

GUILT AND SHAME AS THEY RELATE TO COMBAT POSTTRAUMATIC  
STRESS DISORDER (PTSD): AN ANALYSIS OF TRAUMA  
CONTENT AND RESULTING SYMPTOMATOLOGY

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This study began testing the Sewell and Williams (in press) model that differing trauma types yield differing presentations in social versus event processing domains. Other hypotheses explored trauma type with levels of guilt, and shame-proneness with anxiety. Volunteers were 44 male combat veterans being treated for PTSD. Data analyses determined whether trauma type related to guilt and perceived social support and whether shame-proneness related to levels of anxiety. High shame persons may process anxiety and social support differently than low shame persons. Results can assist professionals understand how a person's functioning is affected by certain types of trauma. Future research should focus on increasing social support for persons who have experienced trauma.

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## CHAPTER 1

### INTRODUCTION

#### Prevalence of PTSD

The pattern of psychological difficulty observed in 500,000 to 700,000 Vietnam veterans has usually been characterized as Posttraumatic Stress Disorder (PTSD; Foy, Sippelle et al., 1984; Kulka, et al., 1988; Wilson, 1980). Individuals who survive extreme, catastrophic incidents such as earthquakes, airplane crashes, or the Oklahoma City bombing, have also been diagnosed with PTSD. The symptoms exhibited by these individuals are strikingly similar to those seen in combat veterans. Researchers and clinicians dealing with the responses of women who have been raped, battered, or otherwise abused, have begun to conceptualize their clinical picture in terms of PTSD (Foa, Osalov, & Stekette, 1987). The National Victim Center and Crime Victims Research and Treatment Center (1992) carried out a national random sample of adult women and found that 12.9% (about 12 million women) had been raped at least once during their lifetime. Thus, understanding the underpinnings of PTSD is critical, given that the potential population of the disorder is not limited to combat soldiers and witnesses/survivors of accidental catastrophes.

#### Symptoms of PTSD

According to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV; American Psychiatric Association, 1994), there are 17 symptoms that comprise the diagnostic category of PTSD. First, exposure to or witnessing of a

traumatic event that was life-threatening or threatened physical integrity must have occurred. One must respond to the trauma with feelings of intense fear, horror, or helplessness. The 17 symptoms are divided into three clusters which include re-experiencing the trauma, avoiding and/or numbed responding to stimuli associated with the trauma, and increased arousal. Re-experiencing symptoms can include intrusive recollections of the event, distressing dreams, a sense of reliving the experience, or physiological reactivity from internal or external cues that resemble the event in some way. Avoidance and numbing include efforts to avoid thoughts, feelings, conversations, persons or places that remind one of the trauma, an inability to recall important aspects of the trauma, or a sense of a foreshortened future. Increased arousal can include sleep disturbances, irritability, hypervigilance, exaggerated startle, or concentration problems. The symptoms from the three clusters must last more than one month and cause clinically significant distress. A diagnosis of PTSD is considered chronic if symptoms last more than three months. PTSD may also have a delayed onset if symptoms first arise six or more months after the trauma.

#### Current Model of PTSD to be Evaluated

Anticipatory structure model. It has become clear that a theoretical model that generates empirical hypotheses regarding the underlying mechanisms for PTSD would be useful. Sewell and Cromwell (1990) discussed several models of PTSD that led to further refinements of a theoretical model tested by Sewell et al. (1996). Using Vietnam combat veterans, their study suggested that individuals who have PTSD have adopted an anticipatory structure that continually predicts further trauma. As these individuals encounter invalidating experiences, even if the experiences are dramatically different in



character from the original trauma, they are seen as further negative validating information for their construct system. In other words, there are no longer “gray” areas; processing occurs in a context of “black or white” thus impairing the ability to develop new and higher-order constructs (complex ways to predict and account for experiences). The negative anticipation and inability to process invalidating information may lead to symptoms of PTSD, including re-experiencing symptoms and depression.

