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Towards a Deeper Understanding of the Post-Traumatic Growth Factors Leading to an Improved Quality of Life for Military Combat Veterans

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Towards a Deeper Understanding of the Post-Traumatic Growth Factors Leading to an Improved Quality of Life for Military Combat Veterans

Domonicque Tatum, MA, LCSW

CAPSTONE PROJECT

Submitted in partial fulfillment of the requirements

For the Degree of
Doctorate of Education, Ed.D.
Interdisciplinary Leadership, Not-for-Profit/Social Entrepreneurship Concentration

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by

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ABSTRACT

The issue of posttraumatic stress disorder (PTSD) following combat deployment among American military veterans has created significant barriers to successful reintegration. However, positive outcomes also exist in the form of posttraumatic growth. The purpose of this study was to examine Posttraumatic Growth in U.S. military combat veterans by identifying significant relationships among variables leading to successful reintegration of military personnel within the community following combat deployment. Participants in this correlational study included a total of 50 military combat veterans from various eras of conflict. Participants completed a survey battery containing the PTSD Checklist (PCLM), Combat Exposure Scale (CES), Post Deployment Social Support Scale (PDSSS), and Posttraumatic Growth Inventory (PTGI). Pearson Product Moment correlations were used to examine the relationship among these interval-level variables to gain a clearer understanding of the relationship between Post Traumatic Growth and positive reintegration. Results show there was a highly significant, negative relationship between scores on the Post Deployment Social Support Scale (PDSSS) and those on the PTSD Checklist (PCLM) ($r = -.42, p < .01$). There was also a highly significant, positive correlation between mean scores on the Combat Exposure Scale (CES) and mean scores on the PTSD Checklist (PCLM) ($r = .388, p < .01$). Implications are that increases in the participants' perceived level of emotional sustenance and instrumental assistance from family, friends, and individuals within the community are associated with lower perceived levels of severity of PTSD symptoms. In addition, as the
level of wartime stressors experienced by combatant's increases, so do the perceived levels of severity of PTSD symptoms. This research is expected to be a catalyst for future research targeted at creating positive reintegration opportunities for military personnel following combat deployment.

*Keywords:* Posttraumatic Stress Disorder (PTSD), Posttraumatic Growth (PTG), PTSD Checklist (PCLM), Combat Exposure Scale (CES), Post Deployment Social Support Scale (PDSSS), Posttraumatic Growth Inventory (PTGI)
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DEDICATION

This work is dedicated to the men and women who have served and continue to serve in the United States military both foreign and domestic. To my fallen brothers, Rock Hard. I will never forget!
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For starters, I would like to thank all of the service members who participated in this study for sharing their experiences. It is my hope that this research will facilitate the opportunity of better tomorrows for all of those who have served and sacrificed as well as their families. Secondly, I would like to acknowledge the direct sacrifice of my battle buddies from the 2/5 FA and 3ACR of Ft. Carson, CO, who lost their lives on November 2nd 2003, in Fallujah, Iraq. Specifically, I would like to remember my section chief SSG Joe “Nate” Wilson, Sgt. Joel Perez, Sgt. Keelan Moss and the rest of our fallen in the Rock hard Battalion. Rock hard, my brothers, until Valhalla! It is my hope that the process of finding a more clear understanding of the reintegration process of our service members has begun with the completion of this study.

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CHAPTER 1 - INTRODUCTION TO THE PROJECT

As of August 2011, 2.2 million United States (U.S.) soldiers, marines, airmen, and sailors have served overseas in the past decade in the wars in Iraq and Afghanistan (Berg, 2011). Most of these combatants successfully return to their normal lives once they separate from the armed forces. However, many face serious psychological and social challenges in reintegrating into society. These veterans have been the subjects of multiple studies, with the majority focusing on elevated rates of posttraumatic stress disorder (PTSD) and other related negative outcomes (e.g., Hoge, Auchterlonie, & Milliken, 2006; Joseph & Linley, 2008; Lemaire & Graham, 2011; RAND Corporation, 2011). However, there is little research that has examined the positive outcomes in this demographic of those experiencing PTSD upon returning home.

Given the length and frequency of recent deployments, the high likelihood of exposure to potentially traumatic events, and the increased public awareness of PTSD and other problems after the war in Vietnam, the focus on negative outcomes is understandable. That said, the positive or “posttraumatic growth” that can be seen in some of these returning veterans is undeniable. Based on this fact, it seems an important task to investigate this phenomenon of posttraumatic growth in military combat veterans. This study will attempt to identify the most significant factors leading to successful reintegration within the community. It will look more deeply at the history of the combat veterans who returned from Vietnam some 50 years ago; in contrast to the veterans returning from the wars in Iraq and Afghanistan in the modern day.
More specifically, this research project is designed to answer the following questions: (a) How do the veterans in this study experience reintegration into the civilian sector? (b) What factors identified in the posttraumatic growth inventory have the most influence on positive outcomes in their own lives? (c) What specific sources of strength and encouragement did they draw upon to strengthen and guide them as they negotiated their way through difficult circumstances to become highly successful and/or productive citizens? (d) How might these participants’ experiences and insights inform ongoing efforts to promote positive reintegration among veterans? And (e) will the findings have positive potential outcomes for other similar demographic groups facing poverty, family hardship/dysfunction, and community devastation?

Evaluating the reintegration process and outcomes of the Vietnam-era veterans in contrast with modern era Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF) veterans, will offer insight into potential assets to positive reintegration. Also, examined is the U.S. Department of Veterans Affairs’ (V.A.) role in facilitating the transition from combatant life to civilian life of those affected by these disorders focusing upon three areas of particular importance to the returning veteran: housing, education and employment. A better understanding of the prevalence and nature of PTSD among these veterans and their posttraumatic growth potential should help assure better life outcomes for these Americans who have served their nation in these times of conflict.

Research Problem

While the issue of posttraumatic stress disorder (PTSD) in American military
veterans following combat deployment creates significant barriers to successful reintegration, there is positive growth that exists in some veterans as well. Some of these veterans have been successful at completing graduate level collegiate degrees, obtaining high level careers, and establishing successful businesses while maximizing their impact in their communities. Those factors contributing to this successful reintegration have not been clearly identified or studied.

**Purpose of the Study**

The purpose of this study was to investigate the phenomenon of posttraumatic growth in U.S. military combat veterans. This study sought to identify the most significant factors associated with posttraumatic growth that would foster successful reintegration into the community among the military veterans.

This research project was designed to answer the following questions:

(a) How do the adult veteran participants in this study experience reintegration into the civilian sector? (b) What factors identified on the posttraumatic growth inventory have the most influence on positive outcomes in adult veterans’ own lives? (c) What specific sources of strength and encouragement did adult veterans draw upon to strengthen and guide them as they have negotiated their way through difficult circumstances to become highly successful and/or productive citizens? And (d) How might adult veteran participants’ experiences and insights inform ongoing efforts to promote positive reintegration among veterans or other similar demographic groups facing poverty, family hardship/dysfunction, and community devastation?
TBI: Traumatic Brain Injury: Head trauma leading to permanent or temporary impairment of cognitive, physical, and psychosocial functions, with an associated diminished or altered state of consciousness.

V.A.: Veterans Affairs: The U.S. Department of Veterans Affairs provides patient care and federal benefits to veterans and their dependents.
CHAPTER 2 - REVIEW OF THE LITERATURE

Differences in Vietnam Veterans and OIF/OEF Reintegration Issues

According to Berger (2011), the total number of war veterans diagnosed with symptoms consistent with PTSD is approximately 700,000. This number was calculated based on giving due consideration to the number of veterans from the first Gulf War and the recent wars in Iraq and Afghanistan. This number, writes Berger (2011), parallels the number of war veterans who returned from the Vietnam War and exhibited similar PTSD symptoms. Furthermore, according to Berger (2011), it was the experience and symptoms of veterans returning from the Vietnam War as reported by the Council of Vietnam Veterans, who led the American Psychiatric Association to publish in 1980 the disorder for the first time labeled PTSD in the *DSM-III*: (the third edition of *Diagnostic and Statistical Manual of Mental Disorders*). Although there are certainly differences between the Vietnam War and the Iraq War, there are also enough relevant similarities insofar as establishing a base for comparisons as they pertain to such factors as injuries sustained by soldiers in these wars (Record & Terrill, 2004).

Regarding rates of PTSD, according to Tull (2014), the measured effects of the PTSD have been higher in the first Persian Gulf War as opposed to the Vietnam War. During the Vietnam War 15% of male and 9% of female military members were estimated to have suffered from PTSD; up to 24% of service members are estimated to have suffered from PTSD in the first Persian Gulf War. However, regarding the War in Iraq, it is believed to be still too early to have collected accurate and complete scientific
data on the prevalence of PTSD. Preliminary results show approximately 12.5% of services members having suffered PTSD in the Iraq and Afghanistan Wars, which is similar to the Vietnam War (Tull, 2014).

Current research focused on addressing the problems of PTSD, according to Yosick et al. (2012), revolves around five primary categories: (a) psychological fitness, which is concerned with the abilities and capacities of members of the military with PTSD as they pertain to resolving states of tension and conflict that exist in their mental, emotional, and behavioral states and conditions; (b) behavioral fitness, which focuses on the relationship between the behavior in which the service member with PTSD engages and their physical health outcomes; (c) social and family fitness, which has as its concern the development of social networks that support individual wellbeing; (d) spiritual fitness, which connects the service member’s personal beliefs to a greater transcendental whole using such techniques as meditation; and (e) combined body domains, which has as its focus the relationship between the service member’s medical fitness, environmental fitness, physical fitness, and nutritional fitness.

Pisano (n.d.) addresses the third category of research discussed by Yosick et al. (2012), which is the importance of ensuring family fitness in order to enhance the service member’s sense of wellbeing. According to Pisano (n.d.), experiences during the war that caused trauma for a returning member of the military is one of the factors that can influence the relationship between the service member and their spouse and family members. Not only may traumatic experiences be difficult for the member of the military
to come to terms with and discuss, but he or she may not want to discuss these issues because of the desire to prevent the difficulties and painful experiences to be shared, made known, and felt by the spouse and family members. Family members should not be offended if the service member does not want to discuss these issues; instead, they should respect the service member’s privacy while at the same time being especially attentive to engaging in meaningful modes of communication (Pisano, n.d.).

Wegner (1990) also addresses the category of research concerned with family fitness. Family members should be alert to signs that symptoms of distress exhibited by returning service members may actually be symptoms of PTSD if, over an extended period of time, the integration into the family has been unsuccessful. Due to the fact that service members may be hesitant to seek help on their own based on concerns related to career advancement, family members should be prepared to seek professional medical advice and care for the returned service member (Wegner, 1990).

Precursors and Prevalence of PTSD Among Iraq and Afghanistan Veterans

The wars in Iraq and Afghanistan are different from other conflicts the United States has fought in the past century. The U.S. military that has fought and continues to fight in Iraq and Afghanistan is composed of an all-volunteer force. As a consequence, the burden of defending America is not shared throughout the nation’s population as a whole. For example, this was the case in the Second World War. According to Hyams et al. (1996), nations with an all-volunteer military often discover that a sense of separation emerges between those who serve in combat and those civilians who have not served.
This sense of separation can lead service members to feel isolated from the general civilian population. The lack of military service by the majority of Americans can also cause a negative stigma with regard to seeking help for the PTSD suffered by combat veterans. Unlike past conflicts, many service members have been deployed multiple times to Iraq and Afghanistan and reservists and National Guard troops have participated in these wars in what the Washington-DC-based advocacy group Veterans for America (n.d.) says may be unprecedented numbers.

