Spring 2012

The Epidemic of Post Traumatic Stress Disorder among Veterans

Tai Hawk
Tai Hawk, taihawk@gmail.com

THE EPIDEMIC OF POST TRAUMATIC STRESS DISORDER AMONG VETERANS

by

Tai Hawk

Southern Illinois University

B.A., Southern Illinois University at Edwardsville, 1993

A Research Paper
Submitted in Partial Fulfillment of the Requirements for the
Master of Science

Rehabilitation Institute
in the Graduate School
Southern Illinois University Carbondale
May 2012

RESEARCH PAPER APPROVAL

THE EPIDEMIC OF POST TRAUMATIC STRESS DISORDER AMONG VETERANS

By

Tai Hawk

A Research Paper Submitted in Partial

Fulfillment of the Requirements

for the Degree of

Master of Science

in the field of Rehabilitation Counseling

Approved by:

Dr. J. Bordieri

Graduate School
Southern Illinois University Carbondale
April 5, 2012

TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION

Post traumatic stress disorder is an anxiety disorder found in the Diagnostic and Statistical Manual of mental disorders (4th ed., Text Revision), and is one of the primary injuries of soldiers returning from combat in the Middle East. In March of 2003, the United States presidential administration called for an invasion of Iraq, and this war and its subsequent flood of returning soldiers with psychological wounds continued for nearly nine years, and related theaters of war still persist. At this time, the war continues in Afghanistan, and Post Traumatic Stress Disorder continues to adversely affect returning troops. Estimated cost of the war in Iraq is upwards of three trillion dollars, and a substantial portion of this will be spent paying long-term disability benefits to discharged military personnel. PTSD is considered to be one of the "signature" injuries of veterans who have served in the Operation Iraqi Freedom and Operation Enduring Freedom, often coinciding with mild traumatic brain injury and substance use disorder (Burke, Degeneffe, & Olney, 2009).

PTSD, otherwise known as "shell shock," is currently at epidemic proportions among enlisted service personnel and veterans. Army and Marine figures indicate that ten to twenty percent of enlisted soldiers meet criteria for PTSD. Similarly, the Army Surgeon General's Mental Health Advisory Team reports that up to twenty percent of OIF/OEF personnel experience symptoms of PTSD. These figures suggest that hundreds of thousands of individuals returning from Iraq and Afghanistan suffer from at least some posttraumatic stress symptoms (Walker, 2009).

Additionally, since October 2001, approximately 1.7 million U.S. military personnel have been deployed to Iraq and Afghanistan, and of those one in five, or 300,000, have combat related PTSD and other psychological injuries. Due to the use of improved body armor and advanced evacuation and medical care, soldiers who would have died in wars such as Vietnam, are returning home with Blast Induced Neuro Trauma, or BINT, often with a co-morbid diagnosis of PTSD. All indications suggest that mental health problems among military personnel will continue to increase (Jett, 2010). This increase has a profound effect on society with regard to service member suicide and malevolent actions, including recent murders by veterans with PTSD. Clearly, PTSD requires treatment beyond pharmaceutical intervention. Service providers need to be educated on not only the etiology, symptomology and impact of PTSD, but also on evidence based treatment modalities currently being used to treat PTSD.

According to the DSM IV-TR (APA, 2000), a traumatic event is defined as one where the individual ‘‘experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of others’’ and that the individual’s response to the incident involved ‘‘intense fear, helplessness, or horror.” These conditions are necessary for a diagnosis of PTSD.

Upon discharge from a veteran’s inpatient treatment facility, service members are given follow-up plans which include recommendations for continued medical and mental health care, as well as referrals to community reintegration supports and services. Additionally, vocational rehabilitation counselors working within the Veteran’s Benefits Administration offer Chapter 31 vocational rehabilitation services to veterans with a 20

percent or more service connected disability. Today, many veterans Who apply for compensation and pension disability status are given a 50 percent disability rating for PTSD (Burke, Olney, & Degeneffe, 2009). It is crucial that vocational rehabilitation specialists are familiar with PTSD and its adverse affects on service members and their families. The purpose of this paper is to provide an overview of empirical studies and research to provide professional rehabilitation counselors with a broad category of information to better serve this population. Currently, according to information obtained on USAJOBS.GOV, the federal government's official jobs site, Counsel on Rehabilitation Education (CORE) accredited vocational rehabilitation counselors are not eligible to be hired to serve veteran's or enlisted service member's mental health needs alongside other paraprofessionals such as social workers. However, CORE accredited vocational rehabilitation counselors working to provide Chapter 31 vocational rehabilitation benefits will nonetheless need to have a strong understanding of this special population and the challenges they may face upon re-entry into society.

Further, the purpose of this paper is to better inform vocational rehabilitation counselors of the complex nature of post traumatic stress disorder among our nations veterans and service members. Information regarding the social, biological, psychological, cultural, and spiritual aspects will be presented. The current "biopsychosocialspiritual" (BPSS) approach by rehabilitation counselors coincides with the information presented in this paper in that PTSD has a myriad of effects relating to not only psychological symptoms, but also problems related to physical dysfunction, family and social disruption, as well as spiritual and moral issues and actions related to the PTSD inducing trauma.

Definition of Terms:

PTSD—Post Traumatic Stress Disorder: PTSD was added by the American Psychiatric Association in the third edition of its *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-III*). PTSD may occur after exposure to a traumatic event, and is defined by three symptom clusters—experiencing the event, emotional numbing and avoidance of stimuli associated with the trauma, and hyper arousal that persist for more than one month and leads to functional impairment

OEF-- Operation Enduring Freedom: The current war in Afghanistan; the primary theater of war since the recent recall of all United States troops from Iraq

OIF—Operation Iraqi Freedom: The war that took place in Iraq from 2003-2011

ACE--Adverse Childhood Experiences: Physical, emotional, or sexual abuse experience by individuals which may or may not have an effect on the development of PTSD when exposed to traumatic events

Functional limitations: Impairments in physical, behavioral, or emotional functioning that result directly from disability

SUD –Substance Use Disorder: A term that is dichotomized into Abuse or Dependence. It relates to the severity of drug and alcohol problems that a person faces

VHA: Veteran's Health Administration

C&P; Veteran's Compensation and Pension for service connected disabilities such as PTSD

BINT: Blast Induced Neuro Trauma

CHAPTER 2

SURVEY OF LITERATURE

PTSD, which may occur after exposure to a traumatic event, is defined by three symptom clusters—experiencing the event, emotional numbing and avoidance of stimuli associated with the trauma, and hyper arousal that persists for more than one month and leads to functional impairment (Hathaway, Boals, & Banks, 2010). The three sets of symptom clusters related to PTSD are further defined as re-experiencing the event by having recurring thoughts and nightmares about the traumatic event, feeling as though the event is happening again, and experiencing related physical or psychological reactions. The second cluster is "avoidance of stimuli associated with the event and numbing of general responsiveness" (DSM-IV-TR, APA, 2000). This cluster occurs whenever the person avoids thoughts or feelings that are associated with the event, as well as places, activities, and people associated with the event. Avoidance is also identified by difficulty recalling important aspects of the event, reduced enjoyment in pleasurable activities, a sense of a shortened future, detachment feelings, and affect restriction. Finally, the last symptom cluster, increased arousal, is identified by anger and irritability, sleep issues, an exaggerated startle response, and hyper vigilance. Individuals naturally experience some of these symptoms immediately following a traumatic event, however, when these symptoms persist for a period beyond two weeks, Acute Stress Disorder (ASD) is diagnosed. When these symptoms last for more than a month a PTSD diagnosis may be made (Bogaerts, 2008).