Social versus event disruption model. Sewell and Williams (in press) further refined the Sewell et al. (1996) model to include the proposition that different types of trauma will yield disruptions in different conceptual domains. For example, if the trauma involves social loss, disruption in the domain of social processing will be the primary psychopathological effect. Social disruption tends to invalidate one’s beliefs regarding social relationships—both how and with whom one is socially related. Social disruption may also influence how one experiences guilt. Because guilt often involves the perceived violation of social expectations, guilt should be more related to social disruption. On the other hand, if the trauma has more focus in the area of horror and mortality-fear, the disruption will occur in the area of event processing. Event disruption should lead to higher levels of anxiety and re-experiencing symptoms of PTSD. Event disruption should be less related to guilt. Event disruption invalidates one’s constructs of “how the world is supposed to work” (Sewell & Williams, in press, p. 4). Usually disruption in both domains will occur; however one domain is likely to prevail in the clinical presentation. An extension of the model considered here posits that levels of guilt may be affected by trauma type and shame-proneness may affect levels of anxiety. People

who are shame-prone should tend to have higher levels of anxiety, as will be explained in the Models of Shame subsection.

The purpose of this study was to begin testing the theoretical model put forth by Sewell and Williams (in press), that differing types of trauma will yield differing presentations in social versus event processing domains. Specifically, the roles of guilt and shame were explored in relation to the model.

### Affect Theory

To understand how guilt and shame were conceptualized in the present study, a brief review of affect theory is necessary. According to Tomkins (as cited in Nathanson, 1997), affects are the primary human motives and the face is the primary site of action for the affect system. Tomkins believed that affect caused behaviors all over the body because of relations between physiological correlates, specific facial muscles, and specific affects. Tomkins further elaborated that there are nine innate affects: three positive (interest-excitement, enjoyment-joy, and surprise-startle) and six negative (distress-anguish, shame-humiliation, anger-rage, contempt-disgust, fear-terror, and dismissal). Affects were each given bipolar names, indicating a continuum from mild to intense.

Each affect must be activated by a characteristic array of neural stimulation such that the activator triggers the appropriate affect stored in a subcortical center. Differences in affect activation depend on the frequency of neural firing and are further divided into three levels: stimulation increase, stimulation level, or stimulation decrease (Tomkins, 1982). Tomkins stated that positive and negative affects can be activated by stimulus increase. However, only negative affects occur from sustained levels of stimulation.

Conversely, only positive affects can be activated from stimulus decrease. For example, interest-excitement occurs when there is an optimal increase in a stimulus. If the stimulus becomes too intense and sustained, then the fear-terror affect becomes the response. Enjoyment-joy occurs as a relief of stimulus decrease—the smile of pleasure represents a mild decrease while laughter represents a precipitous decrease (Nathanson, 1996). The startle response results from surprise, occurs at the most intense state of neural firing, and causes redirection of the focus of attention. Obviously, how the person interprets the interrupting stimulus determines whether the affect is positive or negative. If the stimulus maintains intensive neural firing, then a severe startle can render the person helpless as long as the startle response is emitted. This may explain increased levels of hypervigilance and higher levels of anxiety seen in PTSD.

Ekman (1972) and Demos (1983) furthered Tomkins' propositions regarding affect theory. Stone (1992) concluded it is commonly accepted that certain facial expressions are universal (independent of culture) and stated his belief that affective responses are preprogrammed for all humans.

Tomkins believed “the affect system provides the primary blueprints for cognition, decision, and action” (Tomkins, 1987, p. 139). Although primary affects are innate, humans have the ability to respond to the environment around them and thus attempt to control circumstances that evoke both positive and negative affective responses. The ultimate goal would be to maximize positive affect and minimize negative affect. Under this theory, learned stimuli and responses can contribute to initiating the affect system. The meaning one gives the affect experience allows for differences in experience for the same affect. In other words, cognition, perception, and

motor responses can lead to differences in how the affect is experienced. Although there was debate regarding whether shame was a learned or innate affect, Tomkins believed shame to be innate and an inhibitor of the positive affect of interest-excitement and enjoyment-joy. As his theory developed, he came to believe that shyness, shame, and guilt were identical as affects, but experienced differently because of differences in perceived causes and consequences (Tomkins, 1987). Shyness involves strangeness of another, guilt involves moral transgression, and shame involves inferiority (Tomkins, 1982). The present study addressed the differences between guilt and shame.