The technology of war has also changed in comparison to earlier wars. Advancements in enemy munitions have led to more severely injured troops. Whereas traumatic brain injuries (TBI) accounted for 12% of combat wounds in Vietnam, these head injuries are estimated to account for 22% of all combat wounds sustained in Iraq and Afghanistan (National Center for Post-Traumatic Stress Disorder, 2009). The exact link between concussive injuries, PTSD and poor mental health outcomes among Iraq and Afghanistan veterans is not entirely clear. For example, a study by Polusny, Kehle, and Nelson et al. (2011) concluded that PTSD more closely predicts poorer psychosocial outcomes among Iraq veterans one year after returning to the U.S. than do brain injuries. However, this may be the result of reporting bias, as veterans with concussive injuries are more likely to seek and receive medical diagnosis and therapy than returning veterans with no incidence of TBI or other concussive injury. Whatever this link, it is clear that these demographic and technological changes heighten the likelihood that returning veterans will encounter PTSD and other mental health disorders.
Combatants have always faced severe stressors that can lead to a range of psychological and psychosocial disorders (Hyams, Wignall, & Roswell, 1996; Yerkes & Holloway, 1996). These stressors include seeing dead bodies of companion service members and civilians or knowing service members who have been killed or wounded, being shot at or ambushed, coming under artillery fire, experiencing mortar and rocket attacks, being involved in motor vehicle accidents, and being separated from their families. In addition, many women warriors have been subject to sexual abuse, military sexual trauma, or MST, in military lexicon. In the V.A. system, MST is understood to be uninvited or unwanted sexual attention, advancement or touch. This can include but not be limited to the use of force or threat of force that leads to unwilling sexual contact or interaction. Unlike in prior U.S. wars, women have come to play an increasingly important role in U.S. combat operations, with women now comprising 15% of active military personnel and 17% of National Guard and military reserve personnel; females comprise 12% of military personnel sent to Iraq and Afghanistan. One study published in Women's Health Issues concluded that 15% of female Iraq and Afghanistan war veterans have experienced MST (Tokar, 2010).

That the prevalence of PTSD among veterans returning from Iraq and Afghanistan is high is beyond dispute. A 2007 study appearing in the American Journal of Psychiatry found that 16.6% of 2,863 veterans self-reported screening criteria indicative of poor mental health outcomes associated with PTSD (Hoge, Terhakopian, Castro, Messer, & Engel, 2007). In 2008, the RAND Corporation concluded that 18.5% of all veterans who
have served in these theatres of war had been diagnosed with PTSD or major depression (RAND, 2008). A more recent study of 13,226 Iraq veterans by the Army’s Medical Research and Material Command placed the prevalence of PTSD at a lower level, from 7.7% to 8.9% among regular army soldiers and 6.7% to 12.4% among National Guardsman. Various factors may account for the discrepancies among these studies including differing instruments and criteria used for diagnosis. Also, the U.S. military and Department of Veterans Affairs have been accused in the past of seeking to underestimate the incidence of mental health disorders among returning veterans and provide necessary treatment. In 2009, during a medical appointment, a patient named “Sgt. X” recorded an Army psychologist at Fort Carson, Colorado, saying that he was under pressure not to diagnose combat veterans with PTSD in order to minimize V.A. treatment costs (de Joanna & Benjamin, 2009). However, the number of people aged 18 or older in the U.S. who will experience PTSD at some point in their lifetimes has been estimated at 6.8%, while the prevalence of PTSD among this same population at any given time has been estimated at 3.5% (Grodus, 2007). Clearly, Iraq and Afghanistan war veterans are experiencing rates of PTSD well in excess of the population as a whole.

Some symptoms experienced by veterans are nightmares, flashbacks, social isolation and withdrawal, emotional numbing, poor concentration, memory loss, and learning difficulties, difficulty sleeping, homelessness, unemployment, increased marital problems, substance abuse, irritability and anger, violence and the tragedy of suicide (Mayo Clinic, 2009; PTSD Combat, 2006). PTSD in military veterans has also been
linked to a high incidence of dementia. The incidence of dementia among male veterans diagnosed with PTSD has been shown to be twice that of non-PTSD diagnosed male veterans (Yaffe, Vittinghoff, & Lindquist et al., 2010).

One assessment found the number of soldiers with anger and aggression problems rising to 22% from 11% after deployment in Iraq and Afghanistan. Service members planning to divorce their spouses rose to 15% from 9% after deployment and alcohol misuse rose to 21% from 13% one year after veterans returned home (Shane, 2005). PTSD and related psychological problems are posited to be leading veterans to engage in risky behavior. In the first year after returning home from combat in Iraq and Afghanistan, veterans are 75% more likely to die in automobile accidents than non-veterans; for motorcycle accidents, the rate is an astounding 148% higher. At 18.7 per 100,000, veterans returning from Iraq and Afghanistan have been found to have twice the rate of suicide as that of non-veterans. For veterans in the 20-24 age group, the figure was as high as 31.9 per 100,000. Over the 12 months of 2005, veterans of Iraq and Afghanistan committed suicide at a rate of 120 per week (MacQuarrie, 2009). Evidence introduced before the Ninth Circuit Court of the U.S. Court of Appeals in the prior mentioned suit against the V.A. indicated that an estimated 18 veterans are committing suicide per day in the U.S., although it is not clear how many of these are veterans of the conflicts in Iraq and Afghanistan. In its ruling, however the court noted that the V.A. had no suicide prevention officers at any of its outpatient clinics and that 70% of its health facilities had no systems to track potentially suicidal patients (New York Times, 2011).
Unfortunately, many veterans returning from service in Iraq and Afghanistan do not seek mental health care. According to Seal et al. (2007), only 7,750 or 31% of 25,000 veterans seen at V.A. primary health care clinics between September 2001 and September 2005 asked for and received mental health evaluations. Of the 7,750, almost one-third was diagnosed as having a mental health disorder and 18% were diagnosed as having two or more co-occurring and distinct mental health disorders. There appears to be a difference in the type of mental health disorders experienced by these veterans. Whereas female veterans are most likely to be diagnosed with depression, male veterans are more likely to be diagnosed with PTSD then females (Maguen, Ren, Bosch, Marmar, & Seal, 2011). Of particular note, Iraq and Afghanistan war veterans diagnosed with mental health problems have a particularly high prevalence of substance abuse. The rate of substance use disorders among those veterans with mental illness ranges from 21% to 35% (Science Daily, 2011).

The most difficult obstacle to overcome in successfully transitioning combat soldiers back to civilian life may be getting them to seek medical care for their psychological problems (RAND, 2009). Returning veterans may be so determined to jump back into civilian life that they ignore the toll of psychological stressors from combat. “Macho” military culture also fosters a sense of stigma in acknowledging PTSD and mental illness (Roehr, 2007; Titunik, 2010).

**Problems Finding Work**

Evidence shows that veterans of the wars in Iraq and Afghanistan have a difficult
time finding work once they separate from military service and return home. On April 2, 2010, the unemployment rate for Iraq and Afghanistan veterans was at 14.7%, notably higher than the 9.7% unemployment rate for the U.S. as a whole (IAVA, 2010). This rate has declined somewhat in recent history. As of March 2011, the unemployment rate of Iraq and Afghanistan veterans of all ages stood at 11.5%. This is two percentage points higher than the unemployment rate for the nation as a whole. However, most veterans of the wars in Iraq and Afghanistan are young, and as of March 2011, the unemployment rate among veterans aged 18 to 24 was 20.9%, again higher than all Americans of this age group, for whom the unemployment rate was 17.3% (Hefting, 2011).

Of course, returning veterans face the same problems finding jobs that other Americans do. In particular, for the past three years veterans of Iraq and Afghanistan seeking work have been faced with the most unfavorable national economy and longest economic downturn since the Great Depression of the 1930s. Still, other factors must be at work for, notwithstanding these difficult economic times, veterans are unemployed at a significantly higher rate than the nation as a whole. There is also some evidence from the Vietnam period that veterans who succeed in obtaining jobs after their term of service ends may start work at wage levels below those of non-veterans (Berger & Hirsch, 1983).

One problem specific to returning veterans trying to obtain employment is that their military service overseas has created gaps in their prior work experience that may make employers wary of hiring them. Many employers do not consider time spent in service as workplace-relevant experience. For a combat infantryman, this may be
understandable. The skills of a combat warrior are often not directly translatable into civilian job descriptions. But it appears to also be the case as well for many skilled specialists (Jones, 2009). It may be that employers see the regimentation that characterizes military hierarchy as leaving veterans ill-prepared to work in business capacities which often call for individual judgment and initiative. In addition to overseas deployments, many veterans in the volunteer professional military have spent time rotating among different military installations in the U.S., making it difficult for them to establish the type of networks and relationships that often lead to new job opportunities (Kelly Government Solutions, 2010). National Guardsmen and women called to service for deployment in Iraq and Afghanistan often must leave jobs that are no longer available when they return home, perhaps because in the current difficult economic climate, a company has gone out of business. Veterans with physical disabilities face additional challenges that all physically disabled people must confront in finding appropriate work (Military.com, 2008; VeteransToday.com, 2010). Race and ethnicity also come into play when returning veterans seek employment. In 2006, 19% of military personnel were Black and 11% were Hispanic (Schmal, 2006; USA Today, 2008). According to Schmal (2006), many Black and Hispanic veterans face the same type of discriminatory barriers that have long obstructed the ability of Blacks and Hispanics to find adequate work throughout the American job market.

For veterans afflicted with PTSD, the search for work becomes even more difficult. PTSD affliction places the veterans themselves in an awkward position when
looking for work. Disclosure of their disorder may make employers reluctant to hire
them. Failure in disclosing their affliction, however, may make it difficult for them to
keep their jobs in the event that the complications of PTSD arise in the workplace.
Employers may fear the potential for aggressive and violent behavior, difficulties
concentrating and memory loss and other PTSD symptoms. The potential costs of
insuring veterans who might encounter PTSD disorders may deter employers from hiring
Iraq and Afghanistan war veterans as well. Disabled combat veterans with PTSD face not
only these obstacles to finding and keeping work but also the problem of finding an
employer willing and able to provide the accommodations needed to allow them to work
with their disabilities (NPR, 2007; Roberts, 2010; Ruh, Spicer, & Vaughan, 2009;
Shapiro, 2007). Some veterans also have criminal records related to their service-
connected disabilities. As noted, veterans have been known to utilize alcohol or illicit
drugs as tools in dealing with their PTSD. This use of drugs and alcohol can lead to
narcotic and DUI convictions. To the degree that PTSD has contributed to criminal
violation by veterans, this can only make their search for employment more difficult.
Last, according to Vinokur, Caplan, and Williams (2006), the act of being unemployed
itself leads to stresses that can exacerbate and compound the mental, behavioral and
emotional difficulties faced by veterans with PTSD.

Educational Barriers

Members of the U.S. military are on average better educated than the nation’s
population as a whole. Ninety-eight percent of recruits who enter the military possess a
high school diploma or a higher-level degree compared to only 75% of the U.S. population as a whole (Heritage Foundation, 2005).

Veterans who have served their country who then seek to further their education encounter a higher education system that is largely oriented towards educating 18 to 21 year olds for whom study is their full-time occupation (Chao, DeRocco, & Flynn, 2008). In contrast and by definition, veterans do not meet these criteria. At the outset, veterans have full-time work experience as members of the military and most veterans who seek post high school education and have served in war zones in Iraq and Afghanistan are older than 21. Unlike financially dependent full-time students, many veterans work full time and have families to balance in addition to their educational pursuits. One barrier that veterans enrolling in traditional four-year institutions face is that many of the courses they seek to complete are scheduled at times of the day that conflict with the veteran’s work or family obligations. Headdon (2009) points to another significant barrier. This pertains to tuition and fees. Most state universities and colleges offer tuition discounts to students who have established residency in the state in which the institution is located. However, depending upon the state within which a veteran finds him or herself, veterans who have served overseas in Iraq or Afghanistan or rotated among different military installations in the U.S. or overseas may not qualify for lower tuition until they have established themselves in a locality, usually for a year. This can delay the veteran’s ability to reenter school and impose higher educational costs on the veteran as well as unnecessary stressors.
Headdon (2009) sees veterans enrolled in post-secondary education as an asset to the institutions they attend. According to Headdon, many veterans offer a more mature perspective, a worldly outlook, and many other assets in the classroom environment. More so than many traditional students, educators, faculty and staff seem to perceive veterans as focused and determined. In the classroom environment, veterans seem to have a better grasp on what they want or need. There is not a lot of educational meandering that occurs with this population. That said, coming home from combat in the wars in Iraq and Afghanistan and enrolling in college could be a difficult cultural shift for veterans. The mindset of many veterans as they return from war is that in putting their lives on the line in service to their country, they have done the most important thing they are likely to ever do in their lives. They then enter a campus community dominated by younger students, many of whom have gone straight from their family homes to college, remain at least in part dependent upon their families for financial support, and often have a much more relaxed view of life’s trials. Under these circumstances, veterans can feel out of place and encounter difficulties in establishing a social environment conducive to learning.

