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A critical review of the utility of complex posttraumatic stress disorder in Operation Enduring Freedom and Operation Iraqi Freedom veterans: a protocol for group treatment

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A CRITICAL REVIEW OF THE UTILITY OF COMPLEX POSTTRAUMATIC STRESS DISORDER IN OPERATION ENDURING FREEDOM AND OPERATION IRAQI FREEDOM VETERANS: A PROTOCOL FOR GROUP TREATMENT

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ABSTRACT

The purpose of this descriptive non-empirical dissertation was to examine the utility of the concept of complex posttraumatic stress disorder (CPTSD) to conceptualize, assess, and treat veterans returning from Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) who have been exposed to traumatic event(s). Many have been exposed to unique traumatic factors, such as frequent deployments of greater length, urban combat theaters, and guerilla warfare. The prevalence of mental health disorders within this veteran population is high while utilization of services remains low. This body of work explores to what extent veterans present with trauma symptoms that may be different from PTSD as historically defined in the DSM system, and that more closely resemble CPTSD symptoms. CPTSD is a subset of psychological trauma that has a unique and broad range of disturbances affecting self-regulation, systems of meaning, and self-perception. The body of work presented here synthesizes the current literature on this veteran population, traumatic stress disorders and treatments, moral injury and moral distress, and betrayal trauma theory to present an argument in favor of the utility of the CPTSD concept. This dissertation may be used in the following ways: (a) to enhance the relevance and understanding of CPTSD specific to the returning veteran population, and (b) to serve as a framework for future research and implementation of a phase-based treatment. While available PTSD treatments may be applicable for these veterans, they do not account for emotion regulation deficits and, in some cases, may be contraindicated. Following a critical review of the literature, the researcher developed phase-based and skills-focused treatment protocol as a creative solution to bridge the gap between PTSD and CPTSD treatments. The potential limitations of the protocol are assessed and opportunities for future directions are presented.

Chapter 1: Introduction

War is transformative and affects service members on a number of different levels. Since October of 2001, approximately 1.64 million U.S. troops have been deployed as part of Operation Enduring Freedom (OEF) to Afghanistan or Operation Iraqi Freedom (OIF) to Iraq. These conflicts make up the most sustained ground war in history since the Vietnam War and have relied on an all-volunteer force made up of both men and women. Soldiers are met with more frequent deployments of greater length with shorter rest periods between them than at any time in U.S. history (Tanielian & Jaycox, 2008).

Veterans returning from the conflicts in Afghanistan and Iraq show high rates of psychiatric disorders, yet many do not remain in treatment (Erbes, Curry, & Leskela, 2009). These veterans attend fewer sessions and drop out of treatment more frequently when compared to Vietnam-era veterans. Researchers posit that the stigma of mental health diagnosis and treatment, demographic profiles, environmental demands, and symptom presentation may all contribute to this finding. Particularly troubling to the OEF/OIF population is the negative impact of mental health symptoms on social functioning, productivity, community involvement, and self-care (Gellis, Mavandadi & Oslin, 2010; Lapierre, Schwegler, & LaBauve, 2007). Finally, although there is no reliable measure of suicide attempts during military deployments, the average suicide rate in 2008 was estimated at 15.5 per 100,000 individuals (Fischer, 2009).

OEF/OIF veterans are particularly vulnerable to the effect of cumulative trauma. For the purposes of this dissertation, cumulative trauma will be defined as a history of traumatic exposure prior to combat and or exposure to more than one trauma during deployment. This dissertation seeks to begin a discourse that critically examines returning veterans who have been multiply deployed. It hopes to understand the potential for a complex symptom presentation that

may closely resemble the associated features of Posttraumatic Stress Disorder (PTSD) stated in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR; American Psychiatric Association [APA], 2000):

> impaired affect modulation; self-destructive and impulsive behavior; dissociative symptoms; somatic complaints; feelings of ineffectiveness, shame, despair, or hopelessness; feeling permanently damaged; a loss of previously sustained beliefs; hostility; social withdrawal; feeling constantly threatened; impaired relationships with others; or a change from the individual's previous personality characteristics. (p. 465)

More specifically, this critical analysis of the literature review will evaluate the research on symptom presentation among OEF/OIF veterans in order to answer the question: to what extent do OEF/OIF veterans present with trauma symptoms that are different from what clinicians may be accustomed to diagnosing and treating under the rubric of PTSD as defined in the DSM-IV? Drawing from the complex traumatic stress, moral injury and betrayal trauma theory literature, general treatment recommendations will be proposed that will address symptoms and other trauma sequelae that may not receive sufficient focus in exposure-based PTSD treatment.

Several cognitive-behavioral therapy (CBT) interventions for PTSD have been successfully used with veterans with PTSD. Specifically, Prolonged Exposure (PE) and Cognitive Processing Therapy (CPT) have demonstrated significant reductions in PTSD symptoms (Foa, Keane, Friedman, & Cohen, 2009; Rauch et al., 2009; Schnurr, Green, & Kaltman, 2007). The U.S. Department of Veterans Affairs and current American Psychological Association (APA) guidelines consider PE and CPT as best practice models (Foa et al., 1999; Resick et al., 2002; Ursano et al., 2004; U.S. Department of Veterans Affairs & Department of

Defense, 2010). However, treatment outcome research indicates the effect size on symptom improvement, although present, is significantly less for veterans than for the general population. This underscores the need to consider what some of the potential unmet needs are in the treatment of veterans diagnosed with PTSD.

The likelihood of soldiers from these conflicts experiencing at least one or more traumatic stressor is very high. Specific traumatic stressors include: retrieving human remains, participating in killing, witnessing fellow soldiers being killed and or injured, as well as a heightened sense of helplessness and arbitrariness (Tanielian & Jaycox, 2008). In addition, these soldiers face a unique situation in Iraq and Afghanistan, including the guerilla style modern combat that is mostly located in urban theaters and that includes risks such as exposure to roadside bombs, improvised explosive devices (IEDs), and suicide bombers. Furthermore, OEF/OIF veterans are serving multiple and extended deployments with both combat and peacekeeping objectives.

Thus, it is not surprising that PTSD is one of the most prevalent conditions among OEF/OIF veterans (Hoge et al., 2004; Hoge, Terhakopian, Castro, Messer, & Engel, 2007). The DSM-IV-TR defines PTSD on the basis of three clusters of symptom: re-experiencing, avoidance/numbing, and hyperarousal (for full diagnostic definition see Appendix A; APA, 2000). This definition has been largely based on presenting symptoms found among military combat veterans of the Vietnam and Korea eras, and among civilians suffering from a single traumatic episode (i.e., car accident, rape, etc.). Little is known about the validity of this current symptom cluster in terms of its relationship to psychopathology and functioning among OEF/OIF veterans (Pietrzak et al., 2009b). The DSM-V definition of PTSD expands the criteria to include four clusters of symptoms: re-experiencing, avoidance/numbing, hyperarousal, and

persistent negative emotional and cognitive states (APA, 2013). With the revised definition of PTSD a broadening of the recognition of symptoms and experiences has begun. Due to the broad empirical body of research that has been conducted on the DSM-IV-TR definition of PTSD (APA, 2000), this dissertation will refer and utilize the studies that have been designed given this definition.

Multiple traumatic exposures, of the type that many OEF/OIF veterans may have experienced, set the stage for a traumatic stress response that is distinct from the result of single traumatic exposures. The concept of complex posttraumatic stress disorder (CPTSD) will be explored in order to account for comprehensive symptomatology present among OEF/OIF veterans that extends beyond PTSD criteria currently found in the DSM-IV-TR (APA, 2000) and beyond the updated definition in the DSM-V (APA, 2013). The complex traumatic stress literature provides a conceptualization of traumatic events that results from exposure to stressors that are repetitive or prolonged, involve harm or abandonment by caregivers, and occur at developmentally vulnerable moments (Courtois & Ford, 2009).

The reliance military personnel have on one another, their commanders, the larger construct of the armed forces, and the government is total. Unintentional errors, transgressive acts of others, and the dual nature of great force and lack of individual mobility may result in moral injury through betrayal trauma. Polusny et al. (2011) discuss the unconventional features of the wars in Iraq and Afghanistan that may produce what they term "ambiguous combat situations for which the warrior may feel especially unprepared (e.g., killing a non-combatant)," noting that these situations "may significantly contribute to PTSD risk" (p. 694). Litz et al. (2009) have argued that this type of unsanctioned killing is one factor in producing a moral injury, which extends beyond witnessing or participating in atrocities. Betrayal trauma theory

emphasizes the importance of the social context of the traumatic event and the adaptive nature of dissociation and impaired memory processing. Freyd (1994) expands the definition of traumatic events to capture the unique sequelae of interpersonal trauma. Due to the interpersonal dependence, hierarchical structure, and combined military goals to promote peacekeeping and engage in combat, betrayal trauma theory highlights how violations within the military network are potentially morally injurious.

The unique context of the veteran population and potential for repetitive, morally injurious traumas coupled with high rates of psychiatric disorders and low treatment success suggests the need to re-assess the diagnosis and treatment of OEF/OIF veterans. This dissertation will propose a treatment protocol for those veterans suffering with CPTSD. The following literature review will discuss the definition and history of PTSD its prevalence and comorbidities. A discussion of the military population and risk factors for mental health disorder in veterans and exposure to multiple traumas will follow. Next, the definition of complex PTSD will be provided and its relevance to the general population and military population will be discussed. The theoretic frame of moral injury will be explored in the context of CPTSD. Betrayal trauma theory will also be discussed. Lastly, PTSD-specific treatment will be presented and its limitations will be reviewed and CPTSD treatment recommendations will be presented.

Chapter 2: Review of Literature

Posttraumatic Stress Disorder

Definition. Posttraumatic stress disorder (PTSD) is one of the most common responses to traumatic events (Miller & Resick, 2007). Symptoms of traumatic stress are common immediately following traumatic events, but typically remit over time. However, in PTSD, these common symptoms become chronic and entrenched, and interfere with daily functioning. PTSD is currently classified in the DSM-IV-TR (APA 2000) as an anxiety disorder[1] that develops in the wake of:

> an extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or witnessing of an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate. (p. 463)

History. PTSD was first included in the DSM in 1980 (APA, 1980) and was modeled on male combat veterans of the Vietnam War. Since that time, the definition of trauma and the categorical classification of PTSD as an anxiety disorder have been the subject of much debate (Lasiuk & Hegadoren, 2006). The PTSD diagnosis is currently the most researched traumatic-stress response disorder described in the DSM. It is expected to capture the profile of psychiatric distress from such diverse experiences as single episode traumas (i.e., natural disaster, car accident), interpersonal traumas (i.e., domestic violence, sexual assault), and multiple traumas

[1] In the current proposed revision of the DSM (i.e., DSM-V), PTSD would be reclassified under a new category of "Trauma and Stressor Related Disorders."

(i.e., histories of child abuse, combat). However, Weathers and Keane (2007) point to problems of creating an *all-purpose, general* trauma disorder:

> Stressors vary along a number of dimensions, including magnitude…complexity, frequency, duration, predictability, and controllability…There is a continuum of stressor severity and there are no crisp boundaries demarcating ordinary stressors from traumatic stressors. Further, perception of an event as stressful depends on subjective appraisal, making it difficult to define stressors objectively, and independent of personal meaning making. (p. 108)

Prevalence. In spite of some of the controversies surrounding the definition of PTSD, it remains one of the most commonly diagnosed mental disorders. The replication study of the National Comorbidity Study determined lifetime prevalence of PTSD in the general population to be 7.8%. About 60% of men and 50% of women in the general population have been exposed to at least one trauma. However, PTSD develops in 10.4% of women and 5% of men, thus pointing to a gender difference (Kessler, Berglund et al., 2005; Kessler, Chiu, Demler, Merikangas, & Walters, 2005). The highest rates of PTSD are found in combat veterans, victims of rape, and survivors of ethnically or politically motivated internment and genocide (Breslau et al., 1998; Kessler, 2000; Prigerson, Maciejewski, & Rosenheck, 2001; Resick & Schnicke, 1996). Indeed, gender and the specific type of trauma experienced are considered to impact the development of PTSD. Researchers have found that women are more likely to be victims of sexual abuse and molestation and men are more likely to be victims of accidents, combat, and fights (Nemeroff et al., 2006). However, Nemeroff et al. (2006) found gender to be of negligible difference when both men and women were under extreme trauma exposure.

Comorbidity. Those with PTSD typically have at least one other psychiatric disorder. Although considerable variability exists among comorbid conditions, common co-morbidities include unipolar depression, substance-related problems, and personality disorders (Miller & Resick, 2007). Eighty percent of patients with lifetime PTSD suffer from depression, anxiety disorders, and chemical abuse/dependency (Foa, Keane, & Friedman, 2000). Vietnam-era veterans diagnosed with PTSD carry the common comorbid diagnoses of generalized anxiety disorder, alcohol abuse, and major depression (Lasiuk & Hegadoren, 2006).

PTSD and the OEF/OIF military population. The prevalence of mental health disorders among U.S. OEF/OIF soldiers continues to be examined. Hoge, Auchterlonie, and Milliken (2006) identified 19.1% of OIF and 11.3% OEF soldiers as meeting screening criteria for mental health concerns, namely PTSD, depression, suicidal ideation, interpersonal conflicts, and aggression.

In a prospective, longitudinal investigation of 522 Army National Guard troops deployed to Iraq from 2006-2007, pre-deployment and post-deployment measures were given in order to determine the presence of PTSD symptoms. Polusny et al. (2011) identified 3.7% of the sample with probable PTSD at baseline, and identified 13.8% with new-onset probable PTSD at post-deployment. Stressful life events after deployment were associated with new-onset PTSD, whereas post-deployment social support was found to be a significant protective factor that decreased the likelihood of a PTSD diagnosis. Similarly, Milliken, Auchterlonie, and Hoge (2007), found among National Guard and Reservists a nearly four-fold increase in new-onset probable PTSD 3 months after return. Veterans in the Polusny et al. study may have been at heightened risk for PTSD development because guardsmen and reservists may lack post-deployment support when compared with other service members (Bray et al., 2006; Polusny et

al., 2009; M. Segal & Segal, 2006). This lack of support, combined with life stressors, may compromise resilience and increase vulnerability to PTSD and other mental health disorders. Since the American armed force is entirely volunteer-based, reserves will continue to be used to supplement active forces (M. Segal & Segal, 2006).

Risk Factors for Mental Health Issues Among Veterans

Deployment risk. General variables (i.e., reservists and junior enlisted, younger (<20 years) and older (>35 years) service members, those in medical occupations, those in direct combat or fired upon by oppositional forces) are associated with an increased risk of developing a mental health disorder (Kolkow, Spira, Morse, & Grieger, 2007; Martin, 2007). In evaluating risk at the level of service association and gender, Saul, Grant, and Smith Carter (2008) found that females were at higher risk than males, and divorced females were found to be at even greater risk within the Air Force, Navy/Coast Guard, and Marine Corps. However, the use of self-report and screening tools with low specificity and the over-representation of Air Force and Officer rank individuals who are at less risk of combat exposure limit the conclusions and generalizability of these findings.

Despite studies that have produced complicated and heterogeneous data regarding identifying veterans with PTSD, deployment remains a constant risk factor, raising the risk of developing PTSD from 1.5-3.5 times for service members (Magruder & Yeager, 2009). Of all the PTSD symptom clusters, the emotional numbing/avoidance cluster was found to be the strongest predictor of interpersonal distress and impairments in social functioning for OEF/OIF guardsman and reservist veterans (Shea, Vujanovic, Mansfield, Sevin, & Liu, 2010).

Pre-deployment risk variables. The Millennium Cohort study is a prospective health project funded by the Department of Defense that was launched in 2001 to examine the long-

term health effects of military service. Wells and colleagues (2010) examined the relationship between functional health and PTSD in deployed OEF/OIF combat members at baseline (2001-2003) and follow-up (2004-2006). This research indicated that poor mental or physical health status before combat exposure greatly increases risk of development and symptom severity of PTSD after deployment. Over 7% of the 5,410 participants reported new onset symptoms or diagnosis of posttraumatic stress disorder at time of follow-up. Of these individuals, over half (58%) occurred among those who had scored below the 15th percentile of mental or physical health before combat exposure (Bremner et al., 1993; Wells et al., 2008). These findings suggest a complex relationship between historical factors and variables more proximal to the trauma exposure in determining which individuals are likely to develop PTSD.

Research on the general population, Vietnam veterans, and Gulf War veterans supports the cumulative model of trauma in which additional traumas increase distress and begin to inhibit functioning (Breslau, Chilcoat, & Kessler, 1999; Fritch, Mishkind, Reger, & Gahon, 2010). Furthermore, research has shown that exposure to prior trauma increases the risk of developing PTSD (Breslau et al., 1999; Breslau, Peterson, & Schultz, 2008). In a veteran population, a history of abuse is associated with increased risk of current PTSD and lifetime panic and alcohol use disorder diagnoses (Brown, McBride, Bauer, & Williford, 2005).

In a retrospective archival study of medical records from 2001-2004, lifetime trauma exposure was examined in a sample of help-seeking male veterans within a specialty outpatient PTSD clinic (Clancy et al., 2006). Ninety percent of veterans reported non-military trauma and 84% of the sample reported three or more traumas, yet 11-69% of these did not consider them traumatic. Twenty-three percent of these traumas occurred prior to military experience, 40% reported exposure to childhood physical violence, and 68% reported traumatic exposure as a

veteran. Similarly, there is a correlation between childhood abuse histories and PTSD of Vietnam-era veterans (Bremner et al., 1993; Zaidi & Foy, 1994).

Rielage, Hoyt, and Renshaw (2010) identified internalizing and externalizing personality factors related to symptom development in relation to trauma. These researchers found that across two military samples of OEF/OIF veterans diagnosed with combat PTSD, anxiety and depression were related to an internalizing style, whereas antisocial behavior and substance use disorders were related to an externalizing style.

Impact of multiple or repeated trauma. Repeated or chronic stressful life events not only increase the risk of developing more severe PTSD symptoms, but also influence the development of more than one psychiatric disorder (Green, 2000; McNally, 2007; Turner & Lloyd, 1995; Weathers & Keane, 2007). As previously mentioned, individuals with PTSD commonly have at least one comorbid diagnosis.

Other researchers have demonstrated the additive or cumulative effect of trauma. Briere, Kaltman, and Green (2008), Cloitre et al. (2009), and Green et al. (2000) studied civilian populations of young women and found a linear relationship between number of traumas and symptom complexity. Suliman et al. (2009) investigated the cumulative effects of multiple trauma on PTSD, anxiety, and depression in an adolescent sample. After controlling for sex and stressful life experiences, the cumulative effect of increased traumas resulted in severe symptoms of PTSD and depression.

Prior exposure to traumas will result in a potentially stronger symptom consequences for subsequent trauma exposures (Breslau et al., 1999). Breslau et al. (1999) found that 5 years post-trauma, risk for a new trauma was predicted to be two times higher for those with a prior history of childhood assault.

Martin, Cromer, DePrince, and Freyd (2011) assessed the psychiatric responses of 273 college students reporting at least one traumatic incident. More than one traumatic exposure was associated with increased symptoms of depression, dissociation, and PTSD. Lanius et al. (2010) examined a sample of PTSD patients to assess differences between those subjected to prolonged traumatic stress. These researchers identified a chronic pattern of dissociation supported by brain imaging and self report among patients subjected to prolonged trauma when compared to those with a single-incident trauma. Patients reporting multiple traumas endorsed more dissociation, guilt and shame, and interpersonal sensitivity than patients with single-episode trauma (Hagennars, Fisch, & van Minnen, 2011). While personality disorders do operate independently of PTSD, many of which develop prior to the onset of PTSD and many individuals for whom the onset of PTSD exacerbate symptoms of personality disorder. In some PTSD patients personality functioning can also be affected (PTSD has been highly correlated with personality disorders; Golier et al., 2003).

Trauma exposure in combat. OEF/OIF deployments are characterized by insurgency warfare and enemy attacks that come in many different forms (Street, Vogt, & Dutra, 2009). In guerilla urban warfare there is no defined safe-zone or war *front*; rather, soldiers are in constant fear of insurgent attacks. Deployed soldiers are subjected to continuous threats in an unpredictable urban environment. The world-view of combatants is forced to shift under considerable and chronic anxious strain. U.S. service members stationed in Iraq and Afghanistan have both peacekeeping and warfare objectives, both of which require interactions with civilians. As a result, service members must adapt to an eerie combination of familiar urban landscape rife with potential danger and the possibility of making alliances with civilians who may also pose a threat. OEF/OIF service members are thus placed in a complicated position of balancing warfare

with peacekeeping mentalities (Adler, Huffman, Bliese, & Castro, 2005). Hoge et al. (2004) found that 62% of soldiers deployed to Iraq were placed in situations in which threat was detected. However, despite their assessment and training to respond combatively, they were unable to respond with aggression as the overriding directive was to avoid collateral damage to civilians.

Advanced technology has improved body armor, elevated the quality of emergency care given in the theater, and greatly shortened the time to evacuate the wounded to full trauma centers. For example, compared with an average of 45 days for wounded Vietnam soldiers, it currently takes an average of 24-48 hours for a service member to receive a medical evacuation (Tanielian & Jaycox, 2008). Thus, the possibility of surviving intense and repeated traumatic exposure remains high as modern warfare results in low killed in action (KIA) numbers. Responsive and swift medical action and the technology that brings service members stateside following deployment allots them little time to adjust to civilian life. Service members who have not sustained physical injuries but have witnessed atrocities may not be adequately assessed or treated, and as a result, many service members do not get sufficient mental health treatment between deployments. Two out of every 10 soldiers re-deployed from Iraq were diagnosed with PTSD (Hoge et al., 2004). Advances in protective armor, medical technology, and engineering have consequences for injured and non-injured service members. Volunteer service members shoulder the burden of sustaining the longest ground-combat war since Vietnam. The likelihood that OEF/OIF veterans will survive horrendous traumatic experiences is higher than at any other time in history. The impact of such survival on mental health functioning once stateside has yet to be borne out.

Response to combat exposure. Combat exposes service members to potential traumatic stressors and interpersonal stressors. According to Tanielian and Jaycox (2008), the most prevalent forms of trauma exposure in OEF/OIF combat include having a friend who was seriously wounded or killed (49.6%), seeing dead or seriously injured noncombatants (45.2%), and witnessing an accident resulting in serious injury or death (45%). Witnessing the aftermath of death and violence creates risk for the development of anxiety, anger, aggression, somatic symptoms, and or posttraumatic stress disorder (McCarroll, Ursano, & Fullerton, 1997). Indeed, soldiers and marines in high combat zones are three times more likely to screen positive for a mental health problem than a member of the general population (Hoge et al., 2004). In addition to combat exposure, difficulties related to being separated from loved ones and interpersonal stressors related to living and working with other troops also elevate the potential for sustained traumatic stress (Street et al., 2009).

Riddle, Sanders, Jones, and Webb (2008) explored combat veterans' mental health needs during deployment by studying personnel systematically selected from current combat regions participating in a rest and recuperation program in Doha, Qatar. Between 2003 and 2005, 40,620 troops completed a clinic screen. Rates of self-reported depression and self-harm were inversely correlated with rank; combat stress and monthly mortality rates were found to trend together. Fontana and Rosenheck (1993) used structural equation modeling to determine that war zone experiences contributed most strongly to PTSD and general distress. Combat exposure was found to contribute directly to PTSD but did not contribute directly to psychiatric distress. Clearly, service members are under sustained stress that may or may not include direct combat exposure. This stress is impacting their mental health functioning while on deployment. If exposed to traumatic events, interpersonal traumatic stressors, or unit tension, service members

may experience an increase in psychological distress. Once these service members return stateside and are out of a military context, psychic distress may again rise dramatically (Hoge et al., 2006). Interpersonal conflict was found to increase four times from immediate post-deployment to a second assessment 3-6 months later (Milliken et al., 2007).

U.S. soldiers are currently deployed for 15-month tours of duty and 36% serve more than one deployment, and 4% have been deployed 4-6 times (Lapierre et al., 2007). Exposure to repeated or multiple types of trauma has been shown to compound psychological distress (Fritch et al., 2010). With regard to length of deployments, soldiers deployed for more than 6 months are approximately 1.5 times more likely to screen positive for acute stress, depression, and or anxiety compared with those deployed for less than 6 months (Castro & McGurk, 2007). Redeployment, extended tours (15 months or longer), and voluntary multiple deployments increase vulnerability to psychological distress in service men and women (Lapierre et al., 2007).

Hosek, Kavanagh, and Miller (2006) noted that soldiers are redeploying at the highest rates in U.S. military history and the breaks between deployments are infrequent and short. The Mental Health Advisory Team (MHAT) was established by the Army to gather information on behavioral health of soldiers and Marines on a regular basis. The MHAT review reports that "soldiers on multiple deployments report low morale, more mental health problems, and more stress-related work problems. Soldiers on their third/fourth deployment are at particular risk of reporting mental health problems" (MHAT V, 2008, Sec. 2.2.2, No. 8).

Among OEF/OIF service members, 74% of soldiers reported exposure to at least one potentially traumatic event prior to deployment. Close to half of OEF/OIF service members endorsed elevated levels of psychiatric distress (Bolton, Litz, Adler, & Roemer, 2001). Studies have shown that prior mental health problems and post-battle experiences were significant

predictors of developing PTSD (Renshaw, 2011; van der Velden & Wittman, 2008). Those who have redeployed may be vulnerable to accumulating non-military traumatic exposure, increased combat exposure, and increased strain on social support. Thus OEF/OIF veterans are at heightened risk for psychic distress related to multiple traumatic exposures of many different types.

Post-deployment. Social support both during deployment and post-deployment has been considered protective, mediating the relationship between PTSD and depressive symptoms (Orcutt, Pickett, & Pope, 2005; Pietrzak et al., 2010). Unit support can assist service members and veterans in meaning making when facing of stressful experiences, and can increase one's sense of personal control and self-efficacy (Pietrzak et al., 2010). Interpersonal connections between veterans post-deployment, especially among National Guard members and Reservists, are less likely to be maintained. Avoidant coping strategies may be relied upon excessively as isolation and withdrawal increase. Eventually non-military relationships may be eroded, significantly impacting service members' mental health. National Guard members and Reservists, many of whom have served more than one combat tour and extended tour duty, have been consistently found to be at higher risk for post-deployment mental health distress (Kolassa et al., 2010; Milliken et al., 2007).

Complex Posttraumatic Stress Disorder

Exposure to sustained, repeated, or multiple traumas results in complex changes to affective, interpersonal, and self-regulatory capacities, after which posttraumatic stress symptoms present as chronic dysregulation in response to traumatic reminders (Cloitre et al., 2011). Complex posttraumatic stress disorder (CPTSD) was first introduced by Herman (1992)

to identify symptoms related to prolonged repeated trauma. These symptoms included disruption in personality functioning at core levels of basic trust, autonomy, and initiative.

Although CPTSD is not included in the current DSM-IV-TR (APA, 2000), nor is it proposed to be included in the DSM-V (APA, 2013), it is mentioned under *associated features* of PTSD in DSM-IV-TR. CPTSD was under consideration for inclusion in the DSM-IV-TR and underwent examination in the Posttraumatic Stress Disorder Field Trial study (Roth, Newman, Pelcovitz, van der Kolk, & Mandel, 1997). Between 1991-1992, 234 subjects reporting sexual and or physical abuse were evaluated for the CPTSD construct. Results revealed that the symptom constellation of CPTSD was specific to trauma, occurring in 6% of the treatment sample population. These studies did not find age of onset predictive of CPTSD symptoms; rather, it showed exposure to chronic traumatic stress or exposure to multiple types of traumas was necessary for the development of the CPTSD symptoms. The CPTSD construct was found to accurately identify symptoms related to self-regulation, self-definition, interpersonal functioning, adaptational style, dissociation, and somatization that were not well captured by the DSM PTSD criteria alone.

Significant variability exists in defining CPTSD. One definition describes prolonged trauma of an interpersonal nature, particularly childhood sexual abuse, as a precipitant to the development of CPTSD symptoms. Courtois (2004) expanded CPTSD experiences to include prolonged stressors that may or may not include childhood or interpersonal abuse. Some researchers require that developmental vulnerability be included as a precipitant to CPTSD. Other related diagnostic terms (again, not included as recognized Axis I or Axis II disorders in the DSM system) have sought to capture personality change following exposure to trauma. These diagnoses include: developmental trauma disorder (van der Kolk, Roth, Pelcovitz, Sunday, &

Spinazzola, 2005) and disorders of extreme stress not otherwise specified (DESNOS; Roth et al., 1997). Despite these variations, the distinguishing feature of CPTSD is that it requires emotional dysregulation to be a primary problem in association with PTSD symptoms (Bryant, 2012). Lewis and Grenyer (2009) describe CPTSD as a diagnostic category at the intersection of personality disorder, PTSD, and mood dysregulation. Thus, CPTSD encompasses core symptoms of PTSD as well as other psychopathology not captured by the PTSD diagnosis (i.e., poor impulse control, reality testing, interpersonal relationships, and or self integration). Lewis and Grenyer note that only certain individuals will experience personality dysfunction as the result of trauma exposure, prior temperament, and biological vulnerabilities.

CPTSD symptoms constitute a reaction not only to objective threats of physical survival, but also to the development and survival of the self. Terr (1991) discusses the difference between Type I and Type II traumas. Type I traumas are defined as single-event traumatic experiences with a clear distinction between pre and post-trauma functioning. Type II trauma symptoms follow longstanding or repeated exposure to external events and result in a symptom profile of profound personality change that includes "repression, dissociation, self-anesthesia, self-hypnosis, identifying with the aggressor, aggression turned against self all of which lead to profound character change" (pp. 15-16). Type II trauma includes sustained, repeated trauma, exposure to ongoing trauma conditions, exposure to extended traumatic conditions, and exposure to a cascade of single-incident and multiple events (Kira, 2001). The extent of trauma response under these conditions is pervasive, typically resulting in a reorganization of personality around the traumatic experience.

Creamer, McFarlane, and Burgess (2005) studied a large community sample and found that those exposed to interpersonal violence were more likely to have negative appraisals of self,

others, and the world. Asmundson and Carleton (2005) conducted a cluster analysis on the symptoms of associated features of PTSD in a sample of 60 patients diagnosed with PTSD. Those patients exposed to simple, or Type I traumas did not endorse symptoms associated with personality disorders, somatization, depression, or dissociation.

Reflecting the profound impact that repeated trauma can have, the International Statistical Classification of Diseases and Related Health Problems (ICD-10) includes a diagnostic category Enduring Personality Change after Exposure to Catastrophic or Excessive Prolonged Stress (EPCACE). EPCACE is defined as "a hostile or distrustful attitude toward the world, social withdrawal, feelings of emptiness or hopelessness, a chronic feeling of being 'on edge'" (World Health Organization, 1990, para. F62). Both the Clinical Description and Diagnostic Guidelines and the Diagnostic Criteria for Research focus on prolonged extreme trauma as a factor in personality change (Beltran, Silove, & Llewellyn, 2009).

Much of what has been written about CPTSD has focused on prolonged childhood abuse. The literature indicates that pervasive effects on an individual's psychological, somatic, and behavioral systems of regulation often result from enduring maltreatment that occurs during developmentally sensitive stages (Hopper, Frewen, van der Kolk, & Lanius, 2007; Streeck-Fischer & van der Kolk, 2000). Schore (2003) examined cumulative caregiver abuse and its pernicious effects on neurobiological development, specifically in areas associated with coping capacity. He terms this type of neglect, overstimulation, inconsistent care, or abuse, *relational trauma*, as it is ambient and far-reaching. On a biologic level, relational trauma has been shown to result in disturbances in limbic, hypothalamic, and homeostatic functioning. Distortions in attribution may contribute to a negative cognitive style, distorted locus of control, and a diminished sense of self-efficacy. Interpersonal difficulties often result from these cumulative

disruptions and are documented as disrupted attachment styles, difficulties with trust, low interpersonal effectiveness, diminished social skills, inability to understand social interactions, poor perspective-taking abilities, expectations of harm from others, and poor boundaries (Hopper et al., 2007). Interpersonal responses to trauma range from withdrawal to aggression (Miller & Resick, 2007).