Many professionals believe that the more critical the event is, the more severe the PTSD will be. It is interesting to note that there are even reports of Air Force pilots operating

remote drones reporting PTSD symptoms. Moreover, some individuals can be exposed to traumatic events and never develop PTSD (McNally, et al., 2011). It is becoming increasingly understood through research that other variables are involved in the complex disorder of PTSD. This seems especially true for soldiers, who face the full burden of deployment to a war zone, including multiple deployments, longer in-theater rotations, as well as pre-deployment stress factors (Jett, 2010).

Pre-deployment risk factors have been a recent topic of interest in research, as the military and Veteran's Health Administration scramble to catch up with the numbers in the PTSD crisis, which is now at an endemic proportion among United States troops. Research suggests that individuals who have experienced adverse childhood traumas including physical, sexual, and emotional abuse and neglect may be more vulnerable to developing PTSD. A history of family mental illness may also be a risk factor. Results from this same study evaluating 8,391 respondents at the Marine Corps recruit depot in San Diego who were deployed between 2001 and 2004, found associations between ACE and mental health outcomes post-deployment. This research identifies the plausibility that this population of young, male marine recruits could be targeted for PTSD prevention programs, early intervention after traumatic exposure, or even protection from exposure, if possible (Leardman, Smith, & Ryan, 2010) In a study of pre and post deployment psychological health, soldiers with ACE were more likely to report traumatic exposure, and these soldiers also reported negative views on comradeship and communication with others in the unit (Wilson, et al., 2008). Further, Hoge et al found that 9.3 percent of Marines who had returned from deployment to Afghanistan with a subsequent PTSD diagnosis met criteria for a mental health disorder before deployment. Recently, the VHA has constructed new

inpatient residential treatment facilities targeting OIF/OEF veterans with PTSD. However, research is just beginning that will eventually lead to prevention programs for troops readying for deployment to war zones.

There are other risk factors besides ACE and a history of familial mental illness for soldiers preparing for deployment. Emotional preparation for deployment is matched by the need to prepare in practical ways to be away from home for an extended period of time, financially and otherwise. Also, the upcoming separation from family members and having to say goodbye can be a pre-deployment stressor. Additionally, because multiple deployments are the norm, soldiers who have already experienced trauma in the field, may be reminded of that in preparation for the upcoming deployment, causing anticipatory stress. While deployed, non-combat stressors are related to a malevolent environment which may include a lack of privacy, worry about family back home, boredom, exposure to excessive heat or cold, problems with supervisors, and inadequate equipment or supplies (Booth-Kewley, et al., 2010). Many of the stressors are related to anxiety, depression, and PTSD symptoms (Maguen, et al., 2008).

Given that negative affect predicts PTSD development during deployment, and positive affect represents protective factors against PTSD, it would seem to behoove the military to promote positive military experiences such as feelings of belonging in a unit, praise for military action, engendering trust among other soldiers in the unit making the unit feel like a family, and helping soldiers feel like they are a part of a larger mission. However, due to the scarcity of research on protective factors of deployment, risk factors remain high, and as aforementioned, the focus is more on treatment of mental health disorders among service members than on prevention.

Other protective factors include trait resilience, which may be defined as the flexibility in response in the face of situational demands and stressful experiences, and the ability to find meaning in adverse situations (Wilson, et al., 2008). However, soldiers are recruited not based on what kind of personality they possess, or on their social skills, but on their physical, and less often, their cognitive ability to be a soldier. According to the study by Booth-Kewley et al (2010), "The one variable that had the strongest association with screening positive for PTSD was deployment related stressors. In fact, this category of non-combat stressors was more strongly related to possible PTSD than was combat exposure." With this information available to the Department of Defense, one way to mitigate the pervasiveness of PTSD would be to alleviate such deployment related stressors such as malevolent environment, lack of contact with family, and revolving tours of duty, to name a few. However, it is yet to be seen whether the cost of PTSD within the VHA and DOD will be a motivator for internal change within military operations.

This begs the question, "What is the US military doing to help soldiers better cope with deployment to war zones in order to reduce the number of soldiers developing PTSD?" Unfortunately, very little is being implemented at this time in the area of PTSD prevention. However, the research and treatment surrounding PTSD in the military is overwhelming and the money being spent on treatment and compensation at the Veteran's Administration medical facilities throughout the country is unprecedented at this time.

PTSD And Traumatic Brain Injury

Before delving into the many research and treatment topics, there are other facets of PTSD among active duty soldiers and veterans of war to explore. Two of the most widely known co-morbidities among this group of returning soldiers include PTSD and traumatic

brain injury, and PTSD and substance use disorder. According to French and Parkinson (2008), "The highly stressful and dangerous context in which these injuries are sustained set them apart in significant ways from brain injuries seen in civilian settings. The associated emotional toll of the environment and co-morbid injuries, often resulting from blast exposure, complicates the clinical picture." Many soldiers do recover from mild head injury. However, a significant proportion of them sustain long-term functional impairment, which is exacerbated by the way the injury occurred and the emotional toll incurred, not to mention chronic pain. One report found that 88 percent of injuries sustained in the combat field were from blasts (Murray, et al., 2005). Co-occurring TBI and PTSD is a complex disorder. According to a recent report in Army Times (2012), complications health care providers face in treating PTSD and TBI is that they share common symptoms, and at times PTSD does not manifest until months and sometimes even years later.

According to this same article, there is a relative lack of information about the brain and its complexities. United States Navy Vice Chief of Staff General Peter Chiarelli state that, "Post traumatic stress disorder remains a particularly difficult and prevalent injury coming out of this war." However, new technology and research involving brain mapping at Wake Forest Baptist Medical Center and Veterans Affairs Department is employing magnetoencephalography, or MEG, which can detect post traumatic stress disorder or traumatic brain injury using images of injured veterans compared to those of non-injured veterans. The MEG measures magnetic fields emitted by brain cells and is able to detect when a brain is thinking and can precisely map which area of the brain is involved, including the executive function of the cerebral cortex, which can help discern whether the soldier has

TBI, PTSD, or possibly both (Army Times, 2012).

Among neuropsychological aspects of PTSD, identified impairments include inability to sustain attention, impaired memory and working memory, and reduced processing speed (Brenner et al., 2009). According to one survey of returning OIF/OEF soldiers, 44 percent of soldiers with loss of consciousness met criteria for PTSD, 27 percent without loss of consciousness met criteria, 16 percent with other types of illnesses met criteria, and 9 percent with other injuries met PTSD criteria (French & Parkinson, 2008). Soldiers are at risk of developing PTSD when there is impaired cognition caused by TBI. BINT affects mood, thoughts, and behavior, and co-morbidity rates for these injuries are 43.9 percent as of 2010 in all returning OIF/OEF soldiers (Jett, 2010). Additionally, in poly-trauma, survivors show some important pathophysiological overlaps between PTSD and TBI.

Poly-trauma is defined as, "two or more injuries to physical regions or organ systems, one of which might be life threatening." Some common symptoms between the two disorders include insomnia, memory problems, poor concentration, fatigue, depression, and anxiety. PTSD is distinguished by the symptoms of emotional numbing, re-experiencing the traumatic event, avoidance, hyper-vigilance, and exaggerated startle response (Jett, 2010). When a blast explosion and its after affects are witnessed, a vast number of soldiers develop anxiety issues and stress related reactions, including PTSD.