For veterans returning with PTSD, difficulty concentrating and memory loss pose barriers to an effective learning process (Church, 2009). Academic institutions may be fearful of the potential for violent behavior by war veterans they enroll who are suffering from PTSD (Coll et al., 2009). The transition from a military environment based upon taking orders from superiors to an educational environment where veterans are expected
to think on their own with minimal supervision creates problems in itself. College faculty and staff are not trained or experienced in how to meet the needs of Iraq and Afghanistan war veterans with psychological and physical disabilities (Brinker, 2009; Madaus, Miller, & Vance, 2009). Some academic faculty may shy away from close interaction with veterans including those who demonstrate signs of PTSD either because of political views they hold on the nature and ethics of warfare or because they are uncertain how best to touch on subjects that may potentially elicit powerful emotional feelings among combat veterans (Burnett & Segoria, 2009).

The Challenge of Housing and Homelessness

Housing is also a significant problem for returning Iraq and Afghanistan veterans. Figures on the number of Iraq and Afghanistan war veterans that are homeless vary, and it is generally difficult to compile reliable data on the homeless population. But according to the V.A. (2009), veterans are estimated to make up about a quarter of the nation’s homeless population, although veterans are only 11% of the nation’s total population. One estimate put the number of veterans who were homeless at some point in 2004 at 500,000, without indicating how many of these were thought to be Iraq and Afghanistan veterans (Marks, 2005). An estimate put the number of homeless veterans in 2008 at 200,000, with Iraq and Afghanistan veterans accounting for 2,000 of this total (Mount, 2008). However this number has grown substantially; according to the V.A., in July 2011, more than 10,000 Iraq and Afghanistan veterans were homeless, living in shelters or receiving housing vouchers. About 13% of these were women (Marine Times, 2011).
While both male and female veterans are overrepresented among the homeless in the United States, the majority (97%) of homeless veterans are male. Veterans are also likely to be homeless for longer periods of time and more likely to suffer from psychological problems and alcohol and drug abuse than the non-veteran homeless. Woman veterans suffering from homelessness are more likely to have been victims of sexual abuse than non-veteran homeless women and are more likely to be single parents than homeless veteran men (RAND, 2008). The V.A. (2009) says that it expects the number of homeless veterans to increase in the years ahead as many veterans do not become homeless until several years after their separation from military service. There is also concern about housing and other services in regards to helping in the transition of returning national guardsmen who have served in Iraq and Afghanistan. Many do not live nearby military bases, making them more at risk than servicemen and woman on active duty whom live on or near military bases (Eckholm, 2007; Perl, 2007). Proximity to a military base facilitates the veteran’s ability to maintain a link to other veterans and develop a mutual support network in dealing with the difficulties these service members encounter. By the same measure, transition assistance facilities are more likely to be found on or nearby a military base than in some distant locale.

A class action lawsuit filed against the V.A. in June 2011 may shed further light on the relationship between PTSD and homelessness between Iraq and Afghanistan veterans. The suit, filed in U.S. District Court in California claimed that the V.A. has failed to provide stable housing for veterans; this has left many of them facing a life of
homelessness (Boston.com, 2011). The plaintiffs are asking the court to order the V.A. to use empty buildings on a Los Angeles V.A. medical complex to house these veterans.

The psychological and psychosocial disorders associated with PTSD and depression can stay with returning veterans for a long time or even for the duration of their life. Sometimes these afflictions do not become apparent until well after the veteran has resumed civilian life. Estimates in 2008 indicated that unemployment, lost productivity at work and the tragedy of suicide among veterans of Iraq and Afghanistan will cost the U.S. economy over $6 billion dollars (RAND, 2008). Given that U.S. troops are still fighting overseas, the cost can only rise. The country may be faced with “long-term, cascading consequences” if the mental health problems of these veterans are not treated (Washington Post, 2008, ¶ 4). Clearly, addressing the needs of PTSD-afflicted veterans is imperative both with regard to the quality of life that the veterans themselves will lead upon their transition to civilian life as well as in terms of the potential costs these veterans may impose upon the American society as a whole.

Posttraumatic Growth

Ryff and Singer (1996) point out that, historically, positive outcomes in clinical research have been characterized as the lack of distress, such that they are mutually exclusive. However, there is evidence challenging this psychological model of dysfunction. For instance, Jennings and colleagues (2006) found that stress-related growth from combat-related PTSD was positively associated with veteran adaptation later in life. Thus, positive outcomes in this population are not simply the absence of
posttraumatic stress symptoms (PTSS) or the disorder (PTSD). Rather, they include continued striving, thriving, and success with coming to grips with the traumatic experience and the existential challenges of life. There are many constructs that attempt to capture these elements in the research literature, most notably wellbeing (both subjective and psychological), quality of life, and posttraumatic growth.

Wellbeing, the umbrella term inclusive of subjective and psychological wellbeing, refers to optimal psychological functioning and, as such, is frequently utilized to assess positive outcomes in psychological terms. Ryan and Deci (2001), in their review of wellbeing, point to two distinct conceptualizations. The first, described by Aristotle as hedonic wellbeing, focuses on happiness (Seligman & Csikszentmihalyi, 2000) and maximizing pleasure, whereas the second focuses on growth (Horney, 1950; Rogers, 1961) and development encapsulated in eudaimonic wellbeing. Hedonic wellbeing is captured by the construct of subjective wellbeing (Diener & Lucas, 1999), and research in this area typically defines subjective wellbeing (SWB) outcomes in terms of happiness, experiencing pleasure and avoiding pain. SWB is often operationalized as the summation of positive mood minus negative mood plus life satisfaction (Diener, 1984; Seligman & Csikszentmihalyi, 2000), or sometimes, more simply, as self-report of life satisfaction (Diener & Lucas, 1999; Diener, Emmons, Larsen, & Griffin, 1985). Thus, overall, SWB defines wellbeing in terms of experienced pleasure.

V.A. Veterans Transition Programs

The Department of Veterans Affairs (V.A.) operates or is otherwise involved in
programs intended to assist returning war veterans in meeting their educational, employment and housing needs when they transition to civilian life. What follows is a description of those programs targeted towards meeting veterans' education, employment and housing needs. The review of program elements is not exhaustive and meant only to highlight the principal elements of these programs with regard to meeting the needs of combatants returning from war in Iraq and Afghanistan. The intent of this section is to depict the types of tools that the federal government makes available to aid veterans in their transition.

**Education and training programs.** The best-known and most widely used program for meeting the educational needs of veterans is the originally authorized in 1994 under the Servicemen's Readjustment Act, known as the G.I. Bill. The Bill has been extended and amended a number of times through its history. Under the original Bill, veterans returning from service in the Second World War were entitled to financial assistance in pursuing a college education. Amidst the Korean War, in 1952, the way in which G.I. Bill educational benefits were paid was revised. Whereas in the original G.I. Bill, benefits were paid to the educational institution attended by a veteran, the 1952 revisions made payments of a fixed sum monthly directly to veterans. The change was made due to allegations that colleges were overcharging veterans in an attempt to defraud the government. The effect of the changes was to give veterans greater discretion in how they spent their G.I. Bill benefit in meeting their educational expenses. With funding being sent directly to the veteran instead of being channeled through educational
institutions, the change also established a more direct communications link between individual veterans and the federal government. However it also had the effect of disconnecting the amount veterans received in educational benefits from the cost charged by colleges for educating them. The reach of the G.I. Bill was significantly expanded in 1966 when educational benefits were extended to veterans who served in the military during periods when the U.S. was at peace, not just during wartime. This change can be seen as a reflection of the demand for soldiers, sailors, marines and airmen created by the Cold War which led the United States to possess a standing military of over two million men and women in arms, many times the size of the standing military that the nation marshaled during peacetime prior to the Cold War’s onset (Altschuler & Blumin, 2001; Bennett, 1999; Subcommittee on Readjustment, 1974).

A major change in the way the G.I. Bill provided for veterans educational benefits took place in 1984 with the passage of what is known as the Montgomery G.I. Bill (MGIB). This Bill was named after a former Mississippi congressman by the name of Sonny Montgomery who was Chairman of the House of Representative Veterans Affairs Committee at the time. The MGIB enacted several important features that define how returning Iraq and Afghanistan veterans can use their benefits today. Under the MGIB, veterans are allowed to draw educational benefits for up to 36 months while enrolled in a qualified education or training program over a period of 10 years. In addition to this, the MGIB expanded the types of education and training opportunities for which veterans could receive benefits to include certain technical and vocational courses that were not
previously acceptable in the program as well as for independent correspondence courses and on the job apprenticeship job training. The MGIB also allowed servicemen and women to "buy-in" to additional G.I. Bill education benefits by making their contributions that the federal government would match on an eight to one basis. Accompanying the MGIB were other changes that expanded educational benefits for veterans who returned from war disabled. To increase recruitment to the military reserves and National Guard, which suffered in the period following Vietnam, G.I. Bill benefits were also extended to reservists and guardsmen. In light of the heavy reliance upon reservists and the National Guard in the wars in Iraq and Afghanistan, the importance of this change upon ensuring the nation has a ready pool of combatants to draw upon should not be underestimated.

In support of the Global War on Terrorism, U.S. soldiers, sailors, airmen and marines first went into combat in Afghanistan in 2001 and entered Baghdad, Iraq, in March 2003. In 2009, congress passed and the president signed new G.I. bill provisions aimed at updating the ability of the V.A. to meet the educational needs of veterans returning from these wars; these said provisions where the basis of the addition of the Post-9/11 G.I. Bill. One of the most important changes included in the Post-9/11 G.I. Bill pertains to the amount of educational assistance eligible veterans can receive is now tied directly to the actual cost of education as opposed to all veterans receiving a monthly flat fee stipend that is the same for all, which was previously the case. Veterans eligible for Post-9/11 G.I. Bill benefits can receive as much as the full cost of education at any public
college or university in the state in which they enroll (TurboTAP, 2009). This is particularly important given that veterans of combat in Iraq and Afghanistan have been returning to school amidst a period in which college costs have been rising much more rapidly than in the past. For example, according to FinAid.org (2010), between 1958 and 2005, the cost of college tuition, room and board increased an average of about 8% annually. This meant that college costs were rising at a rate between 1.2 and 2.1 times the rate of inflation annually. Since 2005, tuition costs at state universities have risen on average in the 6.5% range annually. In California and Florida, states that are home to large numbers of veterans, tuition at state universities will rise as much as 15% this year and it is believed will continue to rise in the future (Damast, 2009). Clearly linking G.I. Bill educational benefit levels to actual school costs at a time of inflation in higher education is a significant step forward in meeting the educational needs of Iraq and Afghanistan war veterans.

Another provision of the Post-9/11 G.I. Bill provides for veterans enrolled in eligible education or training programs to receive a $1,000 stipend to cover the costs of books and supplies needed for their studies and training programs. Unlike past Bills, the Post-9/11 bill also provides for a monthly housing stipend to be paid to veterans who pursue education or training programs. Furthermore, a housing allowance is now payable to students enrolled solely in distance learning programs. Distance learning has expanded rapidly in recent years. One third of all post-secondary schools in the U.S. currently offer some sort of distance learning and 8% offer degree or certificate programs.
completely through distance learning. Post-secondary enrollment in distance learning coursework is projected to grow by 18% to 19% per year for undergraduate and graduate students (Education Center, 2010). Distance learning can be particularly attractive to veterans for a number of reasons. Study can be organized around work and family schedules. Distance learning may be attractive for veterans who are unable or unwilling to relocate to attend on-campus coursework and greatly facilitates access to educational resources for veterans living in rural areas that lack nearby campus facilities. Last, distance learning can be a very effective way of reaching veterans who are disabled and face mobility obstacles in commuting to a college campus or training center or suffer from PTSD or other psychosocial disorders. Many enroll in distance learning programs because they do not live near a college, have family or work obligations that prevent them from relocating or are disabled due to service-related injuries. Making housing stipends available to veterans enrolled in distance learning programs will encourage greater participation in the program and offer better long-term psychosocial outcomes.