CPTSD in the general population. In research conducted by Styron and Janoff-Bulman (1997), 879 college students participated in a study that sought to determine the difference between those with an abuse history and a normative control sample. Those reporting abuse experienced more depressive symptoms, less secure adult relationships, and more destructive behavior in conflict than the non-abused participants. Cloitre et al. (2009) studied 849 women presenting for trauma treatment over approximately 12 years in order to determine the impact cumulative traumas have on symptom complexity regardless of the presence of childhood trauma. Adult cumulative trauma was defined as sexual assault, physical assault, repeated sexual assault, or domestic violence. Adult cumulative trauma was found to increase symptom complexity, predominantly affective and interpersonal dysfunction, in addition to PTSD symptoms and dissociative symptoms. Briere et al. (2008) conducted a study with 2,453 participants in order to test three hypotheses: that a linear association exists between cumulative childhood trauma exposure and symptom complexity, that child abuse is associated with more symptom complexity, and that cumulative trauma exposure would predict symptom complexity with or without child abuse. Findings confirmed that traumas such as childhood rape and physical abuse were unique predictors of increased symptom complexity. These symptoms included suicidality, substance abuse, dissociation, self-injury, and dysfunctional sexual behavior. Alterations in socially-related meaning structures result from interpersonal traumas and

often, more severe trauma symptoms (Green et al., 2000; Kelly, Rizvi, Monson, & Resick, 2009). Ford, Stockton, Kaltman, and Green (2006) examined 345 college-aged women at least 84% reported exposure to at least one trauma. Those exposed to interpersonal trauma showed more severe symptoms. Specifically, those with one or more interpersonal traumas evidenced self-regulation problems, dissociation, altered relationships, altered belief systems, and psychosocial impairments. Zucker, Spinazzola, Blaustein, and van der Kolk (2006) assessed the construct of disorders of extreme stress in a PTSD-diagnosed clinical population (n = 155); 16% of this population met criteria for this form of complex traumatic stress. These patients endorsed symptoms of PTSD as well as dissociative symptoms characterized by amnesia, transient dissociative episodes, and depersonalization.

Cloitre et al. (2009) define CPTSD as a set of interrelated and frequently co-occurring symptoms resulting from prolonged traumatic exposure. Vulnerability to CPTSD may be related to developmental trauma or the severity, intensity, and prolonged nature of traumatic exposure. Given that CPTSD is not defined in the DSM-IV-TR, or DSM-V, this creates problems for uniform evaluation of the construct (Bryant, 2012). CPTSD is a variant of PTSD and thus shares many of its symptoms. Affect dysregulation and dissociation are two distinguishing features of CPTSD that mimic aspects of borderline personality disorder and major depressive disorder. What emerges from the literature is the critical impact of multiple and or prolonged traumatic exposure on psychosocial functioning. Specific to the military population under review here, the sequelae of symptoms following prolonged and multiple traumatic exposure will be most pertinent and are examined next.

CPTSD in the military population. When extrapolating findings about CPTSD to the OEF/OIF population, it is not necessarily the duration or repetitious nature of traumatic events

service members experience, but rather the clustering of multiple events that may lead to symptom complexity similar to what has been described in the CPSTD literature. Bremner (1999) notes, "the more traumatic stress is examined the more it becomes apparent that it may have far reaching influence on all of the major psychiatric disorders" (p. 351). Total exposures to traumatic events for service members as well as symptom complexity signal the CPTSD construct may be applicable.

Repeated traumatic exposures for OIF/OEF veterans. According to the most recent MHAT (2011) the number of combat exposures for soldiers and Marines has steadily increased since 2005 from 9.5 to 15.4 experiences on average. Specifically the following exposures increased: threat of an improvised explosive device (IED) exploding near them, killing a combatant, and shooting at an enemy. A significant dose-response relationship exists for service members on their second or third deployment (or beyond) and psychological problems, use of medications, and psychosocial impact (increase in divorce or separation). Given that increased mental health risk is associated with prior traumatic exposure, it is of note that service members entering into tours of duty (regardless of prior combat exposure) also experience current concern about potentially traumatic events (Helmer et al., 2007). Maguen et al. (2008) surveyed the risk of Air Force service members deployed to Iraq who reported an average of 2.5 potentially traumatic events prior to deployment. Seventy-six percent of these reported at least two current concerns about those stressors. Despite a general reduction in combat intensity since 2005, the most recent MHAT found that witnessing of intense combat events and multiple extended deployments have continued to negatively impact service members, the extent of which has yet to be known.

Shen, Arkes, Kwan, Tan, and Williams (2010) randomly sampled 678,227 active duty service members from 2001-2006. They found that one deployment increased the chance of developing PTSD and deployments longer than 180 days increased the possibility of developing PTSD by 2.84 times.

Complex symptom profiles of veterans in the literature. Jongedijk, Carlier, Schreuder, and Gersons (1996) extended Herman and van der Kolk's complex traumatic stress research to a combat veteran population. The authors studied Dutch veterans of a guerilla-like colonial war that occurred from 1945-1949. At time of combat, these veterans reported exposure to enemy patrols, regular enemy fire, comrades being killed under enemy fire, witnessing mutilation and killing, and perpetrating killing of civilians. Thirty-eight percent of this sample met the criteria for CPTSD. These researchers used criteria set in the PTSD Field Trial and diagnosed CPTSD as meeting Criteria I-VII. These are presented in Appendix B.

Veterans were of an average age of 65.9 and were evaluated with the Structured Clinical Interview for the DSM. Highest symptom endorsement was found in the areas of affect regulation, modulation of anger, amnesia, damaged self-concept, inability to trust, and chronic pain. The greatest difference observed between PTSD-only and DESNOS+PTSD was the later group's endorsement of dissociation, conversion, and despair and hopelessness.

Newman, Orsillo, Herman, Niles, and Litz (1995) conducted a small study of 10 male combat veterans seeking mental health services. CPTSD was assessed in this sample following the criteria for DESNOS put forth in the Field Trials. All 10 met criteria for a complex traumatic stress presentation. Moderate-severe level of distress was reported in affect dysregulation, amnesia, sense of being damaged, sense that no one else can understand, inability to trust,

despair, and loss of meaning of life. The majority of these veterans also reported histories of childhood physical and or sexual abuse.

Ford (1999) researched the distinct presence of complex traumatic stress symptoms in a U.S. veteran population. He studied a sample (n = 85) of predominantly Vietnam era, Caucasian military veterans seeking inpatient PTSD treatment. Warzone traumas were defined broadly among this group as single-incident, multiple traumatic exposures, observation of atrocities, and participation in atrocities. All participants reported serious suicidal ideation at some time since military service. Ford's study used Herman's model of CPTSD, labeling this constellation of symptoms DESNOS. Symptoms observed were marked by affective and cognitive dysregulation. Other symptoms endorsed included: problems with rage, distress, amnesia, sense of being damaged, guilt and shame, distrust, relational conflict or avoidance, hopelessness, and loss of meaning in life. He confirmed not only comorbidity between PTSD and DESNOS but also a distinction between the two diagnoses. Thirty-one percent qualified for both PTSD and DESNOS, 29% met criteria for PTSD only, and 27% met criteria for DESNOS alone. Childhood trauma and war atrocities were both predictive of traumatic stress symptoms, whereas war atrocity participation was an independent predictor of CPTSD. Interestingly, comorbid major depressive disorder and personality disorders were most frequently associated with DESNOS when compared against a PTSD-only sample.

Research across Vietnam, Gulf War, and OEF/OIF veterans has shown that trauma exposure in addition to combat exposure places veterans at risk for developing symptoms beyond PTSD (King, King, Foy, Keane, & Fairbank, 1999; Nunnink et al., 2010; Orcutt, Erickson, & Wolfe, 2002). Vasterling et al. (2002) examined the impact of the psychological outcomes of war in response to a natural disaster. The sample consisted of military personnel who had

participated in the Gulf War and who had also been exposed to 1992's Hurricane Andrew. Personnel exposed to combat and the hurricane developed more adverse psychological symptoms when compared with personnel who had not experienced combat prior to the hurricane. Specific symptoms observed included higher rates of depression, anxiety, anger, PTSD symptoms, physical symptoms, and lower self-esteem when compared to non-combat exposed military personnel.

Although current research has not systematically studied the construct of CPTSD among the OEF/OIF population, data suggesting that these veterans are experiencing symptoms that fall beyond the PTSD construct will be reviewed for its consistency with the CPTSD construct. J. Tsai, Harpez-Rotem, Pietrzak, and Southwick (2011) presented and evaluated a four-factor structure in 164 treatment-seeking OEF/OIF veterans: bodily disturbance, hopelessness/depression, detachment/emotional numbing, and re-experiencing/avoidance.

Walker, Clark, and Sanders (2010) coined the term *post-deployment multi-symptom disorder* to capture the most common co-occurring symptoms in OEF/OIF veterans. Chronic pain, post-concussive symptoms, and PTSD make up this triad and are likely connected to multiple deployments and frequent combat-related injuries. Post-concussive symptoms follow mild to severe traumatic brain injuries and typically include headaches, concentration and memory difficulties, insomnia, vestibular disturbances, and irritability. This triad of symptoms appears resistant to current treatments and impairs functional ability. These symptoms can be traced back to a 1995 study conducted by Newman et al. in Gulf War and Vietnam-era veterans seeking treatment for chronic combat-related PTSD. Symptoms among this cohort included: problems modulating affect and anger, dissociation, amnesia, inability to trust, despair, hopelessness, feeling permanently damaged and misunderstood, and a loss of sustaining beliefs.

These symptoms, as illustrated in Table 1, map onto symptoms captured by CPTSD. It is necessary to discuss the mechanism of symptom development in this cohort of multiply deployed OEF/OIF veterans in order to ensure that parsimonious assessment and treatment follow. The symptoms of CPTSD can include depression and hopelessness, as well as suicidality. Affective dysregulation and anger dyscontrol are symptoms of CPTSD.

Mood disorders. Vasterling et al. (2006) assessed depression in a random sample of OEF/OIF soldiers of Army battalion-level units and compared them against a non-deployed control group. Results indicated that 25% of those deployed met criteria for depression and 11.6% met criteria for PTSD. Lapierre et al. (2007) studied U.S. Army soldiers returning from a 12-month deployment to either Iraq (n = 2,275) or Afghanistan (n = 1,814) to determine self-reported depression, posttraumatic stress, and life satisfaction. Almost half of those surveyed (44%) reported clinically significant depression and or posttraumatic stress symptoms. Depression impacts veterans' psychosocial functioning independently and increases the risk of suicidal behavior. Pietrzak et al. (2009b) surveyed OEF veterans and found that reported symptoms were more consistent with a four-factor model of PTSD, which included a dysphoria component. Emotional numbing/dysphoria symptoms correlate with measures of depression, anxiety, anger, and general distress. Both dysphoria and avoidance symptoms were inversely associated with perceptions of post-deployment social support and predicted engagement in avoidance coping.

Table 1

Comparison/Correlation between Post-deployment Multi-symptom Disorder and CPTSD

Post-deployment Multi-symptom Disorder (Walker, Clark, & Sanders, 2010)	Complex Posttraumatic Stress Disorder (Luxenberg, Spinazzola, & van der Kolk, 2001)
Sleep Disturbance	
Low frustration tolerance	Anger dyscontrol
Concentration/Attention/Memory problems	Alterations in Attention and Concentration
Fatigue	
Headaches	
Chronic Pain	Somatization (Chronic Pain)
Affective disturbance	Affective dysregulation
Relationship conflict	Alterations in relationships with others
Personality change	Alterations in self perception
Apathy	Alterations in systems of meaning
Substance misuse	Risk behaviors (substances, etc.)
Avoidance	
Employment difficulties	
Hypervigilance	

Intense anger is prevalent among combat veterans. Kulkarni, Pole, and Timko (2012) identified a relationship between anger, dissociation and PTSD in treatment-seeking veterans over a 4-year period. Seventy-six percent of the sampled 214 male veterans scored above the clinical cut-off for anger across all eras, with younger veterans experiencing more anger.

Suicidality. Veterans of the wars in Iraq and Afghanistan are at an increased risk of suicide and other serious psychological sequelae following deployment. Suicide is a significant risk among males ages 20-29; risk factors include mental health diagnosis, chronic physical illness, and exposure to trauma (Kang & Bullman, 2009). Fifty-one percent of OEF/OIF service members are males ages 20-29 and a large percentage of veterans will carry a mental health

diagnosis and chronic health issues (McDermott, Tull, Gratz, Daughters, & Lejuez, 2009). Thus, OEF/OIF veterans who are diagnosed with PTSD and other comorbid conditions are at significant risk for suicide. Bray et al. (2006) surveyed 40,000 active duty service members. Among these, 4.3% considered suicide as an option in dealing with stress and depression. Almost 8% seriously considered suicide prior to joining the military and 2.9% reported prior suicide attempts.

The association between combat exposure and suicidal ideation may be mediated by experiences with high personal responsibility, such as killing in combat (Maguen et al., 2011). PTSD and depressive symptoms have been found to impact these experiences in OIF veterans.

CPTSD criteria include a symptom cluster of alterations in attention and consciousness. Traumatic brain injury may complicate this area in the veteran population.

Traumatic brain injury. Traumatic brain injury (TBI) is considered to be the signature wound of the world's current conflicts. These injuries involve an exposure to blast, force, or collision with an object/debris and result in loss of consciousness and posttraumatic amnesia. In combat, IEDs are responsible for the majority (66-68%) of TBI incidents. Those with TBI symptoms were more likely to have reported high combat intensity and exposure to more than one explosion or hospitalization during deployment (Hoge et al., 2008). OEF/OIF veterans with mild TBIs may experience post-concussive symptoms that persist for months after expected recovery (Benge, Pastorek, & Thornton 2009). These symptoms often lack specificity but include sensory and somatic symptoms (i.e., dizziness, nausea, headache, sensory sensitivity, difficulty remembering, and emotional problems). A number of OEF/OIF veterans will experience mild TBIs with symptoms in excess and not entirely consistent with traumatic brain injury. Research remains unclear on what phenomenon is responsible for these prolonged

symptoms whether it be biologic assault to the brain, cognitive effects of emotional dysregulation, or a combination of factors.

Perhaps as a combination of heavy body armor, difficult living conditions, and exposure to an inhospitable physical environment, OEF/OIF service members are often diagnosed with musculoskeletal problems, and experience chronic pain that persists beyond courses of medical treatment. Somatization is a criterion category for the CPTSD diagnosis and includes a variety of physical ailments, including pain disorders.

Physical symptoms and pain. Helmer et al. (2007) identified common illnesses during and after deployment. These researchers found that musculoskeletal, gastrointestinal, and ear, nose, and throat problems were most prevalent. Hoge et al. (2007) studied a convenience sample of four Army infantry brigades deployed to Iraq. The veterans sampled reported PTSD symptoms as well as lower perceptions of general health, more sick call visits, missed workdays, more physical symptoms, and higher pain and or physical distress.

Gironda, Clark, Massengale, and Walker (2006) studied OEF/OIF veterans for quantitative data on reported symptoms. An overwhelming majority of the sample (85%) reported chronic pain. Fifty-seven percent of those rated their pain intensity to be moderate-severe, suggesting that pain may be interfering with daily functioning. Although lengthy and repeated deployments increase service members' likelihood of exposure to blast injuries, gunshot wounds, and motor vehicle accidents, over half of those reporting pain had no reference to injury at all or indicated no identifiable injury. Clark, Walker, Gironda, and Scholten (2009) found that blast exposure may increase the risk for emotional symptoms and produce a profile of emotional symptomatology, pain, and cognitive complaints that are more challenging to treat. Lastly, risk

behaviors and pain disorders are found in the returning military population and symptoms of CPTSD.

Substance use disorders. Alcohol and substance misuse has been found at a higher prevalence among OEF/OIF veterans when compared with non-OEF/OIF veterans (Hawkins, Lapham, Kivlahan, & Bradley, 2010). In a cross-sectional national medical record review of both male and female veterans, Hawkins et al. (2010) estimated the prevalence of substance use for OEF/OIF veterans at 21% compared to 5% for non-OEF/OIF veterans. Jakupcak et al. (2010) studied a sample of OEF/OIF veterans seeking U.S. Department of Veterans Affairs (VA) health care and estimated between that 11.5-35.4% reported misuse of alcohol. Factors that increased misuse of substances included: younger males, Army or Marine Corps, PTSD or depression diagnosis, emotional numbing, and hyperarousal. Among active-duty service members, heavy alcohol users were more likely to report increased stress in work or family life (Bray et al., 2006). Hazardous drinking was found among 50% service members returning from Iraq and Afghanistan enrolled for care at the Minneapolis VA Medical Center (Erbes, Westermeyer, Engdahl, & Johnson, 2007). Petrakis, Rosenheck, and Desai (2011) examined the rates of substance use disorder diagnosed in OEF/OIF veterans and compared these rates against other service eras. Similar to Vietnam-era veterans, affective disorders were most strongly associated with dual diagnosis among OEF/OIF veterans. Bernhardt (2009) estimated that the percentage of OEF/OIF veterans in substance abuse treatment who also met criteria for PTSD is about 30%. The prevalence of OEF/OIF veterans suffering from substance use disorders and PTSD may be much larger, as many treatment programs require a significant (30-60 days of sobriety) prior to entry. From 2003-2010, veterans with PTSD demonstrated a 1-7% increase in short-term benzodiazepine use, and long-term use (greater than 90 days) increased from 1-4% (Hawkins et

al., 2011). Increased substance use among this population has been associated with many different causes. Family stress, chronic pain, undiagnosed and untreated mental health disorders, and increased effort on behalf of Veterans Administration Medical Centers (VAMCs) to screen veterans all may contribute but further studies are necessary to determine causality.

Psychosocial functioning is of paramount concern among OEF/OIF veterans with PTSD. This subset of veterans is more likely to experience poorer functioning, lower satisfaction with role performance, and decreased social well being compared to non-veterans (Schnurr, Linney, Bovin, & Marx, 2009). Employment and marital satisfaction are additional areas of interest as OEF/OIF veterans have higher rates of unemployment and are experiencing a downward trend in marital satisfaction (Castro & McGurk, 2007; Schnurr et al., 2009). OEF/OIF veterans manifest more violent behavior, chronic pain, and post-concussive symptoms compared with veterans of other conflicts (Fontana & Rosenheck, 2011; Iverson et al., 2011). These symptoms in turn, effect veterans' ability to maintain relationships and employment. The previous sections describe symptoms in excess of the PTSD diagnosis as captured by the DSM-IV-TR. Similarities between symptoms documented in OEF/OIF veterans and those in CPTSD invite further examination into CPTSD-vulnerabilities in the military population.

Military population and prior history of trauma. The especially pernicious combination of prior mental health disorders and combat exposure leads to the development of additional disorders post-deployment. Although these factors have been discussed in prior sections, specific childhood abuse, will be described in this section. Crain, Larson, Highfill-McRoy, and Schmied (2011) examined 63,890 veterans deployed to Iraq, Afghanistan, and Kuwait from 2002-2008. These researchers found that pre-existing mental health disorders increased the likelihood of developing a new disorder within 6 months of post-deployment by

3.6 times. A significant impact on psychosocial functioning was documented among veterans with pre-existing mental health disorders. Eight percent of Marines with pre-existing conditions were demoted within 6 months post-deployment, and 6.5% had separated from their romantic partner. New onset anxiety and mood disorders were most common in those with pre-existing conditions, and new onset substance use disorders were most common in those without mental health disorders prior to deployment.

Childhood abuse in military population. Soldiers with prior developmental trauma who are also exposed to combat may be at increased risk of developing CPTSD. Cabrera, Hoge, Bliese, Castro, and Messer (2007) conducted one of the first cross-sectional surveys of OIF male soldiers and adverse childhood experiences among the deployed and non-deployed. Adverse childhood experiences were defined by exposure to mental illness in the home, an alcoholic adult, sexual abuse, physical abuse, psychological abuse, and or violence directed at the respondent's mother. Fifty-three percent of pre-Iraq deployment soldiers reported at least one adverse childhood experience, and 29% experienced two or more events. Among post-deployed soldiers, 54% reported an adverse childhood experience and 31% reported two or more such experiences. Bray et al. (2006) found almost half of the 40,000 active duty military personnel surveyed reported past physical or sexual abuse, 39% of which occurred prior to 18 years of age.

Pre-combat traumas are typically assessed as either physical or sexual abuse and focus on one to two events. Most studies also utilize assessments that are normed on the general population (Clancy et al., 2006). Thus, pre-military trauma may indeed be greatly under-reported, especially in male service members. Brown et al. (2005) studied male and female veteran childhood trauma history. Forty-eight percent of the sample reported childhood abuse. Sexual and physical abuse was found in 18.7% of males sampled. In female veterans 6%

reported physical abuse history and 27% reported sexual abuse history. Studies of women veterans from 2002-2007 found over half reported pre-military physical or sexual abuse. The significance of pre-combat trauma, specifically childhood physical and sexual abuse, cannot be underestimated.

Exposure to childhood trauma predisposes an individual to having diminished coping skills, increased impulsivity, and decreased self-regulation following traumatic events in adulthood. Deficient self-regulation is one of the hallmarks of CPTSD. Clancy et al. (2006) conducted a retrospective study of archival data indicating that non-military related trauma was prevalent among combat veterans. Ninety percent of the sample reported a history of childhood physical abuse, adult sexual abuse, or a history of assault within the military. These veterans also reported more PTSD symptoms of greater duration. Clancy et al. conducted a retrospective study for 422 male veterans diagnosed with PTSD through a Veterans Administration Medical Center PTSD Clinic between 2001-2004. Ninety percent of this sample indicated experiencing a non-military trauma. More specifically, 84% of these veterans reported experiencing at least three traumatic events. The total number of exposure to traumatic events meeting Criterion A was averaged to be six. Event exposure prior to service was averaged to be 1.6, 2.6 during their military service, and 2.8 after. Warzone trauma, childhood physical abuse, accidents (non-motor vehicle), and the death of a loved one were the events most likely to result in a traumatic response. Forty-four percent of this sample reported childhood sexual abuse, and 40% of this sample reported childhood physical abuse. Forty-five percent of this sample reported exposure to at least one personal trauma while on active duty, whereas 68% reported experiencing personal trauma as a veteran. This study supports the notion that veterans are at risk for not only combat

PTSD but also frequently have histories of multiple traumatic experiences prior to, during, and after military service.

Interpersonal traumatic exposure in military population. Interpersonal and developmental vulnerability in repeated traumatic exposure is significant, although not necessary, for the development of CPTSD. Interpersonal trauma may compromise core psychobiological self-regulatory capacities (Ford et al., 1993). OEF/OIF veterans are a demographically diverse population with unique socio-economic and cultural contexts. Seal et al. (2009) conducted a descriptive analysis of prevalence, clinical setting, and timing of mental health diagnosis among 103,788 OEF/OIF veterans listed in a nationwide database across 1,300 Veterans Administration health facilities. Their findings support the demographic diversity of this population. This study identified 54% of the sample as being under 30 years old, half being a member of the National Guard or Reserves, 13% as women, and one-third as a member of an ethnic minority. Women service members have joined the armed forces in large numbers in recent years. The increase in women serving among men in combat has been associated with sexual assault, harassment, and interpersonal stressors that characterize a unique set of potentially traumatic interpersonal experiences that are prevalent in this population (Street et al., 2009). Military sexual trauma is significant in female service members and is a topic that exceeds the scope of this dissertation. For the purposes of this dissertation it will be noted that a large percentage of female service members experience significant interpersonal trauma during their service. Street et al. (2009) report that over half of women service members experience offensive sexual behaviors and 31% experience some form of unwanted sexual attention during their military careers.

Developmental vulnerability among military personnel. Service members under 30 years old make up the majority of OIF/OEF veterans. These individuals are likely within Erikson's (1980) identity crystallization stage of psychosocial development. Silverstein (1994) details that the modal age of combat duty significantly impacts the formation of a military identity within personality development. Erikson observed combat veterans from World War II and described a phenomenon akin to an identity crisis in which they expressed loss of a continued sense of identity upon post-deployment. Military service requires significant identity shifts over the course of pre-deployment to post-deployment. First, soldiers are asked to shed their civilian identity and assume a military identity; after deployment they are asked to again shed their military identity and resume a civilian identity. Maladaptive responses to the developmental milestone of identity formation can ensue with repeated traumatic exposure at time of consolidation of personality.

Summary of the risk of combat CPTSD. Given (a) the prevalence of childhood abuse in service members and (b) multiple and extended deployments with the possibility for multiple combat exposures, a portion of OEF/OIF veterans may be at risk for developing CPTSD. Taking into account the unique setting of Iraq and Afghanistan conflicts (i.e., urban landscapes and guerilla warfare) the line between civilian and combatant is blurred. Such a setting requires service members to remain at high alert at all times. Although such hypervigilance may not be new to combat, the lack of a designated safe zone suggests persistent exposure to threat of death over some of the longest deployments in our military history. The prevalence of military sexual trauma also places both female and male service members at risk for developing CPTSD. In veterans with trauma that pre-dates entry into the military service, the risk of developing CPTSD

is increased. Lastly, research on prior veterans may indicate that repeated trauma following combat will place veterans at risk for developing CPTSD.

Between-group similarities of veterans and civilian CPTSD populations. There appear to be similarities between symptom profiles in combat veterans and civilians who have experienced prolonged child abuse. Shea, Zlotnick, and Weisberg (1999) compared three distinct trauma samples: male combat veterans with PTSD, female inpatients with histories of childhood sexual abuse, and female outpatients with histories of childhood sexual abuse. Results indicated personality disorder features in all three categories. Elhai, Frueh, Gold, Gold, and Hamner (2000) investigated the differences in MMPI-2 symptom patterns in two different trauma samples: 122 male combat veterans seeking outpatient treatment and 64 PTSD-diagnosed predominantly female civilians seeking outpatient treatment for the effects of childhood sexual abuse. Following a demographic adjustment for age, nearly identical symptom patterns emerged for the two groups. Symptom similarities emerged across the following domains: anger, anxiety, thinking problems, expansive mood, health concerns, and social discomfort. These data support the notion that some combat veterans diagnosed with PTSD may be exhibiting complex symptom profiles reminiscent of chronic interpersonal trauma.

CPTSD profiles may translate into an identity disturbance and chronic feelings of emptiness. Poorly modulated affect and impaired self-control can lead to impulsivity (i.e., self injury, substance abuse, and reckless sexual and or violent behaviors). Uncertainty about the reliability and predictability of others coupled with interpersonal mistrust may translate into a pattern of unstable or intense relationships. Many can become consumed by their physical symptoms, utilize physical pain to communicate psychic pain, and or decouple their somatic experience from their psychic experience through dissociative behavior (Spiegel, 1994). This

constellation of symptoms is akin to what may more commonly be considered a personality disorder. In fact, Bollinger, Riggs, Blake, and Ruzek (2000) found that 79% of those receiving inpatient treatment for combat PTSD had a diagnosis of at least one personality disorder. There is a strong association between combat veteran status, PTSD, and personality functioning. In one study, military combat has been associated with avoidant and borderline personality disorder (Yen et al., 2002). Most significantly, Yen et al. (2002) found that unwanted sexual contact and being attacked with the intent to kill or injure may be a significant factor in the development of a personality disorder. However, the relationship between personality variables and the development of a traumatic stress disorder is not clear. Symptoms that result from combat may lead to complex symptomatology in which an individual begins to adapt and cope in a manner that may mimic personality disorder. In contrast, pre-existing personality pathology may place an individual at greater risk for PTSD. Miller (2003) echoes the predictive relationship between personality features and PTSD development. His review found that high negative emotionality is a primary personality risk factor for the development of PTSD, mediated in form and expression by low constraint and low positive emotion. Miller and Resick (2007) identified specific personality subtypes of PTSD in a sample of female rape survivors. They found that the influence of personality on core psychopathological processes was fundamental to the structure and organization of mental disorders.

Ultimately, the establishment of a sense of safety, agency, and containment are essentially truncated and distorted by repeated traumatic exposure. The avoidance of emotions is carried out through the expression of anger in fear avoidance theory, whereas survival mode theory postulates that anger is experienced as heightened due to a biological predisposition to survival mode and is triggered when met with stimuli in the environment or re-experiencing

PTSD symptoms. Survival mode theory (Chemtob, 2005) posits that when people are faced with threat, a specialized form of cognitive information processing is activated, characterized by peremptoriness, suppression of normal modes of cognition, and loss of self-monitoring. This mode is adaptive in combat and is maintained by high levels of self-potentiating threat-arousal, confirmation bias, inhibition of alternative modes of processing, and narrowing of attention focus. According to this theory, subjects with PTSD are predisposed to seek and interpret evidence of threat, experience positive escalation in arousal and interpretation of threat, and have higher limits to arousal and threshold for arousal dampening mechanisms (Chemtob et al., 1988). Fear avoidance theory (Foa & Kozak, 1986) states that individuals attempt to avoid confrontation with fear-evoking cues. Fear-evoking cues are maintained by a fear structure that is accompanied by a negative emotional valence. Avoidance of this negative emotional state is what creates and maintains PTSD symptoms.

Whether the activation of arousal as noted by Chemtob et al. (1998) creates the marked behavioral rigidity and emotional constriction or the activation of a fear network and subsequent avoidance of unpleasant responses, both PTSD and CPTSD patients may exhibit significant disruption in personality functioning, as well as a constriction of experience and behavior (Herman, 1997). Courtois and Ford (2007) stress the importance of the nature of the aggressor and timing of the complex traumatic stressor. The betrayal of an interpersonally meaningful other on whom an individual depends for well-being results in the dysregulation of self and secure attachment. In application to the veteran population, it is possible, given a high rate of personality disorders diagnosed, that developmental vulnerability upon entering combat is responsible for a resulting fragmented identity (Southwick, Yehuda, & Giller, 1993). Adaptation to the multitude of symptoms following trauma may also play a role in the reorganization of

identity in a manner that is consistent with the CPTSD presentation. This symptom profile represents those with mental health issues who present with multiple diagnoses, severe symptoms, and impaired functioning in both civilian and military populations.

Moral Distress and Moral Injury

Moral distress is distinct from emotional distress in that individuals are aware of how they wish to act but encounter some barrier that renders that action impossible. Wilkinson (1989) describes an initial distress that manifests in feelings of anger, frustration, and anxiety, and a secondary distress that occurs following the inhibition to action. It involves feelings of powerlessness, guilt, self-criticism, and low self-esteem (McCarthy & Deady, 2008).

Soldiers who do not face combat but have peacekeeping roles may be at specific risk for moral distress as they are located within a context of potential threat that calls for behavioral self-control (Adler et al., 2005). Adler et al. (2005) examined the effects of stressor duration (deployment length) and stressor novelty of female and male military personnel. Extended deployments result in either exhaustion or habituation. Adler, Castro, and McGurk (2009) suggest that peacekeeping objectives may result in helplessness "when a soldier's normal outlet of responding to provocation and threat is hindered by the mission's rules of engagement" (p. 122). Prior deployments and sustained peacekeeping objectives increase the psychological stress that soldiers may experience and have been correlated with increased depression and posttraumatic stress symptoms. Nissen, Marott, Gyntelberg, and Guldager (2011) studied Danish soldiers deployed to Iraq from 2003-2005 and found that the following psychosocial and cultural stressors (besides combat exposure) were correlated with increased distress in soldiers: long lasting physical and psychological alertness, feelings of powerlessness and frustration, perceptions of meaningless connected to the mission, chronic danger, and insecurity.