Insomnia

Insomnia is the most commonly reported symptom among soldiers with PTSD. Sleep disturbance is also a diagnostic criteria for PTSD, as well as a co-morbidity with many other psychological problems, including depression, anxiety, and substance abuse (Hoge, et al., 2008). Firstly, insomnia is an immediate reaction to stress. The theory that one of the main

functions of sleep is emotional regulation may also be related to how lack of sleep is a trigger for other psychological symptoms. Recent research also quantifies sleep as a function in regulating emotional memories (Walker, 2009). According to this same study by Walker (2009), " Sleep performs a function similar to systematic desensitization. That is, sleep normally serves to strip the emotional component from memories. A failure or an absence of this process could then trigger psychological symptoms such as re-experiencing symptoms of PTSD." Simply stated, sleep buffers the human mind from aversive and perhaps traumatic memories, providing us with natural emotional adaptation and resilience. The lack of restorative sleep among combat soldiers would therefore be a risk factor in the development of mood and anxiety disorders. Soldiers who experience high levels of combat intensity would be expected to have insomnia, which underlines the importance of understanding how sleep disturbance plays a role in the development of mental health problems for this population (Wright, et al., 2011). In a recent study, Wright et al (2011) show implications that early treatment for insomnia might prevent the onset of other psychological symptoms, including PTSD. The results of this study support the hypothesis that earlier insomnia is a strong predictor of symptoms of psychological disorders that develop at a later time. In this study, insomnia at 4 months post-deployment was a significant predictor of depression and PTSD symptoms at 12 months post-deployment. In contrast, depression and PTSD symptoms at 4 months post-deployment were not significant predictors of insomnia at 12 months post-deployment in the cross-lagged analyses.

Substance Use Disorder and PTSD

In soldiers with PTSD, alcohol addiction is common and several explanations such as "self-medication" and "tension reduction" are prevalent. Accordingly, PTSD develops

first, and alcohol abuse or addiction is related to reduce stress. Studies have shown that it isn't the actual exposure to traumatic events that causes someone to develop SUD, but that development of PTSD has a high incidence of causing an SUD. In fact, in the symptom clusters avoidance and emotional numbing are significant in diagnosing PTSD according to the DSM IV-TR (2000). Also, with such symptoms such as hyper vigilance, exaggerated startle response, sleep disturbance and irritability, it is not far reaching to understand why some individuals would choose to self-medicate with a depressant such as alcohol in order to suppress these symptoms (Mills, 2009).

Unfortunately, this approach in offering a short-term solution to PTSD symptoms only brings about other negative consequences. In the long run, substance abuse may worsen the symptoms. Repeated avoidance of symptoms related to the trauma experience has been shown to be a factor in the persistence of PTSD. Not only that, but a cyclical relationship develops between the two disorders when users attempt to cut back on use or abstain and have difficulty doing so because PTSD symptoms return and increase (Dunmore & Ehlers, 2001). Integrated treatment for individuals with this co-morbidity is the norm. Although the "gold standard" of treatment for PTSD in Prolonged Exposure Therapy, many clinicians are wary of using this past-focused approach in fear that it may bring to the surface material that may be so overwhelming as to cause relapse. Instead, present-focused therapies that provide skills in coping and managing the symptoms is the preferred approach to treating PTSD & SUD (Brady, et al., 2001). It has been shown that co-morbid alcohol dependence in soldiers with PTSD increases aggression level. Aggressive behavior is one of the symptoms of hyper arousal in PTSD criteria, and there is a difference in the level of aggressive behavior, as well as the addition of verbal aggression that delineates between those with PTSD and those with

a dual diagnosis of PTSD and SUD. Alcohol addiction is the most common co-morbid condition with PTSD and is associated with poor behavior control, impulsiveness, irritability, and weakened inhibitory mechanisms. Also, alcohol addiction often gives rise to increased criminal behavior, including homicide, antisocial behavior, as well as suicide (Zoric et al., 2003).

PTSD and suicide

A serious concern among military personnel is rising rates of suicide. According to the interpersonal-psychological theory of suicide, "three necessary factors are needed to die by suicide: feelings that one does not belong with other people, feelings that one is a burden on others or society, and an acquired capability to overcome the fear and pain associated with suicide." (Bryan et al., 2010). Deaths by suicide in the US military range from between nine to fifteen deaths per 100,000 service members per year, and suicide is the leading cause of death among soldiers. It is interesting to note that combat injuries are not the main cause of death for today's soldier due to advanced armor and medical care, but that suicide caused by a mental disorder, diagnosed or undiagnosed, is the modern leading cause of death among this population. Studies have indicated that military service is a risk factor for suicidal behavior, and male soldiers are at a greater risk than civilian males. Furthermore, combat duty increases suicide rates among male soldiers (Ritchie, Keppler, & Rothberg, 2003).

Because all three factors of the interpersonal-psychological theory of suicide are needed for someone to actually die by suicide, versus the desire to die by suicide without the acquired capability factor, soldiers who have been repeatedly exposed and habituated to painful and aversive events often do possess all three factors, which include thwarted belongingness, perceived burdensomeness, as well as acquired capability (Van Orden et al.,

2008). Also, higher pain tolerance and pain thresholds are associated with higher capability. Standard military experience, such as deployment training, basic training, and combat all contribute to acquired capability. For instance, it is widely known that during basic training, recruits are repeatedly exposed to fearful and painful "shake downs" in order to reduce their initial emotional responses to such stimuli. During real combat settings, exposure to violence such as hand-to-hand combat, weapons firing, and killing of people also increases the likelihood of increased levels of acquired capability for suicide completion. However, combat experiences do not necessarily increase the factors of lack of belonging and being burdensome directly, but indirectly through feelings of guilt and shame secondary to combat exposure (Selby et al., 2010). The increased risk for combat soldiers lies in the creation of the desire for suicide through the factors of guilt and shame that create isolation and lack of belongingness. PTSD symptoms that include aggressiveness, impulsivity, hostility, and irritability which often lead to guilt, shame and isolation all contribute to suicide risk among PTSD diagnosed soldiers. Also, as reported by Breggin (2010), concern has been expressed about the increased prescription of psychiatric medications, especially anti-depressants, to military personnel. The newer antidepressants can cause violence, suicide and mania in reported studies, and in 2010 the Food and Drug Administration changed the labels due to the number of cases of suicide from use of selective serotonin reuptake inhibitors (SSRIs). There is an inherent risk of not only developing PTSD from traumatic combat experiences, but also the danger of high suicide risk among soldiers, as demonstrated by statistics, as well as the danger of abuse of psychiatric medications.

Impact on family and sexual function

Another major issue concerning combat veterans is trouble with intimacy.

Following a trauma it is not uncommon for people to find their ability to relate intimately with their partners to be difficult. After trauma, there is often a blunting of emotionality and cognitive function. Although all relationships are impacted by PTSD, the impact on intimate relationships is felt most keenly, often dampening the emotional and sexual lives of couples. It has been found that lower levels of self-disclosure and intimacy among veterans with higher levels of PTSD related avoidance that may have negative effects on the spouse. Also, when the spouse is forced to "run interference" for service members or veterans with PTSD, such as minimizing noise in the household to avoid triggering an emotional outburst, this creates distress for the spouse (Fredman, Monson, & Adair, 2011). Additionally, the inability to relate with both friends and intimate partners further exacerbates the isolation of soldiers dealing with PTSD. Cornerstone symptoms of PTSD, avoidance and numbing, lead to general unresponsiveness to things that used to be interesting. Also, the use of alcohol or other substances used to further numb PTSD symptoms and are often used as a method of avoidance of intimate relationships (Mills & Turnbull, 2004). According to the Army Times (2012), spouse abuse went up by 33 percent and child abuse by 43 percent between 2006 and 2011. Additionally, alcohol associated with child abuse went up 40 percent and spouse abuse increased by 54 percent in the same time period. The research makes it clear that PTSD is a factor in spousal abuse. In fact, in an Army Times interview of General Chiarelli (2012), he states that, " A person diagnosed with post traumatic stress is three times more likely to participate in some kind of partner aggression. That is why it is so critical to eliminate the stigma associated with post traumatic stress and get people in for treatment to deal with their alcohol problem, their drug abuse problem, their prescription drug abuse problem, or anger management problem, or spouse or

child abuse."

