risk Alcohol Use Disorder	43	39.4
High Risk Alcohol Use Disorder	60	55.0
MISSING	6	5.5
TOTAL	109	100

Description of Research Questions and Results

Pearson product-moment correlations were used to investigate the relationship between key study variables and can be found in Table 10. Analyses revealed several significant positive correlation between study variables and will be discussed within the context of the research questions below.

Table 10

Correlation Matrix: PCL-M, PSSS, M2CQ, AUDIT-C, SBQ-R

	PCL-M	PSSS	M2CQ	AUDIT-C	SBQ-R
PCL-M	1				
PSSS	.462**	1			
M2CQ	.800**	.580**	1		
AUDIT-C	.135	-.004	.068	1	
SBQ-R	.460**	.290**	.469**	.139	1

Note: PCL-M = Posttraumatic Stress Disorder Checklist – Military Version; AUDIT-C = Alcohol Use Disorders Identification Test Consumption Questions; PSSS = Postdeployment Social Support Scale; M2CQ = Military to Civilian Questionnaire. High scores indicate poorer outcomes. **Correlation is significant at the 0.01 level (2-tailed).

Following pilot data collection, minor changes were made to this study's research questions to be inclusive of all service members deployed since September 11, 2001, regardless of gender, marital status, trauma diagnosis, or length of time home from deployment. Thus, the revised research questions and hypotheses for the proposed dissertation are as follows:

Research Question #1: Is post-deployment social support correlated with post-deployment reintegration success among Iraq and Afghanistan veterans with trauma?

Hypothesis one stated that post-deployment social support would be shown to be positively correlated with post-deployment reintegration outcomes. Pearson product-moment correlations revealed a significant positive correlation ($r = .580, p < .01$) between the variables of social support and reintegration.   As such, service members with lower levels of social support are expected to report lower levels of postdeployment reintegration success (Figure 7).

Figure 7

**Scatterplot of Level of Trauma by Reintegration Outcomes**
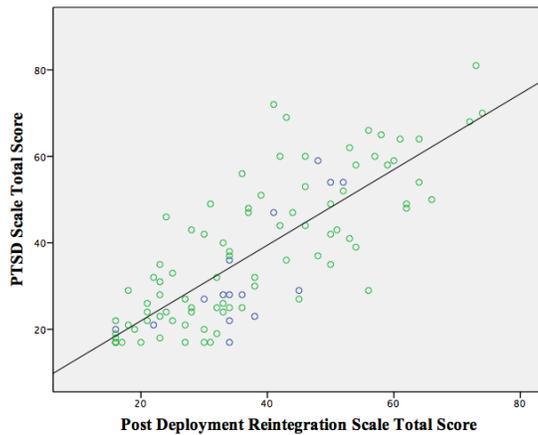
Research Question #2: Is a service member's level of trauma correlated with his experience of post-deployment social support?

Hypothesis two stated that a service member's level of trauma would be positively correlated with his experience of post-deployment social support. Pearson product-moment correlations revealed a significant correlation ($r = .800$, $p < .01$) between trauma and social support. The hypothesis that service members with higher levels of trauma report poorer experiences of post-deployment support is supported (Figure 8).

Figure 8

Scatterplot of Social Support by Reintegration Outcomes
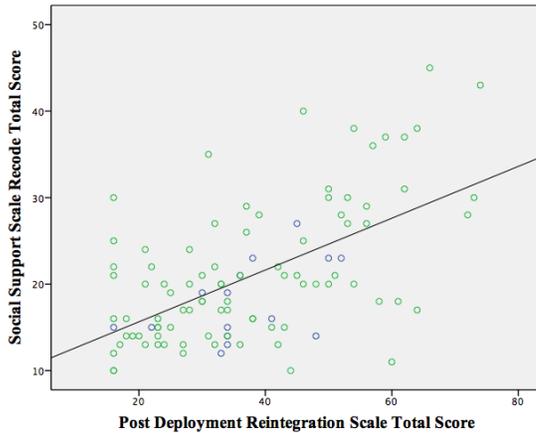
Research Question #3: Does post-deployment social support moderate the effects of service member trauma on service member reintegration success?

Hypothesis three stated that post-deployment social support would moderate the effects of service members' trauma on their ability to reintegrate with success. Thus, it was hypothesized that as veterans with trauma experienced satisfactory social support, the effects of trauma would be tempered and more satisfactory reintegration outcomes would be experienced.

In order to describe the relationship among the two continuous independent variables (i.e., trauma, social support) and the dependent variable (i.e., reintegration outcomes), as well as identify the potential moderating effects of social support, a multiple regression analysis was used (Table 11). In the first step, both independent variables (i.e., trauma, social support) were entered into the equation. This model was significant and accounted for a large portion of the variance in post-deployment

reintegration outcomes ($F(2, 100) = 114.66$, $p < .01$). Then, the interaction variable (i.e.,

trauma x social support) was entered into the regression equation to depict the amount of

variance in post-deployment reintegration outcomes that may be explained by trauma

plus social support plus the interaction variable combined. This analysis also yielded

statistically significant results ($F(3, 99) = 76.06$, $p < .01$); however, the additional amount

of variance predicted by the interaction (R^2 Change $= .001$, $p = .55$) was not significant

enough to suggest a moderating effect of social support on trauma.

Table 11

Multiple Regression Analysis Predicting Reintegration from PTSD, Social Support and the Interaction

Model	*R*	*R²*	Standard Error of the Estimate	*Sig.*	*R²* Change	*F* Change	*Sig. F* Change
1 PTSD	.800	.639	9.133	.000	.639	179.101	.000
2 PTSD, Social Support	.834	.696	8.423	.000	.057	18.748	.000
3 PTSD, Social Support, Interaction	.835	.697	8.450	.000	.001	.355	.553

a. Dependent Variable: SBQ-R Total Score

Research Question #4: How do the social support experiences of Reservists and

Guardsmen differ from those of Active Duty (i.e., full-time) service members?

Those who deployed from Reserve and National Guard units were hypothesized

to report poorer experiences of social support. In other words, those who deployed from

Active Duty units were expected to report higher levels of social support given the daily, ongoing relationship with other members of their unit. A one-way ANOVA (Table 12) determined significant differences between the groups' mean scores on the Post Deployment Social Support Scale ($F = 5.25$, $p < .05$). Means and standard deviations for social support levels reported by full-time service members and weekend service members are included in Table 13. Although the differences in experiences of social support are significant, members of the Armed Forces reported considerably poorer experiences of post-deployment social support ($M = 20.94$, $SD = 7.91$) than their Guardsmen and Reservist counterparts ($M = 16.13$, $SD = 4.05$). Given the modest number of respondents in the Guardsmen/Reservist group ($n = 15$), results must be interpreted with some caution. A post-hoc power analysis (Erdfelder, Faul, & Buchner, 1996) revealed that on the basis of sample size and means of the two groups, a between-groups comparison observed an effect size of .05 with power of .62. An N of approximately 128 with relatively even distribution between the two groups would have been needed to obtain an effect size of .25 and statistical power at the recommended .80 level.

Table 12

Test of Between-Subjects Effects for Social Support

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
Intercept	Hypothesis	17427.448	1	17427.448	59.519	.082	.983	59.510	.455
	Error	292.850	1	292.850					
Service Capacity	Hypotheses	292.850	1	292.850	5.253	.024	.052	5.253	.621
	Error	5296.428	95	55.752					

Table 13

Test of Significant Mean Differences in Social Support

	n	*M*	*SD*
Armed Forces Social Support	82	20.94	7.91
Guardsmen/Reservists Social Support	15	16.13	4.05

Research Question #5: How do the reintegration experiences of Reservists and

Guardsmen differ from those of Active Duty (i.e., full-time) service members?

Those who deployed from Reserve and National Guard units were hypothesized

to report better experiences of reintegration. Given their weekend status and repeated

experiences of returning to civilian life following drills, Reservists and Guardsmen were

expected to more readily return to their civilian lives post-deployment. In order to

compare the mean scores of reintegration experiences between Reservists/Guardsmen

and those service members designated as Active Duty, an Analysis of Variance

(ANOVA) was conducted. A one-way ANOVA (Table 14) did not find significant

differences between the groups' mean scores on the Military to Civilian to Questionnaire

($F = 2.06$, $p = .16$). The service capacity of participants in this sample appeared to have

no bearing on their experiences of post-deployment reintegration. Means and standard

deviations for social support levels reported by full-time service members and weekend

service members are included in Table 13. A post-hoc power analysis (Erdfelder, Faul,

& Buchner, 1996) revealed that on the basis of sample size and means of the two groups,

a between-groups comparison observed an effect size of .02 with power of .30. An N of

approximately 128 with relatively even distribution between the two groups would have

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been needed to obtain an effect size of .25 and statistical power at the recommended .80

level.