Fry, Harvey, Hurley, and Foley (2002) examined moral distress in a military nursing population. These researchers defined moral distress as arising from an event that requires an individual to have responsibility for some action and to feel responsible for the outcomes of his/her action. The distress arises when encountering an obstacle to carrying out one's responsibilities, which then results in what these authors term "psychological disequilibrium" (p. 376). This disequilibrium is akin to CPTSD, with symptoms of frustration, anger, anxiety, powerlessness, hurt, insomnia, appetite disturbance, pain, worthlessness, and decreased confidence. More than 25% of soldiers report experiencing stress that interferes with their job, typically due to increased workload (Pflanz & Ogle, 2006; M. Segal & Segal, 2006). Operating under rules of engagement requires soldiers to follow restrictive, detailed, and fundamental rules. The objectives of avoiding causalities and maintaining peace-keeping relationships are at odds with hypervigilance, irritability, and an urge to self-protect. Given that soldiers rate their leaders low on defining the mission, flexibility, and performing team tasks, mission unpredictability and unknown effectiveness contribute to moral distress (MHAT, 2007). Soldiers experience demoralization through exposure to a number of different stressors. After injured comrades are replaced with new soldiers it places the unit at higher risk, and physical threats, unfamiliar terrain, inhospitable terrain and temperature, sleep disruption fatigue, and distraction all contribute to demoralization among troops (Lipschitz et al., 2003).

Often the construct of posttraumatic stress is focused on individual perception, reaction, and symptoms. Military culture, especially among those who are deployed and combat-exposed, is unit and group-focused. Functionality is determined on an individual's value within the context of group success, which can significantly impact the effect and development of PTSD symptoms. Low morale is predicted by a sense of betrayal on a number of levels: interpersonally,

institutionally, and extraneously. Sudden unit changes, leadership problems, a sense of inadequate family support, and insufficient time for recovery between deployments are among the most frequent correlates of low morale among service members (D. Segal, Bachman, Freedman-Doan, & O'Malley, 1999).

Moral injury. A related but distinct concept from moral distress is moral injury. Litz et al. (2009) defined moral injury as that which "involves an act of transgression that creates dissonance and conflict because it violates assumptions and beliefs about right and wrong and personal goodness" (p. 698). Specific morally injurious acts are defined as "perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations" (p.700). Compromised integrity can lead to a dissociative compartmentalization, after which individuals may abandon their moral structure and interact with the world from a place of reaction rather than reflection (McCarthy & Deady, 2008). Guilt and shame follow from a violation of the fundamental assumptions about how actions and consequences should follow. This is what many combat veterans face as a result of their combat missions (i.e., shooting at combatants, killing combatants, and witnessing/perpetrating abuse and or violence against non-combatants). Litz et al. highlight research that has shown shame (i.e., the internal appraisal and judgment of actions) is more damaging to emotional and mental health than guilt (e.g., the external judgment of action) and may be a more integral part of moral injury than guilt. Individuals often respond to shame with a motivation to hide or withdraw, and to guilt with shows of aggression. Moral injury could accounts for the dysthymic and avoidant features of the complex and chronic presentation in some cases of PTSD.

Guilt and shame are often used to describe a similar outcome following combat, although they have different meanings. The two constructs have not been well-studied in the veteran

literature, although what has been studied shows positive correlations between self-reported guilt and shame and severity of PTSD symptoms (Henning & Frueh, 1998; Leskela, Dieperink, & Thuras, 2002; Wong & Cook, 1992). Lee, Scragg, and Turner (2001) delineated the difference between internal shame, external shame, and guilt in the formation and maintenance of PTSD. External shame is the experience of having others look down on the self and judge the self as disgusting, inferior, and inadequate. Intense experiences of both internal and external shame lead to escape behaviors (i.e., hiding, concealing, and safety behaviors). Guilt is defined as when an individual carries a sense of responsibility for causing harm to others. Those who experience guilt as a result of combat trauma may not be able to provide restitution and thus suffer from ruminative guilt, resulting in greater avoidance behaviors (i.e., substance use disorders). Combat related guilt is closely related to suicidality (Adams & Lehnert, 1997). Shame schemas perpetuate the traumatic meaning of the event, whereas shame incongruence result in humiliation, blame, intrusive rumination and rage.

Moral injury is likely to occur if a global attribution about the cause of the transgression, internal responsibility, and stable effects of the trauma persist (Litz et al., 2009). The inability to contextualize, externalize, and compartmentalize the traumatic event will prevent integration of the experience into an individual's worldview (Herman, 1992). Betrayal trauma theory is particularly important in understanding the re-experiencing and hypervigilant symptoms of PTSD. It is further useful in understanding the development of chronic, severe alterations in systems of meaning, sense of self, and trust in others and the world that can be seen in CPTSD. Maguen et al. (2010) identified that participation in and witnessing of combat atrocities and killing is linked to a loss of value and psychological distress. OEF/OIF veterans suffer from loss

of meaning, feel as if they are a burden to others, and experience strained interpersonal relationships (Dorahy et al., 2009).

Betrayal trauma theory. Betrayal trauma theory attempts to account for the unique contextual variables and social nature of sustained interpersonal trauma. Freyd (1994) defined betrayal trauma as that which "produces a conflict between external reality and a necessary system of social dependence" (p. 312). The degree to which human ethics are violated is essential to this conceptualization and its effect on the nature, form, and processes of trauma. Betrayal trauma expands the traditional assessment of trauma from within the individual to the social context of the trauma and the role others may have played in response to the trauma. Embracing this larger scope provides an important lens from which to view combat trauma, as combat is a unique interpersonal environment that transforms individuals met with traumatic experiences.

The military is an institution that creates a social structure stratified by power, much like families. Features common to both the family and military unit include: control of body and bodily functions (eating, sleeping, etc.); body form (clothing, weight); prolonged daily contact with a power-holder(s) in the group; combination of enticement, force, and intimidation; power-holder(s) as the source of reward and approval; inconsistent and unpredictable enforcement of rules; secrecy regarding activities; and barriers to escape (Shay, 1994). In individuals with a history of childhood or pre-military trauma, cognitive schemas may link military environments with those prior experiences. Perceptions of authority for these individuals may be "arbitrary, capricious, and absolute" and rules may seem "erratic, inconsistent, or patently unfair" (p. 98). For individuals without such a history the chronic and prolonged stress of extended or repeated deployment may alter cognitive schemas akin to those with histories of interpersonal or sustained

abuse. In both of these potential cases, helplessness may result from an inability to escape, preventing the ordinary integration of experiences, knowledge, and emotions.

Betrayal trauma theory helps link the development and maintenance of moral injury because of its focus on traumatic context. Theories such as emotional processing theory (Foa, Steketee, & Rothbaum, 1989) and the cognitive model of PTSD (Ehlers & Clark, 2000) identify important constructs to partially account for the deep and global alteration in beliefs about the world and self caused by moral injury. Negative appraisals and non-confrontation of the event or meaning of the event are important concepts and drive much of the current treatment for PTSD regardless of the presence or extent of moral injury. However, this formulation does not account for significant dissociation, meaning-making, and the experience of guilt and shame that shape symptom expression and treatment.

In betrayal trauma theory, the individual's cognitive encoding of a traumatic experience is compromised. Traumatic memories are fragmented and remain un-integrated because storage and access to episodic memory has been affected (DePrince & Freyd, 2002). DePrince and Freyd's (2002) betrayal trauma research is largely applicable to child abuse in which the child is motivated to ignore the betrayal by caregivers and important others and thereby avoid pain. Thus, it is out of an adaptive process of evolutionary pressure that betrayal trauma memories are stored in an abnormal manner. DePrince and Freyd posits that lack of episodic memory leads to flashbacks and intrusive memories that are essentially the byproducts of unprocessed information. In order to integrate traumatic material the mind engages in the symptoms consistent with the re-experiencing cluster of PTSD symptoms (O'Leary, 1998; Upegraff & Taylor, 2000). Dissociation as a defensive coping mechanism, including emotional numbing, denial, withdrawal, and freezing, may be adaptive in the short-term, but become debilitating over

time (Stevenson & Meares, 1992). The indications of dissociative symptoms in CPTSD and dissociative-PTSD may be an example of withdrawal of awareness of emotion.

Betrayal trauma thus has been extended to capture the responses of alexithymia, depression, and anxiety to a violation between an individual and others, or institutions upon which he/she depends for survival (Freyd, DePrince, & Greaves, 2007). Kira et al. (2009) define a social or collective trauma as any event that threatens the existence of the major interest of a social group. Veterans, as a part of a military unit, are steeped in potential social group threat throughout deployment. The social, personal, and physical identities are all at risk throughout deployment and role identity is at risk upon post-deployment or separation from the military. Thus, veterans are at risk for trauma across multiple dimensions.

Prigerson et al. (2001) studied males exposed to multiple traumas. Those who reported combat as their worst trauma were more likely to have delayed symptom onset with a lifetime course. Those veterans who indicated combat as their index trauma also reported life stressors such as unemployment, divorce, and domestically violent relationships at a higher rate when compared veterans who did not indicate combat as their index trauma. Thus, exposure to combat trauma may carry a particularly pernicious effect on the psychosocial functioning of many veterans.

DePrince and Freyd (1999; Freyd & DePrince, 2001) delineate two types of trauma that result in psychic disorders: those that involve life-threat and those that involve social betrayal. Birrell and Freyd (2006) note that "high levels of both life-threat and social betrayal characterize many of the most severe traumas; with both dimensions present, we expect: anxiety, hyperarousal, intrusive memories, dissociation, numbness, constricted, or abusive relationships, memory impairment" (p. 50).

One of the most salient components of betrayal trauma is the role of interpersonal harm. Betrayal trauma emphasizes the importance of the fear paradigm as a primary response to trauma; however, it also notes that fear is not the only internal experience that results in dysfunction. In addition to fear, shattered assumptions and betrayal are important core insults that stem from trauma exposure. The sole focus on fear as the core reaction to a traumatic experience has guided assessment by informing the diagnostic criteria structure and treatment that are largely based on activating fear structures to decrease symptomatology (DePrince & Freyd, 2002). Betrayal trauma theory focuses on the impact of trauma on cognitive systems from which assumption theory builds. Both affective and cognitive components are at work, producing tremendous shifts within an individual over time.

Assumption theory is concerned with how individuals construct their identity and meaning in the world. Janoff-Bulman (1992) states "at the core of our internal world we hold basic truths of ourselves and our external world" (p. 4). When betrayal trauma occurs, these core truths are shattered and thus one's assumptive world: the ultimate betrayal. Individuals who have been subjected to trauma, especially multiple traumas, can no longer trust their perceptions of themselves, others, and the world.

Betrayal traumas in the civilian and military population. Research has demonstrated the far-reaching effect of traumatic experience. The damage done to identity, belief in a meaningful world, and human connection is especially profound when the events involve the betrayal of important relationships (Herman, 1997). Betrayal trauma theorists have studied its role in the development of personality disorders, specifically borderline personality. Kaehler and Freyd (2009) found in a sample of 199 male and female undergraduate students that high betrayal traumas were the largest contributor to borderline characteristics and medium betrayal

traumas significantly predicted borderline features. High-betrayal traumas were characterized as interpersonal traumas of significant relational closeness, whereas medium betrayal traumas were defined as interpersonal traumas at a lesser level of relational closeness. Goldsmith, Freyd, and DePrince (2012) determined that the number of high betrayal traumas to which young adults were exposed predicted self-reported levels of alexithymia, anxiety, depression, dissociation, and poor physical health. Traumatic stress mediated the relationship between high betrayal trauma and physical health complaints.

Turning more specifically to the context of war, Litz et al. (2009) considered the impact of morally challenging experiences on service members' knowledge about themselves and the world. Guerilla warfare exposes service members to unpredictable violence that is outside of the realm of what is typically anticipated and prepared for in combat training. In 2003, 30% of soldiers and Marines surveyed endorsed responsibility for the death of a non-combatant and in 2006 just 45% of those assessed felt that non-combatants should be treated with dignity and respect (MHAT, 2006; Murdoch, Polusny, Hodges, & O'Brien, 2004). Soldiers were found to be more likely to act unethically if they screened positive for a behavioral health problem (MHAT V, 2007). Insulting or cursing noncombatants in their presence, damaging or destroying property unnecessarily, hitting or kicking noncombatants, and modifying and ignoring rules of engagement area are examples of unethical behaviors that soldiers can carry out.

Issues in Outcome Studies for OEF/OIF Veterans

Systematic studies of OEF/OIF veterans have not been completed in order to ascertain that established gold-standard treatments for PTSD are widely effective. Lindley, Cacciapaglia, Noronha, Carlson, and Schatzberg (2010) examined factors of mental health outcomes in veterans. Seventy-six percent did not receive treatment within 2 years despite a positive mental

health screen. No specific variables related to treatment drop-out/avoidance could be identified other than uncertainty as to where to go for help, inability to get an appointment, inconvenience, and the time-consuming nature of treatment.

Twenty-five percent of OEF/OIF veterans treated at the Veterans Administration have a mental health diagnosis. Compared to veterans of other conflicts, OIF veterans have the highest rate of access to mental health services, likely due to the U.S. Veterans Affairs efforts to embed psychological screening tools within the primary care settings. Therefore, veterans who screen positive on measures of depression and PTSD are offered an initial mental health assessment. Despite this, the average use of mental health services among OIF veterans studied ranged from 1-3.4 discrete appointments per person per year, despite the fact that more than half of these veterans were either dually or multiply diagnosed (Hoge et al., 2006). Seal et al. (2009) conducted a study with 289,328 OEF/OIF veterans of which 36.9% were diagnosed with a mental health disorder. This study further found that after 2 years of separation from the military, prevalence rates for mental health disorders increased 4-7 times. These statistics illuminate the mental health needs of returning veterans as vast, complex, and growing.

Studies of Army and Marine Corps veterans indicate that one of the most significant barriers to treatment is the perceived stigma of mental health treatment (Hoge et al., 2004; Riddle et al., 2008). Hoge et al. (2004) found that those diagnosed with a mental health disorder are two times as concerned with the stigma of seeking assistance than those without a diagnosis. Significantly, 40% of soldiers and 44% of Marines in high combat conditions screened positive for mental health problems when they viewed their leaders as poor. Examining this construct further, while on deployment, service members expressed frustration, anger, and resentment at what they perceived as arbitrary and unfair execution of base camp rules and policies (Castro &

McGurk, 2007). Negative beliefs about mental health care and negative perceptions of one's unit support are both associated with a decreased likelihood of seeking counseling and medication services (Pietrzak et al., 2009a).

PTSD-specific Treatment

Cognitive behavioral treatments have been developed and systematically studied in the treatment of PTSD. Prolonged exposure and cognitive processing theory have been researched among both civilians and veterans. The 2004 Department of Defense/Veterans Administration guidelines identify these two treatments among the four evidence-based treatments as a frontline intervention for combat-related PTSD (Foa et al., 1999; Resick et al., 2002; U.S. Department of Veterans Affairs & Department of Defense, 2010). Treatment outcomes are generally shown to be efficacious, yet often show the lowest effect sizes within the veteran population (Bradley, Greene, Russ, Dutra, & Westen, 2005; Schnurr et al. 2003, 2007). Non-response rate for cognitive behavioral therapy for PTSD can be up to 50% (Kar, 2011). Researchers have postulated that severity of PTSD symptoms, tendency to limit disclosures, and the presence of secondary monetary gain through disability status influence the effects of treatment among veterans (Bradley et al., 2005; Gros et al., 2011). Research study exclusion criteria often include substance abuse, suicidality, and other comorbidities that are common to the combat-PTSD profile. Clinical trials for PTSD treatment exclude about 30% of all patients referred (Bradley et al., 2005).

Although decreases in PTSD symptoms are notable following exposure treatment, those with comorbid personality disorders continue to report poor quality of life. Feeny, Zoellner, and Foa (2002) found that patients with comorbid PTSD and borderline personality disorder who were given prolonged exposure (PE), stress inoculation training (SIT), or PE with SIT were more

difficult to treat effectively when compared with a PTSD-only sample. The personality disordered group retained PTSD symptoms at 3 and 6-month follow-up assessments. Solomon, Bleich, Shoham, Nardi, and Kotler (1992) conducted an empirical evidence review of PTSD treatment, evaluating 11 studies. The researchers found that although behavioral techniques with direct therapeutic exposure reduced intrusive PTSD symptoms, severe complications were reported in comorbid samples. Regardless of type of trauma exposure, pre-combat variables, and era of service, the lack of data on patients with PTSD and other Axis I and Axis II diagnoses raises the question of how comprehensively effective PE is in treating clinical cases.

Few clinical studies have included meaningful numbers of OEF/OIF veterans. A recent study by Tuerk et al. (2011) examined the largest cohort of OEF/OIF veterans engaged in prolonged exposure treatment (n = 65). Results suggested that PE was effective for OEF/OIF veterans based upon the 66% of treatment completers. Unaccounted for is the 34% of non-completers, their demographics, and symptom profiles. In another study of 112 Vietnam, Persian Gulf, and OEF/OIF veterans diagnosed with PTSD and enrolled in PE, 26% of the OEF/OIF veterans did not complete the protocol (Yoder et al., 2012). The mean age in this non-randomized, post-hoc observational study was 41 and the modal age was 34. Although a large effect size (2.73) was present across all three groups for PE treatment, the study's design and sample is not representative of the OEF/OIF veteran cohort (i.e., age, exposure to combat, etc.). These studies demonstrate the difficulty in assessing the effectiveness of treatments for veterans returning from current conflicts with PTSD, among other mental health disorders. Garcia, Kelley, Rentz, and Lee (2011) examined dropout predictors among OEF/OIF veterans and found that younger age was correlated with a greater likelihood of dropping out. It is difficult to ascertain the specific reasons for dropout in the OEF/OIF population. Erbes et al. (2009) asserted

that high levels of perceived stigma, sustained ties to military peers, diverse presenting problems, and different priorities may all influence the level of engagement of newly returning veterans in mental health treatment.

Cumulative traumas resulting in PTSD may prove to be a significant challenge to treat with traditional PE treatment. Specifically, habituation and attenuation necessary for emotional processing may be compromised in individuals with multiple or cumulative traumas. Lang and McTeague (2011) assessed 500 treatment-seeking individuals and community controls. They found when the index trauma was evoked in exposure therapy, individuals with multiple exposures failed to show significant startle potentiation and were, overall, least reactive throughout exposure treatment. This group of individuals carried comorbid diagnoses, evidenced dysphoria, and experienced enduring PTSD symptoms. Those who reported a history of repeated traumas often included sustained interpersonal victimization. Van Minnen, Arntz, and Keijsers (2002) investigated outcome and dropout in a sample of outpatient patients referred to a university clinic and an outpatient clinic for anxiety disorders. A total of 132 patients were recruited, and 37% of one sample and 50% of another sample reported multiple trauma exposures. A 31% dropout rate was consistent across both samples. These researchers found no significant variables (including childhood sexual abuse) to discriminate between completers and dropouts. Males were found to be more likely to drop out of treatment, and those with multiple traumas were found to be more symptomatic post-treatment. Repeated warzone deployments, exposure to combat, traumatic brain injury, and comorbid psychiatric diagnoses may contribute to dysfunctional engagement and therefore, poor outcomes among a portion of treatment-seeking OEF/OIF veterans.

Rumination may also impede progress in prolonged exposure therapy. Consequences of cognitive dysfunction in PTSD include: excessively negative appraisals of trauma, disturbance in autobiographical memory (i.e., poor elaboration, context and strong associative and perceptual priming), and problematic behaviors that prevent change (Ehlers & Clark, 2000). Ruminations are understood in this model as cognitive avoidance, driven by the problematic appraisals and memory deficits common to PTSD. Ehlers and Clark (2000) identify the concept of mental defeat, or a negative view of self as permanently damaged, to correlate with poor treatment outcome. Rumination is an early predictor of the development and maintenance of PTSD as it impairs the ability to process other information during the treatment itself (Echiverri, Jaeger, Chen, Moore, & Zoellner, 2011). In these patients, exposure serves as a cue to start the ruminative process rather than interrupt and allow for new learning.

Craske et al. (2007) updated the conceptualization of the mechanisms underlying exposure treatment and present major gaps between research and clinical practice. PE operates under extinction learning through emotional activation and processing. Activation of the fear structure leads to integration of non-trauma compatible information and renders a new, non-fear structure. Inhibitory learning is thus critical to extinction, although these authors suggest that clinicians attend to other mechanisms at work. The conditioned stimulus and unconditioned stimulus associations made during fear conditioning are never erased. The conditioned stimulus emerges with at least two meanings and thus it is vulnerable to re-instatement, renewal, or recovery. The degree to which inhibitory association can shape fear response is independent of fear levels and instead, dependent on context and time.

Initial fear activation (IFA) has been said to predict outcome in exposure therapy. Studies typically limit their confirmation of IFA to heart rate or skin monitoring. Craske et al. (2007)

reiterates that many confounds can account for an increase in heart-rate or skin sensations. Fear often declines as a result of IFA, but the amount may not predict improvement in symptomatology; this relationship may be correlational, but not enough information supports the relationship being casual. These researchers identified that in cases where fear is prolonged and does not achieve habituation, little to no learning occurs.

Within-session and between-session habituation is also a basis of exposure therapy. In a study of patients with chronic PTSD, skin conductance responses to the paired conditioned stimuli did not attenuate to extinction, highlighting the role of affective valence in learning (Blechert, Michael, Vriends, Margraf, & Wilhelm, 2007). In patients with PTSD there has been no difference between improvers and non-improvers and the amount of within-session habituation. Stronger evidence for between-session habituation and improvement has been garnered. However, the most critical test of exposure therapy is in post or follow-up assessment. Unfortunately post-treatment assessments typically have not extended beyond 6-12 months. Schottenbauer, Glass, Arnkoff, Tendick, and Gray (2008) conducted a review of treatment dropout and non-response rate among 55 articles for empirically-supported PTSD treatments. Dropout ranged widely and was found to be up to 50%, whereas non-response rates exceeded 50%. Only few studies report exacerbation rates, include data on dropouts, and note the stage and symptom improvement among non-completers and non-responders. These researchers documented barriers to treatment, exacerbation of symptoms, substance use, severity of trauma, type of trauma, presence of shame, guilt, and anger as reasons for dropping out. Despite success of 40-70% in reduction of PTSD symptoms across clinical trials, virtually no follow-up studies to exposure therapy for PTSD report the percentage of sustained improvement after 6-12 months post-treatment (Bradley et al., 2005; Schottenbauer et al., 2008).

Ultimately, randomized control trials may underestimate the problem of PTSD in clinical practice. Zayfert et al. (2005) assessed variables associated with cognitive behavioral therapy completion for PTSD in a group in 115 outpatients. Treatment completion was defined as when goals were met; failure to meet treatment goals was considered a treatment dropout and coded as such. Sixty-four percent of this sample reported childhood physical or sexual abuse and 34% met criteria for borderline personality disorder. Seventy-two percent of this sample did not complete treatment. Dropouts reported higher avoidance, arousal, and symptom severity. They were more likely to suffer from depression and experienced more impaired social functioning.

PTSD treatment: Cognitive processing therapy. Chard, Shumm, Owens, and Cottingham (2010) examined cohort differences between Vietnam-era veterans and OEF/OIF veterans receiving Cognitive Processing Therapy in outpatient treatment between 2005-2008. OEF/OIF veterans attended significantly fewer sessions and reported lower PTSD screening scores post-treatment than Vietnam veterans. Thirty-one of 51 OEF/OIF veterans dropped out of the study. Analysis revealed no demographic trends among dropout veterans. Reasons provided for discontinuing treatment included: moving, substance relapse, unwilling to complete assignments, absences, work conflicts, and family burdens. An interesting finding showed that post-treatment depression and PTSD symptoms increased with attendance of sessions.

The wartime environment promotes a chronic expectation of hostile encounters that is subsequently followed by a need to maintain constant vigilance. Soldiers are more likely to experience repeated trauma exposure with little or no processing (Garske, 2011; Gerardi, Rothbaum, Ressler, Heekin, & Rizzo, 2008). Peacekeepers may suffer from a sense of betrayal by home-front government, politicians, and or military family throughout wartime (Ray, 2008).

Likening PTSD to a disease such as diabetes, Shalev, Freedman, Peri, Brandes and Sahar (1997) highlighted the pernicious effects of chronic PTSD. Shalev et al. studied Vietnam veterans with lifetime trauma exposures, many of which occurred prior to or following combat exposure. Most commonly, comorbid conditions develop following combat exposure (major depression, substance use, and psychotic disorders). Many veterans face a number of life stressors upon returning from combat (i.e., poverty, unemployment, lack of social support, and exposure to violence). These variables are not era-specific and apply to many contemporary veterans as well. Shalev et al. assert that major mental health complications arise over the course of PTSD and targeting its etiology may not be sufficient treatment. Tertiary problems identified as dysfunctional affect, concentration, and memory and social impairment may be at the fore for these veterans and thus in need of immediate recourse. Complex, chronic, and or resistant PTSD distorts brain functioning. Shalev et al. suggest that remembering and reliving treatments may not be curative for these types of traumatic experiences. Yoder et al. (2012) compared treatment outcomes across 112 veterans spanning the Vietnam War, first Persian Gulf War, and the wars in Afghanistan and Iraq. This nonrandomized, archival study was based on screens for depression and PTSD. Although these researchers demonstrated improvement in PTSD symptoms, OEF/OIF veterans had the highest non-completion rate; 26% of the 61 patients were identified as non-completers.

Rationale for skills-based focus in phase oriented treatment. Treatment must be built upon a foundation of skill-based containment. This is due, in part, to what Goodwin (2005) describes as a neurological blackout that individuals exposed to early or repeated traumas often experience when in emotional distress. Memory systems and associational areas darken when anxiety exceeds a certain maximum; individuals then are unable to access content or process

trauma at this stage (J. Hayes et al., 2011; Lanius et al., 2010). As Briere and Scott (2006) caution, adjustments in trauma exposure or processing must be made in order to not exceed the capacities of the client's tolerance level. Processing trauma is a complex undertaking, as the traumatic memory itself may hold triggers for other traumas or cognitive material associated with the trauma. Relational schemas are often encoded at the implicit level and are based in survival and attachment needs. Triggering relational schemas of danger when engaged in therapeutic work with a patient's historical childhood abuse can activate primitive or childlike behaviors aimed at safety. In combat veterans, remembering or reliving traumas may not only activate fear-networks but also engage betrayal, shame, guilt, anger, or arousal. Emotional processing of the trauma material is typically unavailable at this point either due to dissociation, lack of memory encoding for repetitive or prolonged exposures, or activation of pre-military trauma structures. How a clinician embarks on the trauma exposure or processing piece of treatment is a critical question that has not been fully addressed by current research literature. Titrated memory exposure and PE are some available intervention choices (Wagner, Rizvi, & Harned, 2007). Foa and Rothbaum (1998) recommend the classic PE for a full activation of the fear structures, allowing the extinction process to occur with traumatic material. In contrast, Briere and Scott encourage the processing of trauma occur to within a therapeutic window, which they define as a place within the treatment in which interventions elicit trauma memories and promote processing but are not too powerful to overwhelm protective systems and move the patient back into avoidance. Thus, to avoid the creation of greater internal pain as well as increased vulnerability because, when one's focus is turned inward, one cannot scan his/her environment for potential danger.

Foa and Jaycox (1996) note that overwhelming anxiety, intense anger, and the use of emotional numbing as a primary coping mechanism all impede the activation of the fear network, and thus pose formidable obstacles to successful emotional processing. In order to provide trauma treatment that will enhance emotional processing it may be necessary to borrow from the complex traumatic stress literature.

CPTSD treatment recommendations. Trauma recommendations for CPTSD have built upon the foundation researchers and theorists have developed for PTSD. CPTSD's tendency toward affect dysregulation, interpersonal mistrust, and avoidant, tension-reducing behaviors render this syndrome difficult to treat, yielding poor prognostic outcomes (Ford & Kidd, 1998). Phase models are often developed in an effort to prevent or manage crises that may arise once exposure or processing of traumas develops.

Phase-oriented treatment is necessary in order to determine the best approach not only to containment but also as a guide to modify the adaptive but nonfunctioning aspects of the patients' personality. Patient safety, affect regulation, skills-deficit models, and therapeutic alliance goals have been the thrust of treatment for CPTSD and PTSD cases. The clinical consensus is to follow a phase-oriented treatment that proceeds in the following manner: (a) symptom reduction and stabilization, (b) processing of traumatic memories and emotions, and (c) integration and rehabilitation (Ford et. al., 2005).

Most interventions have been designed for single-incident traumas (Kira, 2010); the effects of these interventions may not be sufficient to treat complex traumas. Kira (2010) draws clinicians' attention to the difference between core and triggering traumas. Core traumas sensitize and bias responses to potential triggering events whereas triggering traumas set off the

post-cumulative response. Treatment must then be designed to enhance intrapersonal and well as interpersonal dysregulation.

Summary

Ultimately, the current body of knowledge about combat-related PTSD has been based on studies of veterans from earlier wars, many of which utilized retrospective data (Polusny et al., 2011). Retrospective data and limitations of current methodology examining PTSD rates, comorbidities, and treatment effectiveness may be missing or underestimating the mental health needs of OEF/OIF veterans. The use of self-report checklists and brief screen measures do not account for functional impairment and prior trauma exposure. Cross-sectional sampling is often overly-inclusive of service members that do not represent those most likely to be combat-exposed. Avoidant behaviors, long-term consequences, and help-seeking veteran population all impact the sample population that voluntarily participates in these studies. Comparison groups are often made up of age-matched civilian peers; this methodology does not account for the differences in military culture or high risk-takers that may be attracted to military duty (Richardson, Frueh, & Acierno 2010). Timing and latency of assessment is critical. If too much time passes between post-deployment and assessment, the influence of emotional and psychological states may impede the validity of reporting, and become influenced by poor recall and selection bias. However, assessment of veterans immediately after homecoming or 3-4 months later may be too soon to capture the extent of symptoms on psychosocial functioning.

Greater attention must be paid to assessment and treatment planning for newly returning veterans suffering from multiple traumatic stress symptoms. The possibility that clinicians will be faced with symptom profiles that appear similar to yet distinct from veterans of previous eras is high. Current treatments, although proven to be effective clinically, are often confounded by

variance that is not easily accounted for in the general population. Given the complexity in pre-military profiles, combat experiences while on deployment, and stressors faced post-deployment, it is likely that OEF/OIF veterans face symptoms comparable to CPTSD. Utilizing and critically analyzing the CPTSD, Betrayal trauma, and Moral injury literature, this dissertation will provide a treatment model that is designed to address the unique needs of traumatized veterans who may exhibit a constellation of symptoms that extend beyond DSM-IV-TR and DSM-V-defined PTSD and that may be more akin to CPTSD.

Chapter 3: Methods

Overview

This chapter presents: (a) a rationale for a theoretical research approach, (b) methods and procedural steps used to develop treatment recommendations, and (c) practical contributions of this study to the field of psychology.

Rationale

Through a critical analysis of the literature, this study intended to provide treatment recommendations for a subset of OEF/OIF veterans who meet sub-threshold criteria for PTSD and who have a history of multiple treatment deployments and or significant, chronic, pre-military trauma history. Treatment recommendations were made under the assumption that this subset of OEF/OIF veterans exhibits symptoms in excess of DSM-IV-TR criteria of PTSD (APA, 2000). In particular, multiple and extended deployments coupled with dual mission objectives for peacekeeping and combat place OEF/OIF veterans at risk for cumulative, sustained, and or prolonged traumatic exposure. This type of traumatic exposure is likely to produce symptoms akin to CPTSD. Given the current limitations of cognitive behavioral treatment, recommendations based on the CPTSD literature, moral injury, betrayal theory, and moral distress are provided. This study elaborated on (a) the particular characteristics of trauma-exposed OEF/OIF veterans; (b) the impact of cumulative, sustained, and prolonged traumatic exposure on the OEF/OIF veterans; and (c) strategies to augment, adapt, or add to cognitive behavioral treatments currently in use by the VA.

Evidence-based practice stresses the integration of systematically collected data, clinical expertise, and client preference that guides service options (Antony & Barlow, 2010). Such practice requires continual evaluation of knowledge and skills. Given the diverse treatment needs

of OEF/OIF veterans, careful consideration should be given to ensure that treatment is appropriate for capturing presenting problems, meeting treatment goals, and demonstrating treatment success. The treatment protocol presented here is based on a careful review of the current literature, incorporating clinical expertise of the works of experts in CPTSD.