Employment assistance programs. Under the original 1944 G.I. Bill, veterans returning home from the Second World War were entitled to payment of a federally funded unemployment benefit of $20 per week for up to 52 weeks or until they found a job, whichever came first (Bennett, 1999). Those separating from the U.S. military today continue to be eligible for unemployment benefits in the state in which they reside. The federal government reimburses state governments for the cost of paying these unemployment benefits to veterans. Adjusting for inflation, $20 in 1945 is equivalent to
$244 today (Federal Reserve, n.d.). This is less than the $300 average weekly in unemployment benefits offered by the 50 U.S. states today. It is also less than the lowest weekly unemployment benefit paid by any U.S. state, $255 paid in Alabama (MSN Money, 2009). So in terms of unemployment insurance benefits, veterans today are better off relative to their predecessors who separated from service after World War Two.

However veterans who separated from service after the end of the Second World War came home to a generally growing national economy. The picture is much different now. The recession that began during the fourth quarter of 2007 became the longest and in many ways the deepest since the Great Depression. Over eight million jobs have been lost. As of June 2010, over half of all American’s whose jobs have been lost during the recession had been unemployed for more than 6 months (Murray, 2010). As of September 2011, this number had increased to 45% (Washington Post, 2011). Most economists believe that U.S. job growth will be tepid at best for several years to come (Powell, 2010). Veterans returning from service in Iraq and Afghanistan are returning to the worst job outlook in generations. For veterans suffering from PTSD, unemployment can increase the seriousness of their disorder. In the event that a combat veteran suffers from an injury, illness or ailment that was caused or aggravated by their military service they have the right to file a claim for disability to the Department of Veterans Affairs. Conditions found to be service related are rated individually before being added to the veterans’ individual case file. The conditions are then combined into an overall disability rating from 10% to 100% based on the level of debilitation the ailments cause.
Depending on the percentage of disability found the veteran will receive a monthly compensation rating ranging from $123 at 10% to $2673 at 100% untaxed monthly. (Department of Veterans Affairs, 2009). If a veteran is found to be service connected with a disability, they may apply for an additional program entitled Vocational Rehabilitation and Employment. This program has two main goals. The first is to assist disabled veterans in preparing for, gaining and maintaining functional and feasible employment that is not detrimental to the conditions for which they are service connected. Secondly, for those veterans who are not employable due to their service connected ailments or afflictions they assist them in becoming more independent in their living situation in their respective community. In order to complete these tasks vocational rehab offers multiple tracks to assist the veterans based on individual needs. Higher education, vocational or technical school training, job placements, on-the-job training and help with starting a small business are all methods of approach for the vocational rehab program to assist in rehabilitation. Beyond this, they offer an untaxed stipend on a monthly basis while in their program in addition to the veterans’ disability payment. Non-service connected veterans though often find it more difficult transitioning as there is little direct help coming from the V.A. as they search for jobs once they return home.

For non-service connected veterans there is the transitional assistance program also known as TAP. Veterans attending TAP briefings or accessing TAP online will find that V.A. and other web sites provide a list of resources that they can consult in seeking new employment. These include job boards such as that operated by the Military.com.
veteran job center, which lists employers described as military friendly (Military.com, 2010). TAP also includes information on how veterans may access job-hunting assistance services provided by the U.S. Department of Labor as well as information on small business loan programs operated by the U.S. Commerce Department’s Small Business Administration. These may be of interest to those former warriors seeking to start their own businesses after they separate from military service. V.A. transition counselors can and do help disabled veterans in their job search efforts by directing them to services that can assist in resume writing and assembling other materials that a veteran may need in his or her job hunt (TurboTAP.org, 2009).

Under federal law, veterans receive a point preference when applying for certain federal civil service jobs. Many state and local governments and companies also seek to award military veteran’s preference in hiring. While this may provide veterans a step up in competing for certain jobs, veterans must first demonstrate that they are qualified and able to perform such work successfully before being hired. As discussed earlier, for the veteran with PTSD, this can be a challenge. It is notable that the TAP website calls attention to the fact that up to 70% of all jobs filled in the United States are never advertised but filled by word of mouth (TurboTAP.org, 2009). TAP advises veterans to develop professional relationships and networks that might lead to employment opportunities. However for the Iraq and Afghanistan war veterans suffering from PTSD, reaching out to develop such relationships is complicated and can have negative effects on the nature of their PTSD affliction. By all appearances, when it comes to searching for
work, the returning Iraq and Afghanistan war veteran finds him or herself in the same position as the millions of other Americans who are often fruitlessly searching for work amidst what is arguably the worst job market in almost 70 years (Huffington Post, 2009).

The federal government offers tax credits of up to $4,800 to companies that hire veterans with service related disabilities (VeteransToday.com, 2010). It’s not clear from the literature exactly how effective these tax credits have been in increasing employment by veterans. According to Time Magazine (Gandel, 2010), hiring tax credits often simply allow employers to make hires that they were going to make anyway with little net increase in overall employment levels. In any event, in light of the elevated unemployment levels being experienced by veterans of Iraq and Afghanistan, consideration should be given to making all of these veterans eligible for the tax credits.

**Housing Homeless Veterans.** Under the original G.I. Bill, veterans returning from the Second World War were eligible for low cost federal loans that enabled them to purchase new homes. The V.A. continues to operate programs that provide home loan guarantees and mortgage insurance to veterans under section 64.114 of the U.S. Code of Federal Regulations (Federal Grants Wire, 2010). However it is not clear in the literature how effective these programs are in expanding home ownership by veterans in today’s housing market where mortgages have become very difficult to obtain for all but the most credit worthy consumers.

In 2008, Congress approved and the president signed legislation that provided $75
The U.S. Department of Housing and Urban Development department administers these funds. Information on how to apply for housing voucher support is generally available through TAP and V.A. benefits representatives also advise veterans on the application process. Despite funding made available under Section 8, federal support for housing vouchers have not kept pace with the need for affordable housing. During the housing boom of the early part of this decade many landlords stopped accepting Section 8 vouchers and applicants eligible for Section 8 vouchers can remain on a waiting list for years before a suitable residence becomes available (NPR, 2010). In New York City in 2008, over 214 people applied for a single Section 8 housing voucher eligible apartment (CES, 2008). So even though funding has specifically been targeted toward Section 8 housing for veterans, these former combatants must still wait in a queue with everyone else until an actual Section 8 eligible housing unit becomes available.

Homelessness may be the most intractable problem faced by PTSD afflicted veterans. It is certainly hard to see how homeless veterans are in the position to effectively pursue education programs and find employment. Likewise, a lack of housing makes it difficult for those with PTSD disorders to seek and receive the type of medical care needed to help treat their affliction. The V.A. has long been involved in efforts to find shelter for homeless veterans. Much of these efforts have been directed toward contracting with community based non-profit agencies. In 2009, over 92,000 veterans
found shelter in over 4,000 facilities operated by these agencies. Still using conservative estimates of 200,000 homeless veterans, this still left over 100,000 veterans lacking adequate shelter (National Coalition, 2010). As it is likely that veterans suffering from PTSD are the hardest for veterans housing advocates to reach, it may be assumed that those with PTSD account for a significant share of those left un-housed.

A significant part of the problem in evaluating how best to meet the housing needs of veterans with PTSD disorders is that the V.A. has in the past been reluctant to acknowledge that PTSD plays a role in homelessness among veterans. Veterans themselves have however not been blind to the role played by PTSD however. Many veterans who are displaced and at risk have to live with the ongoing effects of PTSD (National Coalition for Homeless Veterans, 2010). It is hard to see how a solution can be developed to house homeless veterans with PTSD until the V.A. acknowledged the link between PTSD and homelessness.

On November 3, 2009 U.S. Secretary for Veterans Affairs Erik Shinseki announced a new and potentially landmark five-year plan to end homelessness among veterans by 2014 (V.A., 2009). He noted that on any given night an estimated 170,000 veterans are homeless and that without “a change in the status quo, the number (of homeless veterans) could increase 10 to 15% in the next five years” (McClosky, 2009, ¶ 3). Vogel noted that the plan, which was funded under the auspices of the 2880 G.I. bill, aims to put an end to the shamelessness associated with being (Vogel, 2011).

The 2009 plan made several significant advances in the V.A.’s approach to
homelessness among veterans. For example, the plan acknowledged that homelessness is often a consequence of multiple psychosocial factors, including unstable family supports, job loss, inadequate job skills, health problems, substance abuse and other mental health disorders. The plan's premise was that effective homeless services could not be provided in isolation but needs to be offered in a comprehensive format that supports physical and mental health treatment and enhances independent living skills (V.A., 2009). The 2012 budget for the program included $939 million for programs under which the V.A. will work with the U.S. Department of Housing and Urban Development and community organizations to provide transitional housing to 20,000 veterans and their families. The 2012 budget represented a 17.5% increase over the program's 2011 budget. The V.A. has also budgeted $2.7 billion to diagnose and treat PTSD and other psychological and psychosocial conditions that often lead to homelessness among veterans. The new program shows the V.A. to be acting to address the intertwined problems of mental illness and housing in a concerted fashion.

In February 2011, Secretary Shinseki provided a progress report before an assembly of the Disabled American Veterans. According to the Secretary, the number of homeless veterans had dropped from about 195,000 in 2005 to about 76,000, and the V.A. seeks to bring this figure down to below 59,000 by the end of June 2012 (Miles, 2011, p. 7). The V.A. has also launched a comprehensive review to identify vacant or underutilized V.A. properties that might be used to house homeless and at-risk veterans and their families. Despite these signs of progress, the degree to which the new V.A. plan
truly ends homelessness among veterans remains to be determined.
CHAPTER 3 - METHODS

Research Design

In configuring the correlational study all subjects were required to be military veterans that served in one of the five branches (Army, Marine Corp, Navy, Air force, Coastguard), during a period of war. Recruitment was conducted at the St. Louis Warrior Summit and Welcome Home celebration for combat veterans. The Department of Veterans Affairs St. Louis Medical Center and Illinois Warrior Summit Coalition hosted the event at the America Center in St. Louis, Missouri, on 26 September 2014. The first 100 qualified entrants at the event were offered the survey battery associated with this study and asked if they were interested in participating in the study. Upon acceptance of the study, participants were directed to a private room at the facility where they were introduced to the details of the study. Additionally, participants were given a blank white envelope to put the completed study in prior to returning it to the staff. At that time if they were not interested in completing the survey, staff collected the survey battery from the participant and directed them into the warrior summit event to utilize the available resource offered at the event minus further questioning. Those who remained interested in participating in the study where allowed to begin the completion of the survey battery.

The participants were given 60 minutes to complete the survey in its entirety. Upon completion event staff collected the enclosed unmarked envelope containing the survey and dropped it into an enclosed and locked safe box only accessible by the studies primary researcher. Following this, the participants were directed into the general Warrior
summit event to engage in utilization of the various veteran resources with no further communication following. It is important to note that the participants that completed the study received no further compensation than those whom did not. This was an unpaid study and at no time where the participants offered any compensation for their participation in this study.

**Description of Participants**

A total of 50 military veterans completed the survey battery through self-report that is discussed and reported throughout this work at the St. Louis Warrior summit and welcome home celebration at the American Center in St. Louis, Missouri, on 26 September 2014. The 50 individuals who provided information about their gender on the survey were closely representative of the active duty military population, with 44 males (88%) and six females (12%) represented (CNN.Com, 2013).

The participants were asked to report their military service leading to a sample that was representative of four of the five military branches, including Army with 37 respondents (74%), Navy, three (6%), Air force, five (10%), Marines, five (10%), and the Coast Guard was unrepresented (0.0%). The sample reflected both enlisted (E1-E8) 48 (96%) and officer (O1-010) two (4%) service statuses with warrant officer status (W-1-W5) unreported, zero (0%). Also reported was era of military service. This included Vietnam 22 (44%), Persian Gulf or Desert Storm, three (6%), OIF/OEF/OND, 23 (46%) and non-combat deployed veteran, two (4%). Participants reported race as Black or African American, 33 (64%), White or Caucasian, 14 (28%), Hispanic or Latino, three
(6%) and Asian or Pacific Islander, 1 (2%). Age was not assessed in this study.