Table 14

Test of Between-Subjects Effects for Reintegration Outcomes

Source	Type III Sum of Squares	*Df*	Mean Square	*F*	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
Intercept	53022.550	1	53022.550	242.375	.000	.725	242.375	1.000
Service Capacity	449.869	1	449.869	2.056	.155	.022	2.056	.295

Table 15

Test of Significant Mean Differences in Reintegration Outcomes

	n	*M*	*SD*
Armed Forces Reintegration	81	37.57	15.27
Guardsmen/Reservists Reintegration	13	31.23	11.09

CHAPTER V

DISCUSSION AND IMPLICATIONS

In Chapter IV, the results of the analyses conducted for this study were presented. In Chapter V, interpretation and application of the results are discussed. First, notable findings with respect to the study's sample are reviewed. Next, the performance of the five primary assessments is discussed. Then, the results of hypothesis testing are presented and interpreted. Key findings concerning the variables of trauma, social support, and reintegration are also reviewed in light of previous research. Limitations to this study and key implications for counselors and researchers working with traumatized veterans are also outlined. Finally, the chapter concludes with a discussion of future research to be based upon this exploratory study.

Participants

The study consisted of 109 participants representing all branches of the United States Armed Forces. Although 202 individuals viewed every question in the online survey, the functional N was reduced by 93 due to incomplete responses, participant attrition, and the elimination of significant outliers. A substantial number of respondents exited the survey either at the introduction of demographic questions or items concerning trauma. It is possible that such items were either received as triggering or intrusive; however, there was no way to determine definitively the reason for the dropouts. The original inclusion criteria was established to collect data from single, male service

members with trauma who had been home from deployment for less than twelve months, with no immediate plans to redeploy. Although such criteria would have meant a more homogenous sample, such restrictions hampered recruitment efforts considerably during the pilot phase of the study. As such, the research team decided to permit the enrollment of any service member having deployed since the terrorist attacks on September 11, 2001. The final sample was comprised of both men and women, partnered and single, who may or may not plan to redeploy and who reported varying degrees of trauma. Consequently, study results may have been affected by the relatively small sample size and the inability to control for myriad confounding variables present.

The sample consisted of significantly fewer female participants (16.6%) than male participants (83.3%); however, the frequencies very closely matched those represented in the current United States Armed Forces population (16.4% and 83.5%, respectively). Married service members comprised 58.7% of the study's sample, slightly higher than the 51% observed in the military as a whole. African-American service members (5.5%) were greatly underrepresented in this sample as compared to the 16.8% seen in the total military force (Military One Source Demographic Report, 2014). This may be an artifact of the racial homogeneity often found in snowball samples (Bornstein, Jagger, & Putnick, 2013) or it may be a result of the African-American community's general reluctance to speak with mental health providers (Bahrampour, 2013). With respect to service capacity, 85% of the sample were Active Duty members of the Armed Forces and 15% were National Guardsmen or Reservists, which represents a significant departure from the military population as a whole, where Guardsmen and Reservists

make up close to 38% of the service population (Military One Source Demographic Report, 2014).

Respondent ages spanned from 21 to 59 years of age, with half of all those surveyed under the age of 34. Since younger age of enlistment has been shown to be a risk factor for PTSD (King et al., 1996; Schnurr et al., 2004), this may explain, in part, the high frequency of respondents with active trauma in this sample. Also of note in this sample was the fact that 44% of respondents held less than a four-year education, a significant statistic given that lower levels of education have also been correlated with the development of service-based trauma. (Schnurr et al., 2004).

The differences between reported mental health concerns among National Guardsmen/Reservists and those deployed from Armed Forces units (Milliken, Auchterlonie, & Hoge, 2007) were the impetus for two of this study's research questions. However, several between-groups differences were noted with respect to trauma, social support, reintegration, alcohol use, and suicidal ideation. For instance, enlisted men and women ($n = 66$) fared significantly worse than their officer counterparts with respect to level of trauma ($F = 5.00$, $p < .01$), experiences of social support ($F = 5.17$, $p < .01$), and postdeployment reintegration ($F = 4.38$, $p < .05$). This may be due to differences in level of education or age at time of enlistment (both predictors of trauma), greater exposure to life-threatening, deployment-related events, or difficulty finding meaningful work or civilian purpose during reintegration. Also, non-married service members ($n = 66$) reported significantly higher levels of trauma ($F = 8.79$, $p < .01$) than married participants. Unpartnered warriors also had significantly poorer experiences of social

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support ($F = 7.40$, $p < .01$) and struggled more with postdeployment reintegration ($F = 15.16$, $p < .01$).   These findings confirm the buffering effect of partnership against some of the negative effects associated with deployment.   Significant differences were also found among those service members who intended to redeploy ($n = 24$), those who did not ($n = 70$), and those who were unsure ($n = 6$). Those who did not know whether or not they would redeploy reported much higher scores with respect to trauma, alcohol abuse, suicidal risk, and reintegration difficulties than either of the groups who knew what the next twelve months held in store.   One plausible explanation is that the uncertainty in and of itself brings a level of stress, if not trauma, and the experience of not knowing either delays or stalls any psychosocial attempts to begin the transition and healing process. It bears mentioning that there were no significant differences between male and female warriors on the five assessments. Nor were there significant differences between those participants with a strong family history of military service and those without such a background.

One of the most surprising findings pertained to a participant's length of time home, in this study subdivided into those postdeployed for longer than five years ($n = 21$), home for one to five years ($n = 34$), home for less than twelve months ($n = 19$, and those service members currently serving ($n = 23$). There were no significant differences among these groups with respect to alcohol use, level of suicidality, postdeployment reintegration, or experience of social support, suggesting that the simple passage of time may not be a significant contributor in the re-acclimation or healing process. However, as a rule, the reported level of trauma tended to be higher as the length of time home

following deployment grew ($f = 73.49$, $p < .05$). Despite the fact that many consider the

period of reintegration to include the twelve months following separation of service,

these data suggest that the difficulties of reintegration (for some) may last well beyond

the first year.   One plausible theory for heightened experiences of trauma with the

passage of time may be simple awareness – a recognition within the veteran of trauma

signs/symptoms and, ultimately, an understanding of one's need for support services.

Another theory posited by researchers (Gewirtz, Polusny, DeGarmo, Khaylis, & Erbes,

2010; Kaniasty & Norris, 2008; Laffaye, Cavella, Drescher, & Rosen, 2008) hinges on

the reciprocal relationship between trauma and social support. With the well-documented

effect of PTSD on social support over time, service members with unresolved trauma are

liable to find themselves with reduced support as time passes, leaving them vulnerable to

isolation. Other researchers suggest that recurrent geographic moves, limited down time

between multiple deployments, and the consistent impact of service on the family unit, all

play a critical role in the development of trauma response in service members (Sherman

& Bowling, 2011). Whatever the reasons, these data support the hypothesis that

reintegration is less about a physical relocation than it is about an upheaval of

relationships, purpose, and identity; issues that may not resolve, or even surface, within

the first year of a veteran's homecoming. This finding, if replicated in other studies, may

have significant implications for Veterans Administration programming efforts, benefits

available to service members, and the treatment approaches of mental practitioners seeing

veterans of these conflicts.

Instruments

The assessments utilized in this study had all either been normed on the military population or had been widely used in studies of military personnel. An oft-used instrument for more than 20 years, the Posttraumatic Stress Disorder Checklist – Military Version (PCL-M; www.ptsd.va.gov) performed exceptionally well, yielding a Cronbach's alpha of .96 (norm α = .97). The observed range of respondents (17-81) came close to the possible range of 17-85. This assessment also yielded a fairly large standard deviation (SD = 16.49), suggesting a wide array of trauma scores within the sample. The PCL-M was well-suited for the subclassification of trauma into Full-Blown PTSD, Subclinical PTSD, or No Trauma within this sample using DSM-IV criteria.

The Postdeployment Social Support Scale of the Deployment Risk and Resilience Inventory-2 (DRRI-2; Vogt, Smith, King, & King, 2012) is a fairly new assessment, initially designed in 2008 specifically for the postdeployed population of present day military conflicts. In this study, it demonstrated high reliability with a Cronbach's alpha of .89, as compared to the norm alpha of .90. In this sample, the observed range (10-45) fell slightly short of the expected range of 10-50 and the standard deviation was (SD = 7.92). Although this assessment was tailored expressly to the experiences of veterans of recent international conflicts, it focused more on the tactical aspects of social support than the companionship aspects, and was therefore less well-suited to measure social support insomuch as this study was concerned.

Another recently developed instrument deployed in this study was the Military to Civilian Questionnaire (M2C-Q, Sayer et al., 2011) designed to assess postdeployment

community reintegration difficulty among veterans. Respondents of this survey utilized the full range of the assessment, with scores spanning from 16 to 74, and the Cronbach's alpha for the sample was .92 (norm α = .95). This assessment also yielded a fairly large standard deviation (SD = 15.13), suggesting a wide array of reintegration experiences within the sample. The M2C-Q touched on many of the critical aspects of reintegration, such as finding employment, maintaining social relationships, and postdeployment self-care; however, it lacked items measuring one's ability to rediscover meaning and purpose in civilian life upon homecoming, a key struggle for many veterans (Sherman, Larsen, & Borden, 2015).