Veterans returning from the conflicts in Afghanistan and Iraq have shown high rates of psychiatric disorders, yet many do not remain in treatment (Erbes et al., 2009). These veterans attend fewer sessions and drop out of treatment more frequently when compared to Vietnam veterans. Researchers posit that the stigma of mental health diagnosis and treatment, demographic profiles, environmental demands, and symptom presentation may all contribute to this finding. Particularly troubling to the OEF/OIF population is the negative impact of mental health symptoms on social functioning, productivity, community, involvement, and self-care (Gellis et al., 2010; Lapierre et al., 2007). Extended and multiple deployments coupled with interpersonal stressors and exposure to traumatic events may affect not only acute stress reactions, but also a host of other psychiatric comorbidities. Providing clinicians with knowledge of the symptom constellation that encompasses CPTSD allows for a greater number of OEF/OIF veterans suffering with complex traumatic stress to be identified and treated.

Literature Sampling

This study examined existing research on CPTSD, PTSD, OEF/OIF, veterans and the veteran population at large to consider the symptom manifestations fitting the profile of CPTSD in the OEF/OIF veteran population. The researcher conducted electronic literature searches using databases such as PUBMED, PsycINFO, PILOTS, Dissertation abstracts, and SCOPUS. These databases were reviewed using search words such as: posttraumatic-stress disorder, PTSD, CPTSD, complex PTSD, complex traumatic stress disorder, disorders of extreme stress not

otherwise specified, DESNOS, prolonged exposure outcome, OEF/OIF and combat, combat veterans and posttraumatic-stress disorder, moral injury and distress in veterans, betrayal trauma, betrayal trauma theory, betrayal and veterans, betrayal and multiple traumas, veterans and multiple traumas, multiple trauma and symptoms, traumatic response to combat, military culture of OEF/OIF, military, suicide, risk, military mental health, childhood physical abuse and military, childhood sexual abuse and military, and personality change and trauma. The review was limited to adult samples and the researcher identified relevant citations and references of relevant manuscripts. Other literature was identified and then reviewed through the use of relevant texts from experts in the area of CPTSD, veterans, and trauma.

Model and Protocol

No formal structured or semi-structured instruments exist to examine the complex developmental and contextual issues germane to adjustment to trauma exposure. Models serve to organize information into a helpful heuristic that guide general recommendations to treatment. Given the complex presentation of OEF/OIF veterans, the transdiagnostic model of psychopathology (Nolen-Hoeksema & Watkins, 2011) was used to set the stage for the treatment protocol presented here. A transdiagnostic model emphasizes common or universal components that maintain problematic cognitions and behaviors that in turn contribute to emotional response to different cues across diagnoses (McEvoy, Nathan, & Norton, 2009). Transdiagnostic treatments target common functional relationships that cut across multiple diagnoses that often cluster together. Transdiagnostic therapies have been evaluated as appropriate for a population that has high comorbidities, does not respond to disorder-based interventions, and demonstrates complex presentations (Mansell, Harvey, Watkins, & Shafran, 2009).

In this study, a theoretical research approach was undertaken in order to propose a model that accounts for the heterogeneity in a subset of OEF/OIF veteran symptom presentation. A large body of literature was compiled to examine various aspects of trauma among veterans, of multiply traumatized civilians, and those who have suffered prolonged or cumulative childhood trauma. This model integrated the existent literature in the following way:

1. Reviewed current and most widely recognized literature on PTSD, CPTSD, OEF/OIF veterans, Moral Injury and Betrayal Trauma Theory.
2. Utilized the transdiagnostic model to establish what fundamental processes underlie the development and maintenance of CPTSD and the disorders associated with it described prior (i.e., PTSD, mood disorders, substance use disorders).
3. Proposed an integration of Dialectical Behavioral Therapy and Acceptance and Commitment Therapy in a 12-Session Group Guideline, applicable to the VAMC setting.
4. Created a 12-Session Group Guideline (Appendix C) to emphasize the restoration of adaptive, functional behavior and modify maladaptive attempts to regulate emotional experiences.
5. Summarized this study, its clinical implications, and limitations.

Transdiagnostic model. A common set of vulnerabilities integral to the development and maintenance of emotional disorders has been identified in the research. Returning to the discussion of etiological vulnerabilities, Barlow et al. (2010) introduced the triple vulnerabilities theory relevant to the development of anxiety and related emotional disorders. Distal risk factors, such as the genetic basis of temperaments (i.e., behavioral inhibition, negative affect, anxiety, disrupted biological stress systems) and early life experiences (i.e., adverse childhood

experiences, emotional abuse, neglectful parenting) contribute to a *generalized psychological vulnerability* to experiencing anxiety and related negative affective states. The OEF/OIF population suffering from CPTSD may be exposed to distal risk factors (i.e., early life experiences, temperament) that interact with proximal triggers of deployment and post-deployment (i.e., combat exposure and re-exposure, potentially traumatic experiences, traumatic experiences, and reintegration). This exposure results in emotional and behavioral dysregulation due to undeveloped or distorted systems of regulation that profoundly affects psychological functioning. The goals of treatment in the protocol presented in this dissertation are to increase psychological flexibility and emotion regulation strategies that reduce the intensity of psychological disorder and restore psychological functioning.

Emotional regulation. Emotion regulation or dysregulation emerges out of the strategies individuals employ to manage the experience of emotions often aimed to control or regulate emotion. The selection, implementation, and success of these strategies are multiply determined and beyond the scope of this dissertation. However, of note are individual unique cultural differences that may influence symptom expression, strategies employed, and the determination of effective or ineffective coping. The treatment protocol presented here is based on Barlow et al.'s (2010) research on the Unified Protocol, a treatment designed to target maladaptive emotion regulation strategies, or attempts at emotional avoidance that ultimately backfire in a viscous cycle of increased physiological and emotional arousal, or psychological distress.

The core process that is addressed in the proposed treatment protocol for the OEF/OIF veteran CPTSD population is emotion regulation to reduce the cycle of avoidance and control. Those with CPTSD may experience negative affect more intensely and frequently, and judge emotional experience as unwanted or intolerable. The judgment and intensity result in excessive

attempts to avoid, suppress, or control emotions (Campbell-Sills, Barlow, & Gross, 2007). The treatment protocol was designed to help group members reduce the intensity of negative affect, and decrease judgments of emotion as being intolerable.

Given the prevalence of childhood abuse in service members, exposure to early traumatic environments may have prevented the development of flexible emotional regulation strategies. Socialization into military culture requires behavioral learning and acquisition of principles that will be adaptive in urban and guerilla warfare settings and to maintain functioning on extended deployment. When service members are exposed to potentially traumatic experiences on deployment, the experiences themselves may serve as proximal factors in the production of traumatic stress symptoms at a later date. Survival mode theory posits that when people are faced with threat, a specialized form of cognitive information processing is activated, characterized by peremptoriness, suppression of normal modes of cognition, and loss of self-monitoring. This mode is presumed to be adaptive in combat and is maintained by high levels of self-potentiating threat-arousal, confirmation bias, inhibition of alternative modes of processing, and narrowing of attention focus. These types of biases in cognition and behavior are generated in combat may disrupt veterans' access to flexible emotion regulation and behavior regulation strategies post-deployment (Chemtob, 2005). The treatment presented here was designed, in part, as a tool for re-integration aimed at increasing psychological flexibility within emotion regulation.

Veterans, as a part of a military unit, are members of a social group combating chronic threats throughout deployment. Their social, personal, and physical identities are vulnerable to constant instability throughout deployment and upon post-deployment or separation from the military. The 12-Session Group Guideline targets what have been identified as the main processes of CPTSD deficits and or rigidity in emotion regulation strategies, promoting

reintegration of the civilian role. Emotion regulation of CPTSD can be characterized across three areas: situation selection, attentional deployment, and behavioral problems (Campbell-Sills et al., 2007; Gross, 1998). Situation selection is met with behavioral avoidance and or emotionally avoidant strategies designed to regulate affect. Attention deployment problems (i.e., rumination, worry, distraction, reactivity) serve to regulate emotion cognitively. Behavioral problems (i.e., angry outbursts, withdrawal/isolation, substance use, etc.) serve to regulate emotion intensity. Each of these areas is targeted in the 12-Session Group Guideline with an emphasis on restoring psychological functioning, restoring active functioning in civilian society, and preparation for stage 2 trauma reprocessing.

Modality. The value of treating traumatic stress disorders in a group modality lies in its inherent exposure to other group members and targeted treatment of isolation and alienation (Foa et al., 2009). Groups allow members to interact with one another and therefore develop a sense of safety, trust, and intimacy towards reconnection. The 12-Session Group Guideline presented in this dissertation was designed for enhanced interaction between group members in order to increase interpersonal reconnection.

Trauma-focused groups. Trauma group treatments are typically either trauma-focused or present-focused. Trauma-focused groups assume that integration of the traumatic material will reduce symptoms and modify the meaning of the event(s). These aims can be accomplished regardless of theoretical orientation. In cognitive-behavioral oriented groups, cognitive restructuring can be employed as well as exposure, habituation, and extinction in order to integrate traumata. Due to the nature of CPTSD, the Group Guideline focuses on preparation for trauma-focused work. Skills training, psychoeducation, and unstructured exposure strategies are

all employed in this protocol in the service of providing veterans with safety and stabilization skills to support successful trauma-focused work.

Present-focused groups. Present-focused groups are experiential and seek to increase mastery and self-esteem while enhancing interpersonal connections. These groups focus on the patterns of relationships that emerge within the group structure and focus on current problems and issues rather than with past events. Social roles, deficits, and relational losses are all appropriate content for present-focused groups.

The literature presents ample evidence for the success of both present-focused and trauma-focused groups in reducing the severity of PTSD symptoms among other quality of life measures (Schnurr et al. 2003). Based on these findings, the Group Guideline presented here was designed as a present-focused model. Interventions and group structure were designed to increase group members' mastery of emotional regulation, as well as a return to social roles and value-directed action. The literature supports that trauma-focused groups often suffer from high dropout rates, and many are not long enough to provide members with an adequate dose of exposure for reduction of avoidance and numbing symptoms (Cloitre & Koenen, 2001). The Group Guideline prepares its members across 12, 120-minute sessions for trauma reprocessing or formal exposure treatment. These group sessions were designed to enhance member capability for emotion regulation and reconnection in order to reduce avoidance and numbing and increase the pursuit of value-directed living.

Potential exclusion and inclusion criteria. Due to the wide range of symptoms that result from CPTSD, the proposed group protocol was designed to treat veterans with broad inclusion criteria. Prescreening would be recommended to identify veterans with CPTSD. One method of assessment for inclusion could be in the administration of Briere's (1995) Trauma

Symptom Inventory (TSI), a broadband evaluation for a range of complex trauma symptoms. Veterans who also meet full criteria for PTSD would first need to be offered exposure-based treatments, and, if they chose to engage in a Phase 1 group treatment, be apprised of the risks and benefits thereof. Veteran members suffering from CPTSD may be engaging in tension-reducing or target behaviors as a result of emotional dysregulation, including substance use, self-harm, binge/purge behaviors, angry outbursts, and risk-taking behaviors (i.e., driving recklessly, unprotected sexual encounters). If a potential veteran group member is experiencing suicidal ideation and active self-harming behaviors, concurrent enrollment in active individual psychotherapy would be required to ensure his/her safety. If the veteran has a history of chronic suicidal ideation and self-harm but has reduced engagement in behaviors to urges without action, he/she would be a likely candidate for the group if he/she was currently engaged in individual psychotherapy to monitor any need for increased psychological interventions. Depending on the frequency and intensity of self-harm behavior and or suicidal ideation, participation in this group may intensify or trigger symptoms and be contraindicated. Other contraindications for the participation include: primary psychotic disorders, unsafe living conditions, impairments in comprehension, and illiteracy. In assessing substance use, it would be important to consider the quantity, frequency, and impact in order to determine wither group participation would be contraindicated. Veterans with substance abuse problems as primary disorders may need to demonstrate a desire to reduce addiction behaviors prior to beginning this group.

Chapter 4: Results

The literature review examined elements of empirically supported treatments for warzone veterans experiencing complex trauma and posttraumatic stress. This review found that veterans suffering with symptoms of CPTSD might remain unidentified and inadequately treated. Veterans with a prior history of traumatic experiences may be particularly vulnerable to experiencing symptoms of CPTSD, as well as veterans who have participated in atrocities of war and or have experienced betrayal trauma. A chronic guilt/shame response may better be conceptualized as a primary response to moral violation rather than as cognitive errors resulting in dissociative symptoms, abandonment of moral structure, and engagement in reactive behaviors (Litz et. al, 2009).

Thus, the protocol presented here was designed to target symptoms related to CPTSD and arising from moral injury, thus augmenting existing empirically-based trauma treatments. Appendix C contains a detailed outline of a 12 session group therapy protocol whose overarching goal is to begin the restoration of functioning and reintegration into civilian life of returning veterans who may be experiencing symptoms related to CPTSD. More specifically, the objectives of this group are threefold: (a) to restore emotional, cognitive, behavioral, and interpersonal functioning to veteran participants; (b) to restore ability to function in civilian setting and increase engagement with personal values; and (c) to prepare veteran participants for Phase 2 trauma exposure and reprocessing by enhancing capacities to engage and tolerate emotions. This Group Guideline draws from the following established treatments: Dialectical Behavioral Therapy (DBT), Acceptance and Commitment Therapy (ACT), and Somatic Experiencing (SE). Appendix C includes instructions to the clinician, providing interventions for each group. Given that this treatment model uses interventions from DBT and ACT primarily,

the Appendix includes references to additional master resources that are required for group sessions.

This chapter will explain the rationale for inclusion of the various goals and interventions of the group sessions. Treatment objectives and suggested therapeutic approaches contained in Appendix C will be linked to the literature on the veteran population and CPTSD or related conditions in order to support the inclusion or recommendation of a particular treatment goal or therapeutic strategy.

Assumptions about Clinician Qualifications

Because individuals with CPTSD have complex symptom presentations, the treatment protocol addresses multiple domains of psychopathology. As such, it is ideal if potential treatment providers have experience treating a wide range of clinical disorders, with specific attention to traumatic stress and personality disorders. Ideally these clinicians will also have some training in/familiarity with ACT and DBT and/or are skilled CBT practitioners. However, at a minimum, it is recommended that treatment providers be well versed in CBT and be willing to seek supervision in modalities with which they may not be familiar.

Cultural Considerations of Veteran Population

OEF/OIF veterans are a diverse group; researches have identified two major trends for African American and Hispanic populations. Other race/ethnic groups make up less than 10% of the military, the largest of those being Asian Americans at 3-5% (Burk & Espinoza, 2012). African American and Hispanic representation within the military has grown to about 20% and 11% of the force, respectively (Burk & Espinoza, 2012). The impact of cultural factors on symptom expression, attitudes toward mental health and treatment cannot be ignored. Minority veterans are more likely than non-minorities to acquire PTSD and less likely to receive high

quality healthcare (Burk & Espinoza, 2012). More specifically, research supports that in some cases of caring for minority veterans, psychiatrists may prescribe more antipsychotics, pain may not be adequately assessed or treated, and diagnostic tests may not be ordered to exhaustion. Thus, the social context that many of our OEF/OIF veterans may face within medical centers may complicate presentation, diagnosis, and attitude towards mental health care that may influence the accessibility of the Group Guidelines for Treatment presented in this dissertation.

Furthermore, the Department of Defense identified to what extent the stigma of mental health illness prevents service members from seeking help. Half of those service members who screened positive for mental health concerns also cited concerns about appearing weak. One quarter of those also believed that mental health treatment is not effective, or resulted in medications (Tanielian & Jaycox, 2008). A pilot study of OEF/OIF veterans (n=110) evaluated veterans' perceived barriers and preferences to treatment. Over half reported hesitance to join group treatments for PTSD due to perceptions that they would be misunderstood, express emotions, and/or dislike the composition of the group (Kracen, Mastriak, Loazia & Matthiew, 2013). Taken together, perceived stigma and barriers to mental health care for OEF/OIF veterans are likely a function of cultural, ethnic/racial, and military factors that extend beyond the scope of this dissertation to address. However, veteran perception of mental health treatment is vital to understand given its impact on likelihood of pursui. Psychoeducation would need to be disseminated regarding the focus and applicability of the group treatment presented in this dissertation. Clarification of the aim to restore functionality through skill-based training and cognitive behavioral interventions may serve to decrease negative perceptions of group treatment and enhance veteran access to the treatment presented.

Duration of Treatment and Frequency of Sessions

An orientation to this group treatment, the duration of treatment, frequency of sessions and treatment frame will be presented. Psychoeducation is a key component to this early stage treatment because it is critical to provide information about traumatic stress disorders, clarify modes and functions of treatment, and set expectations for recovery (e.g., length of treatment, possibility for future exposure work, relapse, environmental contingencies). Another example of clarifying expectations is having the clinician explain the phase-based approach to complex trauma. Phase-based treatment is designed to first establish safety and stabilization (Phase 1), and the initial phase is typically the longest stage of treatment. Processing of traumatic memories (Phase 2) and reintegration (Phase 3) work to resolve developmental deficits, fine tune self-regulatory skills, and enhance the veteran participants' engagement in daily life. The treatment protocol proposed mainly incorporate Phase 1 tasks and begin to introduce elements of Phase 3 treatment, in addition to preparing patients who qualify for additional Phase 2 trauma work following successful completion of the group. Phase 3 elements are incorporated in this group because its potential members face issues that arise from reintegration into civilian culture that cannot be ignored in the establishment of safety and stabilization. In addition, it should be noted that this 12-session treatment might not fully prepare some veteran participants for Phase 2 trauma work. Indeed, according to the literature on CPTSD treatment, the length and extent of treatment may vary greatly. Some veteran participants may need treatment that extends over the course of years, whether provided continuously or episodically, whereas other veteran participants may be adequately treated in a course of 20-30 sessions, and others still may need repetitions of specific interventions (Courtois & Ford, 2009).

The 12 weekly group therapy sessions described in Appendix C are intended to be 120 minutes in length and occur once per week. Due to the varied nature of symptom presentation and treatment course mentioned previously, some veteran participants may be eligible to re-enroll in this 12 group format if, following the first course of treatment, there is still a need to establish safety, stability, and/or reconnection to social support.

DBT (Linehan, 1993) was developed to effectively reduce parasuicidal behaviors of patients diagnosed with borderline personality disorder (Kliem, Kröger, & Kosfelder, 2010). DBT tools were recruited in the development of this group to help veterans suffering from symptoms of CPTSD that emerge as a result of emotion regulation failures. At its core, DBT assumes the interaction between biological vulnerabilities and invalidating social environments gives rise to pervasive emotional dysregulation (Koerner, 2012). Treatment is based on the principle that skills-training is necessary for individuals to learn to change dysfunctional behaviors, manage contingencies, restructure distorted thoughts, and tolerate negative affect (Vujanovic, Niles, Pietrefesa, Schmertz, & Potter, 2011). Comprehensively, this treatment draws upon features of four main skill-building areas–mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness–in the service of decreasing veterans' maladaptive behaviors learned both prior to military service and/or developed to regulate emotional experiences in a warzone.

Consistent with the overarching principle of reducing self-stigma of mental illness and increasing awareness of internal experiences, ACT (Hayes, Strosahl & Wilson, 1999) strategies are also utilized in this group treatment. A core psychological process that characterizes complex traumatic stress disorders is avoidance of private experiences (i.e., thoughts, feelings, body sensations, memories). For many survivors of repeated traumas, the behavioral avoidance

of these experiences results in maladaptive coping strategies such as substance use, self-injury, numbing, dissociation, and somatization (Courtois & Ford, 2009). ACT targets experiential avoidance, or an unwillingness to experience private and situational events, through promoting the identification and pursuit of values and the defusion of detrimental language that maintains symptoms (Ruiz, 2010). ACT treats the aftermath of traumatic experiences by interrupting this cycle of experiential avoidance via six key processes: acceptance, values, defusion, committed action, self as context, and contact with the present moment (Walser & Hayes, 2006). Over 20 randomized controlled trials have demonstrated ACT interventions to be superior to control, wait-list, and treatment as usual interventions (Ruiz, 2010; S. Hayes et al., 2006). Specifically, there is empirical support for ACT in the treatment of PTSD (Follette & Vijay, 2009; Walser et al., 2003) substance use disorders (Batten & Hayes, 2005), depression (Folke & Parling, 2012) chronic pain, and (Kratz, Davis, Zautra, 2007; McCracken & Vowels, 2012) anxiety (Kashdan. Morina, & Priebe, 2008; Tull, Gratz, Salters, & Roemer, 2004).

Group Session 1

Given that the primary goals of the proposed group therapy are restoration of psychological functioning, restoration of active functioning in civilian society, and preparation for Phase 2 trauma re-processing work, each group session will be discussed in terms of how it addresses each of these three issues. The three treatment goals are each addressed in at least one of the 12 groups sessions, and at times, one or two of the three treatment goals will be a focus of the group session.

Restoration of psychological functioning.

1. Introduce DBT concept of States of Mind. DBT States of Mind is used in Group 1 in order for veterans to begin to learn and adapt a model to organize internal experiences and make

sense of a fragmented sense of self (Becker & Zayfert, 2001). This intervention will lay the foundation for restoring emotional and cognitive functioning by facilitating awareness and differentiation between the concepts of Reasonable Mind, Emotion Mind, and Wise Mind. This heuristic is helpful in teaching veterans a language to identify internal feeling states, and provides a basis for understanding that emotions and internal experiences are valuable. It targets both symptoms of alexithymia and intense, unmediated emotional states present in CPTSD. DBT States of Mind is an acceptance-based skill designed to help veteran participants decrease impulsive behaviors and increase engagement with their internal and external world (Linehan, 1993). In order to decrease impulsive behavior, the development of awareness of thoughts, feelings, urges, and actions is created through the identification of States of Mind. Through the organization of internal experiences into the three states of mind (Reasonable Mind, Emotion Mind, Wise Mind), veteran participants learn to create the skill of observing thoughts, feelings, and bodily sensations (Observe) rather than reacting behaviorally to escape, avoid, or decrease their intensity (Linehan, 1993). The States of Mind can also extend to the demarcation between the adaptive warzone worldviews and civilian worldviews, which may help to lay the foundation for improvements in readjustment post-deployment. Veterans are introduced to the concept of DBT States of Mind in order to identify how contact with Emotion Mind and Reasonable Mind both have a useful purpose in civilian and in combat contexts. Throughout the 12 Group Sessions, the dialectic of maintaining both peacekeeping and warfare objectives as well as military and civilian worldviews will be highlighted. The synthesis of opposing objectives and worldviews will be sought throughout the treatment guidelines proposed in order to increase dialectic thinking and psychological flexibility.

2. Mindfulness. Mindfulness has been defined in the literature as moment-to-moment awareness and the cultivation of the skills to self-observe (Kabat-Zinn, 1990; Siegel, 2007). Research further supports the finding that mindfulness skills result in decreased emotional lability, physical arousal, and behavioral reactivity (Hill & Updegraff, 2012; Vujanovic et al., 2011). Mindfulness exercises drawn from the ACT literature will be presented at each group in order for veteran participants to practice present-centered awareness, willingness, and nonjudgmental acceptance. In Group Session 1, DBT's Observe and Describe skills are introduced to veteran participants. These skills are at the core of identification and labeling of private, internal experiences (Linehan, 1993). Accurate identification and labeling of internal experiences (e.g., "I'm feeling sadness and a sinking feeling in my gut") leads to an awareness of action urges and acknowledgement of long-term goals and values. Cultivating mindfulness of self is helpful in the discrimination of thoughts from feelings and creating psychic space between feeling and acting, decreasing impulsive or ineffective behaviors (Courtois & Ford, 2009). According to Mansell et al. (2009), selective attention may serve to maintain a psychological disorder that can cause an individual to miss information that could disconfirm his/her problematic beliefs. Over time, patterns of behavior become rigid and opportunities to enhance skills, improve relationships, or gain knowledge will be overlooked. As an individual directs attention to internal stimuli, he/she makes more internal attributions for events. Mindfulness treatments train veteran participants to focus and sustain their attention on internal or external environment/sensations. Exposure, relaxation, and cognitive flexibility are all mechanisms of change that can help improve distress tolerance and ultimately promote emotional regulation (Baer, 2007).

3. Create accountability and community within the group by establishing leadership roles. Drawing from the research it is evident that effective trauma treatment must address the veteran's search for meaning and re-establish motivation to seek out and build a social support (Drescher, Foy, Kelly, Leshner, Schutz, & Litz, 2011; Jackovljevic et al., 2012). Research points to the possibility that individuals experience a spiritual alienation following exposure to traumatic events. The loss of connection to that which transcends can result in both positive, and negative changes in individuals' core cognitions of self, others, and the world (Drescher et. al., 2011; Jakovljević et. al., 2012). One way that reestablishing meaningful connection to others is addressed in this treatment is by requiring veteran participants to take leadership roles within the group.

More specifically, each week, group members will rotate leadership roles to be determined in advance by the clinician via random assignment. The group leader will use a pre-prepared script to conduct a mindfulness exercise for the group. Each mindfulness exercise is designed to experientially highlight the main topic of each group. In holding a leadership role, the group members: (a) recreate a sense of responsibility towards group members, (b) recreate a hierarchical leadership role within the group designed for flexibility to increase transition between military and civilian culture, and (c) increase participation efforts.

Restoration to active functioning in civilian society.

1. Psychoeducation on cultural differences between military and civilian values, behaviors, and worldviews. Following deployment, veterans face potential stressors in their civilian lives, which can include: loss of military career, difficulty obtaining employment, changes in roles and responsibilities as parents or spouses, and adjustment to sequelae of physical or psychiatric injuries that results in disappointment, resentment, distance/isolation and

distress (Hutchinson & Banks-Williams, 2006). The Department of Defense is composed of multiple braches–Army, Navy, Air Force, Marines, Service Reserves, and National Guard–each of which has specific values, customs, cultures and procedures. Over time, soldiers develop a belief system regarding themselves, their role in the military, civilian culture, and their outlook on non-military civilians (Bolton, Litz, Glenn, Orsillo, & Roemer, 2002). Trauma from specific terrorizing or grotesque events can impact these beliefs and lead to the establishment of rules of conduct for internal experiences and external behaviors (i.e., being assigned the role of collecting body parts following an explosion may lead to an individual's need to distance emotionally, creating a rule that in order to stay functional one must distance emotionally). Equally devastating are betrayal trauma experiences or moral injuries that can result in adaptation of deeply conflicting values or loss of values. This loss may not be related to a specific event, yet can still painfully shatter beliefs and alter coping styles. For veterans with CPTSD, systems of meaning are lost or transformed, contributing to a sense of despair and disconnection from the world. Through the intervention of psychoeducation, the clinician will note broad differences in military and civilian culture and provide information on symptoms related to CPTSD. It is the aim of this intervention to validate the veterans' struggle and help them to reconcile their two cultures (military and civilian). This validation is also designed to create dissonance between the effectiveness of maintaining a militaristic worldview in the context of a civilian world, as well as seek a synthesis between effective components of the two.

Preparation for Phase 2 trauma reprocessing.

1. Psychoeducation on CPTSD, PTSD. Wessley, Rose, and Bisson's (2000) empirical review of the literature identified that psychoeducation may increase help-seeking, facilitate the

recognition of symptoms in others, and introduce corrective information that will modify survivor's thoughts of the self, others, and the world.

Given that negative beliefs about mental health disorders and treatment present barriers to treatment, psychoeducation aimed at reducing stigma is essential in preparing veterans for Phase 2 trauma reprocessing treatment. The use of psychoeducation in Group 1 is designed to provide a framework for defining CPTSD, and introductory exposure to the possibility of future trauma work.

2. Introduction of cognitive defusion to decrease over-activation. With regard to trauma, ACT contends that experiential avoidance mediates between traumatic events and symptomatic expression (Reddy, Pickett, & Orcutt, 2006). Avoidance of situational (events and reminders of the event/s) and private experiences (thoughts, feelings, sensations) becomes a way of regulating emotional pain associated with trauma (Walser & Hayes, 2006). Eventually a generalized avoidance repertoire is adopted that results in decreased tolerance and problem-solving skills.

Cognitive fusion occurs when behavior is dominated by the literal content of thoughts, fusing verbal symbolic and environmental events. The act of cognitive fusion represents individuals' failure to distinguish between present-focused context and verbal thought content, which results in increased distress and avoidance behavior. In Group Session 1, gentle groundwork around cognitive defusion is laid through the acquisition of the DBT Mindfulness and States of Mind skills. In identifying the process of the mind, internal processes begin to get defused from veteran participants' sense of self. Imparting veteran participants with the skill of cognitive defusion is essential preparation for undergoing traumatic reprocessing work so that

veterans will be able to recover from exposure work and practice re-engaging in the present moment.

Group Session 2

Restoration of psychological functioning.

1. Group member leadership of mindfulness and public commitments to weekly goals. Building relations with others is an integral component to treating the isolation, distrust, and damaged interpersonal relationships that accompany CPTSD. In establishing regular veteran group member roles of leadership and public commitments to weekly goals, interpersonal reconnection and establishment of community membership and responsibility are fostered. Trauma survivors describe the importance of being able to communicate in a respectful and validating peer group as a source of internal clarity, support, and belongingness (Courtois & Ford, 2009). Active group participation allows for in-vivo exposure to interpersonal intimacy and the shaping of social behaviors in a hybrid civilian/military group of people (Mulick, Landes, & Kanter, 2005).

2. Introduce DBT distress tolerance skills. Creation of a skill set to reduce risky or ineffective behaviors and active effective problem-solving and life management tactics is an overarching goal with veteran participants with complex traumatic stress disorders (Courtois & Ford, 2009). Distress is identified as aversive internal states including emotions, body sensations, and thoughts. Distress *tolerance* has been identified as the perceived capacity to withstand distress and the behavioral actions that accompany this perception. DBT distress tolerance skills are designed to arm veteran participants with tools to tolerate internal experiences without escape via suicidal ideation, self-harm, substance use, or dissociation (Becker & Zayfert, 2001). Distress intolerance contributes to the development and maintenance

of multiple disorders such as substance use, anxiety, mood, and personality disorders (Leyro, Zvolensky, & Bernstein, 2010). The context of warzone stress influences the development of high or low distress tolerance skills. Veterans then develop or are reinforced for patterned styles of coping that may be ineffective or problematic in civilian life (i.e., hypervigilance, aggressive behaviors, avoidant strategies). Distress tolerance deficits may lead to a variety of avoidance behaviors, such as: disengagement from internal experiences, withdrawal or isolation from others, or aggression either to others or themselves. Veterans may experience difficulty tolerating ambiguous stimuli in the present environment, have trouble modulating reactivity to uncertain events, habituate to unwanted/fear sensations, and develop faulty cognitions around self-efficacy to manage distressed states. The inclusion of DBT distress tolerance skills in the proposed intervention is designed to target behavioral dysregulation present in CPTSD, improve self-perception and cognitive functioning by reducing dissociation as a coping strategy, and teach mastery to reduce helpless cognitions of self (Linehan, 1993).

The seven distress tolerance skills presented in DBT by the acronym ACCEPTS (Linehan, 1993) teach veteran participants how to shift attention and sustain contact with the present moment, create patterns of self-care necessary to prepare for physiological recovery when doing exposure work, and lastly, to create a sense of mastery over behavioral choices. The strategies taught in Group Session 2 include distracting with activities, doing things that contribute to society, comparing oneself at the present moment to other times in one's life or other people, observing opposite emotions, eliminating cues or controlling stimuli that elicit target behavior urges, generating pleasant images or thoughts, and experiencing intense sensations. The function of introducing these skills in Group Session 2 is to restore adaptive behavioral functioning to veterans in distress.

Restoration to active functioning in civilian society.