Hyper-arousal causes individuals with PTSD to have symptoms such as diarrhea, nausea, palpitations, insomnia, irritability, headaches, poor concentration, muscular aches and pains, as well as being on guard, paranoid, and hyper-vigilant. It is not hard to imagine that these problems would dampen the possibility of intimacy. Not only is the combat veteran affected, but his or her romantic partner also experiences distress within the relationship, and reports psychological and relationship stress. Unfortunately for combat veterans with PTSD, relationship difficulties are also associated with poor prognosis and recovery (Renshaw & Campbell, 2011).

In one study of 50 wives of returning servicemen who had recently returned from combat, the association between PTSD and negative attributions by the partners of the servicemen were less obvious for combat veterans who had spent more time in combat (Cook et al, 2004). The perception of the wives that symptoms were beyond their mate's control helped them to be more compassionate and forgiving in the relationship. However, it is a double-edged sword, because learning about the level of combat a spouse has experienced can also lead to psychological distress of partners. In fact, in a study by Figley (2004), a theory of partner distress called secondary traumatic stress, was further documented and researched, and showed a positive association between knowledge of combat experiences by partner and high levels of psychological stress. But regardless of spouse's perception of combat, higher levels of PTSD symptomology create higher levels of partner distress, particularly due to the symptom cluster of numbing and avoidance. The question that is formulated by the current research on the effect of combat related PTSD on spouses is whether or not association between numbing and avoidance can be reduced by spousal

recognition of these symptoms as being directly related to combat trauma, and not to the service member's feelings about them or the relationship. Additionally, if research can confirm that spouse's feelings, beliefs, and intentions toward service members suffering from PTSD, interventions can target spouses by way of psycho education. According to Renshaw and Campbell (2011), "More specifically, educating partners about the numbing/withdrawal component of PTSD, which appears to be of paramount importance in the relationships of individuals with PTSD, might help partners who have difficulty making sense of such behaviors." The Veteran's Health Administration is darting to catch up to the waves of returning veteran's with combat related trauma by the aforementioned recent building of inpatient treatment facilities which offer both psycho educational and cognitive behavioral treatment to these veterans in need. The current realization is that families play a huge role in the successful outcomes of veterans, and need to be somehow integrated into the recovery process.

PTSD, anger, and aggression

Anger and aggression, as well as dysphoria, anxiety, and depression are usually present among combat soldiers with PTSD, and the presence of co-morbid depression is among the strongest risk factors among veterans with PTSD (Taft et al., 2007). Aggression theory, according to the work of Berkowitz (1990), suggests that the variable of negative affect helps to explain the relationship between PTSD and aggression. Berkowitz' model of cognitive neoassociationisticism holds that negative affect is linked to anger related thoughts, memories, feelings, and aggressive inclinations that impact the entire network of negative affect experience within an individual. According to this theory, those who experienced more severe and frequent negative affect also experienced heightened memories, thoughts, and

feelings related to anger, and also have a higher propensity for aggressive behavior. Also, feelings of dysphoria, a state of unease or generalized dissatisfaction with life, suggest that such symptoms also serve as a direct mechanism in the relationship between PTSD symptoms and aggression. Dysphoria causes disinhibition as well, which can override external and internal restraints which would otherwise limit aggressive responses (Taft et al., 2007). According to Berkowitz' (1990) model, dysphoric affect activates associative networks of anger related memories, feelings, and thoughts, as well as aggression, making aggressive behavior more likely. The suggestion is made in the study by Taft et al (2007) that when a soldier with PTSD is being treated for anger and aggression management, symptoms of dysphoria should not be overlooked, and treatment should aim to address related symptoms. Threats in the environment of combat veterans play a huge role in levels of aggression and hostile attribution, as well as hyper-vigilance, and perpetuation of aggression may cause higher levels of guilt for combat veterans with PTSD. Thus, a vicious cycle is set in place, one that requires attention to all aspects of symptomolgy, as well as to environmental factors that may perpetuate aggression. It becomes clear that anger functions to facilitate emotional disengagement (Jakupcak et al., 2007). Numerous studies have shown that veterans with PTSD are more likely to commit aggressive acts than veterans without PTSD or the general public. It has also been shown that veterans with PTSD are more likely to express physical aggression and hostility within their intimate relationships (Carroll et al., 1985). Since anger and hostility need to be addressed among this population, anger management should be a priority in treating Iraq and Afghanistan war veterans.

Females and PTSD

Unlike the war in Vietnam, the current theaters of war deploy females who are directly

involved with combat situations. There are currently 48 women working along the front lines in Afghanistan as marines in the second Female Engagement team, participating in a more active role in combat than ever before in history. Although direct combat for females has not yet been approved by the Pentagon, female soldiers are often directly exposed to the same traumatic experiences as their male counterparts, such as witnessing a Humvee vehicular explosion that kills and maims personnel. More than 230,000 women have served in Iraq and Afghanistan in the past nine years. Women account for 15% of the active-duty military (Fitzpatrick, 2010). However, most often women soldiers that are diagnosed with PTSD have been exposed to military sexual trauma, and an even worse scenario is the double exposure of MST and combat related trauma (O'Connor & Elklit, 2008). In general, women are twice as likely to develop PTSD in a lifetime as men are, according to empirical studies published since 1980. One might think that this is a fact due to the greater likelihood of sexual trauma by women. However, this hypothesis was rebutted by the statistical analysis that found that when women were exposed to potential traumas that are traditionally male, such as combat or war, fire or disaster, non sexual assault, witnessing death or injury, or other serious illness, that females are at a greater risk for developing PTSD than males (Tolin & Foa, 2006).

Thirty to forty five percent of female veterans report that they were sexually assaulted in the military, and 4 in 31 report exposure to combat. PTSD is higher among women who have been soldiers than in civilian women. Poor psychological functioning, substance abuse, and physical health problems are all associated with a female veteran's PTSD diagnosis (Zinzow, 2008). Zinzow et al also found that "women enter the military with significant trauma histories and are exposed to additional traumatic events during military service,

suggesting that military women are at risk for cumulative trauma exposure, significant occupational stress, and related mental and physical health problems." Clearly, female combat veterans represent a special population with unique needs in the implementation of health care, as well as a military population in need of preventative measures to avoid "double exposure" to an already trauma-sensitive soldier.

PTSD and cultural influence

One very interesting culturally based idea regarding maintenance of PTSD among soldiers, both male and female, is that in autonomous cultures, the individual, not the trauma experience, is an integral part of how the concept of trauma is internally perpetuated, or the anchor of behavior. In other words, in a socially contextual culture that places more emphasis on external factors and less on the individual, a person derives meaning more from the traumatic event rather than from how it manifests in independent and individual thought, feeling, and belief. In such cultures, there is an inherent tolerance of differences in self in these roles that does not deviate from the personal solidity created by being a member of a social culture (Jobson & O'Kearney, 2008).

It is further posited by Summerfield (2004), who terms PTSD as "the medicalization of human suffering" that "the private and individual emotional vulnerability is emphasized during trauma in individuals from autonomous cultures." This gives further evidence of the importance of the prevention of PTSD by promoting unit cohesion, which would also be beneficial to soldiers discharged from combat. The development of longer term group debriefing of returning soldiers, perhaps extending the current 5 day time period to a 30 day period, would perhaps help combat veterans gain the social support of fellow veterans. It has been shown that PTSD symptoms considerably improve within three months (Schiraldi,

1999). Currently, after the five day period, veterans are reintroduced into a culture that expects them to fall back into autonomous roles, when what is needed is social soothing. Thousands of combat veterans are claiming PTSD within weeks of discharge, and the VA compensation totals of service connected disability for this population are staggering. Instead, this money could be spent on both prevention and extended traumatic debriefing and inter-branch support systems immediately following discharge for veterans who are assessed with acute PTSD.