### Guilt and Shame

The psychological constructs of guilt and shame vary across the research literature. However, the general consensus is that guilt is associated with feelings of having done something wrong and for which reparation may be necessary (Caprara, Manzi, & Perugini, 1992; Gerrard & Hyer, 1994; Hendin & Haas, 1991; Joseph, Williams & Yule, 1997; Kubany et al., 1995; Kubany & Manke, 1995; Lewis, 1990; Nathanson, 1987). Guilt is more event-related. Shame, on the other hand, is viewed as a core construct in which one's entire being is seen as being defective, inferior, or flawed (Greenberg & Paivio, 1997; Lewis, 1987, 1990; Nathanson, 1997; Stone, 1992; Tangney, 1990; Tomkins, 1987; Wurmser, 1999). A person may attempt to hide the flaw from exposure so that others cannot see it (Joseph, Williams & Yule, 1997). Shame has a tendency to be trait-related (Cook, 1996). Paunovic (1998) stated that guilt tends to lead toward reparative actions whereas shame results in avoidance coping or withdrawal from the social sphere.

Some researchers say it is difficult to distinguish between guilt and shame because there is a strong relation between the two constructs (Harder & Zelma, 1990; Henning & Frueh, 1997; Kugler & Jones, 1992; Nathanson, 1992). Cook (1996) proposed that guilt is a variant of shame, but stated that investigating guilt as a separate construct by using separate measurement instruments is an “empirical dead-end for the study of psychopathology” (p. 134). However, according to Kubany (2000), most shame theorists agree that shame involves depreciation of the entire self. This total depreciation is distinctly different from guilt which involves depreciation of specific actions or behaviors. Kubany also noted that trauma survivors commonly experience shame.

Models of guilt. Kugler and Jones (1992) defined guilt as “the dysphoric feeling associated with the recognition that one has violated a personally relevant moral or social standard” (p. 318) and further theorized that it can be adaptive or maladaptive. They looked at three conceptualizations of guilt: state guilt, trait guilt, and moral guilt. In validating the Guilt Inventory, Kugler and Jones looked at several measures of guilt and shame, most of which they concluded did not measure the entire domain of guilt. Those designed to differentiate between guilt and shame were seen as better measures of shame. Kugler and Jones concluded that there was poor support for maintaining a distinction between trait and state guilt. They also concluded that moral guilt was directly correlated with religious involvement and, as such, may need to be evaluated separately from the affective experience of guilt.

Caprara, Manzi, and Perugini (1992) stated that guilt is accompanied by feelings of responsibility for a negative outcome. They see guilt as multidimensional, having affective, cognitive, and motivational dimensions. The outcome of a guilt-producing

event is determined functional if it is “empathy guided” (need for reparation) or dysfunctional if it is “fear-driven” (fear of punishment; p. 520). The fear of punishment correlates with irritability and rumination. This leads to greater hostility because the person worries about the consequences and feels out of control. On the other hand, the need for reparation leads the person to take responsibility for his/her actions and repair damage caused. Tangney (1990) stated that reparative action, which can include “confessing, apologizing, undoing, repairing” (p. 103), helps one’s self-concept to remain intact so that the sense of self remains stable.

Glover (1988) addressed four syndromes experienced by combat veterans who were diagnosed with PTSD. Glover had previously identified these syndromes as a unique stressor experience along with a central emotional conflict. The four were: 1) survival guilt caused by loss of a friend in combat, 2) fear and anxiety caused by exposure to life-threat, 3) guilt caused by participation in acts of abusive violence, and 4) mistrust caused by experiencing a betrayal of trust. To test this model further, Glover, Pelesky, Bruno, and Sette (1990) examined 339 male Vietnam combat veterans using the Vietnam Related Experiences Questionnaire. The measure was constructed to highlight the four above-mentioned combat related conflicts: fear-anxiety, mistrust, survival guilt, and guilt secondary to aggression. Using exploratory and confirmatory factor analytic techniques, they found a five-factor solution: vulnerability, guilt, dreams of death/destruction, depression, and rebelliousness. Interestingly, items that loaded on the guilt factor included survival guilt and guilt for acts of abusive violence, even though these are two very different kinds of combat experiences. Joseph, Williams, and Yule (1997) further confirmed that survivors’ causal attributions affect their emotional state.

They stated that soldiers who believed their experience was externally caused (i.e., officer's error during battle, coming under friendly fire) experienced fewer combat stress reactions than those who attributed the experience to personal weakness or personality deficits.