1. Increase willingness to act in valued direction. Using the metaphor of "monsters on the bus" (S. Hayes et al., 1999, p. 183) helps veteran group members to simultaneously remain aware of and in contact with the challenge of using committed action to create a valued life worth living and be aware of choice. The monsters on the bus exercise utilized in Group Session 2 is adapted from S. Hayes et al. (1999):

> Therapist: Living your values is a lot like driving a bus. Imagine that you are the river and as you have driven along, you've picked up a number of passengers. Some of these passengers are easy going and some act more like monsters. These monsters are threatening and they make a lot of noise and never do what you tell them to do. You try to ignore them, but it's too difficult, each time you kick them off they get back on. These monsters yell in your ear how to drive this bus, "Go left!" You cut a deal and turn left but another comes along and gives you another direction. What you find is that your world has gone from a whole city of driving to a small block of making left turns. If your monsters could come up to a yellow line between you and them but not cross the yellow line, you can drive where you want to go. You always have the choice to drive where you want to go, even if they stand right next to you and make havoc. (p. 183)

The metaphor demonstrates how action can be taken in the midst of internal or external distress. It is designed to restore active functioning to veterans returning to a civilian society where they may feel displaced, uncomfortable, or frightened. The goal is to provide veterans with the skills and experience of acting in a valued direction rather than avoiding a value due to distress. It is used here to target the detachment from mental processes, helplessness, and distorted perceptions of the civilian world that are symptomatic of CPTSD.

2. Elicitation of values through Acceptance and Commitment Therapy. Building on the differences between values of the military and civilian world, this treatment seeks to elicit veterans' values following their military service. Military culture is defined in large part by unit cohesion, success as defined by mission achievement, a devotion to duty, and a hierarchical chain of command social structure (Weiss, Coll, Gerbauer, Smiley, & Carillo, 2010). In what may appear to be a contrast, civilian culture is defined in large part by emphasis on individuality, individual achievements, a devotion to freedom, and fluid, interconnected social structures. However, in a dialectic stance, the synthesis between oppositional points is sought as a point of wisdom (Linehan, 1993). Military values such as group cohesion, collective achievement, and a devotion to duty overlap with civilian values. Other overlooked values of military personnel that cross into civilian society include peacefulness, obedience, and restraint (Rubin, Weiss, & Coll, 2012). Often value structures are embedded within a cultural context and combine both personal and familial values that may seem invisible or automatic. In ACT, an elicitation and verbal identification of values bring these automatic guides into distinct focus, helping veteran participants to notice their freedom to choose to live in the direction of their values (Walser & Westrup, 2007).

Group Session 2 invites veteran participants to evaluate their current values. Given that in complex traumatic stress, people experience a loss of a belief system, this intervention is employed in order to have participants begin to identify and reconnect to existential values beyond reactive behaviors in order to enhance resilient outcomes and reconnect to social and professional support in civilian life (Pietrzak et al., 2010).

Group Session 3 and Session 4

Restoration of psychological functioning.

1. Emotion regulation skills. Emotion regulation deficits, although understudied in the area of PTSD, are central impediments in psychological functioning for those afflicted with traumatic stress disorders (Litz, Orsillo, Kaloupek, Weathers, 2000; Ray & Vanstone, 2009). Emotional numbing, withdrawal, and explosiveness are seen across the traumatic stress disorders behaviorally identified as "irritability or outbursts of anger" "restricted range of affect" and "feeling of detachment or estrangement" (APA, 2000, p. 468). In CPTSD, emotional and cognitive dysregulation can also lead to dysregulated somatic states in the form of chronic pain and other chronic physical conditions (Courtois & Ford, 2009). Emotion regulation is thought to be a state in which one can respond internally or externally in an adaptive manner (Orsillo, Roemer, Lerner, & Tull, 2004). Emotion regulation skills are taught in both Group 3 and Group 4. Veteran group members learn to identify primary emotions, noting physical sensations, behavioral urge-actions, interpretations, and functions that accompany emotions. These skills are designed to help veteran participants develop awareness of emotional responses and re-consider their nature as adaptive and appropriate rather than threatening (Linehan, Tutek, Heard, & Armstrong, 1994).

2. Control as problem. Lack of willingness and acceptance of emotions may be contributing factors to the alexithymic presentation of some CPTSD veteran participants and or impulsive behaviors so often seen among chronically traumatized individuals. Indeed, avoidance of internal responses has been shown in the literature to result in increased psychological distress in combat veterans (Roemer, Litz, Orsillo, & Wagner, 2001). A key change strategy of ACT is employed in Group Session 3 in order to help veteran participants identify how a *solution* for

dealing with difficult emotions–namely, experiential control–may actually be part of the problem. Specific to this population of veterans who have experienced multiple deployments and multiple traumatic exposures, experiential avoidance has likely been habituated as an overlearned adaptive strategy. In order to engage in valued roles of civilian life Group Session 3 encourages veteran group members to identify experiential control as a problem rather than a solution, allowing for the acknowledgment, identification, and experience of emotions in order to feel reconnected to self and others. The mindfulness exercise, "Don't think about Vanilla Ice Cream" (Walser & Westrup, 2007, p. 69) is useful to highlight control as the problem:

> Spending time trying to fight off feelings has become bothersome. This plan to control is a strange deal, you're trying to control your trauma as a means to keep from being retraumatized, and your life has become about your trauma. Along the way, all that fighting against it has created a life all about it. Try this exercise with me, I would like you *not* to think about this next thing. Are you ready? Don't think about vanilla ice cream, vanilla ice cream with warm chocolate fudge on top, with bananas around the edges and a little cherry on top. You can see the problem, try not to think about the problems stemming from your trauma, or the trauma itself. See the problem? Even when we successfully *block it out*, whatever the *it* is, we had to think about it in order to know you don't want it. (Walser & Westrup, 2007, pp. 69-70)

***3. Willingness and willfulness*.** Mindfulness of current emotions means to experience them without judgment, blocking, inhibition, or distraction (Linehan et al., 1994). In Group Session 3, veteran group members are taught that a willingness to experience emotions will ultimately result in increased ability to tolerate distressing emotions rather than being stymied by them. Veteran group members are also introduced to the concept of willfulness to experience

emotions or refusal to acknowledge or tolerate distressing thoughts, feelings, or experiences. This unstructured exposure principle encourages veteran group members to experience distressing emotions without negative consequence so that any secondary negative emotions become extinguished. Ultimately, the concepts of willingness and willfulness in the context of allowing for emotional experiences are designed to create flexibility in how veteran group members respond to distressing thoughts, feelings, and emotions.

4. Somatic experiencing. Psychological trauma affects both the body and mind. When encountering overwhelming emotional or physical threat, the body prepares for the defensive stances of flight, fight, freezing, or submission (Courtois & Ford, 2009). These automatic survival responses can persist in the form of symptoms as threat-related hyperarousal, hypoarousal, disorganized attachment, and somatoform disorders in veteran participants with CPTSD. Experiential psychotherapies help veteran participants become aware of the bodily changes associated with emotional states and help veteran participants remain engaged and take adaptive action (i.e., new physical action patterns, completion of frozen or incomplete defense responses, paying attention to how relational patterns are related to and driven by bodily experiences). This is targeted in Group Session 4 when the clinician directly encourages veteran group members to attend to the bodily sensations that accompany emotions, and through the introduction and practice of the oscillation exercise as discussed later.

5. Mindfulness of body experience. Sensorimotor psychotherapy utilizes the body as a source of information and as an avenue for treatment intervention. In Group Session 4, the clinician encourages attention to physical reactivity of emotions by inquiring, *What happens inside when you have this thought?* and *How does that thought affect your body's sensations, posture, and movement?* Providing a list of common physical responses to emotions, practicing

them within the group, and encouraging the development of individualized responses to emotions will veteran participants develop awareness of physical reactions associated with emotion and the ability to communicate about these experiences (Ogden, Minton, & Pain, 2006).

6. Self-regulating body arousal. After developing awareness of physical responses to emotions, the next step is to teach veteran group members strategies to regulate arousal in response to emotions (Courtois & Ford, 2009). Veteran participants who struggle with irritable, aggressive impulses benefit from centering exercises (i.e., breathing with one hand on the abdomen and the other hand over the heart, grounding, and vertical alignment, whether seated or standing). Purposeful reorientation, or the oscillation technique, is the exercise provided in Group Session 4. Specifically, veteran participants are directed to repeatedly and mindfully orient back and forth between calm body areas, experiences, or sensations, and those that may be painful or uncomfortable. Alteration is useful in helping veteran participants establish safety and stabilization while targeting hyper- and hypoaroused states.

Restoration to active functioning in civilian society.

1. Emotional engagement. Relationship distress and dissatisfaction are common symptoms among veteran participants with CPTSD. There is evidence of elevated rates of separation and divorce among couples that have experienced trauma (Mullen, Martin, Anderson, Romans, & Herbison 1996). Lack of emotional engagement is common among intimate relationships in which one or both partners are trauma survivors (Leonard, Follette, & Compton, as cited in Follette & Ruzek, 2006). Numbing, alienation, and emotional withdrawal leave partners in distress and increase isolation. Targeting experiential avoidance is grounded in the behavioral principle that emotional engagement will generalize to intimate interpersonal relationships and strengthen partnerships and support systems. Experiential avoidance is targeted

in Group Session 4 with the oscillation exercise and in Group Sessions 3 and 4 with the discussion of and training in identification and tolerance of emotion states.

Preparation for Phase 2 trauma reprocessing.

1. Enhancing ability to stay present with emotions. Group Sessions 3 and 4 introduce a number of emotion identification (Session 3) and regulation (Session 4) strategies. For example, in Group Session 4, veteran group members practice DBT skills related to observing and describing emotions, and utilizing sensorimotor psychotherapy strategies such as heart/belly breathing, physical and mental grounding, vertical alignment, and oscillation strategies to identify, stay with, and tolerate strong negative emotions. Through the acquisition and use of emotion regulation strategies, veteran participants practice staying present with emotional experiences. The enhanced ability to identify and tolerate distressing emotions will prepare veteran participants for Phase 2 trauma reprocessing interventions.

2. Opposite to emotion action. Effective treatments for anxiety and depressive disorders share a common thread of activating behavior, non-reinforced exposure to feared situations, and learning to discriminate cues that trigger stress-related reactions and safety behaviors (Mansell et al., 2009; Linehan, 1993; Linehan, et al., 1994). Given that veterans with CPTSD struggle with both anxiety and depressive symptoms and the treatment protocol proposed herein aim to decrease experiential avoidance, *opposite to emotion* action is recruited at this stage to regulate emotionally-elicited behaviors. This procedure works when emotions may not be realistic to the situation and or result in chronic disengagement from valued living. Emotional experiences such as fear, guilt, shame, and sadness may be felt intensely and or chronically for veterans struggling with CPTSD. When adaptive emotional and behavioral regulation strategies have been disrupted or exhausted in this population prior to combat and or on deployment, emotional experiences

post-deployment may lead to automatic behaviors of withdrawal, isolation, angry outbursts, numbing, and or substance misuse. Encouraging veteran group members to first identify an emotional experience and its urge toward action (i.e., noticing feeling sadness and the urge to withdraw or isolate) is the first step in regulating emotionally elicited behavior. The second step is to utilize opposite to emotion action, engaging in behaviors that are contrary to an emotion. For instance, directing veteran group members to approach situations that elicit the emotion of fear and act contrary to the action urge to retreat or avoid; approach situations that elicit the emotion of guilt/shame and act contrary to the action urge to withdraw or hide; engage in activities and act contrary to the action urge to isolate that accompanies sadness; gently avoid situations or people that elicit the emotion of anger, and act contrary to the action urge toward angry outbursts; gently approach and set limits with situations and people that elicit the emotion of anger and act contrary to the action urge of retreat and internalizing the anger.

Group Session 5

Restoration of psychological functioning.

1. Review of mindfulness of body sensations and self-regulation strategies.

Sensorimotor strategies are reviewed to remind veteran group members of the importance of present-focused attention to emotion in order to regulate intense arousal states. This is intended to prepare veterans for unconventional emotional exposure.

Restoration to active functioning in civilian society.

1. Psychoeducation on moral injury and shame response. In regard to the population targeted in this dissertation, veterans with CPTSD may have also been exposed to a morally injurious event. Morally injurious events result in ruminative guilt, severe alterations in systems of meaning, and increased avoidance behaviors. As discussed previously, global attribution of

oneself as the cause of transgression can lead to an inability to contextualize, compartmentalize, and integrate traumatic experiences. This, in turn, can result in behavioral rigidity and emotional constriction that is akin to personality dysfunction. The literature has supported that a subset of OEF/OIF veterans experience loss of value and meaning, and feel that they place an increased burden on others. Psychoeducation has been demonstrated to be an effective first-line treatment in decreasing symptoms associated with CPTSD (Cloitre et al., 2011).

Following the DBT model, the inclusion of psychoeducation and discussion of moral injury and shame responses allows for unstructured exposure to emotional content and opportunities to utilize emotion regulation strategies effectively.

2. *Psychoeducation on shame*. The intervention of psychoeducation on shame is included in Group 5 given that shame is a potential significant outcome of moral injury acquired via warfare. This veteran population may be at risk of experiencing shame and guilt without effective emotion regulation strategies in place to mitigate emotional effects on daily living (Andrews, Brewin, Stewart, Philpott, & Hejendberg, 2009; DePrince et al., 2012). Shame and guilt may be dominant responses to moral injurious events and not necessarily a result of cognitive distortion. Emotion identification and regulation strategies introduced in Group Session 4 and expanded on in Group Session 5 are provided to validate participants' dominant emotional response. However, chronic emotion regulation deficits may also result in the acquisition of cognitive distortions, for which schema-work is introduced in Group Session 5.

The literature confirms that shame proneness is correlated with PTSD symptom severity, treatment failure and treatment dropout (Lee et al., 2001; Leskela et al., 2002). Controlled trials have demonstrated that psychoeducation increases cognitive mastery and decreases guilt/shame (Dorrepaal et al., 2010). Shame is highly correlated with substance use, mood disorders, and

behavioral dysregulation, which this population is also at risk of developing. Following the complex trauma model of phase-based treatment, after stabilization has been accomplished the treatment transitions to enhancing capacities for emotion regulation and interpersonal efficacy (Courtois & Ford, 2009). The goal for this phase of treatment is to provide veterans with strategies to regulate emotions to decrease avoidance of valued action in daily life. Group Session 5 will first seek to educate its participants on shame, and then encourage veteran group members to use emotion regulation strategies to actively engage life in their valued direction. Group Session 5 will provide coaching on how to tolerate distress and assimilate new schematic material in order to reduce cognitive associations with betrayal, self-blame, mistrust, social isolation, feelings of incompetence, and unrelenting standards (Young, 1990).

3. Identification of meaning-making in shame/guilt. The role of schemas in the maintenance and development of PTSD symptoms is well documented (Horowitz, Bonanno, & Holen, 1993; Janoff-Bulman, 1992). Schemas, or meanings that individuals make about the self, others, and the world, are affected by traumatic experiences because either mismatch between pre-existing schemas, or confirmation of a pre-existing maladaptive schema can influence intrusive activity, emotional discord, and psychological upset. Among veterans who exhibit complex posttraumatic stress symptoms, the role of schema congruence and shame may be particularly important to evaluate and cognitively restructure.

Schemas can be adaptive and protective or maladaptive. Shame may arise because of a pre-existing maladaptive schema of self-blame, betrayal, and lack of trust in the world (i.e., pre-military vulnerabilities and or multiple tours of duty). When activated by a traumatic event (i.e., combat trauma, moral injury), the individual may perceive a loss of status, sense of self, or social attractiveness due to the trauma, which often exacerbates avoidance behaviors (Lee et al., 2001).

Humiliation, anger, and secondary shame may arise following a traumatic exposure even if an individual holds a pre-existing adaptive schema. The mismatch or schema incongruence may first be met with anger and humiliation, placing blame on others (Lee et al., 2001). Over time, the primary response of anger may give way to shame as maladaptive schemas are then generated about the self, others, and the world (i.e., shattered assumptions; Janoff-Bulman, 1992). The schema mechanism generated by incongruence may indeed be at work in the case of moral injury.

Given that veteran participants with psychological disorders may have easier access to memories relevant to their disorder and more easily simulate disorder-relevant scenarios (Mansell et al., 2009) it is especially important to provide veteran participants with skills to regulate their emotional response. In Group Session 5, schema work is introduced following psychoeducation on shame and moral injury. Veteran group members are encouraged to identify how schemas are impacted following a moral injury and if there is an assimilation (changing memories to fit beliefs), overaccomodation (overgeneralizing of beliefs as a result of memories), or accommodation (changing beliefs to incorporate trauma) in their belief structure of the self, others, and the world. Veteran group members are then instructed to identify how certain behaviors are avoided following these changes in worldview.

4. Emotion regulation skills for shame/guilt. Research has indicated that emotion dysregulation is an understudied but important component in conceptualizing PTSD and CPTSD. As has been noted earlier, given its salience in PTSD and the fact that certain PTSD interventions (e.g., prolonged exposure) may carry the potential for exacerbating emotional dysregulation, teaching veteran participants methods for regulating emotions is an important initial goal for treatment (Lanius et al., 2010). Specific to the veteran population, the concept of

fear conditioning is likened to the DBT concept of an "invalidating environment" in which primary responses are "persistently squelched or mocked; normal needs for soothing are regularly neglected or shamed" (Koerner, 2012, p. 6). The person in this environment then learns to avoid, interrupt, and control his/her own primary responses, leading to extreme sensitization to all cues that may trigger invalidation. Thus, people learn to respond to their emotional vulnerability or emotion dysregulation by invalidating themselves (i.e., attempts at control and avoidance of emotion increase; Koerner, 2012). Emotion regulation strategies taught in Group 5 will teach veteran participants to self-validate, recognize the difference between primary and secondary emotions, and practice skills to transform maladaptive emotional responses through opposite action.

Group Session 6

Restoration of psychological functioning.

1. Functional analysis of behavior. Cognitive therapy and mindfulness-based cognitive therapy are effective in increasing metacognitive awareness, as are the use of functional analysis of antecedents, consequences, and possible function of control strategies (Mansell et al., 2009). Functional behavioral analysis focuses on understanding the function of behavior before modification of that behavior occurs. A functional analysis is used to therapeutically examine and incrementally modify the escalation of avoidance and dysregulated behavior. Conducting a functional analysis (i.e., chain analysis) to identify sequential connections between environment, private and public behavior (i.e., thoughts, feelings, and actions), and consequences is a primary tool that is utilized in Group Session 6. Given the behavioral ramifications of CPTSD, veteran group members may suffer from targeted behaviors such as isolation, rumination, angry outbursts, substance use, or other tension-reducing behaviors. This protocol stresses the

importance of first understanding the context and function of such behavior prior to creating interventions and more adaptive behavioral responses. For example, avoidant behavior (e.g., escaping from crowds) may be targeted explicitly in other treatments at the moment an individual behaviorally removes himself/herself from contact with a situation or person that elicits anxiety (e.g., supermarket). A functional analysis of behavior, however, reveals that the process of avoidance has a contextual beginning point that is influenced by environmental, cognitive, and behavioral factors (e.g., the store is located on a street that is similar to an urban warfare environment, thoughts related to safety and preparedness began prior to deciding to go to the supermarket, earlier that day this individual may have experienced a disagreement with a family member, emotional reactions from that encounter are subsumed under anxiety, a number of safety behaviors were engaged en route). This analysis also reveals short-term relief and long-term consequences that may persist after engagement in the target behavior. For example, escape from crowds may validate the emotion of fear and reduce the physical sensations of anxiety almost immediately. It may also serve to reinforce the core belief that this individual is unable to engage in civilian settings. If there is more than one emotion present, such as both anger and fear, avoidance behavior may serve the dual purpose of reducing contact with anger. Evaluating the process and function of avoidant behavior within specific contexts gives veteran group members and clinicians multiple points to integrate skills that will decrease engagement in target behavior and begin to create effective patterns of behavioral change.

Group Session 7

Restoration of psychological functioning.

1. Skill identification and practice. Group sessions 1-6 focus on skill acquisition for distress tolerance, emotion regulation, and building mindfulness through instruction and

modeling. Group Session 7 provides members an opportunity to identify solutions to problem behavior and create new patterns of adaptive response through solution analysis. Solution analysis is presented in Group Session 7 by the acronym ACE: Acceptance strategies, Change strategies, and Environmental solutions. Each of the first-line interventions provided in this group series is available for veteran group members to identify and utilize in order to improve functioning (Cloitre et al., 2011).

2. Solution analysis. Solution analysis encourages a veteran participant to take an active stance in solving problems and strengthens his/her ability to generalize what is learned in therapy to everyday life. Group Session 7 provides a model and opportunity to practice how to problem solve, given that dysfunctional behavior is viewed as the veteran participant's attempt to solve the problem of emotional pain or distress. Once a chain analysis is completed per Group Session 6, an identification of which factors impeded adaptive or value-directed behavior helps to distinguish if the veteran participant needs to remediate a lack of skill, problematic emotional responding, problematic environmental contingencies, and or problematic cognitive processes. A full solution analysis may borrow from skills designed to regulate emotions, tolerate distress, act effectively, and modify cognitions.

Restoration to active functioning in civilian society.

1. Problem solving strategies. Restoring problem-solving strategies is especially relevant for veterans suffering from CPTSD. The literature supports the finding that problem-focused coping is counterproductive once an individual becomes overwhelmed by the intensity or magnitude of stressors (Brailey, Vasterling, Proctor, Constans & Freidman, 2007). This literature suggests that, in the context of combat when an individual is overwhelmed by stressors, military unit-cohesion, formerly a source of resilience, begins to lead to consensual appraisal of negative

outcomes as catastrophe, handicapping problem-solving strategies on the individual and group level. To what extent this process has occurred will vary greatly between veterans. It is assumed for the purpose of this dissertation that veterans with CPTSD have encountered multiple moments of overwhelm similar to that described by Brailey et al. (2007) and may then suffer from handicapped problem-solving strategies. The process of identifying such a skill deficit and its solution parallels the creation of wisdom following trauma. Dialectical integration and self-knowledge contribute to the pursuit of a valued life despite encounters with difficulty. These two processes are mediated by rumination, appraisals, attributions, social support, and meaning-making (Linley, 2003). A functional analysis of behavior practiced in Group Session 6 provides a structured method by which to identify what mediating factors can be addressed to resolve obstacles and thus pursue a valued life. In discussing the philosophic roots of the dialectical method, Hegel (Gadamer, 1971) states that there is movement from a thesis (life) that is shattered by trauma (antithesis) where wisdom is the outcome (synthesis) if adaptation to traumatic experience is achieved. The wise individual is one who recognizes that the world is uncertain and has learned how to manage its stressors effectively, developing with challenges rather than working against them (Linley, 2003). This philosophic conceptualization of wisdom is what the functional analysis of behavior and solution analysis aims to achieve. In Group Session 7, veteran group members are encouraged to use problem-solving strategies to identify and employ skillful behavioral responses.

Group Sessions 8 and 9

Restoration of psychological functioning.

1. Interpersonal effectiveness skills. The format of group therapy for individuals who suffer from symptoms of complex traumatic stress disorders is designed to offer a direct antidote

to the isolation and social disengagement that characterize these disorders (Courtois & Ford, 2009). Alterations in relationships with others affecting trust is a prominent symptom cluster in CPTSD. Behaviorally, veteran participants may vacillate between avoidance of intimacy and conflict and or intense confrontation. The goal of interpersonal effectiveness skill training is to teach veteran group members how to apply specific concrete interpersonal problem-solving, social, and assertiveness skills to enhance intimacy, build conflict resolution skills, and decrease interpersonal avoidance. The specific interpersonal effectiveness skills taught and practiced in Group Sessions 8 and 9 are discussed in more detail in the subsequent sections.

Restoration to active functioning in civilian society.

1. Active membership within the group. Becoming a member of a peer group that is validating, supportive, and non-exploitive is a key factor that allows individuals with CPTSD to increase opportunities for interpersonal growth, individuation, and bonding. Membership in this group context facilitates the development of a support system that is essential for those who have been misused extensively by others, are extremely mistrustful of others, and when traumatic bereavement is an issue (Courtois & Ford, 2009). Integrating role-play in Group Sessions 8 and 9 is essential for the practicing of interpersonal effectiveness skills, including validation of fellow veteran group members to create a supportive environment.

2. Identifying context-dependent behaviors. Contextual behaviorism is a psychology that is rooted in the events that happen between the organism and the world. From this point of view, the maintenance and development of internal and external behavioral responses are shaped over time given the environmental and historical contingencies (Tsai, Kohlenberg, Kanter, Holman, & Loudon, 2012). Determining behavioral function requires the assessment of the

contexts that evoke behavior and identifying the consequences that make the behavior more or less likely to recur. Veteran participants with complex trauma histories often have difficulty evaluating the appropriate level of assertiveness in a situation (Cloitre & Rosenberg, as cited in Follette & Ruzek, 2006). In Group Session 8, the clinician contrasts civilian and military communication styles in order to help veteran group members evaluate the ACT concept of self as context. This intervention is also designed to validate how clashes between opposing communication styles are normative in the transition between military and civilian life. Recognizing the importance of context and validating the difficult expectation of shifting interpersonal styles provides veteran group members the option of creating flexible interpersonal styles. Military and combat contexts are distinct from civilian contexts; however, all three contexts have associated reinforcements and punishments that begin to shape interpersonal behavior based on survival. While on deployment, military personnel receive both social and professional reinforcement for behaviors (i.e., hypervigilance, limited self-disclosure, directive communication) that, while necessary in a military context, may become obstacles in adapting to civilian life (Tuerk, Grubaugh, Hamner, & Foa, 2009). Identification and validation of the ecological context in which certain traumatic behaviors are developed is necessary for laying the foundation for acceptance, change, and synthesis.

3. Learning to identify factors impeding communication. Consistent with behavior theory, social repertoires are learned behaviors. Given the historical and military context for veteran group members, social repertoires adopted within a military context may not be compatible with effective communication strategies for civilian life. By teaching veteran group members how to identify factors that impede successful communication in Group 8, skill remediation and practice can follow.

4. Learning and practicing identification of interpersonal priorities. Individuals with CPTSD may have repeated experiences where they were not able to or effective at protecting themselves, physically or emotionally. Thus, these individuals may have schemas of helplessness or vengefulness that impede successful interpersonal exchanges and the ultimate development and or use of social support networks. In Group Session 8, members are urged to identify three interpersonal priorities (i.e. objective, relationship, and self-respect priorities). Once the priorities are identified, veteran group members are provided with a concrete rubric of how to make a request, make a refusal, or resolve a conflict. By learning a skillful interpersonal approach, chances of obtaining interpersonal mastery and social approval, and amassing evidence against a helplessness schema are improved.

5. Interpersonal effectiveness skills. Interpersonal effectiveness skills are designed to decrease interpersonal problems and increase the ability to form and use positive relationships. The concrete behavioral protocol follows from identification of priorities (e.g., objective priority, relationship priority, or self-respect priority). The skill that is introduced in Group Session 8 as the backbone of interpersonal interactions is encompassed in the acronym DEARMAN, which is designed to provide a roadmap for veteran group members to become re-socialized to effective civilian communication. Integrating role-play into skills training is intended to help veteran group members create and/or expand their interpersonal behavioral repertoires.

6. Validation skills. Validation is a key acceptance strategy for both the clinician to model to veteran group members and for veteran group members to learn as a vital aspect of interpersonal effectiveness (Black-Becker & Zayfert, 2001). Validation refers to communication that affirms what is accurate and or felt to be true in another's beliefs, emotional reactions, and or behaviors (Wagner & Linehan, as cited in Follette & Ruzek, 2006). When clinicians validate

veteran participants' beliefs, emotional reactions, or behaviors, it often results in a reduced state of arousal and an increased sense of belonging (Black-Becker & Zayfert, 2001; Linehan et al., 1994). Affective symptoms of CPTSD and moral injury (e.g., excessive despair, shame, and worthlessness) and behavioral symptoms utilized to regulate these feelings (e.g., avoidance strategies: isolation, substance use, dissociation, angry outbursts) can be targeted, in part, by teaching veteran participants to self-validate. Validation can increase motivation to change, increase the ability to distinguish effective behaviors from ineffective behaviors, and facilitate the development of self-validation skills (Black-Becker & Zayfert, 2001). In Group 9, through the overt practice of validation skills, veteran group members not only learn how to validate members of their social support system but also in receiving validation from other veteran group members learn to self-validate. Building skillful use of validation both intra and interpersonally is a central component to Group Session 9. The interpersonal effectiveness skills (DEARMAN; Linehan, 1993) teach veteran group members how to maintain relationships behaviorally while making requests or refusals.

Group Sessions 10 and 11

Restoration of psychological functioning.

1. Commit to behavioral control in achieving psychological needs. The ACT literature describes committed action as action taken in the service of a guiding value. Linking behavioral activation to a value in Group Session 10 is designed to enhance veteran group participants' motivation for active functioning in the world, despite distressing private experiences.

2. Identification of impediments to the pursuit of value-directed goals. In order to model and teach active problem solving, as well as target helplessness and over-identification with symptoms, problems/obstacles to pursuing goals are discussed. The ACT compass is highlighted

Group Session 11 in order for veteran group members to note how behavior is a vehicle that moves an individual closer to or farther from his/her values. Acknowledging what behaviors move veteran group members closer to or father from value-direction is the first step in problem solving. Identification of emotion following an error, mistake, misstep, or lapse is labeled in Group Session 11 as *discouragement*. According to self-determination theory, humans are assumed to be active and inclined to develop a role in which they are engaged with their social world (Deci & Ryan, 1985). Veteran group members may or may not be able to locate this innate inclination and often begin to drift into maladaptive behavioral patterns as they await the remission of distress in order to act in line with a value-direction. Discouragement in Group Session 11 is reframed as an important *signal* for conducting a chain analysis to figure out how emotion regulation, distress tolerance, acceptance/mindfulness, and interpersonal skills need to be used to encourage action as opposed to inaction. Acting in a value-direction and challenging discouragement involves the practice of the ACT concept of self as context. Group Session 11 introduces metaphors (i.e., the chessboard metaphor and ski metaphor) to re-focus veteran group members' attention to the task of creating a platform or valued life on which the unfolding process of life can play out, rather than becoming attached to and identified with the success of meeting a goal (Walser & Westrup, 2007). The chessboard exercise can be conducted with an actual chessboard, or as a metaphor. The exercise is as follows: Place the chessboard on the floor. Place chess pieces on the board, explaining that they represent various experiences, thoughts, and feelings veteran participants have had both in combat and in civilian life. The clinician then elicits examples from participants of thoughts and feelings. The clinician then groups pieces representing *bad* or uncomfortable feelings or thoughts together and pieces representing *good* or comfortable feelings or thoughts together. The pieces are used to depict the

struggle between *good* and *bad* thoughts and feelings in order to point out that there is actually no winning of this game. The clinician then identifies that just as history is additive (humans can't erase their histories or traumas, or prevent more from occurring in the future) the chessboard extends in all directions, and people continuously pick up good and bad pieces along the way.

> Chessboard metaphor: We don't want these pieces. (Points to pieces that are evaluated as bad.) They are painful, and so we fight the good fight. Sometimes we devote our lives to trying to get rid of these pieces that can't actually be gotten rid of! How many of you can relate to this? What if you weren't the content of those good and bad pieces? Is there anything else you could be besides the chess pieces? (Responding to being the player. You could try to move these pieces around in an effort to win. However, that doesn't really change things – the player is still caught up in the game.) What if you became the board? Notice how you would still have all the pieces but be free to go where you want to go. What else do you notice about the board? The chessboard is strong, solid, and whole. Are the pieces the board? The board is in contact with the pieces, it is aware of the pieces, it experiences the pieces but is it invested in the game and does it care who wins? As the board, you can hold all the pieces, experience them, and yet not be them. (Walser & Westrup, 2007, pp. 116-117).