Adult attachment style and PTSD

Besides cultural differences in the development of PTSD, another interesting factor that may play a role as a protective factor is adult attachment style. According to some studies, attachment style is a stronger predictor of PTSD symptoms intensity than trauma severity (Bogaert, 2008). There are individual differences that have a great effect on the response to trauma and the development of PTSD. The attachment behavioral system is biologically based and stems from early development in relation to parents, infant characteristics, and environmental factors. It is a system that determines how an individual maintains safety, and plays a role in adult behavior by predicting how an individual copes with perceived threat, danger, or loss (Nye et al, 2008). Evidence shows that individuals with a secure attachment style tend to have better coping skills, have a more positive affect, and instead of avoidance will tend to dwell on the positive, even in a traumatic experience. These individuals also lean more toward perception of social support and more readily recover from traumatic exposure (O'Connor & Elklit, 2008). Although the recruitment of soldiers cannot sift out those who had emotionally insecure childhoods or childhood trauma to avoid producing soldiers who will more likely suffer from PTSD, but once again

preventative measures such as development of strong social relationships among units during deployment, and post deployment group therapy could very well reduce PTSD severity and maintenance among soldiers.

Attachment theorists develop ideas about response to trauma around emotional relativity, whereas information processing theorists propose that traumatic events can disrupt the processing of information that can lead to changes in belief. One such interesting idea that has been studied is the relationship between trauma, PTSD, and religious belief. In one study by Falsetti, Resick, and Davis (2003), results indicated that the PTSD group was more likely to report changes in religious beliefs following the first traumatic event, generally becoming less religious. Theorists and researchers hypothesizing trauma think that an individual's beliefs develop through his or her interactions with the environment, or are interaction based beliefs. For instance, certain stereotypes are associated with murder, however, a soldier who commits murder during a war must assimilate the fact that although he or she did commit murder; the fact is that it was during battle, and he or she must then develop a new schema around murder. An example of this would be a belief such as, "Since I was a soldier and killed, it must not have been a murder." New beliefs must be assimilated or accommodated, and this is an additional stressor.

Spirituality and PTSD

But is religion a resilience factor as well? According to Harris et al (2008), "Some trauma survivors find their faith helpful in recovery, others find it a source of distress, and still others abandon their faith." Most people who are confronted with traumatic events use religious beliefs to cope, while others find that maintaining their religious beliefs is hurtful to them, based on the morality involved in the specific trauma, and the conflicting schema of

belief and the personal involvement in the trauma (Schuster et al., 2001). Those who find it troublesome seek to abandon their faith or reduce involvement in their religion. There is a clear diversity in religious outcomes among trauma survivors. An important way that trauma disrupts religious beliefs is due to the challenges about views of the self and world, and beliefs about safety, power, and control. Additionally, beliefs about an omnipotent, benevolent God when transposed on a traumatic event may lead to an existential crisis (Janof-Bulman, 1992). The challenge posed by a change in religious functioning may pose additional stress to an already overwhelmed individual with PTSD due to the fact that he or she must render a new meaning to perceptions of the world at physical, interpersonal, and spiritual levels (Decker, 1993). However, for soldiers who do maintain a spiritual practice following exposure to trauma, there are four coping functions of prayer: seeking to increase one's ability to accept the stressor, actively seeking help, seeking help to focus coping efforts, and deferring or avoiding the stressor. The first three serve to lower anxiety levels while the deferring and avoiding prayer function predict higher levels of anxiety. Some positive aspects of involvement in religion include improved meaning, purpose and direction, the support of virtues, and increased social support, which in turn supports better interpersonal relationships and better social role functions (Exline, 2002). However, a major negative adaptive affect is guilt associated with failure of personal virtues associated with religious faith.

The diagnosis of PTSD requires that the individual has experienced fear, helplessness, and horror at the time of trauma, but guilt is often reported as a peritraumatic emotion that may also be crucial in the development or maintenance of PTSD disorder (Marx et al., 2010). According to Marx (2010), "Guilt has been construed as recognition of personal wrongdoing

and subsequent self-condemnation for such wrongdoings." Additionally, PTSD related guilt is more specifically recognition of wrongdoing and self-condemnation with regard to either the threat of one's own survival by actions or inactions, or the protection of one's own life that exposes others to danger (Marx et al., 2010). Altogether, findings suggest that combat related guilt among deployed service members requires intervention, and that assessment of religious functioning as a help or hindrance to growth during PTSD can provide clinicians further information in providing cognitive behavioral therapy.

Also, the exploration of spiritual experience in the wake of trauma and PTSD symptomology can be a useful examination in exploring post traumatic growth during recovery. Personal growth is "generally reported by the majority of people experiencing even the most traumatic of events" and is "commonly described in the teachings of philosophical, spiritual and religious traditions (Park & Hegelson, 2006, p. 791).

Grof and Grof (1990) suggest that:

An individual's openness to exploring the experience as a consistent factor in the successful negotiation of spiritual emergence and emergency is not only confirmed by findings and reinforced in a recent study that identified an individual's ''openness'' to transformation as the core category in coping with stressful life events. They suggest that a willingness to ''let go'' accept the ''transcendent'' and understand the process of transformation as ''gradual'' enabled participants ''to experience the true essence of spirituality in its natural and pure state.'' Without a willingness to surrender to the process of posttraumatic growth and transformation a satisfactory or enhanced outcome might be difficult to achieve.

The concept of personal growth is related to the humanistic-existential or transpersonal psychology approach, and although much of the treatment of OIF/OEF veterans is cognitive

based exposure therapy, this therapy requires that individuals talk about their traumatic experience in order to heal from it, and it is not far fetched to think that spiritual aspects may arise for discussion during treatment sessions with clinicians. The human experience is no doubt altered by traumatic life events, and within spiritual domains, individuals inevitably engage in the processing of personal transformation, re-evaluation, and learning that results in psychological shifts (Bray, 2010). Additionally, the movement in psychological treatment continually points toward what is termed "wholistic" or "holotropic" or moving toward wholeness, which is part of the BPSS model in the field of rehabilitation.

After exposure to a traumatic event there may be challenges to an individual's awareness, which might be so disorienting as to become a "spiritual emergency" (Grof & Grof, 1990). Additionally, a person's worldview may also disintegrate, which could in turn lead to an alienation of the self. Clearly, the symptom set of PTSD is an indication of a deeper crisis. According to Bray (2010), individuals who are struggling with an existential or spiritual emergency are exposed to acute internal cues that confront ways of existing, challenge old beliefs, bring discomfort with a once familiar world, and confront ways of thinking by causing perceptual problems between inner and outer worlds. These issues are difficult to bear, and perhaps more difficult for a soldier, who may not have the capacity to regenerate a new sense of self and relationship with the world after trauma exposure that leads to PTSD. More than likely, this population has not engaged in the human development or self-awareness growth potential that renders him or her to be more internally malleable. A soldier may not be capable of internal transformation of emotion or belief, and is therefore susceptible of being literally short circuited by what ensues internally after exposure to trauma. A soldier may not be able to "master challenges to awareness that is ultimately

dependent on openness of experiential style and the ability to process, understand, make meaning and integrate these new experiences" (Bray, 2010).

CHAPTER 3

DICUSSION AND IMPLICATIONS

According to a study by the VA, veterans with PTSD are 19 percent less likely to be employed at discharge (Resnick, S., Rosenheck, R. 2008). VA policy is slowly changing toward veterans with PTSD in assisting these veterans in becoming productive members of society. The VA is working to ensure services with goals such as workforce reintegration, incorporation of evidence based psychiatric rehabilitation, vocational rehabilitation, supported employment, community treatment, and recovery focused interventions (Frueh et al., 2007).