Henning and Frueh (1997) agreed with Kubany and Manke (1995) that guilt is more prominent in PTSD than many researchers currently recognize. Traumatic events often occur with guilt-related cognitions that produce an aversive emotional response. This response is then followed by recollections of the triggering event, which causes yet more aversive emotional response. Paunovic (1998) stated that these guilt-related cognitions bring forth guilt-related emotions which may cause neutral post-trauma stimuli to trigger further post-traumatic reactions. Henning and Frueh (1997) found that guilt relating to commission (acts committed out of anger or frustration) and omission (the absence of actions that might have prevented a friendly soldier's death) was more prevalent in their combat-related sample than other types of guilt (such as survival guilt and guilt regarding unacceptable thoughts and feelings). They concluded that most combat veterans experience some type of guilt; however, this guilt was not confined to any one type. This lends further support for Glover et al.'s (1990) finding that differing types of guilt load on to a single guilt factor. The severity of combat guilt was positively related to the overall severity of PTSD symptoms, but was particularly associated with re-experiencing and avoidance.

Hendin and Haas (1991) found that veterans with combat-guilt were more prone to suicide than other veterans. The persistent wartime-related guilt provided the sharpest contrast between those veterans attempting suicide and nonsuicidal veterans. They found

that anxiety and depression were significantly related to post-combat suicide attempts. However, via logistic regression, they found that anxiety was not an independent predictor of suicide, and depression was a secondary predictor of suicide in relation to combat guilt. Hendin and Haas further pointed out that in their sample, the average age for combat exposure was just under 20 years and the participants had considerably heavier combat exposure than most others who had served in Vietnam. They also elaborated that the affective state of the veteran at the time of combat played a significant role in how the veteran perceived guilt. Once again, if they were able to externalize their behavior, there was less guilt.

Kubany et al. (1995) defined guilt as “an unpleasant feeling accompanied by a belief (or beliefs) that one should have thought, felt, or acted differently” (p. 355). Kubany and Manke (1995) stated that trauma-related guilt tends to produce more damage and distress than negative events that occur in everyday life. Trauma-related guilt is a multidimensional construct that contains an affective component and a set of interrelated beliefs about one’s role in a negative event. Kubany (2000) stated that both the negative affect and guilt cognitions must be present for one to experience guilt. After all, if one does not “feel” negative about playing a role in an event, then guilt feelings will not be evoked. Also, if one does not cognitively experience responsibility for an event, then guilt should not occur. Combat-related guilt appears to be positively related to PTSD severity, which may contribute to the maintenance of other trauma-related psychopathology. Vietnam veterans’ guilt components tend to be more event-related than trait-related (Kubany et al., 1996).



Kubany (1997) attributed higher levels of PTSD to faulty thinking patterns regarding specific guilt issues. In establishing a cognitively based treatment model for trauma-related guilt, he lists four cognitive components that occur in sequence. The first is the person's belief that he/she had pre-outcome knowledge. Under this model, there are three phases. First is hindsight bias. Hindsight bias involves knowledge of the outcome as a bias and distorts recall of what the person actually knew before the event. This causes the survivor to exaggerate the importance of his/her role in the trauma. Second, there are false beliefs that the person "should have" used better decision making processes. In other words, "it was like a flashing red light as we look back; but before it happened, it was not a flashing red light" (Kubany, 1997, p. 223). Finally, traumatized persons mistakenly believe (because of outcome knowledge) they should have been able to anticipate results of their actions.

The second cognitive component Kubany (1997) discussed is faulty thinking about justification. Once again, trauma survivors use outcome knowledge to mistakenly think they had other alternatives than the ones they chose. If a person believes he/she violated personal moral values, the perception of justification is further distorted.

The third cognitive component is responsibility distortion for causing the outcome. In other words, there is a tendency for the person to think that he/she is responsible for a negative outcome. This component often involves ignoring how many people were actually involved in the decision-making process.

The fourth cognitive component is wrongdoing distortion. Wrongdoing distortion involves believing that he/she may have violated personal standards or attributed unintended negative outcome to oneself. The person ignores the possibilities

that there were no “good” choices and that the choice may have reflected sound moral judgment based on the options available. These cognitive distortions may lead to increased symptoms of PTSD including perceived loss of social support, increased anxiety, and cognitive feelings of guilt.