Another problem in the pursuit of value-directed goals is introduced in Group Session 11 to identify if the veteran group members have chosen values that reinforce avoidance or do not provide positive reinforcement. A functional analysis of behavior can be employed at this point in order to identify the specific reinforcement of the avoidance behavior. In these cases, the process of values becomes lost and some may get discouraged from the response others may

provide. Using ACT principles in Group 11 reminds veteran group members that value-direction is a choice. To encourage veteran group members to refocus their efforts back into the process rather than outcome of a value-direction, the ACT metaphor of skiing is used in Group 11:

> Imagine that you can ski and every time you go to the top of the mountain and get dropped off the ski lift, you simply stepped into an elevator that returned you to the bottom of the mountain. What would it feel like? What would you be missing? The point of skiing is to slide down the hill, to twist and turn, to challenge yourself, and to feel the adventure of sliding on snowy ground. The outcome is to get to the bottom of the hill. So in skiing, the goal is to get to the bottom of the hill, the process is doing the skiing; all that stuff that makes skiing fun and challenging. That's the important part, the process of skiing. What if values are like that? What if the important part is the process, not the outcome? Living your values is fun, challenging, rewarding, enjoyable, and sometimes painful, all part of the process. (Walser & Westrup, 2007, pp. 169-170)

Restoration of active functioning in civilian society.

1. Identification and pursuit of values. The result of betrayal trauma and moral injury often includes a loss of values; a repertoire of behaviors develops as reactive reflex in order to regulate emotion or seek safety. For the veteran population that has experienced multiple traumatic injuries, moral injuries, or betrayal traumas, values-work is imperative in restoring responsive behaviors as well as core cognitive beliefs about the self, others, and the world. The pursuit of a valued life increases vitality. Blackledge and Barnes-Holmes (2009) describe vitality as the result of engagement in behaviors that yield positive reinforcement and feelings of enthusiasm. Thus, Group Session 10 is designed to help veterans specifically identify values. Valuing is embedded in culture and is determined by one's current and historical contexts.

Values are defined in the ACT literature as (a) behaviors that have been emitted in the past and associated with positive consequences, (b) behaviors that have been modeled by others and positive consequences have been witnessed, (c) mirrored forms of behavior that have been emitted to a person that he/she has found reinforcing; d) behaviors that reinforce or supply meaning to the pursuit of living (Blackledge & Barnes-Holmes, 2009). Values are verbally constructed and unlike goals, cannot be achieved or obtained absolutely (Wilson, Sandoz, Kitchens, & Roberts, 2010). Group Session 10 seeks to assist veterans in identifying valued directions that guide behaviors throughout life, both motivating and reinforcing ongoing patterns of effective behavior.

2. Enhance competence, autonomy, and relatedness goals. Veteran participants struggling with CPTSD symptoms often have significant disturbances in self-perception resulting in schemas of the self as helpless and the world as overwhelming. Such schemas may lead to maladaptive behaviors such as heightened isolation, dissociation, or angry outbursts. Due to the unique combination of indoctrinated social mores within the military combined with conditioned responses based on survival instincts, returning veterans with CPTSD may have significant difficulty reintegrating into roles as citizen mothers, fathers, siblings, employees, and spouses. Self-determination theory identifies three fundamental psychosocial processes for psychological well being that were discerned using empirical studies: competence, relatedness, and autonomy (Deci & Ryan, 1985). Identification of value-directed goals in the areas of competence, relatedness and autonomy in Group Session 10 serves to target and restore self-perception schemas disrupted by CPTSD and ultimately enhance veterans' participation in their lives.

Group Session 12

Restoration of psychological functioning and restoration of active functioning in civilian society.

1. Review of skills and creation of coping plan. Relapse prevention training is a series of cognitive and behavioral interventions designed to sustain new behavior change (Witkiewitz & Marlatt, 2007). Witkiewitz and Marlatt (2007) define relapse as a return to symptomatic behavior whereas a lapse is considered an initial setback that provides an opportunity for new learning and redirecting behavior. Behaviorists have identified that treatment designed to create behavioral change essentially creates a separate response to an original signal but does not erase original learning that has proven to be symptomatic (Bouton, 2000, 2004). Thus, individuals with newly acquired adaptive behavioral patterns are vulnerable to lapse and relapse due to novel contexts, prior contexts associated with transgressive behavior, the rapid re-acquisition of transgressive behavior after lapse, and spontaneous recovery of transgressive behavior (Bouton, 2004). In order to protect new learning and continue with adaptive behavior change it is necessary to develop built-in retrieval cues (i.e., coping cards, support system cues) to help prevent relapse and extend behavioral change even in the presence of lapse. Treatment designed to elicit new adaptive behavior repertoires across a vast number of contexts increases the odds that any novel context encountered post-treatment will be less likely to trigger transgressive behavior. Group Sessions 1-12 have been designed to access multiple contexts in homework assignments to practice behavioral change and increase the practice of skills in various contexts.

2. Identification of high-risk situations. The first step in preventing a return of transgressive behavior is identifying high-risk situations that could provoke lapse/relapse behavior. Based on the relapse prevention literature and in conjunction with skills taught

throughout Group Sessions 1-12, high-risk situations are identified across five domains in Group 12: negative emotion states, positive emotion states, cravings and triggers, interpersonal stressors, and the abstinence violation effect (shame tolerance; Witkiewitz & Marlatt, 2007).

3. Review of coping strategies. After veteran group members are able to identify one or two specific examples of high-risk situations across the five domains, the clinician will prompt the identification of skills-based solution analysis modeled in Group Session 7. Emotion dysregulation, whether considered a negative or positive emotional state, can trigger maladaptive behavioral responses for which emotion regulation skills and or acceptance-based mindfulness practice is suggested. Cravings, as defined in the relapse prevention literature (Witkiewitz & Marlatt, 2007) are the attachment to a desired experience that has been achieved before via transgressive behavior. Skills-based solution analysis encourages either using mindfulness to let go of the attachment to needing this experience, use of emotion regulation and distress tolerance skills to tolerate the urge or craving; changing environmental cues or contingencies, and the use of behavioral chain analysis to understand the prompting event that set off the vulnerability to engage in transgressive behavior. Interpersonal situations are critical to relapse, and the integration of interpersonal effectiveness skills is useful in relapse prevention. The abstinence violation effect is the attribution of failure and associated feelings of shame/guilt following a breach of self-imposed rules (Witkiewitz & Marlatt, 2007). In this protocol, psychoeducation on the function of shame/guilt as well as emotion regulation strategies designed to promote willingness and acceptance of shame/guilt as a dominant emotion, as well as opposite to emotion action, have been taught to promote preventative and adaptive behavioral change.

Preparation for Phase 2 trauma reprocessing.

1. Review of phase-based treatment approach to CPTSD. In providing psychoeducation about the phases of treatment for those with CPTSD, this group orients its members to the possibility of continued work to target symptoms beyond this 12-session format.

2. Identification of veteran group members who meet criteria for PTSD and are interested in further treatments beyond scope of group. Veteran group members will need to be identified at the end of this group if they indeed meet criteria for PTSD. These veteran group members who are interested in specific treatment for symptom reduction in relation to trauma would need referrals for Phase 2 trauma reprocessing. Other members who are interested and could benefit from a repeat course of Group Sessions 1-12 will be encouraged to repeat the group in order to establish safety, stabilization, and reconnection.

Discussion and Limitations

Warfare is constantly evolving in response to the need to protect this and other nations. U.S. history has engaged in the political, economic, and social struggles of multiple conflicts abroad. The men and women who currently comprise the U.S.'s all-volunteer force have, since 2001, served in OEF and OIF in peacekeeping, infrastructure-development, and/or conflict roles. These service members have been exposed to urban theaters and guerilla warfare: unconventional features that Polusny et al. (2011) note produce "ambiguous combat situations for which a warrior may feel especially unprepared" (p. 694). Traumatic exposure is embedded within context; for the veteran population, the specific conflict(s) that he/she was involved in will help to inform the nature of traumatic experience. Vietnam-era veterans, for example, engaged in an extended, guerilla-warfare combat that exposed them to many specific contextual traumas. As in WWII European and Pacific theaters and the Korean Conflict, Vietnam-era

veterans endorsed survival guilt, fear and anxiety secondary to a life-threatening situation, and guilt related to participation in acts of abusive violence (Glover, 1988). However, Vietnam-era veterans also suffered significant mistrust secondary to the experience of betrayal of trust by authority figures and for many, the general public's reaction to their homecoming (Glover, 1988). Given the historical, economic, and political landscape that shapes U.S. warfare over time, veterans may be at risk for experiencing unique traumatic events and sequelae depending upon their context. Meeting the challenge of unconventional features of warfare for the OEF/OIF population of soldiers deploy at the highest rates in U.S. military history. They endure more frequent deployments of greater length, which places them at higher risk for acute stress, depression, and anxiety disorders (Castro & McGurk, 2007).

This dissertation has sought to explore to what extent OEF/OIF veterans will present with trauma symptoms that may be different from PTSD as historically defined in the DSM system, and that instead may bear greater similarity to CPTSD, first identified in the literature by Herman (1992) to describe symptoms resulting from prolonged, repeated traumas. Exposure to prolonged or repeated traumas results in complex changes across affective, interpersonal, and self-regulatory capacities. It is at this intersection of personality disorder, PTSD, and mood dysregulation that identification and treatment of CPTSD may be most parsimonious. Using CPTSD as the clinical starting point, this dissertation involved the development of a 12-session group protocol to target emotion regulation, help veterans enhance their psychosocial functioning, and set the stage for the type of prolonged exposure work that has received empirical support for treating trauma.

A critical review of the literature was undertaken to first identify current empirical studies that examined the OEF/OIF population's risks for mental health disorders, symptoms

reported, treatment outcomes, and psychosocial functioning. It is clear that the increasing rate of combat exposures in OEF/OIF veterans has been paralleled by a significant number of mental health symptoms (MHAT, 2011). Hoge et al. (2006) identified screening criteria for mental health concerns including PTSD, depression, suicidal ideation, interpersonal conflicts, and aggressive behaviors met by 19.1% of OIF and 11.3% of OEF soldiers sampled. Literature reviewing the symptom presentations of OEF/OIF veterans is notable for reporting a high prevalence of mood disorders, suicidality, cognitive disorders, somatic disorders, substance use disorders, and psychosocial dysfunction (marital dissatisfaction, violent behaviors, and employment difficulties). These symptoms may not be unique to the OEF/OIF population, but instead may be a consequence of increased attention to screening and research in VA medical facilities. However, the context of the OEF/OIF conflicts is unique and may contribute to the accumulation of symptoms in the CPTSD constellation (i.e., disturbances in affect regulation, interpersonal functioning, self-regulation, somatic regulation, alterations in attention and concentration, self-perception, and systems of meaning).

Examining the OEF/OIF military population more closely, the literature reveals pre-existing vulnerabilities to the development of CPTSD symptoms. Pre-deployment and pre-military exposure rates to potentially traumatic experiences are high within the OEF/OIF population. The Millennium Cohort study identified that over half of those surveyed scored below the 15th percentile of mental or physical health prior to combat exposure (Bremner et al., 1993; Wells et al., 2008). Bray et al. (2006) surveyed almost 40,000 active duty military service members, close to half of which reported experiencing childhood physical and sexual abuse. In cross-sectional survey of male OIF soldiers, over half reported exposure to adverse childhood experiences (physical, psychological, or sexual abuse; witnessing domestic violence; witnessing

alcoholism in caregivers; and witnessing mental illness in caregivers) at pre-deployment, and a third reported exposure to two or more events post deployment (Cabrera et al., 2007). Given that exposure to childhood physical, sexual, and emotional abuse is likely under-reported, rates of pre-existing trauma exposure among this military population may be even higher. Complex traumatic stress and betrayal trauma theory literature highlight the profound impact of exposure to traumatic events and interpersonal distress at developmentally critical moments. The impact of traumatic exposure and interpersonal distress while emotion and behavioral regulation strategies are being developed and modified by the environment (e.g., family system, significant others, social and employment contexts) is far-reaching (Ford et al., 1993). Developmental trauma results in greater impact on psychological functioning, and a greater likelihood of wide-ranging psychological symptoms due to difficulties in, or lack of emotion regulation strategies.

OEF/OIF objectives, specific advances in technology, and the composition of the military service members all contribute to unique symptoms post-deployment. OEF/OIF objectives include both peacekeeping and combative missions in a continuously threatening and unpredictable urban environment. Service members must form alliances with civilians who may later pose threats. Hoge (2004) identified that over half of soldiers deployed to Iraq were unable to respond combatively despite assessing threat in situations because of an overriding directive to avoid collateral damage (i.e., the injury or death of civilian non-combatants). The moral distress and moral injury framework helps to identify the impact of maintaining these opposing objectives on service members' systems of meaning and self-perception schemas.

Moral distress occurs when an individual is aware of how he/she needs to act yet encounters barriers that render that particular action impossible. Soldiers in peacekeeping roles may be at specific risk for moral distress because they are located in a context of potential threat

that simultaneously calls for behavioral control and offensive action, as described previously (Hoge et. al., 2004). OEF/OIF veterans serve extended and repeated deployments, both of which are related to exhaustion or habituation (Adler et al., 2005). Service members face many challenges for which they may be adequately prepared and others for which they may be less prepared, such as: sudden unit changes, leadership problems, inadequate family support, and insufficient time for recovery between deployments that may be associated with helplessness and inaction (Adler et al., 2009; D. Segal et al., 1999).

OEF/OIF veterans also endorse struggling with loss of meaning, feeling as if they are a burden to others, and experiencing strained interpersonal relationships. These symptoms mirror those that result from moral injury, which occurs when an individual participates in a transgressive act that violates moral assumptions and beliefs of right/wrong and personal goodness. Close to half of an OEF/OIF population surveyed endorsed witnessing the killing or serious injury of combatants, witnessing the death or serious injury of other service members, and or participating in the killing of combatants. Some surveyed endorsed witnessing or perpetrating abuse and or violence against non-combatants (Tanielian & Jaycox, 2008). Guilt and shame are frequently associated with engagement in these particular behaviors and may alter cognitions of the self, others, and the world, inhibiting a veteran's ability to conduct meaning-making. Exposure to traumatic events that an individual considers to be morally injurious is associated with dissociation, loss of values, and abandonment of moral structure. Although specific evaluation of OEF/OIF veterans suffering from moral distress or moral injury has not yet been empirically investigated, the symptoms reported by OEF/OIF veterans that have experienced traumatic events that fit the definition of moral injury are consistent with the symptoms of CPTSD.

Now more than at any other time in U.S. history, advances in body armor, emergency care in theater, and shortened medical evacuation time to trauma centers have increased the likelihood that OEF/OIF soldiers will survive horrendous physical traumatic exposures. The ratio of those wounded to fatalities for the OEF/OIF conflict is high, for every 9 wounded there is one accounted fatality. Compared to WWII where the ratio was 1:2.4 and Vietnam, where the ratio was 1:3, OEF/OIF service members have high survival rates (Tanielian & Jaycox, 2008). Somatic disorders resulting from traumatic brain injury and other physical injuries following IED explosions have begun to grow in frequency and identification. The maintenance of an all-volunteer military force throughout an extensive ground conflict has resulted in heavy reliance on National Guardsmen and Reservists who may lack post-deployment support and may face multiple stressors after their separation from the military compared with other service members (Bray et al., 2006, Polusny et al., 2009). The impact of OEF/OIF warzone context, multiple deployments, and higher survival rates may lead to the accumulation of traumatic events and significant alterations in self-perception, systems of meaning, and self-regulatory capacities (i.e., the acquisition of symptoms consistent with a CPTSD presentation).

Development of Guideline

The Group Guideline developed for this dissertation attempted to address the treatment needs of a subset of the OEF/OIF population that has been exposed to multiple and prolonged traumatic exposures (both related to warfare experiences, but also potentially pre-military chronic traumatic exposure) and who may be experiencing moral distress and moral injury as a result of their military or other trauma experiences. It is assumed that these individuals meet the criteria noted in the literature for CPTSD and many may also meet current diagnostic criteria for PTSD (APA, 2013). Currently available treatments for PTSD have applicability to CPTSD but

may not account for emotion regulation deficits that present potential obstacles to the pursuit of valued living and that may preclude successful treatment using prolonged exposure interventions for PTSD. Although more research has been undertaken for the treatment of CPTSD and treatment guidelines (Cloitre et al., 2011; Courtois & Ford, 2009) the empirical base remains limited, especially among the veteran population. This work aims to add to an ever-evolving base for preliminary treatment recommendations for CPTSD specific to the OEF/OIF population. It is hoped that this treatment protocol will serve as a reference for clinicians and researchers and provide them with a tool for working with and studying a population that has been under-researched.

This dissertation sought to review and draw conclusions based on the broad empirical literature base that has been generated on the DSM-IV-TR criteria for PTSD (APA, 2000). In May 2013, APA released the DSM-V with revised criteria for PTSD. The full diagnostic criteria are presented in Appendix D. The most significant changes to the construct reflect a broadened definition of and responses to traumatic events. The stressor criterion (Criterion A) captures both direct and indirect traumatic exposure. Criterion A2 (subjective reaction) has been eliminated. The DSM-V PTSD diagnosis now reflects four symptom clusters: re-experiencing, avoidance, persistent and negative alterations in cognitions and mood, and alterations in arousal and reactivity. The fourth symptom cluster includes "persistent and exaggerated negative beliefs or expectations about oneself, others, or the world;" "persistent, distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others;" and "persistent negative emotional state" (APA, 2013, p. 272). These symptoms account for the transformative consequences of moral injurious and morally distressing events. Alterations in arousal and reactivity have been updated to include: irritable behavior, angry

outbursts, and reckless or self-destructive behavior that account for behavioral dysregulation in CPTSD. The associated features include the caveat that "following prolonged, repeated, and severe traumatic events (e.g., childhood abuse, torture), the individual may additionally experience difficulties regulating emotions or maintaining stable interpersonal relationships, or dissociative symptoms" (p. 276), yet the PTSD definition does not account for interpersonal dysregulation and dissociation outside of anger and detachment. It is yet to be determined what impact the diagnostic changes will have on diagnosing veterans suffering from CPTSD. With the updated PTSD criteria, it is foreseeable that a wider range of veterans, including those who may meet CPTSD criteria, will be diagnosed with PTSD. It can be tentatively concluded that veterans with CPTSD may be diagnosed with PTSD and offered mental health treatment on a larger scale. However, exposure treatments are offered as first-line treatments for PTSD, often without the establishment of safety and stability, which may set up a subset of veterans with CPTSD for dropout, failure, or exacerbation of symptoms. Thus, the importance of educating clinicians, mental health service lines, and veterans on the diagnostic picture of CPTSD and guidelines for treatment remains highly relevant.

The core values that anchor the Group Guideline put forth in this dissertation emerge from the International Society for Traumatic Stress Studies (ISTSS) task force recommendations in training and treatment of CPTSD. Many of the OEF/OIF veterans with CPTSD may struggle with the stigma of a mental health disorder, experience sub-threshold symptoms of PTSD (in addition to those of CPTSD), present as diagnostically complex, under-report symptoms, and or endorse psychosocial dysfunction. This dissertation encourages clinicians to recognize the broad loss of emotional, social, cognitive, and psychological competencies that have either failed to

develop effectively or deteriorated due to prolonged exposure to complex trauma (Cloitre et al., 2012).

The treatment protocol proposed in this dissertation follows the ISTSS recommendations aimed at improving the functional capacities of self-regulation and increasing veteran access to psychosocial resources (Cloitre et al., 2012). Both the ISTSS Task Force on training clinicians and the treatment of CPTSD emphasize context-specific integrated models of treatment in order to moderate the impact of loss through a social environment (Cloitre et al., 2012; Weine et al., 2002). The treatment protocol proposed in this dissertation integrates techniques of DBT and ACT in order to target emotion regulation, increased awareness of internal experiences, behavioral modification, and increased interpersonal skills. Interventions included further encourage the re-establishment of values and/or moral structures with respect to military and civilian contexts. The clinician functions as an active, empathic, and validating guide who helps the veteran examine and identify emotions and behaviors; the clinician further teaches strategies to regulate emotions in order to pursue value-directed behaviors. The format of the protocol is a set of 12 weekly 120-minute groups. The group modality was chosen in order to help veterans re-establish social support and to be able to provide services to large numbers of veterans in preparation for more specific individual-focused work.

Posttraumatic stress symptoms have been reduced in response to exposure-based protocols; however, this treatment protocol highlights the need for veterans with CPTSD to first establish safety, stability, and reconnection. Phase-based treatment considered the standard of care for complex traumatic stress disorders, and stabilization treatments have been associated with moderate-large effect sizes for PTSD, emotion regulation, and social outcomes (Courtois et al., 2012).

This protocol is focused on OEF/OIF veterans because to date limited information is available describing phase-based treatments for military populations with CPTSD related to multiple traumatic exposures. Such populations experience loss of identity, sustain distance from family structures, experience cultural dislocation upon re-integration into civilian life, and suffer from significant emotional turmoil and distress. These observations led to the creation of group treatment protocol presented in this dissertation.

Implications for Clinical Practice

Many clinicians and institutions may not be familiar with the symptoms associated with CPTSD, especially given the dominance of PTSD assessment, clinical training and treatment, and research within the VA medical centers. PTSD itself is a complicated disorder with numerous impairments that may overlap with other Axis I psychiatric disorders while still retaining its syndromal integrity. In the absence of a formal diagnosis for complex traumatic stress disorders, there is a potential for mis- or over-diagnosis of severe disorders (e.g., borderline personality disorder, antisocial personality disorder, bipolar, or psychotic spectrum disorders; Courtois & Ford, 2009).

It is essential to prevent complexly traumatized veterans from being stigmatized with diagnoses, treated with protocols that may re-traumatize them, or prolong psychosocial dysfunction with a string of disorder-focused protocol treatments. Clinicians must be equipped with the current scientific and clinical knowledge base to accurately assess the domains of CPTSD, understand the context and sequelae of prolonged exposure to traumatic events, and plan and carry out interventions that enable individuals to develop capacities for self-regulation (Courtois & Ford, 2009). Evidence-based or evidence-informed ways of interacting therapeutically need to be recruited in order to model and teach skills to veterans that promote

emotion regulation, self-regulation, and the ability to engage meaningfully in civilian life that were either lost or altered as a result of prolonged and repeated exposure to traumatic events.

Therefore, it is hoped that mental health professionals will welcome the information provided herein as it enhances understanding of CPTSD specific to the OEF/OIF veteran population. The protocol presented for group treatment is designed to decrease the risk of reactivating and/or exacerbating veterans' symptoms, decrease veterans' early termination from treatment, and reduce veteran marginalization due to sub-threshold or unclear diagnostic profiles.

Limitations of the Group Guideline

This Group Guideline represents an initial attempt to call attention to and provide information on OEF/OIF veterans with CPTSD. Although they are based on an extensive review of the literature, the protocol presented herein remains limited. Specifically, it would be clinically useful to develop a formal treatment manual. Many steps would need to be undertaken, along with further research, in order to develop a clinician treatment manual and accompanying veteran group member workbook. First, this protocol would need to be evaluated by experts on CPTSD and veteran providers and administrators to obtain and incorporate feedback on effectiveness of interventions and feasibility of disseminating this treatment. Regarding effective treatment, the Group Guideline has not been piloted or formally tested to determine whether the components are effective for the target population.

Given the broad disruption they experience across affective, behavioral, cognitive, somatic, and relational domains, veterans with CPTSD may be a high-risk group. In some cases, veteran group participants would require consistent monitoring of impulsive behaviors, suicidality, and/or self-harm. The on-going assessment and containment of high-risk behavior may be best conducted in individual psychotherapy. Treatment may be most effective for this

population with a combination of both individual and group treatment, leaving a gap for guidelines to be developed that will complement the protocol presented here for the group modality. Other potential limitations regarding the dissemination of this treatment to VA medical centers include the supposition that a clinician who administers this group will command significant knowledge of specific treatment protocols (DBT and ACT) and a system is in place to evaluate and assess for those veterans who meet criteria for CPTSD.

Issues for Further Research

Minimal research has been conducted on the U.S. veteran population at large and CPTSD; therefore, empirical research is required to support the theories and suggestions put forth in this protocol for group treatment. Further research can also significantly enhance national and international awareness of CPTSD.

Several issues are important to study in order to identify the prevalence and extent of CPTSD. Research specifically aimed at assessment of CPTSD within the OEF/OIF veteran population will help identify prevalence within this sample. Currently, research on CPTSD in the military population is limited to three studies presented in this review of the literature. Based on the studies cited, anywhere from 38-100% of the sample size met criteria for a version of CPTSD. These studies are not replications, suffer from small sample sizes, and did not employ similar screening methods. Although current research has not systematically studied CPTSD among OEF/OIF veterans, data suggest that these veterans are experiencing symptoms that fall beyond the PTSD construct (Ford, 1999; Jongedijk et al., 1996; Newman et. al, 1996).

There is a growing empirical base to support that adult cumulative trauma yields an increase in symptom complexity, or CPTSD symptoms in the general population (i.e., affective dysfunction, interpersonal dysregulation, cognitive and behavioral dysfunction, and alteration in

systems of meaning; Cloitre et al., 2009, Green et al., 2009, Kelly et al., 2009; Zucker et al., 2006). Specifically, empirical data to evaluate the prevalence of disrupted systems of meaning and examine the correlation between disruption following exposure to morally injurious events is necessary in demonstrating precipitants to CPTSD in the OEF/OIF population. The data generated by these studies would also affect the choice of interventions dictated by context of traumatic experiences and symptom expression.

Landes, Garovoy, and Burkman (2013) reviewed trends in OEF/OIF combat that place veterans at higher risk for developing CPTSD. This study identified that, as a group, veterans report higher levels of childhood abuse when compared with the general population. It also noted that as women assume a variety of roles in combat they might encounter chronic traumatic stressors that are not traditionally viewed as combat stressors (i.e., 37% of women report involvement in handling human remains vs. 29% of men). Lastly, military sexual trauma (MST) and interpersonal violence are two other areas that fall beyond the scope of this dissertation but potentially contribute greatly to the development of symptoms of CPTSD. Therefore, it is essential that studies assess for trauma exposure outside of traditional combat and the sequelae of symptoms that result, contributing to the understanding of chronic and betrayal trauma.

To date only nine studies have been published where CPTSD adults were the targets of treatment (Cloitre et al., 2012). All of these studies identified adults with childhood histories of physical and or sexual abuse. Further research that identifies adult participants with CPTSD regardless of childhood history would be helpful in revising diagnostic criteria. The data from these studies identified four stabilization treatments with no or limited trauma-focus and four with a trauma-focus. One study compared phase-based treatment with exposure-focused treatment, for which the former demonstrated superiority (Cloitre et al., 2010). It is expected that

OEF/OIF veterans would benefit from phase-based treatment, yet further studies are needed to draw this conclusion firmly.

Currently, no outcome studies comparing phase-based and skills-focused treatment specific to OEF/OIF veterans with multiple traumatic exposures have been conducted. One way to enhance research is to encourage the development of pilot studies for the assessment and treatment of CPTSD within the OEF/OIF population. Given that the OEF/OIF veteran population is yielding high dropout rates from mental health treatment, further research on the needs of veterans seeking mental health treatment is necessary. One way to enhance this dataset is by proposing focus groups of OEF/OIF veterans seeking mental health treatment to develop a qualitative understanding of the current needs of this population.

Although data have not yet been gathered to determine the effectiveness of employing ACT for trauma-related symptoms in the VA setting with OEF/OIF veterans. A multi-site examination of outcomes with OEF/OIF veterans undergoing ACT treatment versus psychotherapy controls is currently underway (Lang et al., 2012). Vujanovic, Bonn-Miller, Bernstein, McKee, and Zvolensky (2010) investigated the predictive validity of building mindfulness skills in relation to emotion dysregulation in young adults. This study as well as Vujanovic, Youngwirth, Johnson, and Zvolensky's (2009) study with individuals who had experienced traumatic events concluded that the mindfulness skills of observe and describe and acceptance without judgment were associated with enhanced emotional awareness, acting with awareness of values, and decreased PTSD symptoms. A large-scale study designed to examine how mindfulness skills relate to emotion dysregulation improvements in an OEF/OIF veteran sample would be helpful in creating effective treatment interventions.

Employing the use of structured clinical interviews, or Briere's (1995) TSI as a broadband evaluation for a range of complex trauma symptoms, may be useful in assessment of CPTSD. Insufficient data and a lack of consensus also make a recommendation for ideal duration of treatment difficult. Further research on duration of treatment would be useful in providing further recommendations for treatment following the group protocol presented here.

Concluding Remarks

This dissertation included a review of CPTSD and the unique context, risks, and symptoms connected to OEF/OIF veterans, proposing a group treatment protocol in order to enhance mental health professionals' awareness of complex traumatic stress disorders. Although there is some literature on CPTSD and the veteran population, the compilation of information and proposed protocol in this dissertation represent advancement in helping this population. OEF/OIF veterans have bravely volunteered to serve their country and placed themselves at risk in order to secure this nation, and it is necessary to continue to serve this country's veterans following their sacrifice.

The VA has deployed a range of initiatives to help veterans recover from various aftereffects of their military service. Every VA medical center offers outpatient services, including evidenced-based psychotherapies with demonstrated effectiveness. Given that OEF/OIF veterans may present with a range of treatment needs, including sub-threshold or unclear diagnostic profiles, training on CPTSD should not go unaddressed amongst mental health professionals. Designing studies that facilitate the identification of CPTSD, including effective comprehensive treatment models, will inform efforts to reduce stigma and barriers to care for veterans.

As the nation moves forward and undergoes transitions that result in a large and eagerly anticipated return of OEF/OIF veterans, clinicians must be prepared with knowledge of how compromised self-regulatory, emotional, interpersonal, behavioral, and meaning-making systems contribute to psychosocial impairments as a reaction to complex traumatic stress. The protocol presented here will hopefully provide a tool for clinicians and researchers to galvanize their momentum, rippling outwards towards the development of assessments, conceptualizations, and treatments to help veterans adjust back to life with their loved ones and the civilian society they gave so much to protect.

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APPENDIX A

Diagnostic Criteria for 309.81 Posttraumatic Stress Disorder (DSM-IV-TR)

A. The person has been exposed to a traumatic event in which both of the following were present:

(1) the person 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 self or others

(2) the person's response involved intense fear, helplessness, or horror. Note: In children, this may be expressed instead by disorganized or agitated behavior

B. The traumatic event is persistently re-experienced in one (or more) of the following ways:

(1) recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. Note: In young children, repetitive play may occur in which themes or aspects of the trauma are expressed.

(2) recurrent distressing dreams of the event. Note: In children, there may be frightening dreams without recognizable content.

(3) acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated). Note: In young children, trauma-specific reenactment may occur.

(4) intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event

(5) physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event

C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:

(1) efforts to avoid thoughts, feelings, or conversations associated with the trauma

(2) efforts to avoid activities, places, or people that arouse recollections of the trauma

(3) inability to recall an important aspect of the trauma

(4) markedly diminished interest or participation in significant activities

(5) feeling of detachment or estrangement from others

(6) restricted range of affect (e.g., unable to have loving feelings)

(7) sense of foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span)

D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:

(1) difficulty falling or staying asleep

(2) irritability or outbursts of anger

(3) difficulty concentrating

(4) hypervigilance

(5) exaggerated startle response

E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month.