The Alcohol Use Disorders Identification Test Alcohol Consumption Questions (AUDIT-C, Bush et al., 1998) is a widely applied instrument that was selected for its ability to quickly screen for hazardous or disordered drinking. Despite being validated among three large samples of military service personnel, its performance in this study fell somewhat short of published alphas (.77-.80), evidencing a Cronbach's alpha of .72. The observed range in this study was 0 to 11, as compared with the possible range of 0 to 12, and the standard deviation in this sample was 2.8. Although somewhat limited in the information it could provide about patterns and purposes of alcohol use among the study's participants, it served its purpose as a low-burden assessment for ongoing alcohol abuse during the postdeployment period.

The Suicide Behaviors Questionnaire-Revised (SBQ-R, Osman, Bagge, Guitierrez, Konick, Kooper & Barrios, 2001) was a rapid screener employed to assess the level of at-risk suicidal behaviors among participants. Respondents in this study matched

the possible range of 3 to 18 and the analyses evidenced a standard deviation of 3.18. The published norm alpha is .74 and, in the context of this study, the instrument performed less than reliably with an alpha of .65 and thus must be interpreted with caution.

Three of the five instruments (PCL-M, AUDIT-C, SBQ-R) were selected specifically for their abilities to assess levels of risk with respect to trauma, suicidality, and alcohol use among service members. In this sample, 56% of respondents met the DSM-IV criteria for Full-Blown PTSD. These data represent a significant increase in the number of service personnel suffering from trauma when compared to the estimate of 18-20% cited by the Rand Center for Military Health Policy Research (2008). Moreover, 22.9% of this sample met partial diagnostic criteria and were categorized as having Subclinical PTSD, thus indicating that 78.9% of this sample had experienced some measure of service-related trauma symptomology within the past 30 days. The difference in observed versus expected outcomes may be due to veterans' reluctance to honestly disclose PTSD symptoms during postdeployment visits to the Veterans Administration, given the ongoing stigma associated with mental health issues (Adler, Castro, & McGurk, 2009; Hoge et al., 2004; Milliken et al., 2007; Stecker, Fortney, & Sherbourne, 2011; Veteran's Health Administration Office of Inspector General, 2012). These findings may also indicate that survey respondents had seen civilian practitioners where there would be fewer career repercussions for discussion of trauma symptomology. Moreover, it could be an indicator that those service members suffering from PTSD were more likely to participate in anonymous, civilian-based research. Since other published studies also

indicate high reported rates of PTSD (Milliken, Auchterlonie, & Hoge, 2007; Seal et al., 2009), the results of this research suggest that, although the frequency of active PTSD may be overrepresented in this sample, the incidence of trauma among postdeployed service members is more significant than the government has ordinarily reported. Of note those service members with subclinical trauma (22.9%), fared worse than their counterparts with no active trauma on measures of social support, postdeployment reintegration, and alcohol abuse, supporting previous research that the social and occupational hazards are similar to those participants with a diagnosis of PTSD (Stein et al., 1997).

In 2009, Zaroya reported that the incidence of drug and alcohol use and abuse among service members had been escalating since 2003. High rates of alcoholism have long been an issue among veterans (Kelley, Runnals, Pearson, Miller, Fairbank, & Brancu, 2013), but the ongoing elevated rates among postdeployed service members suggest that the services available to men and women in the reintegration period are insufficient and many veterans continue to self-medicate as treatment for depression, anxiety, pain, and trauma. With respect to alcohol use, 55% of respondents in this study met the diagnostic criteria for alcohol use disorder, signifying high-risk alcohol use behaviors and dependency. What's more, research indicates that younger soldiers are often at twice the risk for alcohol use disorders (Seal et al., 2009), a finding that was not entirely supported in this study.

In 2013, it was noted that veteran suicides had reached a 30-year high (Blumenthal, Maliha, & Mathews, 2014), a trend that has shown no sign of leveling off.

In terms of suicidal risk, 29.4% of this sample reported suicidal ideation or behaviors at a rate high enough to be considered clinically concerning. High scores on the SBQ-R signified high levels of suicidality and were strongly correlated with high levels of trauma ($r = .460, p < .01$), poor experiences of social support ($r = .290, p < .01$), and poor reintegration outcomes ($r = .469, p < .01$). More importantly, in a stepwise regression analysis, postdeployment reintegration scores were significantly predictive of participant's level of suicidality ($t = 3.65, p < .01$). Factors such as pre-existing depression, severe childhood punishment, negative affect, level of perceived threat in combat, harassment, and instability in family of origin have all been shown to predispose service members to maladaptive trauma responses (Herman, 1992; King et al., 1998; Rademaker, van Zuiden, Vermetten, & Geuze, 2011; Schnurr, Lunney, & Sengupta, 2004), however were not assessed in this study. However, Jakupcak et al. (2010) noted that veterans reporting greater satisfaction with their social support had reduced risk of suicide, and this study supported such findings with its strong correlation between social support and suicidality. As Goodwin (2010) noted, "The returning soldier is no longer part of a group bound together by a clear sense of purpose, familiar rituals, and shared experiences" (p. 67). When warriors separate from service and return to civilian life, their built-in support network largely evaporates. The findings of this study underscore the vast importance of comprehensive, ongoing treatment of PTSD, the protective role of social support, and the criticality of sustained reintegration support for the prevention of suicide among service members.

Discussion of Hypotheses

Hypothesis one - that post-deployment social support would be shown to be positively correlated with post-deployment reintegration outcomes – was meaningfully supported. It was anticipated that service members with lower levels of social support would report lower levels of postdeployment reintegration success or satisfaction; analyses revealed a significant positive correlation. Despite the fact that the instrument used (PSSS) primarily measured the functional aspects of social support, the data evidenced that those service members with a less than desirable network of support were less likely to report success in returning to their pre-deployment lives in the civilian world. The implication for this finding is that the Veterans Administration is well poised to do more to provide veterans with the tactical and emotional assistance they require upon reintegration (e.g., helping veterans to feel supported, find work, reduce isolation). Additionally, it would behoove the Department of Defense to educate the American people as to how best serve veterans during the postdeployment period (e.g., recognize the intensity of the reintegration process; learn about the effect of service on relationships, self-concept, worldview; continue to offer physical and emotional support for as long as is feasible).

The second hypothesis was that a service member's level of trauma would be positively correlated with his experience of post-deployment social support. This hypothesis was strongly supported with significant correlations between the variables of trauma and social support. It is largely unsurprising that service members with higher levels of trauma reported poorer experiences of post-deployment support, but what is less

obvious is the direction of the influence. It stands to reason that veterans returning home

with significant levels of trauma may have difficulty perceiving, accessing, and utilizing

the emotional, tangible, and social support that may be available to him (Asberg, Bowers,

Renk, & McKinney, 2008; Gayer-Anderson et al., 2015). However, given that isolation

generally maintains or exacerbates an individual's experience of depression, anxiety, or

trauma (Barrat, Shaban, & Moyle, 2011), it also stands that poorer experiences of social

support may make it more difficult to metabolize or resolve trauma upon homecoming.

The implication for this finding is similar in nature to that of hypothesis one.

Meaningful, comprehensive, ongoing support by the Veterans Administration is critical

to a veteran's sense of stateside support. Additionally, reducing stigma related to mental

health diagnoses is critical in order for service members to truthfully avail themselves of

the free services offered by the military (Hoge et al., 2004). Yet friends and family of

returning service members bear the largest burden in terms of day-to-day monitoring of

and support for veteran trauma. In order to minimize veteran isolation and augment

symptom spotting, widespread training should be available to any civilian interested in

supporting community veterans.

Hypothesis three stated that post-deployment social support would moderate the

effects of service members' trauma on their ability to reintegrate with satisfaction and

success during reintegration. Consequently, it was hypothesized that as the experience of

post-deployment social support improved, the effects of trauma for veterans would be

moderated and more satisfactory reintegration outcomes would be experienced.

Although the independent variables of trauma and social support were (independently)

statistically significant predictors of post-deployment reintegration outcomes, the interaction of the two variables did not add meaningfully to the model and thus the hypothesis was not supported. One possible interpretation is that since postdeployment social support was significantly correlated with both trauma ($r = .800$, $p < .01$) and reintegration ($r = .580$, $p < .01$), the capacity for this variable to influence the model was significantly limited. Alternatively, anecdotal evidence from service members suggests that the support of brothers-in-arms, although not a comprehensive cure for service-based trauma, may be protective against suicidality; it may be that the instrument used to measure postdeployment social support in this study did not sufficiently capture the experience of connecting with other service members as a means of therapy.

Those who deployed from Reserve and National Guard units were hypothesized to report poorer experiences of social support. Conversely, those who deployed from Active Duty units (i.e., stationed and returned to military bases) were expected to report higher levels of social support given the daily, ongoing relationship with other members of their unit. Although the difference in experiences of social support was significant, members of the Armed Forces who deployed from Active Duty units reported considerably poorer experiences of post-deployment social support than their Guardsmen and Reservist counterparts; thus, the hypothesis was not supported. One possible interpretation for this finding may be that the glorification of wartime experiences is maximized on military bases and the experience of PTSD is minimized due to mental health stigma (Hoge et al, 2004). Thus, those on base may be expected to "man up" and find themselves less likely to reach out to others for support. In a similar vein, those

returning to civilian communities may be more likely to experience the balm of a hero's return. Given the small frequency of Guardsmen and Reservists in this sample, results must be interpreted with caution.