Guilt magnitude may be caused by a number of factors, including the extent that each guilt component is activated in a guilt-producing scenario (Kubany, 2000). Situations in which one commits an act that violates a moral standard, but in which reparation for the violation is readily possible, should result in reduced guilt once the reparation is made. However, if reparation or restitution is not possible, then distress levels may increase. In most trauma situations, reparation may not be possible and the traumatic outcome is usually irreversible. Thus, as distress levels increase, magnitude of guilt also increases. An example would be loss of one’s buddy in a combat situation; such social loss is likely to cause stronger and more chronic levels of guilt than if the loss involved horror and mortality-fear without the social loss. Kubany (2000) also proposed that when events are outside of human control, one is less likely to activate internal attributions of causation, thus leading to lower levels of guilt.

Conceptual definition of guilt. For this study, guilt was defined as a dysphoric feeling based on an internal evaluation that one has violated a personally relevant or moral social standard. In other words, the guilt trauma survivors experience is based on thoughts and feelings about things they did or did not do, and beliefs that the outcomes should have been different. Theorists agree there is an affective and cognitive component to guilt. Generally when dealing with guilt, a person tends to believe in a need for

reparation for an event for which he/she acknowledges some responsibility. Feelings of guilt tend to be “action oriented” and associated with situational events.

Models of shame. According to affect theory, shame stems from the interest-excitement and enjoyment-joy affects. When shame is triggered, it decreases the rate of these positive affects and becomes a powerful impediment. The shame affect then acts as an ongoing trigger to more impediment. Physiological aspects of shame include the facial blush, slump, averted gaze, head down, and loss of attention to previously pleasant stimuli. The shame response reduces facial communication. By lowering one’s eyes, dropping the head, and even slumping slightly forward, the shamed person is able to stop looking at the other person as well as preventing the other person from looking into his/her face. A cognitive aspect occurs when the neocortex scans memory for associations to previous experiences of this affect, bringing into consciousness everything that has ever been embarrassing (Nathanson, 1989). Lazare (1987) describes the cognitive aspects of shame as “. . .a painful awareness of oneself as defeated, deficient, exposed, a failure, inadequate, wanting, worthless, and wounded. . . .The very essence of the self feels wrong” (p. 1654).

Tomkins (1963) put forth that “shame strikes deepest into the heart of man” (p. 118). Because it is felt as inner torment, it reaches into the person’s sense of self and is felt as a sickness within. In a sense, the self splits into both subject and object: as subject it becomes the judge and shows contempt; as the object it receives the contempt, experiences self-disgust and thus becomes ashamed.

Shame becomes malignant if it is magnified in frequency, duration and intensity. When this occurs, one may develop a shame-prone identity. Persons who are shame-

prone tend to interpret any vague or negative experience as validating their worthlessness, their badness, and their inability to give to others. According to Harper and Hoopes (1990), shame-prone people experience guilt that is excessive, intense and rarely evocative of a change in behavior. They propose that shame is always the underlying foundation of pathological guilt. Thus, extreme guilt tends to shame the self more, which leads to a splitting off of emotions or feelings as being bad parts of themselves. Because such persons go to extreme lengths to hide their shame, the presenting problem can be anything from depression to other mental disorders, but all act as covering agents for the shame-proneness.

Shame is often experienced as disproportionate with the seriousness of the initial experience, such that the shamed person cannot see his/her overblown affective reaction. He/she then may externalize the blame for the situation and become angry because of a threat to self-worth. The anger may provide relief (although temporary) from the global, self-condemning, and debilitating shame experience. The use of anger for externalization is likely to be a defensive maneuver to alleviate the painful experience of shame (Tangney, 1990). Tangney et al. (1992) utilized Lewis's (1971) theory of an "internalized other" that causes feelings of hostility. This hostility is initially directed toward the self, but because there is at least an image of a disapproving other, hostility can be directed outward in the form of retaliation and externalizing blame. This further reinforces the use of anger as a defense mechanism against feelings of shame. Such a definition of shame goes beyond an affective reaction to public disapproval. It may account for the angry outbursts so typical in PTSD.

Goss, Gilbert, and Allan (1994) viewed shame from the aspects of inferiority, helplessness, anger and self-consciousness and found that inferiority accounted for the largest proportion of the variance. This affirms Lewis's (1971) theory that shame occurs when one negatively evaluates the self or sees others as looking down on oneself. Allan, Gilbert, and Goss (1994) further found that shame-related beliefs about negative evaluations by others have a high association with measures of clinical distress and are strongly associated with measures of psychopathology.