There were no significant exclusion criteria. Inclusion criteria were as follows:
1. Subject is a male or female 18 years or older
2. Subject served in the United States Military
3. Subject served during a military conflict

Measures

PTSD symptoms. The PTSD Checklist (Weathers, Litz, Herman, Huska, & Keane, 1993) is a 17-item, 5-point Likert scale on which respondents rank the severity of their PTSD symptoms over the past month from 1 (not at all) to 5 (extremely). The Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition (DSM-IV) (American Psychiatric Association, 1994), derives each scale item from a PTSD criterion symptom as defined. In this study, combat veterans completed the military version of the PCL (PCL-M), which directs participants to respond regarding to their own stressful military experiences.

The scale has high internal consistency, test-retest reliability, and convergent and discriminant validity (Pratt, Brief, & Keane, 2006), and recent research has demonstrated adequate internal consistency of individual cluster scores (e.g., Renshaw & Caska, 2012). The creators of the scale recommended a score of 50 to indicate the presence of PTSD (Weathers et al., 1993), but more recent research in a primary care setting indicated that a cutoff score of 34 maximized sensitivity and specificity for estimating diagnosis (Bliese
et al., 2008). The mean score for the study was 52.82 indicating substantial rates of PTSD in our sample group.

**Posttraumatic growth.** Posttraumatic growth was assessed using the Posttraumatic Growth Inventory (PTGI) (Tedeschi & Calhoun, 1996). The PTGI has 21 questions focusing on posttraumatic growth in the context of relating to others, new possibilities, personal strength, spiritual change, and appreciation of life. Participants responded to each item on a 4-point scale regarding the extent of change that has occurred in the life following a traumatic experience. The overall posttraumatic growth score is the sum of responses to the 21 items. The PTGI has good internal consistency and construct, convergent, and discriminant validity (Tedeschi & Calhoun, 1996).

**Combat exposure.** To examine the participant’s level of combat exposure, the Combat Exposure Scale was the utilized tool of assessment. The Combat Exposure Scale (CES) is a seven-item self-report measure that assesses wartime stressors experienced by combatants. Items are rated on a 5-point frequency (1 = “no” or “never” to 5 = “more than 50 times”), 5-point duration (1 = “never” to 5 = “more than 6 months”), 4-point frequency (1 = “no” to 4 = “more than 12 times”) or 4-point degree of loss (1 = “no one” to 4 = “more than 50%”) scale (King, Keane & Fairbank, 1999).

Veterans are asked to respond based on their exposure to various combat situations, such as firing rounds at the enemy and being on hazardous duty assignments. The total CES score (ranging from 0 to 41) is calculated by using a sum of weighted
scores, which can be classified into one of five categories of combat exposure ranging from “light” to “heavy.” The CES was intended to be easily administered and scored and is useful in both research and clinical settings.

**Post deployment social support.** To evaluate this area the Post Deployment Social Support Scale (PDSSS) was used. This assessment tool is a Likert based scaling instrument that examines the extent to which family, friends, and individuals within the community provide emotional sustenance and instrumental assistance. Emotional sustenance refers to the extent in which others provide the veteran with understanding, companionship, a sense of belonging, and positive self-regard (e.g., making the individual feel proud of his or her service, offering advice when needed). Instrumental assistance refers to the extent to which the individual receives tangible aid, such as help to accomplish tasks and material assistance or resources (e.g., helping the individual with daily chores, lending the individual money) (King, King & Vogt, 2003).
CHAPTER 4 - RESULTS

As noted in the literature, while the issue of posttraumatic stress disorder (PTSD) following combat deployment among American military veterans has created significant barriers to successful reintegration, positive outcomes also exist in the form of posttraumatic growth. A review of recent literature revealed that more research is needed to identify factors contributing to successful reintegration. Therefore, the purpose of this correlational study was to examine posttraumatic growth in U.S. military combat veterans by identifying significant relationships among variables leading to successful reintegration of military personnel within the community following combat deployment.

Research Questions

This research attempted to address the following questions:

1. How do the adult veteran participants in this study experience reintegration into the civilian sector?

2. What factors identified on the posttraumatic growth inventory have the most influence on positive outcomes in adult veterans’ own lives?

3. What specific sources of strength and encouragement did adult veterans draw upon to strengthen and guide them as they have negotiated their way through difficult circumstances to become highly successful and/or productive citizens?

4. How might adult veteran participants’ experiences and insights inform ongoing efforts to promote positive reintegration among veterans or other
similar demographic groups facing poverty, family hardship/dysfunction, and community devastation?

Data Gathering Tools

Four tools were used to collect data for the variables investigated in this study. These instruments were (a) the PTSD Checklist (PCLM) (Weathers, Litz, Herman, Huska, & Keane, 1993), which is a Likert-type scale on which respondents rank the severity of their PTSD symptoms over the past month. (b) The Posttraumatic Growth Inventory (PTGI) (Tedeschi & Calhoun, 1996) asked participants to respond to 21 questions focusing on posttraumatic growth in the context of relating to others, new possibilities, personal strength, spiritual change, and appreciation of life. (c) The Combat Exposure Scale (CES) (Keane & Fairbank, 1999) is a seven-item, Likert-type, self-report measure that assesses wartime stressors experienced by combatants. (d) The Post Deployment Social Support Scale (PDSSS) (King, King, & Vogt, 2003) is a Likert-type scaling instrument that examines the extent to which family, friends, and individuals within the community provide emotional sustenance and instrumental assistance. These data collection tools were described in detail in the Methods chapter of this document. Results from data collection are reported below.

Descriptive Information

Table 1 depicts the gender of respondents. As shown in the table, 44 participants reported their gender as male (88%) and six reported their gender as female (12%).
Table 1

Gender of Participants (N=50)

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<th>Frequency</th>
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<th>Cumulative Percent</th>
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<tr>
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Participants in the sample provided information about their race. This information is summarized in Table 2. Thirty-two participants (n=32) reported their race as Black or African American (64%), 14 were White or Caucasian (28%), three were Hispanic or Latino (6%), and one was Asian or Pacific Islander (2%).

Table 2

Race of Participants (N=50)

<table>
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<td>Hispanic</td>
<td>3</td>
<td>6.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Participants were asked to provide information about the branch of the military in which they had served. Results are shown in Table 3. Participants reported their branch of service as follows: 74% served in the Army (n=37); 6% served in the Navy (n=3); 10% served in the Air force (n=5); and 10% served in the Marines (n=5).

Table 3

*Military Branch (N=50)*

<table>
<thead>
<tr>
<th>Branch</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Force</td>
<td>5</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Army</td>
<td>37</td>
<td>74.0</td>
<td>74.0</td>
</tr>
<tr>
<td>Marine</td>
<td>5</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Navy</td>
<td>3</td>
<td>6.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Participants provided information about military status. As shown in Table 4, 96% of participants reported their military status as enlisted (E1-E8) (n=48) and 4% reported their status as officer (O1-010) (n=2).

Table 4

Military Status (N=50)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enlisted</td>
<td>48</td>
<td>96.0</td>
<td>96.0</td>
</tr>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Officer</td>
<td>2</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In addition, participants reported their era of military service. Forty-four percent (44%) indicated Vietnam (n=22); 6% indicated Persian Gulf or Desert Storm (n=3); 46% indicated OIF/OEF/OND (n=23); and 4% reported being a non-combat deployed veteran (n=2). These results are shown in Table 5.
Table 5

_Military Era (N=50)_

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gulf</td>
<td>3</td>
<td>6.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Non-Combat</td>
<td>2</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>OIF /OEF</td>
<td>23</td>
<td>46.0</td>
<td>46.0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>22</td>
<td>44.0</td>
<td>44.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Descriptive statistics for participants’ scores on the survey battery are reported in Table 6. For the PTSD Checklist (PCLM), $M=51.82$, $SD=18.75$. The minimum score was 17 and maximum was 85 possible on the scale. The Combat Exposure Scale (CES) showed $M=17.62$, $SD=9.88$, with a minimum score of 0 and a maximum score of 32. On the Post Deployment Social Support Scale (PDSSS), $M=33.54$, $SD=8.68$, the minimum score was 20 and the maximum, 53. Finally, on the Posttraumatic Growth Inventory (PTGI), $M=65.48$, $SD=19.32$ with a minimum score of 17 and a maximum of 102.
Table 6

*Participant Score Statistics (N=50)*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PCLM recoded score</td>
<td>50</td>
<td>17.00</td>
<td>85.00</td>
<td>51.82</td>
<td>18.74</td>
</tr>
<tr>
<td>Total CES recoded score</td>
<td>50</td>
<td>.00</td>
<td>32.00</td>
<td>17.62</td>
<td>9.88</td>
</tr>
<tr>
<td>Total PDSSS recoded score</td>
<td>50</td>
<td>20.00</td>
<td>53.00</td>
<td>33.54</td>
<td>8.68</td>
</tr>
<tr>
<td>Total PTGI recoded score</td>
<td>50</td>
<td>17.00</td>
<td>102.00</td>
<td>65.48</td>
<td>19.32</td>
</tr>
<tr>
<td>Valid N (list wise)</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7 shows the Pearson Product Moment correlations for interval-level variables in the study. The correlation matrix shows the two-tailed tests of significance for bivariate pairs. Relationships among variables were tested using $\alpha = .05$. Correlations marked with double asterisks were shown to be highly significant ($p < .01$).

As shown in the table, there is a highly significant, negative relationship between Post Deployment Social Support Scale (PDSSS) and PTSD Checklist (PCLM) ($r = -.42$, $p < .01$). This indicates that increases in the participants’ perceived level of emotional sustenance and instrumental assistance from family, friends, and individuals within the community were associated with lower perceived levels of severity of their PTSD symptoms over the past month.

There is also a highly significant, positive correlation between mean scores on the Combat Exposure Scale (CES) and mean scores on the PTSD Checklist (PCLM) ($r = .388$, $p < .01$). This indicates that as the level of wartime stressors experienced by
combatants increases, so do the perceived levels of severity of their PTSD symptoms over the past month.

In correlational studies, data are collected to determine whether and to what degree the distribution of one variable is related to the distribution of other variable(s) for a single group of participants. In this study, the goal was to determine the strength and direction of the relationships. That said, statistical significance here refers to whether the obtained coefficient is significantly different from zero. Correlation studies cannot be used to determine causality. For a given level of significance, the smaller the sample size the larger the coefficient required for significance. No matter how significant a coefficient is, a low coefficient represents a low relationship. These results will be discussed in greater detail in the next chapters.
### Table 7

**Correlation Matrix (N=50)**

<table>
<thead>
<tr>
<th></th>
<th>Average PTGI</th>
<th>Average recoded PDSSS score</th>
<th>Average recoded CES score</th>
<th>Average recoded PCLM score</th>
<th>Were they in the air force?</th>
<th>Were they OIF/OEF?</th>
<th>Were they in the army?</th>
<th>Were they in Vietnam?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average PTGI</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average recoded PDSSS</td>
<td>-.063</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>score</td>
<td>.633</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average recoded CES</td>
<td>-.80</td>
<td>-.250</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>score</td>
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<td>.081</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average recoded PCLM</td>
<td>.132</td>
<td>-.42**</td>
<td>.388**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>score</td>
<td>.363</td>
<td>.003</td>
<td>.005</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>N</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were they in the air</td>
<td>-.040</td>
<td>.169</td>
<td>-.192</td>
<td>-.248</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>force?</td>
<td>.784</td>
<td>.241</td>
<td>.182</td>
<td>.082</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>N</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were they OIF/OEF?</td>
<td>-.099</td>
<td>.454**</td>
<td>-.182</td>
<td>-.29*</td>
<td>.227</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.495</td>
<td>.001</td>
<td>.206</td>
<td>.040</td>
<td>.112</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were they in the army?</td>
<td>.069</td>
<td>.067</td>
<td>.192</td>
<td>.201</td>
<td>-.29*</td>
<td>.227</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.634</td>
<td>.644</td>
<td>.183</td>
<td>.162</td>
<td>.040</td>
<td>.112</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were they in Vietnam?</td>
<td>.120</td>
<td>-.55**</td>
<td>.373**</td>
<td>.499**</td>
<td>-.30*</td>
<td>-.82**</td>
<td>.158</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>.408</td>
<td>.000</td>
<td>.008</td>
<td>.001</td>
<td>.037</td>
<td>.000</td>
<td>.273</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: ** indicates highly significant correlation at the $\alpha = .01$ level.
CHAPTER 5 - DISCUSSION