Similar to hypothesis four, those who deployed from Reserve and National Guard units were hypothesized to report better experiences of reintegration. Given their weekend status and repeated experiences of returning to civilian life following drill weekends, Reservists and Guardsmen were expected to more readily return to their civilian lives post-deployment. The analyses revealed that the service capacity of participants in this sample had no bearing on their experiences of post-deployment reintegration and the hypothesis was not supported. This may be due, in part, to the fact that wartime deployment is unlike any other experience, and service members will struggle or succeed in equal measure regardless of their postdeployment location. Moreover, it may be that some of the protective factors against the development or worsening of trauma symptoms (e.g., ongoing support, positive role models, active coping styles, positive paternal relationship) also play a role in facilitating stateside reintegration.

Major Findings

Trauma

Several major results were obtained from analysis of study data that are relevant to the construct of trauma. In this study, trauma referred to any service-related experience for which the veteran found himself physically, emotionally, cognitively, or spiritually ill-prepared, including experiences of overwhelming fear, guilt and shame.

Specifically tailored to the military population, the PCL-M contained items that address many trauma-related symptoms and it was supplemented with a multiple choice item that allowed participants to specify physical, mental, or emotional manifestations of the deployment related disabilities.

The American Psychiatric Association (2000) denotes that PTSD symptoms can include nightmares, hypervigilance, situational avoidance, and restricted or labile affect. Half (50%) of the participants in this sample reported repeated, disturbing dreams of a stressful military experience while 66.7% reported repeated disturbing memories, thoughts, or images of a stressful military experience while awake. With respect to hypervigilance, 65.7% reported feeling "super-alert" or on guard at some point in the past month. In terms of situational avoidance, 44.4% had, in the past 30 days, avoided activities or situations reminiscent of a stressful military experience and 55.5% avoided thinking about or talking about a stressful military experience. As to restricted or labile affect, 55.5% felt emotionally numb, 58.3% felt jumpy or easily startled, 65.7% felt distant or cut off from other people, and a full 74% had felt irritable or experienced angry outbursts in the past month. These data suggest that the poor cognitive, somatic, affective, and interpersonal outcomes associated with PTSD symptoms may be more insidious than commonly thought. Moreover, PTSD symptoms such as loss of interest in enjoyable activities (49%), trouble falling or staying asleep (64.9%), and difficulty concentrating (64.7%) may indicate comorbid major depressive disorder, all of which leave veterans vulnerable to unemployment, marital conflict, homelessness, and violence directed at self or others (Kessler et al., 2001; Price & Stevens, 2009). Of note, although

56.5% were diagnosed with Full-Blown PTSD per their responses to PCL-M items, when asked outright about suffering from PTSD, only 45% responded affirmatively to the question "As a result of your service in OIF/OEF/OND, have you suffered from posttraumatic stress disorder?" This is concerning, given that it suggests a percentage of service members with active trauma may not recognize the severity or impact of their trauma-related signs and symptoms.

Risk and resiliency variables with respect to the development of trauma response comprise a sizeable portion of the research concerning modern day veterans. Many of the factors that have been shown to predispose service members to maladaptive trauma responses, such as pre-existing depression, severe childhood punishment, negative affect, level of perceived threat in combat, harassment, and instability in family of origin (Herman, 1992; King et al., 1998; Rademaker, van Zuiden, Vermetten, & Geuze, 2012; Schnurr, Lunney, & Sengupta, 2004) were not assessed in this study. However, one such factor – holding only a high school education was evaluated in this sample. Those with a less than a college degree ($n = 48$) evidenced higher average scores with respect to PTSD ($M = 40.83$; $SD = 16.40$), as compared to those with some former of advanced degree ($n = 60$) who had a mean score of 32.95 ($SD = 15.83$), thus supporting previous research regarding the correlation between level of education and degree of trauma.

With respect to participants' efforts to address their experiences of mental distress, respondents were asked about a) their use of mental health professionals and b) their experiences of being prescribed medication for the management of mental health issues. Just over one quarter (26.8%) reported having visited a mental health professional

in the past twelve months for help with issues such as stress, mood, alcohol, drugs, or family problems, 19.6% of whom reported that it was helpful. Whether the visit was mandated by the Veterans Administration or initiated by the service member is not known. The fact that more than 73% had not been to a mental health professional is significant and may be indicative of delays in the receipt of veteran benefits, service members' disinclination to seek treatment, dissatisfaction with the services available, or a tendency to minimize the need for help. Future research of this nature should differentiate whether such professional help was mandated or voluntary as well as whether it was military or civilian-based. Additionally, knowing the treatment modality employed by the practitioner, length of time in therapy, and which aspects the veteran found to be most helpful (or unhelpful) could help to tailor services and potentially keep veterans engaged in a professional therapeutic relationship.

The second question concerned the use of prescription medications for mental health or emotional reasons. Similarly, few had experienced this form of help, with just 23.7% having been issued a prescription for mental health purposes over the past 12 months. Of those prescribed, only 16.5% indicated that such medication had been helpful. As such, future research should delve into the reason prescription medications were not considered to be helpful, the length of time for which the medications were tried, and whether various different medications were tested before opting out of pharmaceutical assistance.

Social Support

Several major results were obtained from analysis of study data that are relevant to the construct of social support. In this study, social support was defined as emotional support, tangible support, affectionate support, or social interaction offered to the service member by family and friends. For many service members, social support, whether through civilian or military relationships, has the capacity to reduce dependency on alcohol, symptoms of depression and anxiety, indicators of PTSD, and suicidal ideation and thus was a primary variable is this research.

The PSSS was created especially for the military population and covered a broad scope of supportive behaviors that may be available to the veteran during the postdeployment reintegration period. Although it suffered in its ability to differentiate between the support offered by civilian friends and family versus support available by Armed Forces programs or military colleagues, the 10-item assessment provided some important information about the service members experience of social, emotional, and tactical support. Participants responded most positively to the items "My family members or friends would help me move my belongings if I needed help" ($M = 1.57$, $SD = .933$) and "My family members or friends would lend me money if I needed it" ($M = 1.75$, $SD = 1.07$), suggesting a satisfactory presence of functional or tactical support. Of note, participants responded least favorably to the items "My family and friends understand what I have been through in the Armed Forces" ($M = 3.09$, $SD = 1.40$) and "There are family and/or friends with whom I can talk about my deployment experiences" ($M = 2.14$, $SD = 1.26$), indicating a dearth of individuals in the veteran's

world who are able to effectively empathize, commiserate, or share in those experiences. Despite the fact that social support did not moderate the influence of trauma on reintegration outcomes, analysis of individual items on the PSSS intimate its import as a variable and reinforce the inability of service members to process their deployment stories without adequate social support. This is an important finding given that the metabolization of trauma often involves repeated narration of the event and service members may be less likely to seek out professionals for this experience.

Reintegration

In this study, reintegration was defined as the "stage of the deployment cycle …characterized by the service member's reentry into his or her daily life as experienced prior to deployment, or into a new civilian life" (The National Council on Family Relations, https://www.ncfr.org/ncfr-report/focus/military-families/returning-home). Many service members struggle with the process of reintegrating into their stateside life following deployment (Allen, Rhoades, Stanley, & Markman, 2010; Jordan, 2011; Knobloch & Theiss, 2012; Makin-Byrd, Gifford, McCutcheon, & Glynn, 2011; Resnik, Borgia, Ni, Pirraglia, & Jette, 2012; Sayers, 2011) and this concept was further supported by this research. The M2CQ assessed for the success of relational, functional, and career-related aspects of the veteran's life during the pstdeployment period. Respondents reported low difficulty with "Keeping up friendships with people who have military experience (including friends who are active duty or veterans)" ($M = 1.96$, $SD = 1.23$), which further supports the hypothesis that relationships with military colleagues and veteran service members are integral in the postdepoyment reintegration phase. In terms

of struggles however, respondents reported the most difficulty with "Getting along with your child or children (such as communicating, doing things together, enjoying his or her company)" and shortly behind that "Getting along with your spouse or partner (such as communicating, doing things together, enjoying his or her company)" ($M = 2.73$, $SD = 1.74$). This finding substantiates that which is published in the empirical and service-based literature distributed during postdeployment debriefing seminars; that is immediate family members are the ones to whom service members are most eager to return while deployed yet those relationships - which have changed while the service member has been away – often prove to be the most challenging in terms of reintegration. Participants noted some difficulty with "Confiding and sharing their personal thoughts and feelings" ($M = 2.83$, $SD = 1.52$) which can be understood within the context of the military's emphasis that information be shared with others on a need-to-know basis and that military deployments do not generally construct the sharing of thoughts and feelings into their agenda.

Since reintegration difficulties may manifest in numerous physical and psychosocial manners (Otis, Keane, Kerns, Monson, & Scioli, 2009; Rand Center for Military Health Policy Research, 2008), this study queried participants as to the degree to which they'd experienced physical injury or disability (28%); ongoing physical pain (29%); traumatic brain injury (8%); ongoing sleep issues (29%); posttraumatic stress disorder (45%); or emotional distress, depression, anxiety (40%). These data indicate that a significant number of OIF/OEF/OND veterans are likely living with one or more of these deployment-related consequences, only one of which is manifested visibly. Given

that the incidence and hidden nature of these diagnoses have serious implications for service members' careers, relationships, and perceptions of self, future research might focus on the objective and subjective roles they played in a service member's experience of postdeployment reintegration.