When shame occurs, the self must choose from what Nathanson (1997) calls the Compass of Shame. The compass has four poles (withdrawal, attack self, avoidance, attack other), each with its own learned resources of response. These poles are conceptualized as continua. The withdrawal pole impedes personal interaction, and indicates the person wanting to hide or retract whatever he/she just did or said. This can be as mild as a minor gesture of embarrassment to a "pathological withdrawal from all human interchange" (Nathanson, 1993, p. 19). At the attack self pole, one must demean one's sense of self "in order to maintain association with others, ranging from simple deference to pathological masochism" (Nathanson, 1993, p. 19). At the avoidance pole, one can avoid shame by calling attention to whatever brings pride (or by use of alcohol or drugs that bring about excitement). At the attack other pole, one is likely to attempt to reduce another's self-esteem by use of mild put-down, or by outright abuse at the other end of the spectrum. Stone (1992) stated "the supplanting of fear by rage as a method of overcoming paralysis in the field is encouraged both in military training and in certain combat experiences" (p. 132). Use of this attack other pole may aid survival in combat

situations; however it becomes maladaptive in civilian life and is viewed as angry outbursts or irritability associated with symptoms of PTSD.

Guilt cannot be present without shame but shame can be present without guilt (Nathanson, 1997). Guilt requires the shame affect and the addition of fear-terror affect (such as fear of punishment) and usually causes regret and the desire to make retribution (Nathanson, 1997). Therefore, when one experiences guilt, one is not likely to externalize blame, but instead to accept responsibility for a negative interpersonal event, likely the result of a specific situation or limited event.

Cook (1996) agreed with Tomkins and Nathanson in the respect that guilt is a variant of shame. Nathanson (1987) specified that shame and guilt differ as mature emotions in that “guilt limits action, especially action that may be harmful to another, whereas shame guards the boundaries of the self” (p. 46). Cook believed that shame emotions influence personality development in that they result from many shame scenes internalized over time; they become an aspect of the self-concept. As a result, higher levels of anxiety can be expected as one attempts to hide the feelings of inadequacy and worthlessness experienced internally. On the other hand, guilt requires a cognitive capability and is “an important social and psychological phenomenon worthy of study in relation to such issues as conscience, social control, and morality” (Cook, 1996, p. 146-147). Nevertheless, shame is viewed by these theorists as the dominant emotion regarding psychopathology, treatment, and mental health assessment issues.

Catherall and Shelton (1996) stated the social dimension of PTSD leads to the feeling of being different or damaged. This may be based on the belief that others do not want to listen or hear about the trauma due to their own fears of being traumatized.

Survivors end up feeling something is wrong with them rather than that something terrible happened to them. This sense of being flawed leads to an intense experience of shame. Healing can only take place within meaningful relationships where traumatic experiences can be examined in a nonjudgmental environment. Group therapy (if the group is shame-sensitive) may be helpful in this respect for combat veterans because they can bond with others (as they did in the combat situation).

Wurmser (1999) defined shame from three dimensions: (1) as a fear of disgrace for having dishonored oneself; (2) as being looked upon with scorn and contempt for having allowed the “feared” event to happen; and (3) as a protective mechanism for guarding against dangerous self exposure. Although Wurmser sees this third dimension as positive and protective, it may also be seen as a further defense mechanism or resistance that clinicians should work with in gently removing the impediments of shame-proneness.

Conceptual definition of shame. For this study, shame was understood in terms of viewing oneself as inadequate or inferior (e.g., a “total loser,” or as “damaged goods”). The entire self is viewed in a global, negative way; this requires the occurrence of negative affect. Kubany (2000) stated shame is often expressed in “I feel” statements conveying a desire to disappear, shrink, or hide. Because shame affects the entire self, it is likely to be concealed and disguised and tends to be concerned with being—with who one “is.”

### Anxiety

Greenberg and Paivio (1997) discuss anxiety as “a response to uncertainty that arises when the sense of self-integrity, coherence, continuity, or agency is threatened” (p.

194). If a person's history is characterized by unpredictability and lack of interpersonal control, levels of anxiety can increase and a sense of loss of control can result. However, anxiety can also be seen as positive and performance-enhancing when the increased arousal can be channeled into the capacity to plan for the future or is experienced as excitement. Anxiety becomes debilitating when it is intense and chronic such as when people continually anticipate dangers of the past to repeat themselves. Fear is considered a distinct emotional experience because it is more survival-oriented. However, when it continues to be inappropriately activated it becomes anxiety (Greenberg and Paivio, 1997).