Discussion Related to Findings of the Study

In a speech to the National Coalition for Homeless Veterans during their 2014 Annual Meeting, Department of Veterans Affairs National director, Eric Shinseki discussed the strategies the V.A. was implementing to better understand the Veteran population and their presenting problems. He spoke about the efforts to rebuild relationships with veterans experiencing homelessness but also the agencies efforts to provide improved healthcare to all veteran service members. During his briefing, Mr. Shinseki presented that he did not think that the Department of Veterans Affairs had a clear understanding of the situation. He also stated that he was unclear of “how many Veterans were homeless or what really caused homelessness.” However, ongoing research efforts were pointing to “depression, insomnia, physical pain, substance use disorder, and/ or failed relationships in veterans lives as triggering events leading to homelessness” (Shinseki, 2014, p.10). Months later, President Barrack Obama affirmed that seeking solutions to these problems did not fall fully on the shoulders of the Department of Veterans Affairs. He posed that, “the bond between our forces and our citizens has to be a sacred trust, and that for me, for my administration, upholding our trust with our veterans is not just a matter of policy, it is a moral obligation.” (Obama, 2014, p. 24). Our leaders, who serve as bridges between civilian and military life, suggest that American society joins in the responsibility of supporting our military forces during battle as well as upon return to the civilian sector. As a nation, we must seek to further
improve the quality of services provided as directed by President Lincoln in his oath to these veterans. (V.A., 2009)

As this research project suggests, there seems to be a significant piece of the puzzle missing in allowing for a successful reintegration for these returning military members. As a nation it seems to be important to offer a communal sense of support to these returning military members. From direct familial engagement to community support from things like offering jobs to simply being a listening ear. Research suggests this could positively impact reintegration. Further, additional study of the idea of PTGI and the factors that may contribute to it, including community support may allow us to facilitate more effective interventions toward building positive growth instead of simply dealing with PTSD and the negative symptoms associated with it acutely.

That said, it is still important to be aware of the negative symptoms and situations that are the foundation of the need for study. Veterans looking to reintegrate into the civilian sector experience higher incidences of anger or aggression, marital distress or divorce and suicide then their civilian counterparts. Despite these trends, veterans' survival in combat was contingent on their abilities to cooperate in high stress environments, apply critical thinking strategies and communicate effectively. Per the research findings, it is clear that a pre-existing sense of social supports would strongly improve the chances of lower rates of posttraumatic stress upon return. Responses to the Post Deployment Social Supports Scale (PDSSS) and the PTSD Checklist (PCLM) indicated a negative correlation that was highly significant ($r=-.42, p<.01$). It can be
assumed that the extent of posttraumatic symptoms increases with a lack of social supports during the transition back to civilian life. Additionally, the extent of support in the community could reduce the level of posttraumatic incidences.

The strength of social supports was apparent in a 2014 study of 85 Veterans experiencing posttraumatic stress symptoms who were assessed as they searched for employment. In a pilot of Individual Placement and Support services with a caseworker, veterans were 2.7 times more likely to find sustainable employment, work significantly more and earn more income than their peers who did not receive this support. Those demonstrating the most impact or positive growth were the subjects with social support issues such as a lack of transportation, housing or family care burdens (Davis et al., 2014). The individualized formal support systems were significant in improving effectiveness of job searches for Veterans experiencing PTSD symptoms. Posttraumatic stress symptoms can impact many areas in the lives of veterans but overcoming them is not impossible. Overall, a sense of community support and access to tangible assistance are important in facilitating the transition from combatant to civilian. Positive growth can also improve the combatants’ readiness concerning establishing meaningful relationships (Koenig, Maguen, & Monroy, 2014).

This research project is the initial stage of the process of further evaluating the experiences both negative and positive of returning combat veterans, their PTSD symptoms, social supports and post-traumatic growth potential. As posed earlier in this work, posttraumatic growth can be characterized as responses to trauma that are
psychologically positive (Tedeschi & Calhoun, 1996). Very similarly to PTSD, posttraumatic growth has also been found to be positively correlated ($r=.29, p<.01$) with combat exposure in past studies (Dekel, Mandl, & Solomon 2011). The positive changes associated with posttraumatic growth (PTG) manifest in the individual as spiritual development, openness to new possibilities, an increased sense of personal strength, and a greater appreciation of life (Tedeschi & Calhoun, 1996). This growth is not only seen in military personnel but has also been observed in survivors of serious medical illness, rape, natural disasters, war, terrorism, car accidents, and in bereaved individuals (Linley & Joseph, 2004). Researchers speculate that this form of growth is an ongoing coping mechanism that responds to ongoing stress as a result of the traumatic event as higher levels of PTSD can lead to the highest amount of PTG (Dekel et al., 2011). This makes sense in that in order to have growth, first the issue of PTSD based on traumatic experiences would seem to need to exist.

An additional observation in this research project reflected a difference among veterans of the Vietnam and OIF/OEF Wars. Those included in the sample group were largely Vietnam (44%) and OIF/OEF (46%) veterans. Vietnam veterans were significantly more likely to score higher on the PCL-M ($r=.449, p=.001$), combat exposure ($r=.373, p=.008$) and lower on PDSSS ($r=-.55, p=.000$). These findings suggest that Vietnam veterans are suffering from long-term posttraumatic stress-related symptoms. When observing this situation, there are many possible contributions for the existence of this contrast. The difference in the reception process between Vietnam and
Modern era veterans was significant. Upon returning home, the Vietnam-era veterans arrived to a country that was in a time of civil turmoil. During this period many Americans were opposed to the war and often the military veterans who had served during this period. Some veterans have been ignored, spat upon, or refused services by some businesses (Gross, 2014). This in itself could have been traumatizing in addition to the actual experiences during their time at war. The literature suggests that modern era war veterans did not experience these negative interactions as often upon their receipt home (Cutter, 2013). Additionally, many Vietnam veterans were drafted, while none of the modern era veterans were enlisted in this manner. The idea of volunteering versus being drafted into service outside of your own personal choice could have been traumatizing to the Vietnam veterans as well. Both of these variables may have contributed to the higher levels of PTSD symptomology and negatively perceived reintegration of the Vietnam veterans. The significantly higher rates on the PDSSS of OIF/OEF veterans in addition to their lower PTSD rates on the PCLM would suggest that social support might improve reintegration outcomes. These differences among Vietnam-era veterans and OIF/OEF veterans are an important aspect in understanding the changing military structure and social relationships experienced by veterans overall while improving the process of returning home for military families at large.

In the work of Hermes et al., *Recent Trends in the Treatment of Posttraumatic Stress Disorder and other Mental Disorders in the VHA*, it was concluded that Vietnam veterans continued an over 10-year trend to be those most statistically significantly
represented combat era in receiving treatment for PTSD or other mental illnesses. Yet, OIF/OEF veterans demonstrated the most significant increase in those seeking treatment for PTSD or other mental illnesses since 2005 (Hermes et al., 2012). The process of seeking and receiving treatment for PTSD can be a daunting one as seen through the review of literature. Findings in Hermes' work also pointed to data that suggested OIF/OEF veterans may wait up to a year for treatment after receiving a diagnosis of PTSD, or may disengage from services sooner than their Vietnam-era veteran counterparts. On the surface, this seems to suggest that there may be a long-term nature in coming to terms with the need to find treatment for dealing with posttraumatic stress related symptoms by the veterans themselves. This shows that there is room for innovation and change within treatment as usual for PTSD. The population of OIF/OEF/OND veterans in post-deployment has grown significantly and our veterans' presenting problems will only become more complex as they age. In looking for opportunities to improve the reintegration process for these deserving service members, the community must be prepared to participate in welcoming these veterans home. Not only governmental entities, but also non-profits and for-profit businesses or corporations must be active participants. Existing transition assistance programs must be revised to consider both the need for a community network that incorporates community partners and American families to maximize reintegration effectiveness.

In closing, it seems that the questions being asked in this study were answered; yet a qualitative aspect could strengthen the findings while offering additional insight.
The question of how veterans experience reintegration in the civilian sector was answered through the study as well as the research findings. It appears that the reintegration for many veterans is a difficult one that must be addressed. The societal situations experienced by returning veterans are often negative with issues in areas such as employment, housing and educational pursuits. In observing the question of what factors on the PTGI have the most influence on positive outcomes in veteran’s lives, it was unclear whether any specific values were more significant than others. However, research suggests that veterans can benefit from increased social support in attempting to reintegrate into the civilian sector. The question of sources of strength that veterans drew upon to assist in creating positive reintegration seems to share the same answer. Feeney and Collins (2015) acknowledge that close and caring relationships are important to health and wellbeing at all stages of the life span, but they indicate that the pathways connecting the two are not well understood. The primary source of strength noted in the literature as well as the findings seems to be that said social support. The fourth and final question of how the insight of this study as well as the feelings of these veterans can positively affect reintegration seems to be that it gleaned on the idea that combating stigma and offering social support in the community can create more positive reintegration in many trauma suffering client demographics. These may include but are not limited to children of the child sex trade, formerly incarcerated individuals, gang affiliated youths or any other trauma suffering individuals.

Per the findings of this study, it can be assumed that if the community engages in
actively supporting reintegration of our war veterans the process will improve. The capacity for growth may improve within the veterans’ intrinsically and will mirror in the extrinsic transition back into civilian society as well. This study was effective in offering hope in this potential.

**Strengths and Limitations**

**Strengths.** This research project was grounded in a search to understand how veterans’ posttraumatic growth can be measured and understood in relation to mediating impacts of combat exposure. PTSD has created devastating effects on this demographic that must be neutralized. The importance of establishing an understanding of the relationships between PTSD, PDSSS, and PTGI holds the key to creating a more positive reintegration process for military families. Literature suggests that social support has great potential at bridging this gap. The understanding of the need for community support can be seen in the context of the agreement on behalf of the American people presented by President Abraham b. President Lincoln posed that the nation was tasked with the responsibility to “care for him who shall have borne the battle, and for his widow, and his orphan” by serving and honoring the men and women who are America’s veterans (V.A., 2009, ¶ 7) This research was a first step in clarifying how to further support and engage our soldiers in their journey towards maximizing positive growth during reintegration. Compiling an additional data set concerning military combat veterans of multiple eras is a strength associated with this study that can facilitate an improved community for returning veterans going forward.
**Limitations.** The survey sample for this research project was a group of veterans that attended the 2014 St. Louis Warrior Summit and Welcome Home Celebration. The purpose was to begin understanding the relationships of posttraumatic growth characteristics to other characteristics of Veterans associated with PTSD. Future directions of this research will include qualitative research tools to better understand how Veteran’s posttraumatic growth characteristics impact recovery of posttraumatic stress. It seems that the questions being asked in this study were answered; yet a qualitative aspect could strengthen the findings while offering additional insight. The question of how veterans experience reintegration in the civilian sector was answered through the study as well as the research findings. It seems that the reintegration for many veterans is a difficult one that must be addressed. The question of what factors on the PTGI have the most influence on positive outcomes in veteran’s lives, research suggests that veterans can benefit from increased social support. The question of sources of strength that veterans drew upon to assist in creating positive reintegration seems to share the same answer. The primary source of strength noted in the literature as well as the findings seems to be social support. The fourth and final question of how the insight of this study as well as the feelings of these veterans can positively affect reintegration seems to be that it gleaned on the idea that combating stigma and offering social support in the community can create more positive reintegration in many trauma suffering client demographics.

Perhaps a reason for caution to include qualitative tools at an early stage of
research was a concern of over-personalization. Being that the primary researcher in this study is a military combat veteran this may have been a point of potential bias concerning findings. In directly interviewing veterans as a veteran himself, the potential for experiences and stories being skewed was an area of concern. The impact of posttraumatic responses viewed only by measuring deficits is one that could be damaging to the process and was a basis for identifying the study model to be used.

In considering future research this is something that must be assessed. An additional step for future research will be to increase the number of survey respondents. The small sample size for this research study may have been the cause of having findings approaching significance in place of achieving statistical significance. This study provided an opportunity to document progress for this research while allowing a stronger understanding of directions to take moving forward in future research concerning this issue.