Limitations

Numerous limitations necessitate that this study's findings be interpreted with caution. First, correlational research does not denote causation. As such, it cannot be inferred that social support is predictive of or responsible for a service member's trauma outcomes or resolution of trauma symptoms. Second, military culture is not homogenous and the experiences of its service members will vary widely by service branch, service region, rank, or length of service. Moreover, research has shown that many other variables, such as age of enlistment, race/ethnicity, level of education, and family of origin, play a role in the way service members experience deployment and reintegration. To wit, the experience of a 21-year-old, Caucasian, small town, enlisted, Navy veteran may not be the experience of a 34-year-old, African American, Air Force officer from a larger metropolis. Third, the participants enrolled may not be representative of the larger population from which the sample was drawn. Recruitment efforts may have primarily reach those service members who continued to struggle with integration or those more likely to complete online surveys, thereby skewing study results. Fourth, this study did not mandate a formal, clinical diagnosis of PTSD for enrollment. Consequently, there may be substantial differences between the post-deployment experiences of those veterans who have received a diagnosis and those who have not. Fifth, several of the

research questions depended upon a fairly even distribution in the numbers of active duty members of the Armed Forces and those serving by way of the National Guard or Reserve units. As this sample substantially under-represents the experience of the Weekend Warrior, interpretation of the data must be applied with care. Finally, the post-deployment reintegration period is marked by a great number of changes for most service members and any number of confounding variables (e.g., changes in relationship status, the use of pharmaceuticals, change in employment status or living conditions, the introduction of talk therapy) that may be responsible for changes in a veteran's trauma, social support structure, or postdeployment experience. Without a study design that controls for the many confounding variables, any findings concerning the relationship among the study's key variables will be limited.

As is the case with any nonexperimental or quasiexperimental design, it is impossible to state with certainty the degree to which any gains made in reintegration outcomes are attributable to social support and not simply the work of other protective factors such as cohesive childhood family environment (King et al., 2003), optimism, altrusism, spirituality (Charney, 2005), a sense of control over one's destiny (Herman, 1992), higher education or socio-economic status (Schnurr et al., 2004), or the simple passage of time. Future researchers may wish to extend this research using a true experimental design, as well as attempt to address these questions with more significant sample sizes to address the inadequate power and effect size present in this study.

Implications

The findings from the current study on the relationship between trauma, social support, and reintegration suggest numerous possibilities for future mental health research and clinical practice among veterans.

Mental Health Research

This study holds implications for military and civilian-based researchers interested in the homecoming experiences of United States service members. There are numerous avenues that warrant further empirical exploration. In order to manage participant burden, the total number of questions were kept to a minimum; however, interpretation of the results could have been enhanced with the addition of several items. First, the reasons for the high rate of attrition in this study are unknown. A question that polled participants who prematurely exited the study would have enabled the investigators to determine whether the questionnaire was too long, too disturbing, or too intrusive. Second, a misperception among civilians and service members alike seems to be that only those veterans who experienced a firefight while deployed would be prone to the development of PTSD. In addition to asking for a participant's rank at time of service separation, knowing a respondent's job title and whether or not they operated "inside or outside of the wire" would have allowed for exploratory correlations between level of combat exposure and degree of trauma experienced. Third, although the qualitative items invited participants to comment on the degree to which they felt able to talk about deployment-related experiences with civilian friends and family, this study might have benefitted from several discreet questions regarding the utility of civilian and military

supports. Items such as "How often are you able to speak with military friends about your deployment experiences?" and "How helpful are such conversations in managing PTSD symptoms?" might have directly addressed some of what this study was attempting to address more obliquely with assessments.

Deployment experiences that are generally thought to overwhelm function and predispose soldiers to traumatic response include enemy fire; sexual assault; traumatic brain injury; friendly fire; physical disability; ambush; loss of friends, subordinates, and command leaders; and capture and imprisonment (Jordan, 2011). What's more, Sherman and Bowling (2011) offered that recurrent geographic moves, limited down time between multiple deployments, and the consistent impact of service on the family unit, warrant unique interventions for service-related stress.   This study was not able to accommodate the impact of such variables on service member trauma, social support or reintegration experiences; however, future research may wish to assess for some of the many confounding variables present in the career soldier's experience. Moreover, the widespread nature and complexity of service-based trauma among the United States' 2.2 million veterans warrants comprehensive future research. The prevalence of trauma in this study suggests that comprehensive research that includes multiple trauma assessments – assessing for changes in trauma over time, the varying manifestations of trauma, the numerous protective and predisposoing factors present, therapeutics factors found to be most helpful – is warranted.

Ongoing, counselor-led research concerning the effect of social support among service members may enhance Licensed Professional Counselors' understanding of the

psychosocial needs of post-deployed veterans. As the work of treating and conducting research among present day veterans has been largely left to psychologists, psychiatrists, general practitioners, and social workers, much of the published research concerning veterans' needs has been published by proponents of the medical model. With the Veterans Administration's recent approval of the hiring of Licensed Professional Counselors (LPC), comprehensive research conducted by strengths-based mental health professionals is critical to establishing LPCs as therapeutic practitioners on par with the psychologists and social workers who have historically provided services within the VA.

The vast majority of participants took advantage of the qualitative items at the end of the survey to offer comments on the specific nature of their own postdeployment experience. As researchers of group, narrative, and exposure therapy among veterans have reported, having their voices heard and their stories honored is not only an important step in the healing process but also a way to normalize the experience for other service members. Future research should continue to include qualitative items in order to lend context to the interpretation of quantitative responses and humanize the experience of each individual veteran.

This study was grounded in the hypothesis that social support is a key factor in the postdeployment reintegration experiences of service members. This theory was based upon anecdotal and empirical evidence that veterans prefer to talk about their deployment experiences with military peers (as compared to civilian family, friends, or mental health practitioners). Although statistical analyses did not prove the proposed model to be significant, the presence of social support in the resolution of trauma and

successful postdeployment reintegration is intuitively a critical variable. Despite its being designed for the specific purposes of measuring postdeployment social support, the PSSS may not have adequately compared the experience of processing stressful or traumatic deployment experiences with battle buddies to that of civilian friends. Given that the relationship to one's brothers-in-arms is unlike any other attachment, the concept of social support, as defined within this study, may have been inadequate to measure the ongoing therapeutic benefits of sharing deployment-related stories in the amelioration of trauma symptoms. Longitudinal studies that explore the connection between trauma, social support, and reintegration, as well as how such variables may change over time, will be essential to understanding the trajectory of veterans' homecoming experiences.

Counseling Practices

The results of this study provide useful information for counselors working with traumatized service members in the postdeployed phase.

First, this study highlights veteran apprehension with regard to the mental health professionals, as well as researchers in the civilian community. Recruitment for this study required eight months of invested efforts, multiple assurances of anonymity, and regular pitches about the necessity of these data and the role they may play in helping future veterans. High dropout rates also suggest that talking about deployment-related experiences (and associated mental health issues) may have felt threatening, overwhelming, or unsafe for some service members. Moreover, anecdotal evidence suggests that service members who were unwilling to begin (or complete) the assessment believed that civilians could neither understand nor appreciate the experiences of

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deployment and thus were unworthy of hearing them. Relationship-building was a

critical step in the process of gathering these data and counselors who wish to provide

services to veterans must be willing to put forth such effort and evidence their

commitment to the military community. The fact that more than 73% of the participants

in this sample had not been to a mental health professional and 7.2% found therapy to be

unhelpful, highlights the missed connection between services available and those who

need them.   Once more, these hurdles will only be overcome by relationship-building

and evidencing a dedication to veteran mental health. Partnerships with non-profit

agencies serving veterans have the capacity to connect LPCs with warriors in need of

mental health services, as well as increase a practitioner's credibility within the veteran

community.

Second, the ongoing issue of mental health stigma must be addressed and

regularly revisited. Study data indicated that service members are likely to under-

diagnose themselves with respect to PTSD. Given that 74% of study participants met

criteria for subclinical trauma or PTSD and only 45% reported having a trauma diagnosis,

the implication is that returning veterans are either not seeking or not receiving the

necessary treatment. As previous literature indicated, career soldiers who disclose

symptoms of trauma are likely to experience advancement-related repercussions and even

those not interested in rising through the ranks may experience the shame and discomfort

of peer ridicule. Counselor may have a role to play in the normalization of mental health

issues such as PTSD, depression, and anxiety among members of the Armed Forces and

those situated to advocate at local, state, and federal levels should engage in such opportunities.

Third, these data evidenced that levels of trauma tend to worsen with the amount of time a service member had been home from deployment. While the findings are not discordant with our clinical understanding of complex and sustained trauma, they do conflict with how the general public (including family and friends of service members) may expect veteran trauma to manifest upon homecoming. It may be that veterans are able to sustain the high associated with homecoming for quite some time until trauma symptoms become burdensome or recognizable. It may also be that the sustained separation from military service and the loss of brotherhood associated with such service wears on veterans over time, while the trauma remains unresolved. Consequently, counselors and other mental health practitioners should be poised to measure how symptoms of trauma change over time, with respect to presentation and intensity, which may necessitate multiple changes in treatment approaches.