Litz and Keane (1989) used previous information processing research to build the case that anxiety occurs when fear-relevant stimuli are encoded in memory in such a manner that the fear information facilitates cognitive, motor, and meaning distortions. The cognitive portion of the fear network occurs when information causes an unnecessary fear response. Motor responses include psychophysiological responses such as increased heart rate and avoidance behavior. Meaning distortions occur when the information activates memories of threat. The original trauma-producing event can cause intense levels of fear that are incapacitating. A person can become paralyzed and unable to move, become unable to speak a single word, or suffer from such high anxiety that he/she loses the ability to think clearly. Litz and Keane (1989) stated that the fear network is so stable that it takes few matching elements in the environment to activate the network, which then leads to various amounts of anxiety depending of the person's past experiences. Litz and Keane (1989) posit that persons with PTSD are more likely to interpret ambiguous stimuli as being harmful and threatening, suggesting that arousal is



at least partially activated in PTSD at all times. Shame-proneness may also affect levels of anxiety because of the stress the person experiences in attempting to hide their feelings of inferiority. Higher levels of anxiety may also result from perceived negative evaluation by others. The use of negative, self-evaluative self-statements may contribute to anxiety, depression, and additional levels of shame.

Relationship to shame and guilt. Jones (1995) proposed that anxiety-panic is an affective state “that signals the approach of disrupted or traumatic states of mind” (p. 112). Anxiety-panic is his description of the physiological arousal that occurs when the nervous system is in danger of not working effectively, resulting in feelings of helplessness or fear. This overload of physiological arousal may cause an inhibition of memory, association, problem solving and planning processes. Greenberg and Paivio (1997) described two types of anxiety; one related to the core construct of insecurity and desire to withdraw and hide needs and wants thus corresponding to Tomkins (1987) description of the shame affect. The second type of anxiety described by Greenberg and Paivio (1997) occurs in situational contexts and does not affect core constructs, appearing to be related to guilt. Both types of anxiety include what Jones (1995) described as physiological arousal.

Role anxiety plays in trauma vulnerability. Kolb (1991) discussed the physiologic response associated with narcosynthetic treatments performed in a VA hospital setting during the 1980s for treatment of chronic PTSD. Patients did not appear to respond physiologically due to barbiturate suppression. Kolb further stated that a cognitive impairment exists such that persons suffering from chronic PTSD cannot discriminate between external stimuli that are indicative of imminent danger and those that are not

indicative of imminent danger. Because of this hypervigilance to everyday events and situations, the person will inevitably develop depression and anxiety. According to Kolb (1991), even those veterans who have been successfully treated and are leading productive lives, live with the fact that everyday occurrences will oftentimes trigger dreams or other re-experiencing phenomenon, leading to increased levels of anxiety.

Van der Kolk (1996) explained that even when traumatized persons are desensitized to specific trauma-related mental images, the level of physiological sensitivity is not affected. They continue to experience excessive levels of physiological arousal and experience innocuous stimuli as potential threat (i.e., the flight or fight response occurs). These persons go from stimulus to response without overtly assessing the meaning of the stimulus. To compensate for their hyperarousal, they either avoid the stimulus by shutting down on a behavioral level, or use emotional numbing on a psychobiological level (p. 188). Thus, they can lose the ability to experience pleasure in ordinary events. Van der Kolk explained that the person does not have the capacity to define alternative actions as long as the trauma is experienced in the form of “speechless terror” (p. 205). It is very difficult for trauma survivors to understand their lack of choice regarding the strong emotional reactions they experience (Kubany & Manke, 1995). However, if the triggers can be identified and the person can attach words to somatic experiences, then the experiences lose some amount of their terror, enabling the person to be able to determine other options.