F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Specify if: Acute: If duration of symptoms is less than 3 months

Chronic: If duration of symptoms is 3 months or more

Specify if:

With Delayed Onset: If onset of symptoms is at least 6 months after the stressor

APPENDIX B

CPTSD Criteria

1. Alterations in Regulation of Affect and Impulses
    a. Affect regulation
    b. Modulation of anger
    c. Self-destructive acts
    d. Suicidal preoccupation
    e. Difficulty modulating sexual involvement
    f. Excessive risk-taking
2. Alterations in Attention or Consciousness
    a. Amnesia
    b. Transient dissociation or derealization
3. Somatization
    a. Digestive symptoms
    b. Chronic pain
    c. Cardiopulmonary symptoms
    d. Conversion symptoms
    e. Sexual symptoms
4. Alterations in Self-perception
    a. Ineffective
    b. Permanently damaged
    c. Guilt and responsibility
    d. Shame

    e. Nobody can understand

    f. Minimizing

5. Alterations in perception of the perpetrator

    a. Adopting distorted beliefs

    b. Idealization of the perpetrator

    c. Preoccupation with hurting people

6. Alterations in Relationship with Others

    a. Inability to trust

    b. Revictimization

    c. Victimizing others

7. Alterations in Systems of Meaning

    a. Despair and hopelessness

    b. Loss of previous sustaining beliefs

APPENDIX C

12-Session Group Guideline

Group Sessions 1-12

Group Session 1

Goals:

- Informed Consent to treatment
- Psychoeducation on PTSD and CPTSD
- Introduction to DBT States of Mind and Dialectical Thinking

Supplemental Resources for Veteran Group Members:

- Paper/notebook/Worksheet for homework tracking

Supplemental Materials:

- White board, markers to aid in discussion and teaching points.

Supplemental Resources:

Courtois, C. A., & Ford, J. D. (2007). *Treating complex traumatic stress disorders: An evidence-based guide*. New York, NY: Guilford.

Linehan, M. M. (1993). *Skills training manual for treating Borderline Personality Disorder.* New York, NY: Guilford. pp. 63-69.

Instructions to the Clinician:

1. *Establish the Function of Group*: To get life worth living, re-engage in social, relational, leisure, and professional domains.

2. *Establish the Time Commitment to Group*: 12 weeks.

3. *Provide education on Phases of Treatment*: Phase 1 treatment is designed to provide Safety & Stabilization, to give veterans skills to deal with intense feeling states and or adjust their behaviors for more effective living.

4. *Identify Groups 1-12 as both Phase 1 and Phase 3 treatments*. After completion of this group, veteran participants may be identified for Phase 2 treatment and or repeat of Groups 1-12 to establish readiness for Phase 2 treatment.

5. *Orient members to Group Rules*
    a. Either provided by clinician or offered as a hand-out (i.e. Limits of Confidentiality; Safety: No violent behavior or threats; Respect: Using language that is not inflammatory or disrespectful; Privacy: To uphold the privacy of shared discussions; Attendance: Agreement to attend group sessions, no more than 2 consecutive misses).

    b. Elicit from group other rules if necessary to establish them.

    c. Assign a rotating Mindfulness leader/or check-in leader to each member weekly.

6. *Provide education on symptoms of PTSD and CPTSD*:
    a. Define PTSD as noted in DSM-V and common reactions following trauma (e.g., World is unsafe/unpredictable; Others are not trustworthy; Self is vulnerable). The rationale in providing this information is to assist veterans in understanding that both symptoms and core assumptions of self, others, and the world are a result of trauma, normalizing this experience.

    b. Highlight the role of avoidance (including experiential avoidance) in maintaining symptoms.

    c. Define CPTSD as exposure to sustained, repeated, or multiple traumas resulting in changes to affective, interpersonal, and self-regulatory capacities. The rationale in providing this information is designed to help veterans understand the psychological consequences of trauma can be quite varied depending on the nature, duration, and context of the traumatic experience.

    d. ***Discussion Point.*** *CPTSD results in emotional dysregulation*:
        i. Define emotional dysregulation as: Trouble identifying and tolerating emotions, having emotions change quickly and unpredictably, feeling emotions intensely, and or not feeling emotions at all. Elicit group discussion.

        ii. Create contextual understanding for emotion dysregulation. Assist veteran group members in understanding that certain symptoms arise out of adaptive behaviors that are overlearned in a particular setting/context (i.e., Checking behaviors are adaptive in combat, usually trained in boot camp. They are often over-learned so that soldiers can automatically scan their environment and keep themselves safe.) Elicit group discussion.

        iii. Behaviorally define experiential avoidance (i.e. shutting off emotions, withdrawing from emotional experiences, isolating behaviors). Assist veterans in identifying the result of living a life without emotions (i.e. short-term gain: less pain and distress, less effort to interact with

others or environment and long-term: chronic mood dysregulation, feelings of disconnection and or loneliness, difficulty with employment). Elicit group discussion.

e. ***Skill Training.*** *Introduce DBT concept of Wise Mind, Reasonable Mind, Emotion Mind:* Given that CPTSD results in under-engagement or over-engagement with emotions, the States of Mind will help veteran group members identify and organize internal experiences. It is also used to highlight the function and purpose of both emotional and rational states of mind. Ask veterans to imagine a coin. Have them describe what they see on each side of the coin. Extend the metaphor of the coin to apply to the idea of the mind. Reason and Emotion being two sides to the same mind.

   i. ***Discussion Point:*** *Emotion Mind*: Define this as a mode of being in which thoughts, feelings, sensations, urges and impulses belong. Positive and negative feelings make up Emotion Mind. Elicit examples from group (e.g., Emotion Mind is made up of sadness, anger, happiness, joy, and desire. If we imagine the saying "seeing red" we are referring to the state of mind where Emotion Mind has taken over, and the thoughts, and urges are all being driven by anger.).

   ii. ***Discussion Point:*** *Reasonable Mind*: Is the opposite side of Emotion mind. Define this as a mode of being in which you think through consequences, logically plan problem-solving. Elicit examples from group (e.g., Reasonable Mind is the computer part of your brain, the one that tells you how to get from your house to this group).

   iii. Ask veteran group members to identify when in combat Emotion Mind is useful (e.g., Fight/Flight/Freeze mechanism).

   iv. Ask veteran group members to identify when in combat Reasonable Mind is useful (e.g., problem-solving, etc.).

   v. Ask veteran group members to identify when in civilian life Emotion Mind is useful (e.g., spending time with your children, friends, or spouse).

   vi. Ask veteran group members to identify when in civilian life Reasonable Mind is useful (e.g., paying bills, budgeting expenses, planning your week).

f. *Introduce the concept of dialectics.* Dialectics is used here for readjustment in identifying both differences and similarities between adaptive warzone and civilian worldviews. Teach veteran group members that much like two sides to the same coin, dialectics is the idea that when we have two opposites, we must look for the middle-ground ground or synthesis that combine the two for effective behavioral engagement.

i. Identify that Emotion Mind and Reasonable Mind are equally important, that throughout this treatment, skills will be provided to help veterans identify what state of mind they are in and how to find a balance between Reasonable and Emotion Mind, Wise Mind.

ii. ***Discussion Point.*** *Return to States of Mind model*. Elicit from veteran group members what Wise Mind thoughts, actions, and feelings would be given the dialectic concept. Wise Mind is the integration of emotion and reasonable mind. It is that part of every person that knows something to be true, like a gut feeling.

iii. ***Skill Training.*** *Teach Observe and Describe Skills as key in Identifying Wise Mind.* Due to CPTSD and military training in which behaviors are trained to occur reflexively, the veteran group members may benefit from tools that delay behavioral action. Observe and Describe skills are tools that when used can slow reaction times and increase responsiveness opportunities. Explain that observing is sensing, experiencing, or noticing, and is usually done through our senses. Explain that describing is using words to represent what you observe.

iv. ***Practice*.** Encourage veteran group members to observe and describe out loud, noticing an object in the room. Elicit observations and descriptions that provide information about that object. Elicit what thoughts about how to use the object described emerge out of this exercise in noticing (e.g., observe and describe a chair. Notice if chair is deemed sturdy or rickety, comfortable, or uncomfortable. Although these are judgments, they begin to generate urge actions to either sit or not sit. Encourage veteran group members to notice what would happen if evaluation through Observe and Describe, is not made. What would happen if you came in the room and immediately sat down without looking?). Essentially, Observe and Describe skills will assist veterans in identifying what the problem to be solved is, what urge actions and consequences are associated with that problem and solution.

7. *Obtain commitment from Mindfulness/Check-in Leader for next session.*

8. *Assign Homework: To practice Observe and Describe skills each day of the week. To identify Emotion Mind, Reasonable Mind, and Wise Mind throughout the week. Using system most applicable for clinician, setting, and participant.*

Group Session 2

Goals:

- Elicit values
- Introduce behaviorally specific commitments
- Introduce common pitfalls to valued action
- Introduce distress tolerance skills

Supplemental Materials:

- White board, markers to aid in discussion and teaching points.

Supplemental Resources:

Linehan, M. M. (1993). *Skills training manual for treating Borderline Personality Disorder.* New York, NY: Guilford. pp. 96-103.

Harris, R. (2009). *ACT Made Simple: An Easy-to-Read Primer on Acceptance and Commitment Therapy.* Oakland, CA: New Harbinger. pp. 178-179.

Walser, R., & Westrup, D. (2007). *Acceptance and commitment therapy for the treatment of Post-Traumatic Stress Disorder and trauma-related problems*. Oakland, CA: New Harbinger. pp. 181-194.

Instructions to the Clinician:

1. *Brief review of material from last group and check in on homework.*

2. *Prompt identified veteran group member to read & lead group in Mindfulness Exercise #1, (The Continuous You, in Harris (2009), p.178-179).* This exercise is used to demonstrate increased awareness and experience the ACT concept of self-as-context.

3. *Thank veteran group member leader & have veteran group members provide one positive thing about the leader or the exercise.*

4. ***Discussion Point.*** *Elicit Life Worth Living:*
    a. Ask the veteran group members about values & life-worth-living. For example, what 1-2 differences do members hope to see at the end of the group treatment?

    b. Obtain behavioral indices of change. For example, to be a good father/mother is a noble goal, but it is important to specifically define what behaviors a good father/mother does (or refrains from doing) on a daily basis as this helps to

provide specific behaviors veteran group members can work on to achieve this goal.

5. ***Discussion Point & Practice.*** *Introduce Value-Directions.* Veterans with CPTSD have likely suffered the loss of a belief system. This exercise is introduced to begin to assist veterans in reconnecting to existential ideals.
   a. Provide group with 5 areas of valued direction: Relationships, Work/Study, Service, Health, Leisure

   b. Have each veteran group member choose 2 of the 5 valued directions to focus on each week. Have each veteran group member behaviorally define a commitment in his/her valued direction weekly. Explain that the group will take commitments seriously and troubleshoot what gets in the way of completing goals.

6. ***Discussion Point & Practice.*** *Assist veteran group members in identifying current target behaviors that gets in the way of engagement in valued direction*. This intervention assists veterans in specifying objectives of treatment. Ultimately target, or tension-reducing behaviors hope to be replaced with skill-use or valued-behavior, restoring functioning to veterans.
   a. Teach veteran group members that skill deficits fall in three areas:
      i. *Lack of Emotion Regulation:* Teach veteran group members lack of emotion regulation is when you have trouble identifying a feeling, decreasing its intensity, or knowing how to behave with it. Elicit examples from veteran group members.

      ii. *Lack of Distress Tolerance:* Teach veteran group members that distress tolerance is when after you have a feeling it's too uncomfortable and engage in some behavior to get it to stop that is no longer working for you. Elicit examples from veteran group members.

      iii. *Interpersonal Problems:* Teach veteran group members that interpersonal problems can come about for many different reasons. Some common reasons are: difficulty asking for what you want effectively, stating a refusal effectively, and or listening or understanding to what another has to say. Elicit examples from veteran group members.

7. ***Discussion Points & Practice.*** *Identify Acceptance and Commitment Therapy mechanisms of maladaptive behavior.* Veterans with CPTSD may suffer from a lack of skill set for emotion regulation and or experiential avoidance, loss of values. This intervention will assist veterans to specify the process that impedes pursuit of a valued directed life.
   a. Introduce the concept of **Cognitive Fusion**, or using language that identifies you in a particular way gets in way of valued action. Provide an example and elicit examples from veteran group members.

i. Provide the example: Having the thought "I'm a lost cause or no one cares", what do you think the urge to act is with this thought?

b. Introduce the result of **not having Values, a loss of Values, or having Conflicting Values** can get in the way of acting effective in life.

i. Provide the example: "Nothing really matters" to illustrate no values. Provide the example: "I used to care about being a good service member/employee/student, but now those things don't matter to me" to illustrate lost values. Provide the example: "I care about being respected, but people keep telling me I'm disrespecting them" to illustrate conflicting values.

c. Introduce how **Internal and External experiences** can get in the way of living in an effective, valued direction. Define internal experiences as thoughts, feelings, body sensations that get in the way; and Define external experiences as financial status, childcare responsibilities, etc.

i. Provide the example: "If I had money/service-connection then I would…" to highlight an external barrier to living in valued direction. Provide the example: "Thoughts/feelings get in the way of me going to see my children, go to the grocery store, etc." To highlight internal experiences.

ii. Highlight to veteran group members the possibility of doing despite what the mind tells you, (i.e. approaching dangerous situation despite assessment of risk). Highlight to veteran group members the possibility of re-defining a value if it is physically or psychiatrically not possible to engage in a prior valued direction, (i.e. if piloting aircraft was a value and this is no longer possible, what was the benefit of piloting? Exploration of new areas, engagement with visually stunning vistas, procedural tasks of flight, How else can these benefits be accomplished through other activities?).

iii. Highlight the cost of letting these barriers determine life course to veteran group members.

d. **Experiential Practice.** Lead veteran group members in the "Monsters on the Bus" metaphor to assist veteran group members in understanding that it is possible to continue in a values-oriented path towards desired goals in spite of internal or external distress. Veterans with CPTSD may feel displaced, frightened, and angry which may impede ability to engage in activities of daily civilian life. This metaphor highlights how willingness to pursue daily life goals is a function of treatment.

8. ***Skills Training.*** *Teach the Wise Mind ACCEPTS Skills in Direction of Values.* Veterans have been trained to use emotional regulation strategies that are most adaptive for survival and functioning within the military context. Veterans with CPTSD may rely heavily on pushing away or engaging in behaviors that reduce contact with emotions. ACCEPTS Skills enhance coping strategies for veterans so they can shift attention, and engage with the present moment effectively.

    a. Activities: Distract attention and fill short-term memory with sensations that are positive (e.g., Engage in hobby, listen to music, watch movies/television etc.).

    b. Contributing: Refocuses attention away from oneself to what one can do for others (e.g., Identifying how to be of service in current context through volunteering, through assisting a friend or family member, through joining an organization).

    c. Comparisons: Refocuses attention away from oneself to others who may be facing continued danger, threat, bodily harm; or used to refocus attention away from current pain but on current coping in comparison to a time when he/she coped less positively. This strategy is often used to recast one's own situation in a positive light (e.g., Identifying environmental and situational difficulties while in combat or on deployment that are not currently a threat (access to privacy, moderate weather, access to family/friends)).

    d. Emotions: Generate opposite emotions by engaging in activities (e.g., Identifying the urge action accompanying an emotion for instance, the urge to isolate when feeling depressed or anxious. Practicing the opposite to emotion action, instead of isolating going out in the world or being around people).

    e. Pushing away: Leaving a situation physically or decreasing cues associated with the situation (e.g., If experiencing a very high intensity emotion or urge to engage in a target behavior it is sometimes necessary to change environments and or remove items from home or other area that continue to trigger distressing experiences).

    f. Thoughts: Distracting with other thoughts (e.g., If experiencing significant rumination, encouraging the generation of other thoughts in great detail to generate more positive emotions. For instance, imagining a favorite memory, or a calming place.)

    g. Sensations: Intense other sensations can interfere with the physiological component of the current negative emotion (e.g., Holding ice cubes and squeezing a frozen lemon).

9. *Obtain commitment from Mindfulness/Check-in Leader for next session.*

10. *Assign Homework: To choose top 3 ACCEPTS skills and practice 3 times in a week. To create a behavioral goal in valued direction 2 times this week.*

Group Session 3

Goals:

- Willingness and Willfulness concepts
- Control as a Problem
- Function of Emotions

Supplemental Materials:

- White board, markers to aid in discussion and teaching points.

Supplemental Resources:

Linehan, M. M. (1993). *Skills training manual for treating Borderline Personality Disorder.* New York, NY: Guilford. pp. 39, 84

Walser, R., & Westrup, D. (2007). *Acceptance and commitment therapy for the treatment of Post-Traumatic Stress Disorder and trauma-related problems*. Oakland, CA: New Harbinger. pp. 181-194.

Instructions to the Clinician:

1. *Brief review of material from last group and check in on homework.*

2. *Prompt identified veteran group member to lead group in Mindfulness Exercise #2. (*Recognizing Mind Quality Mindfulness in Walser & Westrup, 2007, pp. 112-113). This exercise is designed to provide an experience of observation and willingness in tolerating discomfort.

3. *Thank veteran group member leader & have veteran group members provide one positive thing about the leader or the exercise.*

4. *Introduce Willingness and Willfulness concepts*. Veterans with CPTSD who engage in experiential avoidance may not be willing to experience and tolerate distress. The inability to accept pain leads to continued attempts to rid or control internal experiences.

    a. Willingness is defined as accepting what is and doing what works. Accepting is not the same thing as judging it to be good, fair, just, or right.

    b. Willfulness as imposing one's will on reality, trying to fix or refusing to do what is needed.

c. ***Discussion Point:*** Elicit examples from veteran group members on how they know when they are being Willing and Willful, targeting behavioral indices (i.e. noticing increase in anger while driving if someone cuts him/her off, and the willful urge to drive dangerously in response. Whereas a willing stance may accept that other people are unsafe drivers and notice that anger is triggered yet select the choice of driving defensively to ensure a higher value of personal/family safety is achieved, acting effectively).

d. ***Discussion Point:*** Identify how willing veteran group members are to engage in activities that are within their identified values.

5. *Present rationale for Increasing Awareness*: Awareness is the building block to getting through a crisis. If we do not practice enhancing our abilities to attend to our private experiences, we leave ourselves open to avoidance, a key factor in maintaining CPTSD symptoms. Avoidance increases distress and awareness is the key out of distress, even thought it can feel uncomfortable.

    a. ***Experiential Practice and Discussion Points.*** *Lead the group in the ACT exercise, "Don't think of Vanilla Ice Cream."*

        i. Highlight how instructing self in controlling private experiences can be difficult even if we are very willing to control them.

        ii. Highlight the strong urge to control emotions and identify the harder the struggle to control or stop emotions, the stronger and more intense, or more frequent the emotion gets.

        iii. Highlight there is a way out of this suffering; it is through being willing to experience the distress of painful emotions.

6. ***Skills Training.*** *Introduce the function of Emotions*. This intervention both imparts information regarding the function of emotions and, in doing so aims to increase willingness to identify emotions as necessary to survival rather than an obstacle to survival. Identify three basic functions of emotions:

    a. To alert us to our environment

    b. Communicate to other people

    c. Give us information about ourselves

7. ***Discussion Point:*** *Introduce how to Identify Emotion.* This intervention imparts information to assist veterans with language and awareness to identify emotions that may be constricted, dissociated, or disengaged due to multiple traumatic exposures. Educate the veteran group members on 8 primary emotions (i.e., joy, sadness,

guilt/shame, anger, fear, disgust, surprise, interest/curiosity). Identify associated thoughts, body sensations, urges, and actions to review with the group.

8. ***Discussion Point:*** *Summarize factors that impede the pursuit of values.* This intervention links the above information on the necessity of recognizing emotions with the dialect that intense emotions, experiential avoidance, and urge action generated from emotion can get in the way of pursuing values.

    a. Willfulness can get in the way of pursuing values. Elicit examples from group (e.g., The common phrase, "Once I feel motivated/better/less depressed/anxious then I'll go back to school/work/join a team.").

    b. Strong emotions can get in the way of pursuing values. Elicit examples from group (e.g., "I feel so angry, it's impossible for me to drive to the store").

    c. Willfulness over having strong emotions can get in the way of pursuing values. Elicit examples from group (e.g., "I hate feeling so anxious and I can't go to the market/to dinner/to play with my kids/to school unless I get rid of this anxious feeling").

    d. Help veteran group members identify what emotions get in the way of pursuing their values and, how they know when they are being willful.

9. *Obtain commitment from Mindfulness/Check-in Leader for next session.*

10. *Assign Homework: To choose an emotion that impedes in pursuit of values or goals and track it throughout the week, notice its trigger, thoughts, body sensations, urges, and actions at least 3x/week. Identify what value or goal it stands in the way of pursuing and how willfulness is present.*

Group Session 4

Goals:

- Model for Experiencing Emotions
- Emotion Regulation Strategies

Supplemental Materials:

- White board, markers to aid in discussion and teaching points.

Supplemental Resources:

Linehan, M. M. (1993). *Skills training manual for treating Borderline Personality Disorder.* New York, NY: Guilford. p. 85.

Ogden, P., Minton, K., & Pain, C. (2006). *Trauma and the body: A sensorimotor approach to psychotherapy.* New York, NY: W.W. Norton & Company. pp. 206-233.

Instructions to the Clinician:

1. *Brief review of material from last group and check in on homework.*

2. *Prompt identified veteran group member to read & lead group in Mindfulness Exercise #3.* (Adapted from Ogden, Minton, & Pain, 2006, p.226: Have veteran group members place one hand over the heart area and one hand on the belly. Instruct veteran group members to begin to breathe in this position, noticing the rise and fall of each hand. Instruct veteran group members to focus on breathing into the belly, noticing it expand as if it were a balloon. Instruct veteran group members to focus on breathing into belly, noticing it expand as if it were a balloon. Instruct veteran group members to focus on breathing into the chest, noticing it rise an fall beneath the hand. Encourage veteran group members to begin to breathe into the belly first and then, into the chest. Practice for 4 minutes). This exercise is designed to provide veterans with skills necessary to experientially connect to the present moment and to their bodies.

3. *Thank veteran group member leader & have veteran group members provide one positive thing about the leader or the exercise.*

4. *Orient veteran group members that after identification of emotional experience, they will learn how to use strategies to regulate that experience through Sensorimotor Psychotherapy.* Given that veterans with CPTSD may have undeveloped or lack of emotional regulation strategies, Group 4 begins to provide practice in emotion regulation.

5. ***Skills Training & Practice.*** *Present the model for experiencing emotions.* This intervention provides information on how to reduce experiential avoidance.
    a. Notice private experience (i.e., Observe Skill, encourage veteran group members to identify physical reactivity to emotions).

    b. Put words and Describe (i.e., Describe Skill e.g. "I'm feeling my stomach tightening, I feel my jaw clenching")

    c. Notice judgment and urge to jump out of feeling, stop it, or change it to something different (i.e., "This doesn't feel good, I want it to stop, just relax").

    d. Stay in it (i.e., Willingness Skill, "It is an emotion and physical reaction and it will pass.")

    e. Notice it passing.
        i. Use wave metaphor (i.e., Draw a wave on the board to represent an emotional experience. Notice that there is a start point where lower intensity of emotion begins to build as time goes on. Notice there is a high peak, where the intensity is the highest and a decrease in intensity as time progresses. Orient veteran group members to this pattern of emotional experiences. Orient veteran group members to the role avoidance or tension-reducing behaviors serve in deceiving the mind into thinking that building to intensity or its highest peak is how it will always be. Encourage group members to use skills to tolerate the distress of an emotional experience so that the complete cycle, or wave, can pass. Over time the peak of emotional intensity may lessen, or habituate).

6. ***Skill Training.*** *Present the 4 ways to regulate emotions via the body/mind*. This intervention provides veterans with skills to regulate emotions that are present-focused.

    a. Use Heart/Belly breathing (i.e., Place one hand on the belly and one hand on the chest. Direct into deep inhales and exhales, with the goal being to direct air into the belly and allow for the rise of the hand on the belly with each inhale and fall of the hand with each exhale.

    b. Physical Grounding (i.e., While seated, press feet into the ground and or press hands into armrests or head into support.)

    c. Mental Grounding (i.e., Take notice of all colors in the room, categorize the objects in the room, name top 5 favorite songs/sports teams/television shows).

    d. Vertical Alignment (i.e., While seated and if able, press feet into ground. Tilt pelvis so the navel is curled toward the spine. Sit as straight as possible with shoulders over hips. Align neck and head with spine.)

7. ***Skill Training & Practice.*** *Introduce and practice the Oscillation skill*. This intervention is designed to assist veterans learn a technique to tolerate distressing emotional and physical states.

    a. Present the Rationale: This skill is designed to help stay present when difficult or distressing feelings emerge.

    b. Clinician directs group to choose one positive event this past week

    c. Clinician then conducts mindfulness exercise directed at bringing to mind sensations associated with positive event focused on thoughts, sensory data, etc.

    e. Clinician then directs veteran group members to shift posture to open/receptive (palms up in lap, relaxed posture).

    f. Veteran group members are allowed to open eyes occasionally in order to re-establish contact with the present moment if the exercise is too intense.

    g. Clinician directs group that this is a place to return to when the urge to shut-down or escalate anger arises. The goal is to stay here long enough to be able to use Opposite to Emotion Action (described below).

8. ***Skill Training.*** *Introduce Opposite to Emotion Action*: This exercise is introduced as a behavioral approach when veteran group members have a strong urge to avoid:

    a. ***Discussion Point.*** *Elicit from veteran group members which emotions are most distressing and lead to avoidant or target behaviors.*

    b. ***Discussion Point & Practice.*** *Elicit from veteran group members what action urges are associated with* Fear, Guilt/Shame, Sadness, Anger. (i.e. urge to escape, urge to hide/withdraw/shutdown, urge to isolate, urge toward angry outburst or avoid feelings).

    c. ***Discussion Point & Practice.*** Elicit from veteran group members what opposite to emotion action may be with Fear, Guilt/Shame, Sadness, Anger (i.e. approach situations that elicit anxiety, tolerate guilt/shame and approach people or situations, approach and engage in situations when feeling sad, either gently avoid a person or situation, or express distress skillfully when angry).

9. *Obtain commitment from Mindfulness/Check-in Leader for next session.*

10. *Assign Homework: Have veteran group members choose 1 Emotion Regulation strategy and practice Oscillation skill 3 x/ week in order to practice Opposite to Emotion Action.*

Group Session 5

Goals:

- Psychoeducation on Moral Injury and Shame/Guilt
- Emotion Regulation with Shame/ Guilt

Supplemental Materials:

- White board, markers to aid in discussion and teaching points.

Supplemental Resources:

Linehan, M. M. (1993). *Skills training manual for treating Borderline Personality Disorder.* New York, NY: Guilford. p. 59-65, 85.

Walser, R., & Westrup, D. (2007). *Acceptance and commitment therapy for the treatment of Post-Traumatic Stress Disorder and trauma-related problems*. Oakland, CA: New Harbinger. pp. 14-16, 171-174.

Instructions to the Clinician:

1. *Brief review of material from last group and check-in on homework.*

2. *Prompt identified veteran group member to read & lead group in Mindfulness Exercise #3* (Body Scan, in Walser & Westrup, 2007, pp. 44-46). This exercise is designed to enhance self-guided relaxation, although for some survivors of traumatic experience it may remind him/her of the trauma. If this is the case, this exercise then functions to practice awareness of avoidance of contacting the body, and practicing tolerance of self-as-context.

3. *Thank veteran group member leader & have veteran group members provide one positive thing about the leader or the exercise.*

4. *Define Moral Injury* as "an action, or inaction in which an individual's personal moral code, rules, etc. were violated". Veterans with CPTSD are at particular risk for having experienced moral injury and suffer from loss of value structure, global loss of personal goodness/worthiness and loss of meaning. This discussion can contextualize and normalize the experience of moral injury with which these veterans have struggled.

    a. ***Discussion Point.*** *Explain and discuss* this definition with veteran group members to create a personal understanding of moral injury.

b. ***Discussion Point.*** *Highlight results of moral injury (*thoughts about self, others, and the world to begin to help veteran group members identify schemas that may be activated by exposure to morally injurious events).

c. ***Discussion Point.*** *Describe symptoms resulting from Moral Injury* which may include increased dissociation, abandoned moral structure, sense of profound isolation, guilt and shame, dysthymia, avoidance, loss of meaning, feeling burden to others, strained interpersonal relationships.

5. ***Skills Training & Discussion Point.*** *Identify Schemas & Shame.*
   a. *Introduce Schemas.* Schema is a way we view the world, make sense of it and anticipate how people will respond to our actions. Veterans may notice they make sense of the world differently following military service and others get confirmation of a previously held worldview. Especially after exposure to a morally injurious event(s), the experience of shame/guilt etc. may start to predict how veterans think of themselves, others, and the world. This intervention is designed to impart information, create curiosity and awareness of operating schemas, identify behavioral outcomes of such schemas, and prepare for Phase 2 trauma reprocessing work.

      i. Some people begin to make meaning of the world and follow something called the Just World Belief, Good things happen to good people and bad things happen to bad people. We eventually notice that the world is more complicated than that, but this way of organizing the world may still linger. If you've ever had the thought, "Why me?" or "Why not me?" that is the activation of the Just World Belief.

      ii. When an unexpected event occurs that does not fit beliefs, we may try to either make our meaning of the event fit our beliefs. An example of this is, "I'm to blame because I should have protected my fellow service members or should not have followed that order".

      iii. Another way of making sense of traumatic events is by changing our beliefs to make sense of the event. An example of this is, "No one can be trusted after my commander gave me the orders that injured or killed my fellow service member".

      iv. These thoughts can represent feelings about the event, and they may also begin to shape or guide behaviors that are not in-line with values.

   b. Assist veterans in identifying specific behaviors or emotions that get avoided due to these thoughts, or schemas (e.g. avoiding social relationships, avoiding roles of responsibility, engaging in target behavior when the belief is activated).

c. Remind veteran group members that specific work on events that led to a change in worldview would be the focus of Phase 2 trauma reprocessing treatment.

6. ***Discussion Point and Skill Training.*** *Introduce Shame/Guilt*. Shame/Guilt can result from participation in warfare, especially following morally injurious events. Therefore elaboration on thoughts, feelings, and urge actions that accompany shame/guilt is provided in Group 5 to assist veterans in identification of internal cues for emotion regulation strategies as well as preparation for Phase 2 trauma work.

    a. Elicit specific thoughts associated with Shame. (For example, "I shouldn't have done that. I've screwed up").

    b. Elicit bodily sensations associated with Shame. (For example: warm face, sensation of unease in stomach, throat).

    c. Elicit urge actions accompanying Shame. (For example: urge to escape, shut-down, avoid).

    d. **Discussion Point & Practice.** Explain to veteran group members with reference back to Group 3 how to differentiate between primary and secondary emotions. Primary emotions are hard-wired into humans for evolutionary protection. Secondary emotions are either feelings that result as a combination of primary emotions or, most frequently, as feelings about the primary emotion (e.g., If someone is noticing the feeling of shame/guilt, and has a desire to avoid this feeling, he/she may feel anger instead. He/she may not even notice the shame/guilt at first, but instead feel a very intense feeling of anger. Shame/guilt is the primary emotion in this example and anger is the secondary emotion). Elicit group discussion to practice identification of primary and secondary emotions generated from the exercise above.

    e. **Skill Training.** Explain the Function of Shame/Guilt. Shame provides individuals with information on the rules of their identified social group. Shame alerts individuals they have acted outside of their wise mind values. Sometimes shame is unjustified; that is, when shame occurs when it is not warranted by the situation, or it goes on without end. Elicit group discussion of the impact of this function on behaviors in daily life.

    f. ***Skill Training & Practice.*** *Explain ways to alleviate shame.* This intervention continues skill training in emotion regulation.

        1. Observe & Describe the emotion and urge action associated with the emotion (e.g., Noticing shame/guilt and the urge to withdraw and isolate).

        2. Use Behavioral Chain Analysis to find out what triggered the emotion (e.g., Identifying trigger for shame/guilt being a thought, "I'm to blame because I should have protected my fellow service member and not have

followed that order to" generated from learning new information about former service members).

3. Use Willingness and Wise Mind skills to normalize the emotion (e.g., Notice urge to push away shame/guilt and isolate with depression. Activate wise mind to identify to what state of mind this thought belongs. Encourage acceptance of shame/guilt showing up in the moment and choice to tolerate/experience the feeling rather than change it/shut it down).

4. Use Emotion Regulation or Distress Tolerance Skills to reduce intensity (e.g., Utilize emotion regulation skills to tolerate shame/guilt with skills to reduce intensity).