There are certainly implications on rehabilitation counseling and vocational planning with regard to veterans with PTSD. Some specific characteristics of individuals with PTSD that affect employability include: reduced stress tolerance, decreased energy level, decreased understanding and memory, lack of concentration and persistence, difficulty with social interaction, and lack of adaptation (Strauser & Lustig, 2001). Specifically, individuals with PTSD are better at completing short tasks that don't require extended periods of concentration. Hence, the rehabilitation plan could, if possible, include either a partial work week, or a flexible schedule where the individual could work in shorter intervals. Additionally, working closely with others without being distracted or triggered could be an issue. Therefore, another part of the rehabilitation plan may include solitary work, or work that involves few individuals focused upon a specific uninterrupted task, with limited contact with the general public (Strauser, 2000). Some examples of potentially appropriate jobs would be a semi truck driver, grounds maintenance, forest ranger, law enforcement officer

for the Bureau of Land Management, sanitation technician or other jobs that are mainly solitary and or simple task oriented. Another possibility would be working a night shift where the individual is less likely to be in contact with supervisors or other co-workers.

With regard to job accommodations, individuals with PTSD also require a structured environment (Strauser, 2000). In moderate to severe levels of the disorder, the work environment needs to be predictable, with reduced distractions and low levels of anxiety and fear producing stimuli. The individual may require support outside of the work environment, such as group therapy and individual counseling, which may help the individual process any fears or anxieties that come up on the job. Also, a rehabilitation counselor working with a veteran with PTSD needs to determine whether or not employment outcome could be improved by disclosing to the employer the individual's disability. The benefit of disclosure may outweigh any negative aspects, such as discrimination and perceived incompetence, in that it may increase support and help the employer in providing needed accommodations (Pimental, Bell, & Lotito, 1993).

Lastly, with regard to vocational rehabilitation planning and service, PTSD is a known cultural phenomenon in this country regarding returning OIF/OEF soldiers, and it is possible that with the right amount of communication between the employer and the counselor about outside therapeutic support being received by the veteran, an increased willingness to serve those who served may become evident.

PTSD disability status among veterans has recently become an issue of national importance. The VHA spends more than 250 million dollars a year for specialized PTSD treatment, and spends 100 million dollars annually for disability compensation payments for PTSD. The relationship between VHA mental health care and disability and vocational

rehabilitation for PTSD is complex. Service members being given twenty percent or more disability compensation for a PTSD diagnosis are eligible for vocational and educational benefits. Eighty four percent of individuals with PTSD meet criteria for at least one other psychiatric disorders (Brunet, Akerib, & Birmes, 2007). It is necessary for counselors in the field of vocational rehabilitation to be familiar with not only the frequency of dual diagnosis among this population and the complexity of symptomology, but also to have knowledge of the treatment modalities being used address PTSD.

From the Veteran's Benefits Administration (2011):

GENERAL RATING FORMULA FOR MENTAL DISORDERS:

Total occupational and social impairment, due to such symptoms as: gross impairment in thought process or communication; persistent delusions or hallucinations; grossly inappropriate behavior; persistent danger of hurting self or others; intermittent inability to perform activities of daily living (including maintenance of minimal personal hygiene); disorientation to time or place; memory loss for names of close relatives, own occupation, or own name ……..100%

Occupational and social impairment, with deficiencies in most areas, such as work, school, family relations, judgment, thinking, or mood, due to such symptoms as: suicidal ideation; obsessive rituals which interfere with routine activities; speech intermittently illogical, obscure, or irrelevant; near-continuous panic or depression affecting the ability to function independently, appropriately and effectively; impaired impulse control (such as unprovoked irritability with periods of violence); spatial disorientation; neglect of personal appearance and hygiene; difficulty in adapting to stressful circumstances (including work or a work-like setting); inability to establish and maintain effective relationships 70%

Occupational and social impairment with reduced reliability and productivity due to such symptoms as: flattened affect; circumstantial, circumlocutory, or stereotyped speech; panic attacks more than once a week; difficulty in understanding complex commands; impairment of short- and long-term memory (e.g., retention of only highly learned material, forgetting to complete tasks); impaired judgment; impaired abstract thinking; disturbances of motivation and mood; difficulty in establishing and maintaining Effective work and social relationships ……..50%

Occupational and social impairment with occasional decrease in work efficiency and intermittent periods of inability to perform occupational tasks (although generally functioning satisfactorily, with routine behavior, self-care, and conversation normal), due to such symptoms as: depressed mood, anxiety, suspiciousness, panic attacks (weekly or less often), chronic sleep impairment, mild memory loss (such as forgetting names, directions, recent events) 30%

Occupational and social impairment due to mild or transient symptoms which decrease work efficiency and ability to perform occupational tasks only during periods of significant stress, or; symptoms controlled by continuous medication 10%

Rehabilitation counselors greatly benefit by knowing what kinds of methods are being used to treat PTSD. The most interesting development in the realm of PTSD is the research on treatment and its implementation, both based on traditional theory models such as cognitive behavioral therapy, as well as alternative types of treatment, including what is referred to as within the VA health care system as Complementary Alternative Medicine (CAM). The lumbering giant which is the Veteran's Hospital Administration is usually slow to change, but as of very recently is offering yoga in residential treatment programs, and in 2011 held a symposium on CAM, which by nature tends to be holistically oriented.

An eight week study in 2011 on Integrative Restoration (iRest) Yoga Nidra, a form of mindfulness meditation, provided to military combat veterans in the San Francisco Bay area, examined the feasibility of providing this kind of alternative treatment activity in PTSD treatment facilities nationwide. Combat related PTSD, because it is a more complex symptom picture that involves long term pervasive high stakes acts of interpersonal violence, does not respond as readily to treatments proven effective for acute trauma and other forms of chronic PTSD, including conventional talk therapy (McFurlane, Golier, & Yehuda, 2002). The perspective that a survivor's attempt to adapt and

recover from trauma implies that there is energy to be harnessed that can lead to healing. Through yoga and meditation-based therapies, an individual suffering from PTSD may be able to change maladaptive coping strategies toward healthier responses through mind-body approaches that may shift the individual's relationship to their experience. (Roemer & Orsillo, 2003).

Integrative restoration has been introduced into the treatment of PTSD in forms such as Mindfulness-based Stress Reduction, Mindfulness-based Cognitive Behavior Therapy, Acceptance and Commitment Therapy, and Dialectical Behavioral Therapy (Walser & Westrup, 2007). Integrative Restoration, or iRest is a therapeutic mindfulness-based protocol developed by Dr. Richard C. Miller. iRest is a ten-stage form of mindfulness meditation that is based on yoga nidra developed in India by Swami Satyananda Sarswati. It has been adapted to incorporate other forms of therapy such as autogenic suggestion, progressive muscle relaxation, Jungian and Gestalt psychology, Cognitive Behavioral Therapy, and Eye Movement Desensitization and Reprocessing (Stankovic, 2011).

In the field of rehabilitation counseling, the managed care focus is on evidence-based psychotherapy, which has specific and defined benefits including: (a) are effective (b) are goal-oriented (c) are appropriate for a wide range of patients and conditions (d) teach new skills and new perspectives (e) have lasting benefits, and (f) are time-limited (Forbes et al., 2010).