Conclusion

The primary purpose of this study was to add to the body of literature concerning the post-deployment experiences of service members with service-related trauma. High levels of trauma, alcohol abuse, and suicidality substantiate our present understanding of the mental health needs of service members. Most significantly, service members' level of trauma and experience of social support are significantly linked to their ability to reintegrate with success following deployment. The need for comprehensive research

and high-quality mental health programming targeting these variable in the lives of

veterans of OIF/OEF/OND is critical.

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APPENDIX A

PILOT STUDY INFORMED CONSENT

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
ONLINE CONSENT TO ACT AS A HUMAN PARTICIPANT

Project Title: The Moderating Effects of Social Support on Trauma and Reintegration Outcomes Among Single Male Warriors of the Iraq and Afghanistan Conflicts – A Pilot Study

Principal Investigator and Faculty Advisor: Kelli E. Scanlon and Dr. L. DiAnne Borders

What are some general things you should know about research studies?
You are being asked to take part in a pilot research study. Your participation in the study is voluntary. You may choose not to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future.   There may not be any direct benefit to you for being in the research study. There also may be risks to being in research studies. If you choose not to be in the study or leave the study before it is done, it will not affect your relationship with the researcher or the University of North Carolina at Greensboro. Details about this study are discussed in this consent form. It is important that you understand this information so that you can make an informed choice about being in this research study.

If you would like a copy of this consent form, you may choose to print now. If you have any questions about this study at any time, you should ask the researchers named in this consent form. Their contact information is below.

What is the study about?
This is a pilot research project. The purpose of this research is to better understand the reintegration experiences of single, male post-deployed service members from the Iraq and Afghanistan conflicts. Your participation in this research project is voluntary.

Why are you asking me?
You are being asked to participate because you are an unmarried, male service member recently returned from Iraq or Afghanistan. You must be 18 or older to participate in this study.

What will you ask me to do if I agree to be in the study?
You are being asked to complete a one-time pilot questionnaire about your experiences of post-deployment reintegration. This research should only take no more than 20-25 minutes and will involve you answering approximately 62 questions.

What are the risks to me?
There are no known or foreseeable risks involved with this study.   Some questions may remind you of discomfort you may have experienced during post-deployment reintegration and, as such, you may choose not to answer any questions that make you feel uncomfortable.   Additionally, we have provided a list of support resources and referrals at the end of the survey (http://www.ptsd.va.gov/public/web-resources/web-military-resources.asp). If you have questions or would like more information, please contact Kelli Scanlon at kescanlo@uncg.edu or Dr. L. DiAnne Borders at borders@uncg.edu.

If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Are there any benefits to society as a result of me taking part in this research?
Society might gain a better understanding of the reintegration experiences of service members returned from Iraq or Afghanistan by your taking part in this research. These new insights may help to improve programs that serve United States veterans upon homecoming.

Are there any benefits to *me* for taking part in this research study?
There are no direct benefits to participants in this study.

Will I get paid for being in the study? Will it cost me anything?
There are no costs to you or payments made for participating in this study. However, you may choose to participate in the drawing for a $25 Visa gift card.

How will you keep my information confidential?
All information obtained in this study is strictly confidential (unless disclosure is required by law) and will be recorded in such a manner that participants cannot be identified by their responses. Absolute confidentiality of data collected via the Internet cannot be guaranteed due to the limited protections of Internet access. All data will be stored on a password-protected data collection site and ultimately downloaded to password-protected files on a password-protected computer. Any contact information collected for the gift card drawing will be automatically stored in a different file. Please be sure to close your browser when finished so no one will be able to see what you have been doing.

What if I want to leave the study?
You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect you in any way. The investigators also have the right to stop your participation at any time. This could be because you do not meet the study's inclusion criteria or because the entire study has been stopped.

What about new information/changes in the study?
If significant new information relating to the study becomes available which may relate to your willingness to continue to participate, this information will be provided to you.

Voluntary Consent by Participant:
By clicking on the button below you are agreeing that you have read and fully understand the contents of this document and are openly willing to take part in this study. You are also agreeing that you are 18 years of age or older and that all of your questions concerning this study have been answered. Clicking on the button below indicates that you are willing to participate.

Approved IRB
2/10/15

APPENDIX B

PILOT STUDY RECRUITMENT SCRIPT

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
EMAIL/LISTSERV RECRUITMENT SCRIPT

Dear _____ ,

      I am writing to ask for your assistance in recruiting participants for my research study titled "The Moderating Effects of Social Support on Trauma and Reintegration Outcomes Among Single Male Warriors of the Iraq and Afghanistan Conflicts."

      My name is Kelli Scanlon, and I am a doctoral student in the Counseling and Counselor Education program at The University of North Carolina at Greensboro. As part of my dissertation, directed by Dr. L. DiAnne Borders, I am conducting a study exploring the relationship between single, male service members' post-deployment use of social support and their post-deployment reintegration experiences. It is hoped that this research will contribute to the body of literature concerning the prevention of suicide among United States service members. This email is part of an effort to recruit participants for the piloting of an online assessment.

      To be eligible to participate in this pilot study, participants must be single, male veterans recently returned home (i.e., within the past 12 months) from military tours in Iraq or Afghanistan. Participants must be unpartnered males (i.e., no significant other), who have served in the United States Army, Navy, Air Force, Marines, National Guard or Army Reserve within the past 12 months, and have no plans for re-deployment within the next 12 months. All participants must be 18 years of age and read English with fluency.

      Before consenting to participate in the study, it is important that participants are apprised of all of the risks and benefits of the study, as well as procedures for maintaining confidentiality. I have attached the research consent form here for participants to read and keep. This consent form is also embedded in the online Qualtrics® site; participants will be required to consent online before participating in the study. All information obtained in this study is strictly confidential (unless disclosure is required by law) and will be recorded in such a manner that participants cannot be identified by their responses. Some questions may remind participants of discomfort they may have experienced during post-deployment reintegration and, as such, they may choose not to answer any questions that make them feel uncomfortable. Additionally, we have provided a list of support resources and referrals at the end of the survey (http://www.ptsd.va.gov/public/web-resources/web-military-resources.asp).

      Based on the description of the study and its eligibility criteria, I ask that you consider disseminating this invitation to 6 person you believe would consider participating. Those who are willing to participate in the study may click on the link below. This is a <u>one-time</u> pilot questionnaire about the experiences of post-deployment reintegration. This research involves answering approximately 62 questions and should only take <u>no more than 20-25 minutes</u>. If participants wish to do so, they may participate in a separate drawing for a $25 Visa gift card.

Survey: https://uncg.qualtrics.com/SE/?SID=SV_9SIH8NYWsnG2rFX

      If you have any questions or concerns, please feel free to contact me at kescanlo@uncg.edu or my Dissertation Chair, Dr. L. DiAnne Borders, at borders@uncg.edu.

Thank you so much for your consideration!

                                      Approved IRB

APPENDIX C

MAIN STUDY INFORMED CONSENT

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
ONLINE CONSENT TO ACT AS A HUMAN PARTICIPANT

Project Title: The Moderating Effects of Social Support on Trauma and Reintegration Outcomes Among Warriors of the Iraq and Afghanistan Conflicts

Principal Investigator and Faculty Advisor: Kelli E. Scanlon and Dr. L. DiAnne Borders

What are some general things you should know about research studies?
You are being asked to take part in a research study. Your participation in the study is voluntary. You may choose not to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future.   There may not be any direct benefit to you for being in the research study. There also may be risks to being in research studies. If you choose not to be in the study or leave the study before it is done, it will not affect your relationship with the researcher or the University of North Carolina at Greensboro. Details about this study are discussed in this consent form. It is important that you understand this information so that you can make an informed choice about being in this research study.

If you would like a copy of this consent form, you may choose to print now. If you have any questions about this study at any time, you should ask the researchers named in this consent form. Their contact information is below.

What is the study about?
This is a research project. The purpose of this research is to better understand the reintegration experiences of postdeployed service members of the Iraq and Afghanistan conflicts. Your participation in this research project is voluntary.

Why are you asking me?
You are being asked to participate because you deployed to one or more of the Global War on Terror geographic areas.   You must be 18 or older to participate in this study.

What will you ask me to do if I agree to be in the study?
You are being asked to complete a one-time questionnaire about your experiences of postdeployment reintegration. This research should take no more than 20-25 minutes and will involve you answering approximately 71 questions.

What are the risks to me?
The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants.   Some questions may remind you of discomfort you may have experienced during postdeployment reintegration and, as such, you may choose not to answer any questions that make you feel uncomfortable. Also, we have provided a list of resources and referrals at the end of the survey (http://www.ptsd.va.gov/public/web-resources/web-military-resources.asp). Finally, should you

ever feel that some support would be helpful, Alcoholics Anonymous is a free and widely available resource (http://www.aa.org) and The Veterans Crisis Line offers confidential support via phone, text, or online chat (http://www.veteranscrisisline.net). You may also call 1-877-VET2VET (838-2838) to speak to a veteran who understands what you may be going through. If you have questions or would like more information, please contact Kelli Scanlon at kescanlo@uncg.edu or Dr. L. DiAnne Borders at borders@uncg.edu.