5. Take Opposite Action in Valued Direction to increase positive emotions (e.g., Identify value being declared by shame/guilt over protection of others. Encourage an action in the moment that is in the service of that value, for instance, approach behavior to contribute (ACCEPTS skill)).

7. *Obtain commitment from Mindfulness/Check-in Leader for next session.*

8. *Assign Homework: Pursue 2 behavioral goals in valued direction. Notice if Shame becomes a passenger on the bus, Practice Emotion Regulation or Distress Tolerance Skill and Take Opposite Action in Valued Direction.*

Group Session 6

Goals:

- Behavior Analysis
- Model self-validation
- Model problem-solving

Supplemental Materials:

- White board, markers to aid in discussion and teaching points.

Supplemental Resources:

Linehan, M. M. (1993). *Skills training manual for treating Borderline Personality Disorder.* New York, NY: Guilford. pp. 31, 42-48.

Walser, R., & Westrup, D. (2007). *Acceptance and commitment therapy for the treatment of Post-Traumatic Stress Disorder and trauma-related problems*. Oakland, CA: New Harbinger. pp. 20-26.

Instructions to the Clinician:

1. *Brief review of material from last group and check in on homework.*

2. *Prompt identified veteran group member to read & lead group in Mindfulness Exercise #4* (Finding-the Center in Walser & Wastrup, 2007, pp. 112-113). This exercise is designed to practice finding an internal, stable, centered place from which to practice observation of self.

3. *Thank veteran group member leader & have veteran group members provide one positive thing about the leader or the exercise.*

4. ***Skill Training.*** *Introduce Functional Behavior Analysis*. Given the behavioral ramifications of CPTSD, veteran group members may suffer from targeted behaviors such as isolation, rumination, angry outbursts, substance use, or other tension-reducing behaviors. These guidelines stress the importance of first understanding the context and function of such behavior prior to creating interventions and more adaptive behavioral responses.

    a. Introduce rationale of behavior analysis to group as: This treatment assumes that all behaviors have a cause and a reason for getting used, even if they are not effective in obtaining goals or communicating. Behavior analysis is a skill that assists individuals in understanding what keeps behaviors in place and how to change them in order to live in a valued direction.

b. After a behavioral analysis is conducted, solutions to change the outcome are generated based on skills.

5. ***Discussion Point & Practice.*** *Have each veteran group member identify a problem behavior/passenger on the bus* (e.g., substance use, dissociation, self-criticism, interpersonal problems, PTSD-related problems, e.g., flashbacks).

6. ***Practice.*** *Assist veteran group members in identifying internal and external antecedents.* This intervention assists in developing active behavioral problem-solving strategies.

    a. Antecedents: May include feelings of fear, anxiety, shame, etc. and invalidation from significant others, friends, coworkers, trauma cue (i.e. service connection is denied; diagnosed with a mental health disorder; argument with family/friends; find out former service members injured or killed).

    b. Consequences: May include temporary relief from problem thoughts, emotions, followed by escalation of avoidance behaviors, negative views of self, and or dysfunctional behaviors (i.e. reduces intensity of fear, anxiety, shame immediately; distracts; creates other problems).

7. ***Practice.*** *Assist veteran group members in identifying why that day in particular it makes sense that this passenger on the bus is aboard, (Identify Prompting Event) as well as identifying the long-term pain of continuing to act with this behavior pattern (Identify Consequences Of Behavior To Be Changed).* This intervention builds on developing active behavioral problem-solving strategies. Identification of "links in the chain" illustrates how emotion dysregulation and behavioral dysregulation are both triggered by prompting events. The step-by-step behavioral analysis assists veterans in contextualizing dysregulation as it occurs in their present-lives, noting but not reifying the traumatic schema cue. The chain analysis provides an opportunity to develop active problem solving; each "link" in the chain is a place to insert skill training to change maladaptive behaviors. For example: A veteran with CPTSD receives information that reminds he/she of a traumatic experience, after which he/she binges on alcohol and withdraws. A behavioral chain analysis may focus on automatic thoughts: (e.g. "Why is this still happening?" "I can't take care of myself, the world is too overwhelming and this is hopeless" and "I can't take this anymore"). The key emotions may be: fear, anger, sadness, guilt/shame. Action urges may be: willful non-acceptance, angry outbursts, depressive withdrawal, and alcohol use. The consequences in the environment may be: inebriation that prevents involvement with family/social support, reckless behaviors, and/or reinforced hopelessness and reduced problem-solving behavior. The chain analysis provides an opportunity to link

thoughts, emotions, urges, and actions together in sequence and develop active problem solving; each "link" in the chain is a place to insert skill training to change maladaptive behaviors.

a. Assist veteran group members in identifying key "links in the chain" (i.e., thoughts, feelings, behaviors, environmental input) that link the antecedent to problem behavior.

b. Assist veteran group members in identifying the internal and external barriers to resolution of problem behavior.

8. *Obtain commitment from Mindfulness/Check-in leader for next session.*

9. *Assign Homework: Identify 3 Distress Tolerance or Emotion Regulation skills to use today. Re-assign homework from Group 5.*

Group Session 7

Goals:

- Solution Analysis
- "ACE" Problem-Solving
- Commitment to use new strategies

Supplemental Materials:

- White board, markers to aid in discussion and teaching points.

Linehan, M. M. (1993). *Skills training manual for treating Borderline Personality Disorder.* New York, NY: Guilford. pp. 48-58.

Russ, H. (2009). *ACT Made Simple: An Easy-to-Read Primer on Acceptance and Commitment Therapy.* Oakland, CA: New Harbinger, pp. 112-113.

Walser, R., & Westrup, D. (2007). *Acceptance and commitment therapy for the treatment of Post-Traumatic Stress Disorder and trauma-related problems*. Oakland, CA: New Harbinger. p. 194.

Instructions to the Clinician:

1. *Brief review of material from last group and check in on homework.*

2. *Prompt identified veteran group member to read & lead group in Mindfulness Exercise #5* (Leaves on a Stream, in Russ, 2009, p. 112-113). This exercise is designed to practice the observation of thoughts without judgment or reaction.

3. *Thank veteran group member leader & have veteran group members provide one positive thing about the leader or the exercise*

4. ***Skill Training.*** *Introduce Solution Analysis*. Restoration of active-problem solving strategies to veterans with CPTSD is the focus in this intervention. ACE (Acceptance, Behavioral Change, and Environmental change) strategies, where the goal is to plug in skillful behaviors to get to valued living. Clinician first validates why problem behavior is present and then prompts group for ACE strategies.

    a. ***Discussion Point:*** *Acceptance solutions: Elicit examples from veteran group members and assist them in identifying strategies learned thus far that would be employed as acceptance solutions* (e.g., Mindfulness Skills: Noticing State of Mind, Using Observe and Describe to Identify action urge, Practice Mindfulness Activity of contacting the present moment through grounding, focus on bodily-sensations).

b. ***Discussion Point:*** *Change solutions (Behavioral): Elicit examples from veteran group members and assist them in identifying strategies learned thus far that would be employed as change solutions* (e.g., Emotion Regulation strategies, Distress Tolerance [ACCEPTS] strategies, or Interpersonal Effectiveness Skills [Groups 8 and 9]). Facilitate identification of conflicting or abandoned value-directions. Facilitate identification of avoidant coping that may be impeding adaptive behavior. Facilitate identification of fusion with a thought is preventing behavioral-change.

c. ***Discussion Point:*** *Environmental solutions: Elicit examples from veteran group members and assist them in identifying how to modify contingencies in the environment (i.e., stimulus control).* Environmental solutions may be removing alcohol from the home, removing mechanisms that lead to engagement in safety behaviors (e.g., excessive alarms, traps, weapons).

5. ***Practice.*** *Assist veteran group members in making a commitment to potential solutions defined in ACE.* The public commitment to practice skills learned throughout these group guidelines is designed to increase compliance and create committed patterns of valued behavioral action.

6. *Obtain commitment from Mindfulness/Check-in leader for next session.*

7. *Assign Homework: Commit to solutions, these are new target behavior. If the solutions are not successful, or not implemented, conduct a chain analysis at next group.*

Group Session 8

Goals:

- Interpersonal Effectiveness skills
- Civilian vs. Military differences in communication

Supplemental Materials:

- White board, markers to aid in discussion and teaching points.

Supplemental Resources:

Linehan, M. M. (1993). *Skills training manual for treating Borderline Personality Disorder.* New York, NY: Guilford. pp. 70-84.

Walser, R., & Westrup, D. (2007). *Acceptance and commitment therapy for the treatment of Post-Traumatic Stress Disorder and trauma-related problems*. Oakland, CA: New Harbinger. pp. 131-137, 212-213.

Instructions to the Clinician:

1. *Brief review of material from last group and check in on homework.*

2. *Prompt identified veteran group member to read & lead group in Mindfulness Exercise #6* (Observer Exercise, in Walser & Westrup, 2007, pp. 119-123). This exercise is designed to help experientially increase participants awareness of the observer self, practicing acceptance of private experiences that arise.

3. *Thank veteran group member leader & have veteran group members provide one positive thing about the leader or the exercise*

4. ***Skill Training & Discussion Point.*** Veterans with CPTSD may have repeated experiences where they were not able or effective at protecting themselves (physically or emotionally). In order to increase active and effective interpersonal engagement, interpersonal skills training is learned and practiced. Introduce 3 Objectives in Effective Civilian Communication. Encourage veteran group members to provide examples of each. Identify when each objective may be important in military contexts as well.

    a. Objective Goal: A request or refusal.

    b. Relationship Goal: To keep or maintain a good relationship.

c. Self Respect Goal: To maintain self-respect and conduct self within your values.

5. ***Discussion Point.*** *Introduce Factors contribute to Problems in Obtaining Objectives*. Veterans with CPTSD experience symptoms of depression, loss of meaning and connectedness to others. By improving effective civilian communication styles, it is hoped that an increase in use and benefit of social support is yielded.

    a. *Skill Deficit:* Introduce as lacking the skills to be able to ask or refuse requests (e.g., Not knowing what to say to get what you want or refuse requests).

    b. *Emotions:* Introduce as interference from emotions (e.g., Knowing what it is you want to say, but big emotions such as anxiety, anger, shame get in the way of being able to use skills effectively).

    c. *Thoughts:* Introduce as interference from thoughts about self, others, world (e.g., Worry-thoughts such as "I know I'm going to get anxious and I have to hide it from everyone; I need to be able to escape if I get too angry.").

    d. *Indecision or Rigidity:* Introduce as interference from conflicting feelings and insistence or willfulness (e.g., Getting stuck on morality and or fairness rather than being effective. For instance, Getting stuck on morality and/or fairness rather than being effective. For instance, "I've run out of my medications and the VA won't fill them, this is another instance of my life being ruined. There's nothing I can do").

    e. *Environmental Influences:* Introduce the instances when the environment is not yielding to a request or refusal, despite skillfulness (e.g., Skillfully asking for a medical specialist at the VAMC and being told that you have to see a primary care doctor for a referral first. The primary care doctor has no availability for 3 months).

6. ***Discussion Point & Practice.*** *Encourage veteran group members to identify from the list above, which is the top obstacle that gets in the way of being of interpersonally effective. Develop skill practice to target this obstacle.*

7. ***Practice.*** *Introduce Context and Communicating Effectively.* Highlight how interpersonal objectives and problems depend on context, which then determines what styles to use in order to be effective. Elicit group discussion and application to current interpersonal exchanges.

8. ***Discussion Point.*** *Review differences between Civilian and Military styles of communication.* This intervention is designed to validate the struggle of a cultural and stylistic shift veterans make with re-integration into civilian life. It is also designed to

notice the possibility for dialectic synthesis through using DEARMAN skill strategies to be direct, specific, personal and fair in communication.

a. Direct, Blunt, Concise vs. Detailed, Explanatory (e.g., "I won't sit in the passenger seat." vs. "I'd rather not sit in the passenger seat because it makes feel worse on long-drives.")

b. Goal-specific vs. Rationale-specific (e.g., "You need to re-make this bed because it isn't done correctly." vs. "You need to re-make this bed because the sheet is falling off and someone can trip easily.")

c. Hierarchical vs. Equal (e.g., "You need to complete this task, because I say so." vs. "I'd like for you to complete this task because it helps accomplish our shared goal.")

d. Impersonal vs. Personal (e.g., "I'm not going to complete that extra work for the project, it is not in my job description." vs. "I have a lot of tasks that I need to complete before I could take on extra work.")

e. *Elicit more examples from veteran group members.*

9. ***Skill Training.*** *Identify remedy for Skill Deficit Communication Problem:* Use this acronym to practice interpersonal skill in sequence, for making a request, refusal, or resolve a conflict.
    a. D: Describe the situation with just the facts.

    b. E: Express feelings or opinions

    c. A: Assert either request or refusal behaviorally.

    d. R: Reinforce the other person by giving a reason why they should heed this request or refusal.

    e. M: stay Mindful of objective. This may require use of "broken record" or a catch phrase developed with a combination of Express, Assert, and Reinforce that is repeated throughout the negotiation.

    f. A: Appear Confident in non-verbal and verbal behaviors.

    g. N: Negotiate reducing request, practicing joint problem solving, re-evaluating objectives.

10. ***Practice:*** *Role Play.*
    a. *Present Situations 1-3 and instruct veteran group members to break off into pairs to practice. Clinician can coach each set of pairs as they practice using the DEARMAN in each situation (i.e., Refusal, Conflict Resolution, and Request). If veteran group members are having significant difficulty using*

DEARMAN with the given situation, attempt to practice each piece of the DEARMAN as a group, with each member taking on step and rehearsing it aloud to the group.

i. Situation 1: You are in line at the VA waiting for your medications and someone says they are in a rush and asks to go ahead of you. It's a long line and you are running late. First, identify what is your objective and then develop and practice a DEARMAN. (Refusal)

ii. Situation 2: You are at home and begin to get into a disagreement with your spouse, significant other, family member, or roommate. First, identify what your objective is, and then develop and practice a DEARMAN. (Conflict Resolution)

iii. Situation 3: You are in a work setting or school setting, with a boss or teacher that is very busy and stressed. You are given a project with an unmanageable deadline. You'd like to request time off, and or an extension. First, identify what your objective is, and then develop and practice a DEARMAN. (Request)

11. *Assign Homework to practice skills of DEARMAN Skill 1 x week in service of committed action.*

Group Session 9

Goals:

- Interpersonal Effectiveness Skills: DEARMAN
- Role plays

Supplemental Materials:

- White board, markers to aid in discussion and teaching points.

Supplemental Resources:

Linehan, M. M. (1993). *Skills training manual for treating Borderline Personality Disorder.* New York, NY: Guilford. pp. 45, 96-103.

Instructions to the Clinician:

1. *Brief review of material from last group and check in on homework. Note: veteran group members that do not complete DEARMAN homework from Group 8 will have a chain and solution analysis completed on them to model problem-solving in Step 4.*

2. *Prompt identified veteran group member to read & lead group in Mindfulness Exercise #7* (Be Still Mindfulness, in Walser & Westrup, 2007, pp. 86-87). This exercise is designed to continue to practice willingness and observation of private experiences. Practicing withholding response to action urges (to shift in chair, scratch an itch, etc.) is also a produce of this exercise.

3. *Thank veteran group member leader & have veteran group members provide one positive thing about the leader or the exercise.*

4. *Clinician assists veteran group members in conducting a chain analysis on incomplete homework assignment with those members that do not complete assignment.* (See techniques in Group 6).

5. *Clinician assists veteran group members in conducting a solution analysis to assist group member(s) in identifying where skills-use would have helped improve completion of homework.* (See techniques in Group 7).

6. *Clinician has veteran group members re-commit to doing solutions in service of completing homework assignment*.

7. ***Skill Training.*** *Introduce GIVE skill to enhance a DEARMAN for Relationship Effectiveness*. These relational-interpersonal skills are especially relevant for veterans with CPTSD in order to learn and practice skills for empathic connection to increase use of social support and learn skills to self-validate.

a. G: Be Gentle (i.e., Avoid attacks, threats, and judgments).

b. I: Act Interested. (Ask questions, repeat details, nod your head, sustain eye contact).

c. V: Validate. Communicate that affirms what the other person is saying is accurate (i.e., Using Validation Skills in next step). Encourage veteran group members to identify why this step may be so important if the goal is to keep a good relationship.

d. E: use an Easy Manner (e.g., smile, try humor, use an informal tone of voice).

8. ***Skill Training and Practice.*** *Introduce Validation.* Define validation as a skill that acknowledges the other person's feelings, wants, and difficulties with the situation (e.g., practicing understanding out-loud). Emphasize there are many different ways to communicate understanding.
    a. Introduce and practice levels of validation:
        i. Staying awake, attentive – non-verbal communication (e.g., eyes open, nodding head, sustained eye contact).

        ii. Summarizing –repeating or paraphrasing what is being said.

        iii. Stating the Unsaid –voicing what the other person may be leaving out, or reading-between-the-lines.

        iv. Using Context – understanding a reaction given that person's history (e.g., why it makes sense that someone is not trusting given a past history of chronic lying).

        v. Normalizing – stating how another person's reactions make sense to a lot of people.

        vi. Genuine – stating how you see the situation and how you feel.

        vii. Share – sharing your struggle with the similar issue.

9. ***Practice.*** *Role Play. Present Situations 1-3 and instruct veteran group members to break off into pairs to practice. Clinician can coach each set of pairs as they practice using the DEARMAN+GIVE, incorporating as many validation levels they can. If veteran group members are having significant difficulty using validation skills with the given† situation, attempt to practice each validation skill as a group, with each member taking on a validation skill from the seven listed and rehearsing it aloud to the group.*

    a. Situation 1: You are in line at the VA waiting for your medications and someone says they are in a rush and asks to go ahead of you. It's a long line and you are running late. First, identify what is your objective and then develop and practice a DEARMAN. Second, identify which Validation Skills

you want to use (minimum of 3). Practice DEARMAN with Validation. (Refusal)

b. Situation 2: You are at home and begin to get into a disagreement with your spouse, significant other, family member, or roommate. First, identify what your objective is, and then develop and practice a DEARMAN. Second, identify which Validation Skills you want to use (minimum of 3). Practice DEARMAN with Validation. (Conflict Resolution)

c. Situation 3: You are in a work setting or school setting, with a boss or teacher that is very busy and stressed. You are given a project with an unmanageable deadline. You'd like to request time off, and or an extension. First, identify what your objective is, and then develop and practice a DEARMAN. Second, identify which Validation Skills you want to use (minimum of 3). Practice DEARMAN with Validation. (Request)

10. *Assign Homework to identify two relationships or instances where they will practice at least 3 Validation Skills each day.*

Group Session 10

Goals:

- Identifying Valued Direction
- Setting Goals

Supplemental Materials:

- White board, markers to aid in discussion and teaching points.

Supplemental Resources:

Linehan, M. M. (1993). *Skills training manual for treating Borderline Personality Disorder.* New York, NY: Guilford. pp. 18-20, 33-36.

Walser, R., & Westrup, D. (2007). *Acceptance and commitment therapy for the treatment of Post-Traumatic Stress Disorder and trauma-related problems*. Oakland, CA: New Harbinger. pp. 140-149, 151-159.

Instructions to the Clinician:

1. *Brief review of material from last group and check in on homework.*

2. *Prompt identified veteran group member to read & lead group in Mindfulness Exercise #8* (What do you stand for exercise, in Walser & Westrup, 2007, pp. 145-146). This exercise is designed to assist veterans in identifying what they value.

3. *Thank veteran group member leader & have veteran group members provide one positive thing about the leader or the exercise.*

4. ***Discussion Point.*** *Introduction to Values*: Verbal statements that indicate qualities of action. Values are never obtained as an object but can be pursued at any moment with specific behaviors. Valued-behaviors yield positive consequences and supply meaning to life.

5. ***Discussion Point & Practice.*** *Identification of Valued Direction*. Veterans with CPTSD may experience a loss of values, or unresolved conflicts between values that are clarified upon return to civilian life. Behaviors may be generated as reactive to regulate emotion or seek safety rather than organized in a valued direction. Assisting veterans with an identification of both military and civilian values works to restore meaning-making capacities to veteran group members.
    a. *Provide an example in military culture*: Some common values in military include cooperation, contribution, devotion, leadership, peacefulness, obedience, and restraint.

b. *Elicit veteran group member feedback on the accuracy of these values*. Elicit veteran group member feedback on how these values are used as a compass, or guide, and not ends of themselves (e.g., Is cooperation achieved as an objective and then put aside? Or is it continually achieved, and then re-pursued).

c. *Review that the function of values is to serve as a compass, guiding behavioral choices*. Elicit examples from veteran group members of how values have served as compass guides for behavior/action. Identify five areas of potential values: Relationships, Work/Study, Service, Health, Leisure. Identify values vs. goals regarding these areas, (for instance: competence, autonomy, relatedness, mastery, attachment & security, belongingness, self-organization, self-regulation. This intervention is designed to re-establish value-direction for veteran group members.

6. ***Practice.*** *Introduction to Goals:* Specific objectives that are obtained through behaviors guided by value-direction. Elicit from veteran group members what goals fit their values (For example, Relationship goal: Being an active parent, Goal to support this value: Agreeing to pick up child from school and spend quality time together. Work/Study goal: Putting forth effort and rewarded by making money, Goal to support this value: Meet with vocational counselor to identify open positions).

7. *Identify goals or specific behavioral objectives that can be pursued in the next week in top 4 valued areas*.

Group Session 11

Goals:

- Identifying Skills Use
- Identifying Barriers to Valued Direction Actions

Supplemental Materials:

- Chessboard & playing pieces, if no access to a chessboard, then have veteran group members imagine the board and pieces.

- White board, markers to aid in discussion and teaching points.

Supplemental Resources:

Linehan, M. M. (1993). *Skills training manual for treating Borderline Personality Disorder.* New York, NY: Guilford. pp. 96-103.

Walser, R., & Westrup, D. (2007). *Acceptance and commitment therapy for the treatment of Post-Traumatic Stress Disorder and trauma-related problems*. Oakland, CA: New Harbinger. pp. 116-118, 169-170.

Instructions to the Clinician:

1. *Brief review of material from last group and check in on homework.*

2. *Prompt identified veteran group member to read & lead group in Mindfulness Exercise #9* (Place of Peace in Walser & Westrup, 2007, p. 142). This exercise is designed to bring compassion and acceptance to the veteran group members' experience.

3. *Thank veteran group member leader & have veteran group members provide one positive thing about the leader or the exercise.*

4. ***Discussion Point & Practice.*** *Introduce and Identify: Obstacles to Committed Action*
    a. ***Practice.*** Using Homework check, assist veteran group members in identifying what obstacles veteran group members met in trying to take committed action in their value direction.

    b. ***Discussion Point.*** Normalize that emotion reactions follow obstacles. Assist group members in distinguishing primary vs. secondary emotions that may be obstacles (e.g. primary emotion may be fear, secondary, discouragement).

    c. ***Skill Training.*** Assist veteran group members to reframe discouragement as an important signal to conduct a chain analysis and identify how to re-

approach with skills to improve the chances of engaging in adaptive behavior (e.g., A veteran group member made it a goal to contact a teacher regarding weeks of falling behind on assignments to ask for an extension in the service of valuing commitment. The veteran group member returns to group having considered contacting the teacher but decided against it, engaging in withdrawal behavior instead. Chain analysis may reveal the opportunity for practicing Emotion Regulation strategies, Distress tolerance and Willingness).

d. ***Discussion Point & Practice.*** *Assist veteran group members in identification of being caught in the struggle.* Assist veteran group member identify if he/she is struggling with distressing emotions and or not achieving a goal or objective stops the pursuit of valued-direction. Prompt veteran group member to identify skill to be used. (This as an opportunity to practice Letting Go (Self as Context) through Chessboard or Ski metaphor).
   i. *Conduct Chessboard metaphor*

   ii. *Conduct Ski metaphor*

e. ***Discussion Point & Practice.*** *Identify when veteran group members get caught in willfulness.* Assist veteran group members in identifying if willfulness, or a need to control other people, the outcome, environment, or private experiences which get in the way of pursuing valued-direction. Use the Socratic Questioning and Mindfulness (Control as a Problem) to access willingness (e.g., A veteran group member made a goal to contact his/her estranged spouse to request visitation of children in the service of valuing parenthood as being involved with children. The veteran group member returns to group resolving not to contact the spouse after attempting and being met with interpersonal difficulties, and emotional pain. The veteran group member would first be praised and validated for the attempt and then moving to change-based strategies: "You are picking your value, and in this value there may be pain. What would happen if you could choose this value freely and not link it to an outcome or avoidance of pain? Are you willing to experience distress and accept that the environment may be painful along the way to pursuing a value-direction?").

f. ***Discussion Point & Practice.*** *Identify when veteran group members have chosen a value and or goal that is accompanied by distress, what skills they can use to tolerate the distress.* Cue for acceptance/mindfulness, distress tolerance, or emotion regulation strategies.

Group Session 12

Goals:

- Relapse prevention
- Review Skills
- Identification of high-risk situations/triggers/etc.
- Create Coping Plan
- Referrals

Supplemental Materials for Veteran Group Members:

- Index Card or Workbook to record Coping Plan

Supplemental Materials:

- White board, markers to aid in discussion and teaching points.

Supplemental Resources:

Walser, R., & Westrup, D. (2007). *Acceptance and commitment therapy for the treatment of Post-Traumatic Stress Disorder and trauma-related problems*. Oakland, CA: New Harbinger. p.181.

Instructions to the Clinician:

1. *Brief review of material from last group and check in on homework.*

2. *Prompt identified veteran group member to read & lead group in Mindfulness Exercise #10* (Joe-the-bum metaphor, in Walser & Westrup, 2007, p. 181). This exercise is designed to end the group with a sense of humor and target willingness, acceptance and tolerance of experiencing distress for the sake of pursuing a valued directed life.

3. *Thank veteran group member leader & have veteran group members provide one positive thing about the leader or the exercise.*

4. *Review the Goal of Group:* To get life worth living, re-engage in social, relational, leisure, and professional domains.

5. ***Discussion Point.*** *Review Phases of Treatment*: Phase 1 treatment is designed to provide Safety & Stabilization, to give veterans skills to tolerate intense feeling states and or adjust behaviors for more effective living. Phase 2 treatment is designed to target symptoms of traumatic stress that need to be confronted and reprocessed through exposure to the distressing memory. Phase 3 treatment is designed to give veterans skills to reconnect to social support systems, and reintegrate into civilian society in active roles.

6. *Review Main themes of Groups 1-11:*
    a. DBT Mindfulness Skills: States of Mind

    b. DBT Dialectical Thinking

    c. Willingness/Willfulness and Control as Problem

    d. Emotions: Function, Identification, Regulation Strategies

    e. Moral Injury

    f. Behavioral Analysis

    g. Solution Analysis (Acceptance, Change (behavior), and Environmental strategies)

    h. Interpersonal Effectiveness Skills, Objectives, and Differences in Communication

    i. DEARMAN and GIVE skills, and Validation Skills

    j. How to identify and pursue Values, Obstacles to Action, Problem-Solving

7. ***Discussion Point & Practice.*** *Identification of High Risk situations:* Assist veteran group members in identifying specific situations as dictated by a-e below. Assist veteran group members in their creation of a coping plan to refer back to once this group had ended. The goal is to match skills to each of these high-risk situations.
    a. *Negative Emotion States:* Noting what emotions are cues to engage in maladaptive behaviors (e.g., If a veteran group member identifies feeling anxious leads to isolation behavior, or a veteran group member identifies feeling angry leads to explosive outbursts).

    b. *Positive Emotion States*: Noting what emotions (positive) are cues to engage in maladaptive behaviors (e.g., If a veteran group member has accomplished going to work or school each day that week, by Friday feels an urge to reward him/herself. He/she allows for a celebration and engages in withdrawal or isolation behavior until Monday.).

    c. *Cravings and Triggers:* Noting environmental cues, or triggers that lead to engagement in maladaptive behaviors (e.g., If a veteran group member sees military paraphernalia and or media coverage that cues ruminative thoughts and urges to use substances.).

    d. *Interpersonal Stressors:* Noting interpersonal stressors that lead to maladaptive behaviors (e.g., If a veteran group member is vulnerable to feeling ashamed makes an error in his/her relationship and is discovered, he/she may have an urge to engage in an outburst of explosive anger or, withdraw and isolate.).

e. *Abstinence Violation Effect (i.e., Shame Tolerance):* Noting the experience of shame/guilt following a breach of self-imposed rules that leads to a shift from adaptive behavior to a pattern of maladaptive behaviors (e.g., If a veteran group member commits to using validation strategies to improve an interpersonal relationship and is unable to sustain the strategy, ending up abruptly ending the relationship instead. Afterward the veteran group member begins to withdraw and isolate from all relationships.).

8. ***Practice.*** *Coach veteran group members to identify what skills they can use to target A-E*. Encourage group members to use a variety of skills rather than rely on 1 or 2.

9. *Encourage veteran group members to write or audio-record the skills identified, creating a Coping Plan.*

10. *Provide veteran group members with Emergency phone numbers, referral information if continuing in treatment.*

APPENDIX D

Diagnostic Criteria for 309.81 Posttraumatic Stress Disorder (DSM-5)

A. Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways:

1. Directly experiencing the traumatic event(s).
2. Witnessing, in person, the event(s) as it occurred to others.
3. Learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental.
4. Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g. first responders collecting human remains; police officers repeatedly exposed to details of child abuse).

B. Presence of one (or more) of the following intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred:

1. Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s). Note: In children older than 6 years, repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed.
2. Recurrent distressing dreams in which the content and or affect of the dream are related to the traumatic event(s). Note: In children, there may be frightening dreams without recognizable content.
3. Dissociative reactions (e.g. flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present

surroundings.) Note: In children, trauma-specific reenactment may occur in play.

4. Intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).
5. Marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).

C. Persistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred, as evidenced by one or both of the following:

1. Avoidance of or efforts to avoid memories, thoughts, or feelings about or closely associated with the traumatic event(s).
2. Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).

D. Negative alterations in cognition or mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:

1. Inability to remember important aspects of the traumatic event(s) (typically due to dissociative amnesia and not to other facts such as head injury, alcohol, or drugs).

2. Persistent and exaggerated negative beliefs or expectations about oneself, others, the world (e.g., “I am bad,” “No one can be trusted,” “The world is completely dangerous,” “My whole nervous system is permanently ruined”).
3. Persistent, distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame him/herself or others.

4. Persistent negative emotional state (e.g., fear, horror, anger, guilt, shame).

5. Markedly diminished interest or participation in significant activities.

6. Feelings of detachment or estrangement from others.

7. Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).

E. Marked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two or more of the following:

1. Irritable behavior and angry outbursts (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects.

2. Reckless or self-destructive behavior.

3. Hypervigilance.

4. Exaggerated startle response.

5. Problems with concentration.

6. Sleep disturbance (e.g. difficulty falling or staying asleep or restless sleep).

F. Duration of the disturbance (Criteria B, C, D, and E) is more than 1 month.

G. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

H. The disturbance is not attributable to the physiological effects of a substance (e.g. medication, alcohol) or another medical condition.

Specify whether:

With dissociative symptoms: The individual's symptoms meet the criteria for

posttraumatic stress disorder, and in addition, in response to the stressor, the individual experiences persistent or recurrent symptoms of either of the following:

1. Depersonalization: Persistent or recurrent experiences of feeling detached from, and as if one were an outside observer of, one's mental processes or body (e.g., feeling as though one were in a dream; feeling a sense of unreality of self or body or of time moving slowly).
2. Derealization: Persistent or recurrent experiences of unreality of surroundings (e.g. the world around the individual is experienced as unreal, dreamlike, distant, or distorted).

Note: To use this subtype, the dissociative symptoms must not be attributable to the physiological effects of a substance (e.g. blackouts, behavior during alcohol intoxication) or another medical condition (e.g. complex partial seizures).

Specify if:

With delayed expression: If the full diagnostic criteria are not met until at least 6 months after the event (although the onset and expression of some symptoms may be immediate).