Prolonged Exposure Therapy is the foundational evidence based psychotherapy currently in use at VA facilities across the country. PET is a type of cognitive behavioral treatment that focuses on decreasing symptoms of post traumatic stress disorder. It is an individual therapy that addresses the symptoms and causes of PTSD in four ways. Included

in this treatment modality are psycho-education about treatment and common reactions to trauma, breathing re-training, in vivo exposure, and imaginal exposure. Prolonged exposure addresses symptoms by decreasing avoidance, which is one of the underlying causes of PTSD. Activities that were once avoided due to their relationship to the trauma are once again engaged in. In PET, the process of addressing the memory of the trauma is called imaginal exposure. By working closely with a therapist, the individual gradually changes thoughts and feelings surrounding the trauma. During in vivo exposure, the individual engages in real life situations that were previously avoided due to the trauma. The goal of both in vivo and imaginal exposure is to help the individual with PTSD return to activities that were once enjoyed, thus increasing quality of life. Prolonged exposure therapy requires commitment and motivation to change, and the client must be willing to participate in all of the individual sessions and complete homework assignments. PET lasts for 8 to 15 sessions, and each session is approximately 90 minutes in length with sessions given once or twice a week. Additionally recommended by the Department of Veteran's National Center for PTSD, Cognitive Processing Therapy, is a CBT method that involves helping an individual find new ways to handle distressing thoughts and to gain understanding of "stuck" thoughts about the trauma and how it affects ones life. CPT consists of four parts: Learning about PTSD symptoms; becoming aware of thoughts and feelings; learning new skills by questioning or challenging thoughts; and understanding changes in beliefs that occur after going through a trauma. CPT has been shown to be one of the most effective treatments for PTSD (VA NCPTSD, 2011).

In conclusion, a comprehensive knowledge base can play an important role in serving veterans with PTSD. Specialized educational training about PTSD and veterans at the

master's level in rehabilitation counseling will prepare future professionals to work with this growing population. Although the mental health services aspect of treatment of soldiers with PTSD and co-occurring disorders within the VA is now performed by social workers and psychologists in specialized treatment centers, it is not far-fetched to imagine that in the near future, due to the high demand of paraprofessionals needed to serve veterans and active duty soldiers in this capacity, that rehabilitation counselors may be called upon to fill the gap in available providers. In the mean time, the need for vocational rehabilitation services will more than likely continue to increase as more veterans return home from combat duty with the necessary task of successful re-integration into the workforce and the greater community.

REFERENCES

American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4th ed., Text Revision). Washington, DC: Author.

Army Times: January 30, 2012. An interview with Army General Chiarelli.

Berkowitz, L. (1990). On the formation and regulation of anger and aggression: a cognitive neoassociationistic analysis. *American Psychologist, 45,* 494-503.

Bogaert, S. (2008). Critical incedent, adult attachment style, and posttraumatic stress disorder: a comparison of three groups of security workers. *Social Behavior and Personality, 36(8),* 1063-1072.

Booth-Kewley, S., Larson, G., Highfill-McCoy, R., Garland, C., Gaskin, T. (2010). Correlates of posttraumatic stress disorder symptoms in marines back from war. *Journal of Traumatic Stress, 23(1),* 69-77.

Brady, K., Denskey, B., Back, E., Foa, E., Carroll, K. (2001). Exposure therapy for the treatment of PTSD among cocaine-dependent individuals: preliminary findings. *Journal of Substance Abuse, 21,* 47-54.

Breggin, P. (2010). Antidepressant induced suicide, violence, and mania: risks for military personnel. *Ethical Human Psychology, 12(2).*

Brenner, L., Ladley, S., O'Brian, M., Harwood, C., McFilley, M., Dames, M., Homaifar, B., Adler, L. (2009). An exploratory study of neuroimaging, neurologic, and neuropsychological findings in veterans with traumatic brain injury and/or posttraumatic stress disorder. *Military Medicine, 174,* 344-347.

Burke, H., Olney, M., Degeneffe, C. (2009). A new disability for rehabilitation counselors: Iraq war veterans with traumatic brain injury and post traumatic stress disorder. *Journal of Rehabilitation, 75,* 5-14.

Byron, C., Cukrowicz, C., West, C., Morrow, C. (2010). Combat experience and the acquired capability for suicide. *Journal of Clinical Psychology, 66(10),* 1044-1056. doi: 10.1002/jclp.20703

Carroll, E., Rueger, D., Foy, D., Donahoe, C. (1985). Vietnam combat veterans with posttraumatic stress disorder: analysis of marital and cohabitating adjustment. *Journal of Abnormal Psychology, 94,* 329-337.

Cook, J., Riggs, D., Thompson, R., Coyne, J. Sheikh, J. (2004). Posttraumatic stress disorder and current relationship functioning among World War II ex-prisoners of war. *Journal of Family Psychology*, *18*, 36–45. doi:10.1037/0893-3200.18.1.36

Decker, L.R. (1993). The role of trauma in spiritual development. *Journal of Humanistic Psychology, 33,* 33–46.

Department of Veterans Affairs: 2011. Evidence-Based Psychotherapies: Proven Treatments for PTSD and other mental health conditions in the VA Health Care System.

Department of Veterans Affairs: 2011. Prolonged Exposure Therapy Proven Results for Posttraumatic Stress.

Dieperink, M., Erbes, C., Leskela, J., Kaloupek, D., Farrer, M., Fisher, L., Wolf, E. (2005). Comparison of treatment for post-traumatic stress disorder among three department of veterans affairs medical centers. *Military Medicine, 170(4),* 305-308.

Dunmar, E., Clark, D., Ehlers, A. (2001). A prospective investigation of the role of cognitive factors in persistent posttraumatic stress disorder. *Behavioral Residential Therapy, 39,* 1063-84.

Exline, J. (2002). The picture is getting clearer, but is the scope too limited? Three overlooked questions in the psychology of religion. *Psychological Inquiry, 13,* 245–247.

Falsetti, S., Reshick, P., Davis, J. (2003). Changes in religious beliefs following trauma. *Journal of Traumatic Stress, 16(4),* 391-398.

Figley, C. (1995). *Compassion fatigue as secondary traumatic stress disorder*. New York: Brunner and Mazel.

Fitzpatrick, L. (2010). How America fails its female vets. *Time International, 10,* 27-35.

French, L., Parkinson, P. (2008). Assessing and treating veterans with traumatic brain injury. *Journal of Clinical Psychology, 64(8),* 1004-1013. doi: 10.1002/jclp.20514

Fredman, S., Monson, C., Adair, K. (2011). Implementing cognitive-behavioral conjoint therapy for PTSD with the newest generation of veterans and their partners. *Cognitive and Behavioral Practice*, *18*, 120–130. doi:10.1016/j.cbpra.2009.06.007

Frueh, B., Grubaugh, A., Elhai, J., Buckley, T. (2007). US department of veterans affairs disability policies for posttraumatic stress disorder: administrative trends and implications for treatment, rehabilitation, and research. *American Journal of Public Health, 97(12),* 2143-2145.

Germain, A., Shear, K., Hall, M., Buysse, D. (2007). Effects of a brief behavioral treatment for PTSD-related sleep disturbances: a pilot study. *Behaviour Research and Therapy, 45,* 627–632.

Gironda, R., Lark M., Massengale J, Walker R. (2006). Pain among veterans of operations enduring freedom and Iraqi freedom. *Pain Med, 7,* 339– 43.

Harvey, A. (2001). Insomnia: symptom or diagnosis? *Clinical Psychology Review, 21*, 1037–1059. doi:10.1016/S0272-7358(00)00083-0

Grof, S., Grof, C. (1990). *The stormy search for self: a guide to personal growth through transformational crises*. Los Angeles: JP Tarcher.

Harris, J., Erbes, C., Engdahl, B. (2008). Christian religious functioning and trauma outcomes. *Journal of Clinical Psychology, 64(1),* 17-29. doi: 10.1002/jclp.20427

Hathaway, A., Boals, A., Banks, J. (2010). PTSD symptoms and dominant emotional response to a traumatic event: an examination of DSM-IV criteria. *Anxiety, Stress, & Coping, 23,* 119-126.