If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Are there any benefits to society as a result of me taking part in this research?
Society might gain a better understanding of the reintegration experiences of service members returned from Operation Iraqi Freedom, Operation Enduring Freedom, or Operation New Dawn deployments by your taking part in this research. These new insights may help to improve programs that serve United States veterans upon homecoming.

Are there any benefits to me for taking part in this research study?
There are no direct benefits to participants in this study.

Will I get paid for being in the study? Will it cost me anything?
There are no costs to you or payments made for participating in this study. However, for every completed survey, $2 will be donated to the Wounded Warrior Project (www.woundedwarriorproject.org).

How will you keep my information confidential?
All information obtained in this study is strictly anonymous and will be recorded in such a manner that participants cannot be identified by their responses. Absolute confidentiality of data collected via the Internet cannot be guaranteed due to the limited protections of Internet access. As such, all information obtained in this study is strictly confidential unless disclosure is required by law.   All data will be stored on a password-protected data collection site and ultimately downloaded to password-protected files on a password-protected computer. Please be sure to close your browser when finished so no one will be able to see what you have been doing.

What if I want to leave the study?
You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect you in any way. The investigators also have the right to stop your participation at any time. This could be because you do not meet the study's inclusion criteria or because the entire study has been stopped.

Voluntary Consent by Participant:
By clicking on the button below you are agreeing that you have read and fully understand the contents of this document and are openly willing to take part in this study. You are also agreeing that you are 18 years of age or older and that all of your questions concerning this study have been answered. Clicking on the button below indicates that you are willing to participate.

Approved IRB

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Research Participants Needed for
Anonymous Civilian Study about Veterans
https://uncg.qualtrics.com/SE/?SID=SV_3DAJFdDR4WT08Lj

What? Online civilian survey exploring the relationship between service members' postdeployment social support and reintegration experiences. All survey responses will be anonymous.

Who? Service members who deployed in support of Operation Iraqi Freedom, Operation Enduring Freedom, or Operation New Dawn via the United States Army, Navy, Air Force, Marine Corps, Coast Guard, National Guard, or Reserves

Time? The survey take approximately 20 minutes to complete.

Why? There is insufficient research concerning the reintegration experiences of service members, the reasons for high rates of suicide in the military, and the uses of social support in ameliorating post-deployment trauma responses

Why Else? For every survey completed $2 will be donated to the Wounded Warrior Project

SUICIDE FREQUENCY

22 PER DAY
ONE EVERY
65 MINUTES
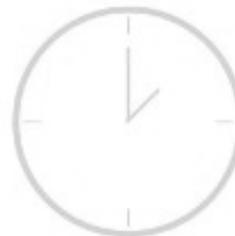
Please contact Kelli Scanlon, Principal Investigator, at
kescanlo@uncg.edu with any questions.   Approved IRB
6/23/15

APPENDIX E

MAIN STUDY IN-PERSON RECRUITMENT SCRIPT

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
IN PERSON RECRUITMENT SCRIPT

- Hello. I am currently recruiting participants for a research study on veterans, in particular those veterans who have returned home from the conflicts in Iraq and Afghanistan since September 11, 2011.

- The purpose of my research is to study the relationship between service members' postdeployment use of social support and their postdeployment reintegration experiences. It is my hope that this research will contribute meaningfully to the body of literature concerning the prevention of suicide among United States service members.

- This study is being conducted by civilians and not by the Department of Defense (DOD) or Veterans Administration (VA). All responses are completely anonymous.

- For every survey completed, I will be donating $2 to the Wounded Warrior Project (http://www.woundedwarriorproject.org).

- To be eligible to participate in this study, you must have deployed in support of Operation Iraqi Freedom, Operation Enduring Freedom, or Operation New Dawn via the United States Army, Navy, Air Force, Marine Corps, Coast Guard, National Guard, or Reserves. Also you must be 18 years of age and read English with fluency.

- I have here a copy of the research consent form here if you would like to read it over. I also have a copy of the questions contained in the survey if you would like to review those first.

- All information obtained in this study is strictly anonymous. All responses will be recorded in such a manner that you cannot be identified by your responses.

- Some questions may remind you of discomfort you may have experienced during postdeployment reintegration so I have here a list of support resources and referrals (http://www.ptsd.va.gov/public/web-resources/web-military-resources.asp).

- This is a one-time questionnaire comprised of 71 questions and should take no more than 20 minutes to complete.

- If you have any questions or concerns at any time, please feel free to contact me at kescanlo@uncg.edu or my Dissertation Chair, Dr. L. DiAnne Borders, at borders@uncg.edu. My contact information is listed here on this flier.

- Are there any questions I could answer for you at this time? Do you think you might like to take the survey here on one of these laptops or would you prefer to take a flier with you to complete it at home?

Approved IRB
6/23/15

APPENDIX F

MAIN STUDY RECRUITMENT EMAIL

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
EMAIL/LISTSERV RECRUITMENT SCRIPT

Dear _____ ,

I am writing to ask for your assistance in recruiting participants for my research study titled "The Moderating Effects of Social Support on Trauma and Reintegration Outcomes Among Warriors of the Iraq and Afghanistan Conflicts." This study is being conducted by civilians and not by the Department of Defense (DOD) or Veterans Administration (VA); all responses are totally anonymous.

For every survey completed, **$2 will be donated to the Wounded Warrior Project** (http://www.woundedwarriorproject.org).

As part of my dissertation, directed by Dr. L. DiAnne Borders, I am conducting a study exploring the relationship between service members' postdeployment use of social support and their postdeployment reintegration experiences. It is my hope that this research will contribute meaningfully to the body of literature concerning the prevention of suicide among United States service members.

To be eligible to participate in this study, participants must have deployed in support of Operation Iraqi Freedom, Operation Enduring Freedom, or Operation New Dawn via the United States Army, Navy, Air Force, Marine Corps, Coast Guard, National Guard, or Reserves. All participants must be 18 years of age and read English with fluency.

Before consenting to participate in the study, it is important that participants are apprised of all of the risks and benefits of the study. I have attached the research consent form here for participants to read and keep. This consent form is also embedded in the online Qualtrics® survey where participants will be required to consent before participating in the study. All information obtained in this study is strictly anonymous; data will be recorded in such a manner that participants cannot be identified by their responses. Some questions may remind participants of discomfort they may have experienced during postdeployment reintegration and, as such, they may choose not to answer any questions that make them feel uncomfortable. Additionally, I have provided a list of support resources and referrals throughout and at the end of the survey (http://www.ptsd.va.gov/public/web-resources/web-military-resources.asp).

Based on the description of the study and its eligibility criteria, I ask that you consider disseminating this invitation to as many individuals as you believe would consider participating. Those who are willing to participate in the study may click on the link below. This is a one-time questionnaire about the experiences of postdeployment reintegration. This research involves answering 71 questions and should take no more than 20-25 minutes.

Survey: (include survey link here)

If you have any questions or concerns, please feel free to contact me at kescanlo@uncg.edu or my Dissertation Chair, Dr. L. DiAnne Borders, at borders@uncg.edu.

Thank you so much for your consideration!

Sincerely,
Kelli E. Scanlon, MS, LPCA, NCC

Approved IRB
3/12/15

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APPENDIX G

MAIN STUDY SURVEY

Thank you for your interest in this important research in support of United States veterans. The purpose of this study is to better understand the reintegration experiences of postdeployed service members. This study is being conducted by civilians and not by the Department of Defense (DOD) or Veterans Administration (VA); all responses are anonymous. You are being asked to participate because you deployed in support of Operation Iraqi Freedom, Operation Enduring Freedom, or Operation New Dawn and we are eager to hear about your experience.

For every survey completed, $2 will be donated to the Wounded Warrior Project. This one-time questionnaire should take no more than 20-25 minutes and will involve you answering approximately 71 questions. You may choose not to answer any questions that make you feel uncomfortable. If you are willing to participate, please continue to the next screen to consent.

1. [AGE] What is your current age?

2. What is your gender?
○ Female
○ Male

3. Are you of Hispanic, Latino, or Spanish origin?
○ Yes
○ No

4. What is your race? Please choose all that apply.
❑ American Indian or Alaska Native
❑ Asian or Asian-American
❑ Black or African-American
❑ Native Hawaiian or Other Pacific Islander
❑ White or Caucasian
❑ Other _____

5. What is the highest level of education you have completed?
○ Less than high school
○ High school or GED
○ Some college
○ Associate's degree or trade certificate
○ Bachelor's degree
○ Master's degree
○ Post graduate degree

6. What is your current relationship status? Please choose all that apply.
❑ Married
❑ Divorced
❑ Widowed
❑ Separated
❑ Engaged or living with partner
❑ Dating
❑ Never married
❑ Single

7. Have you recently experienced a significant breakup?
❍ Yes
❍ No

8. Do you have children?
❍ No
❍ Yes, and they live with me full-time
❍ Yes, and they live with me part-time
❍ Yes, and they do not live with me

9. In what capacity did you serve in support of Operation Iraqi Freedom, Operation Enduring Freedom, or Operation New Dawn? Please choose all that apply.
❑ Armed Forces
❑ National Guard
❑ Reserves

10. In which branch or branches did you serve? Please choose all that apply.
❑ Air Force
❑ Army
❑ Coast Guard
❑ Marine Corps
❑ Navy
❑ Other _____

11. Do you have a strong family history of military service?
❍ Yes
❍ No

12. How many deployments in support of Operation Iraqi Freedom, Operation Enduring Freedom, or Operation New Dawn have you experienced?
❍ 0
❍ 1
❍ 2
❍ 3
❍ 4 or more

13. What was your last date of active duty? (Month and year.)

14. What was your rank on the last date of active duty?

15. Do you intend to return to active duty within the next 12 months?
○ Yes
○ No
○ Maybe

Below is a list of problems and complaints that veterans sometimes have in response to stressful military experiences. Please read each one carefully, then select the response to the right to indicate how much you have been bothered by that problem in the past month.