**Future Directions**

Future contributions to the understanding of how the relationship between wellbeing, posttraumatic stress and traumatic growth are very important to our nation as a whole. As more veterans contribute to our project, we look forward to a clearer view of these variables and further understanding on how to create more effective reintegration for these deserving military members. Identifying the most significant factors to facilitate positive growth of veterans has the potential to benefit not only military veterans and families but also the community at large.
Currently, it continues to be difficult for the Department of Veterans Affairs and the American society to understand fully how to best offer support to improve reintegration. The disproportionate representation of veterans among the homeless, higher rates of young veterans facing unemployment and persistent gaps in veterans’ access to health care, demonstrate the burden veterans face post deployment as well as the lack in clarity concerning solutions in the community.

As the experiences of veterans are a testament to their skill, the importance of measuring their capacity for growth should not be overlooked. If the relationship between a sense of support and lower reporting of posttraumatic stress symptoms can be confirmed, then measuring the potential to reach successful reintegration through increasing PTG can become a reality in improving veteran’s lives. It is assumed that the findings in this research will also have potential in facilitating similar growth in other stress-suffering demographics. Examples of these groups may include but are not be limited to formerly incarcerated individuals, victims of the child sex trade, and various disenfranchised youths globally. If proven true, the facilitation of creating posttraumatic growth holds limitless potential at improving the lives of American community members in many ways.
The problem of veterans returning home from military service in the wars in Iraq and Afghanistan with PTSD is a significant one. The consequences exist both personally and across society. Nearly 20% of returning veterans have been diagnosed with PTSD, depression or suffer from other mental health related issues (NIH, 2009). The symptoms of PTSD can negatively influence a veteran’s cognitive abilities relating to learning, finding housing, and obtaining steady employment. In the worst case scenarios, disorders associated with PTSD have caused many veterans to even take their own lives. The costs associated with the suffering of these veterans are shared throughout society and potentially total in to a sum of billions of dollars. That said, there is also the potential for positive growth upon returning home for these veterans. This phenomenon is known as posttraumatic growth. In observing the idea of posttraumatic growth, there seems to be great potential for positive aspects in creating a more positive reintegration for veterans.

However, in this study, no significant relationship was found between posttraumatic growth and the negative experiences of veterans in the Vietnam and Modern eras. The data did not offer a clear solution for the question of what factors contribute most significantly to positive reintegration of combat veterans. However, based on the fact that PTSD symptomology was higher in Vietnam-era veterans then the OIF/OEF respondents in the sample group while the social support responses were higher in the OIF/ OEF respondents, it can be assumed that the availability of social support plays a large role in facilitating positive reintegration opportunities in the combat veteran
demographic no matter the era. This information is important to be aware of in that the application of social support can be offered not only by the combat veterans spouse or family members, but by the community overall. The literature suggests that the manner in which veterans of the Vietnam war where received in returning home is perceived as negative or unwelcoming by many of the returning veterans. This may have contributed significantly to the higher levels of PTSD as well as their self-reported perception of a lack of social support. This relationship will need to be researched in future studies to further assess this hypothesis. However, this is an area (offering intentional social support) that can be expected to show significant impact at reducing PTSD rates while facilitating posttraumatic growth. It is expected that these increases would assist in improving the overall reintegration processes for combat veterans of all eras. One method of applying social support comes in the form of offering reintegration-related programing. The V.A. in conjunction with other federal agencies, state governments, non-profit associations and private businesses operate programs aimed at addressing the educational, employment and housing needs of veterans. Whereas some of these programs have long histories, the literature reviewed revealed gaps in these programs in terms of their ability to meet the needs of returning soldiers, marines, sailors and airmen who are suffering from or at risk of being afflicted with PTSD. It appears that the V.A. is making progress, but much remains to be known about its new initiatives and improvements on pre-existing programing. Additional research could also help to shed light on the degree to which the V.A.'s new approach is effective. The completion of this
future research would offer more specific solutions for improving the reintegration process and increasing posttraumatic growth in these deserving combat veterans.
CHAPTER 7 - IMPLICATIONS OF THE STUDY

The surveys selected for this research study were chosen to develop a breadth of understanding of military combat veterans of all branches. The most significant observation among survey respondents was the importance of relationships to family, friends or other individuals in their community. This can be recognized as the application of community support. Those scoring high on the PDSSS were more likely to score lower on the PTSD Checklist (PCLM). This opens the door to future research concerning the idea of building from the strengths and sense of support a veteran feels upon their return to civilian society. A shift in the communities' understanding of both the traumatic stress and growth characteristics may allow a more complete picture of our veterans.

While serving, the strengths and weaknesses of military members are absorbed into a team environment or through a “battle buddy approach” (Pennebaker & Williams, 2015). In the military there is a firm structure that organizes relationships and experiences rather positive or negative. Military members are instructed not to think, but to simply execute whatever block of instructions they are given. This culture is known as being “mission first” oriented (Tresseder, 2015).

In the civilian society, that structure is far more flexible and less consistent with more gaps in communication. This is a problem that must be resolved in order to create a more stable transition for military veterans and their families. Going forward, reintegration will continue to be challenging, but observing the idea and applying support as a community could improve the outcomes. Also, conceptualizing and measuring the
posttraumatic response only as a deficit may limit treatment options and understanding. To educate the community on the idea of PTGI may assist in creating a more engaging and supportive community, while also reducing some of the negative stigma often associated with mental health disorders (Mayo Clinic, 2014).

Additionally, this study confirms the importance of building community around veterans upon post-deployment and also the role of building awareness of existing Veteran’s Affairs Transition Assistance services. Community organizations such as the Illinois Warrior Summit Coalition are examples of veteran-led partnerships that can facilitate communication with the Department of Veterans Affairs and build a stronger sense of community for returning veterans. This is important in that many veterans seek a sense of camaraderie or belonging that is not generally found in the civilian sector. It is hoped that a more welcoming community would allow for a more comfortable sense of fitment for these returning veterans.

Based on the lack of finding of significance in the value of PTGI in the veteran survey participants during this study, it would seem that additional research is needed to be completed to find a clearer understanding of how to facilitate this form of growth. As we measure posttraumatic growth, we may be able to demonstrate the importance of a perspective different than psychological dysfunction. This reversing of the negative stigma could create a more participatory community in not only welcoming veteran’s home but in understanding mental health issue at large. Upon further research, potential investment by the V.A. to measure predictors of growth may improve services provided
to veterans. If there is a clearer understanding of the opportunity to facilitate growth in place of simply treating symptoms, it could offer for programing adjustments more targeted in this direction of growth. Going forward, these findings could then be incorporated into the application of the V.A.'s pre-existing as well as future programing concerning education, housing and employment for military veterans.

As the Veterans Outreach Coordinator for the Department of Veterans Affairs, Readjustment Counseling Service and a combat veteran myself I have a personal interest in finding solutions to the problems in military reintegration. It is my belief based on my own experiences as well as the review of the literature that the Department of Defense has an opportunity to assist in improving the process of reintegration through the application of pre-deployment psychological testing. This would allow for a clearer understanding of the changes to the veterans upon return from combat. Additionally, it would be beneficial to educate the community concerning the issues of reintegration. These things could assist in reducing societal stigmas concerning mental health issues as well as the military culture of resistance to seeking help. Allowing veterans to accept support early, which could turn traumatic instances into the breeding ground for posttraumatic growth in place of PTSD. A great deal of time and resources go in to training military members to become effective war fighters. It seems that equal time; commitment and resources should go into returning them effectively back to society following service. Veterans have the skills and character to be one of our truest forms of human capital in American society if given the opportunity of effective readjustment. It
is hoped that this research can be a catalyst for future research targeted at creating a more positive reintegration opportunity for one of our nation's most valuable assets, the American fighting man or women and their deserving families.
REFERENCES


Department of Veterans Affairs, Office. (2009). *Federal benefits for veterans,*


vets-talk-us-welcome-home


APPENDIX A

IRB Approval Letter

Memo

To: Dr. Jane Hudak, Ph.D. & Domonique Tatum
From: David Rhea and Dale Schuit, IRB Co-Chairs
CC: Fatmiah Tommaleh
Date: December 2nd, 2014
Re: Post Traumatic Growth

Project Number: #14-11-28

We are pleased to inform you that your proposal has been approved by the GSU Institutional Review Board. You may begin your research. Please be advised that the protocol will expire one year after the date of approval, December 2nd, 2015.

At the end of the year, if your research is completed, please inform the IRB in writing of the number of participants involved in your research and the closing date. If you intend to collect data using human subjects after that date, the proposal must be renewed by the IRB. If you make any substantive changes in your research protocols before that date, you must inform the IRB and have the new protocols approved.

Please include the exact title of your project and the assigned IRB number in any correspondence about this project.

If you have any questions, please feel free to contact David Rhea at 708-534-4392 (drhea@govst.edu) or Dale Schuit at 708-235-2148 (dschuit@govst.edu).
APPENDIX B
Informed Consent

GOVERNORS STATE UNIVERSITY
HUMAN PARTICIPANTS REVIEW
INFORMED CONSENT

**Project Title:** Towards a Deeper Understanding of the Post-Traumatic Growth factors leading to an improved Quality of Life for military combat Veterans.

**Name of Investigator(s):** Domonique Tatum, Dr. Jane Hudak

**Invitation to Participate:**

You are invited to participate in a research study conducted by Domonicque Tatum a doctoral student at Governors State University. The University requires that you give your signed consent to participate in this study. The following information is provided to help you make an informed decision concerning your participation.

**Nature and Purpose:**

1) The purpose of this study is to investigate the phenomenon of post-traumatic growth in military combat veterans. This study seeks to identify the most significant factors within military veterans to foster successful reintegration within the community.
2) This research project is designed to answer the following questions: a) How do the adult veteran participants in this study experience reintegration into the civilian sector? What factors identified on the post traumatic growth inventory have the most influence on positive outcomes in their own lives; b) What specific sources of strength and encouragement did they draw upon to strengthen and guide them as they negotiated their way through difficult circumstances to become highly successful and/or productive citizens?; and c) How might these adult participants' experiences and insights inform ongoing efforts to promote positive reintegration among veterans or other similar demographic groups facing poverty, family hardship/dysfunction, and community devastation?

**Explanation of Procedures:**

Survey battery questions will be applied through the application of the Combat Exposure scale (CBS), Posttraumatic growth inventory (PTGI), Post deployment social support (PDSS) and the PTSD checklist (PCL-M) to explore a range of reintegration related areas of concern. The survey battery will be issued at the Warrior summit committees, St. Louis Warrior summit and welcome home event in St. Louis, MO. The survey battery will be handed out with the general welcome packet to the first 50 qualified combat veteran participants to enter the event. Upon receipt of the battery, participants will be directed to a private area to complete their survey battery in confidentiality. Upon completion, you will return your completed answer key via a locked drop box at the exit point of the test site. At the end of the day, researchers will collect the survey responses from the box for the purpose of further review.
During this study the participants' confidentiality will be carefully protected, as no aspect of this study will be discussed with anyone other than faculty and/or staff affiliated with this research study. Moreover, a pseudonym will be used to protect your identity throughout the research process.

Permission is requested to record and research your survey responses, however, you are entirely free to accept or decline this request. Research records will be maintained for the purpose of expanding on the academic and professional knowledge base concerning combat veteran reintegration. During the survey, you may choose not to answer any question that you are concerned with and at any point you can choose to stop survey completion. All files (survey records, interview transcripts, field notes, and archival data) will be maintained in a secured [locked] file cabinet in a place where only researchers have access to them.

If you agree to participate, study procedures to include the completion of the survey will take place at the St. Louis, Mo Warrior summit of your convenience. The test site environment will be in a quiet, private, and informal setting. The suggested survey battery completion time is 60 minutes. In the event that a participant is not complete within this time limit they may continue until completion with no penalty. With the exception of withholding of your name for confidentiality and privacy purposes, no withholding of information is required.

**Discomfort and Risks:** There are no significant foreseeable risks to participate in this study.

**Benefits and Compensation:** No compensation or direct benefit will be provided to participants as a result of participating in this study. However, the findings in the study could be invaluable in providing more insights regarding functional reintegration for military veterans and families in the future.