Hoge, C., Auchterlonie, J., Milliken, C. (2006). Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *JAMA 295,*1023-32.

Janof-Bulman, R. (1992). *Shattered assumptions: towards a new psychology of trauma*. New York: Free Press.

Jett, S. (2010). Combat-related blast-induced neurotrama: a public health problem. *Nursing Forum, 45(4)*.

Jobson, L., O'Kearney, R. (2008). Cultural differences in personal identity in posttraumatic

stress disorder. *British Journal of Clinical Psychology, 47,* 95-109. Forbes, D., Creamer, J., Bisson, J., Cohen, B., Crow, B., Foa, E., Friedman, M. (2010). A guide to guidelines for the treatment of PTSD and related conditions. *Journal of Traumatic Stress, 23,* 537-552.

Leard-Mann, C., Smith, B., Ryan, M. (2010). Do adverse childhood experiences increase the risk of postdeployment posttraumatic stress disorder in US Marines? *BMC Public Health, 10,* 437-444.

Leskela J., Dieperink M., Thuras P. (2002). Shame and posttraumatic stress disorder. *Journal of Trauma Stress, 15,* 223–226.

Maguen, S., Turcotte, B., Peterson, A., Dremsa, T., Garb, H., McNally, R., Litz, B. (2008). Description of risk and resilience factors among military medical personnel before deployment to Iraq. *Military Medicine, 173(1),* 1-9.

Marx, B., Foley, K., Feinstein, B., Wolf, E., Kaloupek, D., Keane, T. (2010). Combat-related guilt mediates the relations between exposure to combat-related abusive violence and psychiatric diagnoses. *Depression and Anxiety, 27,* 287-293.

McFarlane A., Golier J., Yehuda, R. (2002). Treatment planning for trauma survivors with PTSD. *Treating Trauma Survivors with PTSD, 2,* 1-19.

McNally, R., Hatch, J., Cedillos, E., Luethcke, C., Baker, M., Peterson, A., Litz, B. (2011). Does the repressor coping style predict lower posttraumatic stress symptoms? *Military Medicine, 176(7),* 752.

Mills, B., Turnbill, G. (2004). Broken hearts and mending bodies: the impact of trauma on intimacy. *Sexual and Relationship Therapy, 19(3)*.

Murray, C., Reynolds, J., Schroeder, J., Harrison, M., Evans, O., Hospenthal, D. (2005). Spectrum of care provided at an echelon II medical unit during operation Iraqi freedom. *Military Medicine, 170, 516*–520.

Nye, E., Katzman, J., Bells, J., Kilpatrick, J., Brainard, M., Haaland, K. (2008). Attachment organization in Vietnam combat veterans with posttraumatic stress disorder. *Attachment and Human Development, 10(1),* 41-57.

O'Connor, M., Elkit, A. (2008). Attachment styles, traumatic events, and PTSD: a cross-sectional investigation of adult attachment and trauma. *Attachment and Human Development, 10(1),* 59-71.

Park, C., Helgeson, V. (2006). Introduction to the special section: growth following highly stressful life events – current status and future directions. *Journal of Consulting and Clinical Psychology, 74,* 791–796.

Renshaw, K., Campbell, S. (2011). Combat veterans symptoms of PTSD and partners' distress, the role of partners' perception of veterans' deployment experiences. *Journal of Family Psychology, 25(6),* 953-962.

Resnick, S., Rosenheck, R., (2008). Posttraumatic stress disorder and employment in veterans participating in veterans health administration compensated work therapy. *JRRD, 45,* 427-436.

Ritchie, E., Keppler, W., Rothberg, J. (2003). Suicidal admissions in the United States military. *Military Medicine, 168,* 177–181.

Roemer L., Orsillo S. (2003). Mindfulness: a promising intervention strategy in need of further study. *Clinical Psychology: Science and Practice, 10(2),* 172-178.

Schiraldi, G. (1999). *The post-traumatic stress disorder sourcebook: a guide to healing, recovery, and growth*. New York: McGraw Hill.

Schuster, M., Stein, B., Jaycox, L., Collins, R., Marshall, G., Elliott, M. (2001). A national survey of stress reactions after the September 11, 2001, terrorist attacks. *New England Journal of Medicine, 345,* 1507–1512.

Selby, E., Anestis, M., Bender, T., Ribeiro, J., Nock, M., Rudd, M. (2010). Overcoming the fear of lethal injury: evaluating suicidal behavior in the military through the lens of the interpersonal-psychological theory of suicide. *Clinical Psychology Review, 30,* 298–307.

Solomon, Z., Dekel, R., Zerach, G. (2008). The relationships between posttraumatic stress symptom clusters and marital intimacy among war veterans. *Journal of Family Psychology, 22,* 659–666 doi:10.1037/a0013596

Stankovic, L, (2011). Transforming trauma: A qualitative feasibility study of integrative restoration (iRest) yoga nidra on combat- related post traumatic stress disorder. *International Journal of Yoga Therapy, 21,* 23.

Strauser, D., Lustig, D. (2001). The implications of posttraumatic stress disorder on vocational behavior and rehabilitation planning. *Journal of Rehabilitation, 4,* 26-30.

Strauser, D., (2000). The impact of psychiatric disorders on the rehabilitation planning process. Paper presented at the Arkansas State University Rehabilitation Counseling Symposium. Arkansas State University, State University, AR.

Summerfield, D., Rossen, G. (2004). Cross-cultural perspectives on the medicalization of

human suffering. *Posttraumatic stress disorder: issues and controversies, 23,* 233–246.

Taft, C., Vogt, D., Marshall, A., Panuzio, J., Niles, B. (2007). Aggression among combat veterans: relationships with combat exposure and symptoms of stress disorder, dysphoria, and anxiety. *Journal of Traumatic Stress, 20(2),* 135-145.

Tolin, D., Foa, E. (2006). Sex differences in trauma and posttraumatic stress disorder: a quantitative review of 25 years of research. *Psychological Bulletin, 132(6),* 959-992.

Van Orden, K., Witte, T., Gordon, K., Bender, T., Joiner, T. (2008). Suicidal desire and the capability for suicide: tests of the interpersonal-psychological theory of suicidal behavior among adults. *Journal of Consulting and Clinical Psychology, 76,* 72–83.

Walker, M. (2009). The role of sleep in cognition and emotion. *Annals of the New York Academy of Sciences, 1156*, 168–197. doi:10.1111/j.1749-6632.2009.04416.x

Walser R., Westrup, D. (2007). *Acceptance & commitment therapy for the treatment of post traumatic stress disorder and trauma related problems: a practitioner's guide to using mindfulness and acceptance strategies*. Oakland, CA: New Harbinger Publications.

Wilson, J., Jones, M., Hull, L., Hotopf, M., Wessely, S., Rona, R. (2008). Does prior psychological health influence recall of military experiences: a prospective study. *Journal of Traumatic Stress, 21(4),* 385-393.

Wright, K., Britt, T., Bliese, P., Adler, A., Picchioni, D., Moore, D. (2011). Insomnia predictor versus outcome of PTSD and depression among Iraq combat veterans. *Journal of Clinical Psychology, 67*. 1240-1258. doi: 10.1002/jclp.2084541

Zinzow, Heidi M., Anouk L., Frueh, Bartley, C., Magruder, K. (2008). Sexual assault,

mental health, and service use among male and female veterans seen in Veterans Affairs primary care clinics: a multi-site study. *Psychiatry Research, 159*, 226-236.

VITA

Graduate School

Southern Illinois University

Tai Hawk

taihawk@gmail.com

Southern Illinois University Edwardsville
Bachelor of Arts, English Literature and Creative Writing, December 1993

Research Paper Title: The Epidemic of Post Traumatic Stress Disorder among Veterans

Major Professor: Dr. J. Bordieri