	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Repeated, disturbing memories, thoughts, or images of a stressful military experience	○	○	○	○	○
2. Repeated, disturbing dreams of a stressful military experience	○	○	○	○	○
3. Suddenly acting or feeling as if a stressful military experience were happening again (as if you were reliving it)	○	○	○	○	○
4. Feeling very upset when something reminded you of a stressful military experience	○	○	○	○	○
5. Having physical reactions (e.g., heart	○	○	○	○	○

pounding, trouble breathing, sweating) when something reminded you of a stressful military experience					
6. Avoiding thinking about or talking about a stressful military experience	○	○	○	○	○
7. Avoiding activities or situations because they reminded you of a stressful military experience	○	○	○	○	○
8. Trouble remembering important parts of a stressful military experience	○	○	○	○	○
9. Loss of interest in activities that you used to enjoy	○	○	○	○	○
10. Feeling distant or cut off from other people	○	○	○	○	○
11. Feeling	○	○	○	○	○

emotionally numb or being unable to have loving feelings for those close to you					
12. Feeling as if your future will somehow be cut short	○	○	○	○	○
13. Trouble falling or staying asleep	○	○	○	○	○
14. Feeling irritable or having angry outbursts	○	○	○	○	○
15. Having difficulty concentrating	○	○	○	○	○
16. Being "super-alert" or watchful or on guard	○	○	○	○	○
17. Feeling jumpy or easily startled	○	○	○	○	○

The next set of statements refers to social support after your most recent deployment, as well as current social support. Please read each statement carefully, then select the response to the right to indicate how much you agree or disagree with each statement.

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
1. The American people made me feel at home when I returned.	○	○	○	○	○
2. When I returned, people made me feel proud to have served my country in the Armed Forces.	○	○	○	○	○
3. My family members and/or friends make me feel better when I am down.	○	○	○	○	○
4. I can go to family members or friends when I need good advice.	○	○	○	○	○
5. My family and friends understand what I have been through in the Armed Forces.	○	○	○	○	○
6. There are	○	○	○	○	○

family and/or friends with whom I can talk about my deployment experiences.					
7. My family members or friends would lend me money if I needed it.	○	○	○	○	○
8. My family members or friends would help me move my belongings if I needed help.	○	○	○	○	○
9. If I were unable to attend to daily chores, there is someone who would help me with these tasks.	○	○	○	○	○
10. When I am ill, family members or friends will help out until I am well.	○	○	○	○	○

This next set of statements refers to your experience of post-deployment reintegration. Over the past 30 days, have you had difficulty with...

	No difficulty	A little difficulty	Some difficulty	A lot of difficulty	Extreme difficulty	Not applicable
1. Dealing with people you do not know well (such as acquaintances or strangers)?	○	○	○	○	○	○
2. Making new friends?	○	○	○	○	○	○
3. Keeping up friendships with people who have no military experience?	○	○	○	○	○	○
4. Keeping up friendships with people who have military experience (including friends who are active duty or veterans)?	○	○	○	○	○	○
5. Getting along with relatives (such as siblings, parents, grandparents, in-laws, and children not living at home)?	○	○	○	○	○	○
6. Getting along with your spouse or partner (such as communicating,	○	○	○	○	○	○

doing things together, enjoying his or her company)?						
7. Getting along with your child or children (such as communicating, doing things together, enjoying his or her company)?	○	○	○	○	○	○
8. Finding or keeping a job (paid or non-paid or self-employment)?	○	○	○	○	○	○
9. Doing what you need to do for work or school?	○	○	○	○	○	○
10. Taking care of your chores at home (such as housework, yard work, cooking, cleaning, shopping, errands)?	○	○	○	○	○	○
11. Taking care of your health (such as exercising, sleeping, bathing, eating well, taking medications as needed)?	○	○	○	○	○	○
12. Enjoying or making good	○	○	○	○	○	○

use of free time?	○	○	○	○	○	○
13. Taking part in community events or celebrations (for example, festivals, PTA meetings, religious or other activities)?	○	○	○	○	○	○
14. Feeling like you belong in "civilian" society?	○	○	○	○	○	○
15. Confiding or sharing personal thoughts and feelings?	○	○	○	○	○	○
16. Finding meaning or purpose in life?	○	○	○	○	○	○

These next questions pertain to your relationship with alcohol. Please remember that all responses are anonymous.

1. How often do you have a drink containing alcohol?
❍ Never
❍ Monthly or less
❍ 2-4 times a month
❍ 2-3 times a week
❍ 4 or more times a week

2. How many standard drinks containing alcohol do you have on a typical day?
❍ Zero
❍ 1 or 2
❍ 3 or 4
❍ 5 or 6
❍ 7 to 9
❍ 10 or more

3. How often do you have six or more drinks on one occasion?
❍ Never
❍ Less than monthly
❍ Monthly
❍ Weekly
❍ Daily or almost daily
❍ 2-3 times a week
❍ Daily

Alcohol use is a common coping mechanism for many postdeployed service members. Should you ever feel that some support would be helpful, Alcoholics Anonymous is a free and widely available resource (http://www.aa.org).

These next questions pertain to any thoughts you may have had about suicide. Please remember that all responses are anonymous.

1. Have you ever thought about or attempted to kill yourself?
○ Never
○ It was just a brief passing thought
○ I have had a plan (at least once) to kill myself but did not try to do it
○ I have had a plan (at least once) to kill myself and really wanted to die
○ I have attempted to kill myself but did not want to die
○ I have attempted to kill myself and really hoped to die

2. How often have you thought about killing yourself in the past year?
○ Never
○ Rarely (1 time)
○ Sometimes (2 times)
○ Often (3-4 times)
○ Very often (5 or more times)

3. Have you ever told someone that you were going to commit suicide or that you might do it?
○ No
○ Yes, at one time, but did not really want to die
○ Yes, at one time, and really wanted to die
○ Yes, more than once, but did not want to do it
○ Yes, more than once, and really wanted to do it

4. How likely is it that you will attempt suicide someday?
○ Never
○ No chance at all
○ Rather unlikely
○ Unlikely
○ Likely
○ Rather likely
○ Very likely

Considering suicide is another common experience among service members; 22 veterans complete suicide each day. The Veterans Crisis Line offers confidential support via phone, text, or online chat (http://www.veteranscrisisline.net). You may also call 1-877-VET2VET (838-2838) to speak to a veteran who understands what you may be going through.

These are the last six questions.

1. As a result of your service in Operation Iraqi Freedom, Operation Enduring Freedom, or Operation New Dawn, have you suffered from any of the following? Please choose all that apply.
❑ physical injury or disability
❑ ongoing physical pain
❑ traumatic brain injury (TBI)
❑ ongoing sleep issues
❑ posttraumatic stress disorder (PTSD)
❑ emotional distress, depression, anxiety

2. In the past 12 months, have you visited any professional (such as a psychologist or a counselor) to get help with issues such as stress, mood, alcohol, drugs, or family problems?
❍ No
❍ Yes, and it was helpful
❍ Yes, and it was not helpful

3. In the past 12 months, have you been prescribed any medication for a mental health or emotional reason?
❍ No
❍ Yes, and it was helpful
❍ Yes, and it was not helpful

4. Is there anything you wish had been different about your homecoming experience? Were there ways in which friends, family, the civilian community, the Veterans Administration, etc., could have done a better job of meeting your postdeployment needs?

5. To what degree do you feel you can talk about deployment-related experiences with civilian friends and family? To what degree is it helpful for you to talk with civilian friends and family? How does the experience of talking with civilian friends differ from talking with military friends?

6. Is there anything else about your postdeployment reintegration experience that might be helpful for us to know?

Thank you very much for your participation! A $2 donation will be made to the Wounded Warrior Project on your behalf.

In the event you should need some support following this survey, a list of resources and referrals may be found at http://www.ptsd.va.gov/public/web-resources/web-military-resources.asp.   Please be sure to close your browser when finished so no one will be able to see your survey responses.

If you have additional questions or concerns, please do not hesitate to contact Kelli Scanlon at kescanlo@uncg.edu or Dr. L. DiAnne Borders at borders@uncg.edu.

Once again, thank you for your time and your sacrifice,
Kelli E. Scanlon