**Confidentiality:** Information obtained during this study will be kept fully confidential. The summarized findings with no personally identifying information, may be published in academic journals or presented at scholarly conferences in the future.

**Right to Refuse or Withdraw:** Your participation is completely voluntary. You are free to withdraw from participation at any time or to choose not to participate at all, and by doing so, you will not be penalized or lose benefits to which you are otherwise entitled.

**Questions:** If you have questions about the study or desire information in the future regarding your participation or the study generally, you can contact (Domonicque Tatum) at 202-779 4155 or (if appropriate) the project investigator's faculty advisor Dr. Jane Hudak at Governors State University (708-534-4983). You can also contact the office of the Institutional Review Board Administrator, Dr. David Rhea of Governors State University, at 708-534-4392 for answers to questions about rights of research participants and the participant review process.
Agreement:

I am fully aware of the nature and extent of my participation in this project as stated above and the possible risks arising from it. I hereby agree to participate in this project. I acknowledge that I have received a copy of this consent statement. I am 18 years of age or older.

(Signature of participant) (Date)

(Printed name of participant) (Date)

(Signature of instructor/advisor) (Date)
APPENDIX C
Posttraumatic Growth Inventory (PTGI)

**Post-Traumatic Growth Inventory**

Listed below are 21 areas that are sometimes reported to have changed after traumatic events. Please mark the appropriate box beside each description indicating how much you feel you have experienced change in the area described. The 0 to 5 scale is as follows:

0 = I did not experience this change as a result of my crisis
1 = I experienced this change to a very small degree
2 = a small degree
3 = a moderate degree
4 = a great degree
5 = a very great degree as a result of my crisis

<table>
<thead>
<tr>
<th>possible areas of growth and change</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. My priorities about what is important in life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. An appreciation for the value of my own life</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>c. I developed new interests</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>d. A feeling of self-reliance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. A better understanding of spiritual matters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Knowing that I can count on people in times of trouble</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>a. I established a new path for my life</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>h. A sense of closeness with others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. A willingness to express my emotions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Knowing I can handle difficulties</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. I’m able to do better things with my life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Being able to accept the way things work out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. Appreciating each day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n. New opportunities are available which wouldn't have been otherwise</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o. Having compassion for others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p. Putting effort into my relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. I’m more likely to try to change things which need changing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>r. I have a stronger religious faith</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>s. I discovered that I am stronger than I thought I was</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t. I learned a great deal about how wonderful people are</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>u. I accept needing others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

_Tedeschi RG & Calhoun LG_  
"The posttraumatic growth inventory: measuring the positive legacy of trauma" _Journal of Traumatic Stress_ 1996; 9: 455-471
PTGI: background

The Posttraumatic Growth Inventory (PTGI) was developed by Richard Tedeschi and Lawrence Calhoun at the University of North Carolina. Their website provides useful resources and background information. See http://ptgi.uncc.edu/index.htm. They write The Posttraumatic Growth Inventory ... has now been used in many investigations in the United States and in other countries throughout the world. There is no charge for the use of the scale, provided the scale is being used for research purposes and financial gain does not occur from its use."
APPENDIX D

Combat Exposure Scale (CES)

Combat Exposure Scale (CES)

Description

The Combat Exposure Scale (CES) is a 7-item self-report measure that assesses wartime stressors experienced by combatants. Items are rated on a 5-point frequency (1 = "no" or "never" to 5 = "more than 50 times"), 5-point duration (1 = "never" to 5 = "more than 6 months"), 4-point frequency (1 = "no" to 4 = "more than 12 times") or 4-point degree of loss (1 = "no one" to 4 = "more than 50%") scale.

Respondents are asked to respond based on their exposure to various combat situations, such as firing rounds at the enemy and being on dangerous duty. The total CES score (ranging from 0 to 41) is calculated by using a sum of weighted scores, which can be classified into 1 of 5 categories of combat exposure ranging from "light" to "heavy." The CES was developed to be easily administered and scored and is useful in both research and clinical settings.

Source: United States Department of Veterans Affairs website: [www.va.gov](http://www.va.gov)
**Combat Exposure Scale (CES)**

*Please circle the number above the answer that best describes your experience*

1) Did you ever go on combat patrols or have other dangerous duty?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>1-3X</td>
<td>4-12X</td>
<td>13-50X</td>
<td>51+times</td>
</tr>
</tbody>
</table>

2) Were you ever under enemy fire?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>&lt;1 month</td>
<td>1-3 months</td>
<td>4-6 months</td>
<td>7 mos or more</td>
</tr>
</tbody>
</table>

3) Were you ever surrounded by the enemy?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>1-2X</td>
<td>3-12X</td>
<td>13-25X</td>
<td>26+times</td>
</tr>
</tbody>
</table>

4) What percentage of the soldiers in your unit were killed in action (KIA), wounded or missing in action (MIA)?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
<td>1-25%</td>
<td>26-50%</td>
<td>51-75%</td>
<td>76% or more</td>
</tr>
</tbody>
</table>

5) How often did you fire rounds at the enemy?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>1-2X</td>
<td>3-12X</td>
<td>13-50X</td>
<td>51 or more</td>
</tr>
</tbody>
</table>

6) How often did you see someone hit by incoming or outgoing rounds?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>1-2X</td>
<td>3-12X</td>
<td>13-50X</td>
<td>51 or more</td>
</tr>
</tbody>
</table>

7) How often were you in danger of being injured or killed (i.e., being pinned down, overrun, ambushed, near miss, etc.)?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>1-2X</td>
<td>3-12X</td>
<td>13-50X</td>
<td>51 or more</td>
</tr>
</tbody>
</table>

COMBAT EXPOSURE SCALE SCORING SHEET

Answers (raw scores) on the Combat Exposure Scale can range from 1 to 5. However, the scoring of the items requires the conversions described below:

(1) SUBTRACT 1 FROM THE RAW SCORE AND MULTIPLY BY 2
     (e.g., a raw score of 4 becomes a converted score of 6).

(2) SUBTRACT 1 FROM THE RAW SCORE
     (e.g., a raw score of 4 becomes a converted score of 3).

(3) 'IF THE RAW SCORE IS BETWEEN 1 AND 4:
     SUBTRACT 1 FROM THE RAW SCORE AND MULTIPLY BY 2
     (e.g., a raw score of 4 becomes a converted score of 6). 'IF THE
     RAW SCORE IS 5:
     SUBTRACT 2 FROM THE RAW SCORE AND MULTIPLY BY 2
     (e.g., a raw score of 5 becomes a converted score of 6).

(4) 'IF THE RAW SCORE IS BETWEEN 1 AND 4:
     SUBTRACT 1 FROM THE RAW SCORE
     (e.g., a raw score of 4 becomes a converted score of 3
     'IF THE RAW SCORE IS 5:
     SUBTRACT 2 FROM THE RAW SCORE
     (e.g., a raw score of 5 becomes a converted score of 3).

(5) SUBTRACT 1 FROM THE RAW SCORE
     (e.g., a raw score of 4 becomes a converted score of 3).

(6) SUBTRACT 1 FROM THE RAW SCORE AND MULTIPLY BY 2
     (e.g., a raw score of 4 becomes a converted score of 6).

(7) SUBTRACT 1 FROM THE RAW SCORE AND MULTIPLY BY 2
     (e.g., a raw score of 4 becomes a converted score of 6).

ADD ALL CONVERTED SCORES TO OBTAIN A TOTAL SCORE:

The total exposure to combat score can be categorized according to the following scale:

1 " 0-8 light
2 = 9-16 light - moderate
3 = 17-24 moderate
4 = 25-32 moderate - heavy
5 = 33-41 heavy
APPENDIX E
PTSD Checklist (PCL-M)

Post Traumatic Syndrome Disorder Check List - Military Version (PCL-M)

Name: ________________________________ Date: __________

Instruction to patient: Below is a list of problems and complaints that veterans sometimes have in response to stressful military experiences. Please read each one carefully, put an “X” in the box to indicate how much you have been bothered by that problem in the last month.

<table>
<thead>
<tr>
<th>Problem or Complaint:</th>
<th>Frequency:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeated, disturbing memories, thoughts, or Images of a stressful military experience?</td>
<td>Not at all (1)</td>
</tr>
<tr>
<td>Repeated, disturbing dreams of a stressful military experience?</td>
<td></td>
</tr>
<tr>
<td>Suddenly acting or feeling as if a stressful military experience were happening again (as if you were reliving ill?)</td>
<td></td>
</tr>
<tr>
<td>Feeling very upset when something reminded you of a stressful military experience?</td>
<td></td>
</tr>
<tr>
<td>Having physical reactions (e.g., heart pounding, trouble breathing, or sweating) when something reminded you of a stressful military experience?</td>
<td></td>
</tr>
<tr>
<td>Avoid thinking about or talking about a stressful military experience or avoid having feelings related to it?</td>
<td></td>
</tr>
<tr>
<td>Avoid activities or talking about a stressful military experience or avoid having feelings related to it?</td>
<td></td>
</tr>
<tr>
<td>Trouble remembering important parts of a stressful military experience?</td>
<td></td>
</tr>
<tr>
<td>Loss of Interest in things that you used to enjoy?</td>
<td></td>
</tr>
<tr>
<td>Feeling 'distant or cut off' from other people?</td>
<td></td>
</tr>
<tr>
<td>Feeling emotionally numb or being unable to have loving feelings for those close to you?</td>
<td></td>
</tr>
<tr>
<td>Feeling as if your future will somehow be cut short?</td>
<td></td>
</tr>
<tr>
<td>Trouble falling or staying asleep?</td>
<td></td>
</tr>
<tr>
<td>Feeling irritable or having angry outbursts?</td>
<td></td>
</tr>
<tr>
<td>Having difficulty concentrating?</td>
<td></td>
</tr>
<tr>
<td>Being &quot;super alert&quot; or watchful on guard?</td>
<td></td>
</tr>
<tr>
<td>Feeling jumpy or easily startled?</td>
<td></td>
</tr>
</tbody>
</table>

PCL-M for DSM-IV (11/1/94)
POST DEPLOYMENT SOCIAL SUPPORT ASSESSMENT

POST DEPLOYMENT SOCIAL SUPPORT SCALE

Source: The items are from the 15-item Post Deployment Social Support Scale. Public Domain

http://asm.sagepub.com/cgi/reprint/15/4/391


Scale Description: The Post Deployment Social Support Scale is a subscale of the full Deployment Risk and Resiliency Inventory (DRRI).

Scoring and Algorithm

| Note: For each assessment, there is an algorithm leading to one of three acuity ranges: Low, Moderate, and High. The logic for the user receiving specific feedback is included in the algorithms below. |

These items are all scored on a scale of 1-5. Total score is sum of all 15 items as scored below. Possible range is 15-75.

For items #6 and #8, items are scored:
Strongly disagree = 5 Disagree
= 4
Neither agree nor disagree = 3 Agree
= 2
Strongly agree = 1

For all other items (#1, #2, #3, #4, #5, #7, #9, #10, #11, #12, #13, #14, #15), items are scored as follows:
Strongly disagree = 1 Disagree
= 2
Neither agree nor disagree = 3 Agree
= 4
Strongly agree = 5

Algorithm

60-75  High Acuity
40-59  Moderate Acuity
15-39  Low Acuity
APPENDIX F
Post Deployment Social Support Scale (PDSSS)

POST DEPLOYMENT SOCIAL SUPPORT ASSESSMENT
POST DEPLOYMENT SOCIAL SUPPORT SCALE

The statements below refer to social support after deployment. Please indicate how much you agree or disagree with each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The reception I received when I returned from my deployment made me feel appreciated for my efforts</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>The American people made me feel at home when I returned</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When I returned, people made me feel proud to have served my country in the Armed Forces.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am carefully listened to and understood by family members or friends.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Among my family or relatives, there is someone who makes me feel better when I am feeling down.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I have problems that I can’t discuss with family or friends</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Among my friends or relatives, there is someone I go to when I need good advice</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>People at home just don’t understand what I have been through in the Armed Forces.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>There are people to whom I can talk about my deployment experiences</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>The people I work with respect the fact that I am a veteran or service member</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My supervisor understands when I need time to take off to take care of personal matters</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My friends or relatives would lend me money if I needed it.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My friends or relatives would help me</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>