### Perceived Social Support

Definition. Social support, for most people, takes place both in context and over time. Social support depends on the nature of the personal relationship and the cognitive

processes that influence interpretation. It can have a positive or negative meaning for the recipient. It may come from family, friends, community or specialist professionals. Social support can be emotional, practical, financial and/or informational in character, according to Payne and Jones (1987). Procidano and Smith (1997) found that social support contributes to positive mood and favorable views of life, whereas its absence may lead to feelings of distress, anxiety and anger. Mankowski and Wyer (1997) stated that a person's perceptions are better predictors of coping success regardless of actual support received. This occurs because a person is likely to form a general concept of support based on past experiences. Once this concept (or schema) is formed, the person is more likely to base judgments on this initial concept, despite current experiences that are concept discrepant.

Procidano and Heller (1983) first discussed distinctions between social networks and perceived social support. They stated that social networks refer to social connections provided by the environment. Perceived social support refers to the subjective impact the networks have on the individual. If the networks do provide support, then perceived social support is the extent to which the individual believes his/her support needs are met. Within-person variables such as long-standing traits or temporary changes in mood or attitude can influence perceived social support.

Procidano and Heller (1983) asserted that there is also a distinction between family and friend support. Sometimes this difference is because of age and/or developmental stage, or because friend relationships tend to be of shorter duration than family relationships. Family relationships—be they good or bad—are there from birth. Perceived support appears to protect a person from the adverse effects of stress

(Procidano & Smith, 1997). However, it is possible that individuals with psychological symptoms perceive less support, or actually receive less support (perhaps even because of their symptoms). Procidano and Heller (1983) further found that persons with negative perceptions tend to withdraw from the object of the negative perceptions, which can result in isolation from family or friends who may actually be supportive. This was especially true for interactions between family members. When negative perceptions of family members exist, one is likely to withdraw from full interaction with those family members.

Procidano and Smith (1997) discussed two models of social support for investigating perceived support's origins, nature, and effects. They defined the cognitive perspective as focused on self-schemas derived from an individual's learning history. In other words, people attempt to confirm positive or negative schemas; such schemas are strengthened by life events that are consistent with the schema. Support related cognitive schemas predict more specific support perceptions and posit that social support enhances self-esteem. A second perspective considers attachment theory and the importance of emotional bonds. In this theory, people tend to maintain contact with others who provide a subjective potential for emotional and/or psychological security. Such attachments provide positive emotions including warmth, happiness and joy. Procidano and Smith (1997) further discuss different measures of social support, stating that many measures do not differentiate between different types of relationships. However, they stated that Procidano's own measure (Perceived Social Support-Family and Perceived Social Support-Friends) shows that friend support "is related more consistently to social competence and extraversion and is more likely to buffer stress" (p. 98) and that family

support's "inverse relation to psychological distress is stronger" (p. 98). Explanations for these phenomena focus on the notion that stressful events tend to increase need for attachment behavior and increase emotional arousal. Family support, which may be confounded with conflictual attachment, is less likely to buffer stress than friend support.

Role perceived social support plays in trauma. Irving, Telfer, and Blake (1997) studied the concept of hope relating to combat-related PTSD. They defined hope as the belief that people can achieve goals through identification of strategies to attain goals. They found individuals who were higher in hope reported higher levels of social support and had superior coping skills. Those who were low in hope reported more loneliness. This latter finding could have been the result of lower hope prior to war experiences or as a result of the combat trauma. Over half the sample reported participating in acts they believed to be immoral; thus both groups contained veterans who had created traumatic experiences as well as were victims of traumatic experiences. Horowitz (1986) stated that PTSD symptoms and lack of hope may become stable characteristics rather than transient reactions to stress if traumatic experiences occurred during the formative, young adult years. If this is true, then lack of hope, which is a persistent symptom of depression, may also be related to lower levels of perceived social support and increased levels of anxiety.

Further evidence of a developmental stage during the young adult years is provided by Arnett (2000). He found that late teens and early twenties is no longer a time in which one enters and settles into long-term adult roles. What Horowitz (1986) described as the formative young adult years, Arnett described as emerging adulthood. Yet, this is the developmental stage when many of those serving in Vietnam were either

drafted or volunteered for military service. Arnett stated that during emerging adulthood, “the character qualities most important to becoming successfully self-sufficient—accepting responsibility for one’s self [*sic*] and making independent decisions—are being developed” (p. 473). Kulka et al. (1990) also reported in the National Vietnam Veterans Readjustment Study (NVVRS), that age at entry to Vietnam was a factor such that young adults 17-19 years of age were 25.2% more likely to have current PTSD than those who were older at the time of entry.

Using the Vietnam Experience Study (VES) and the NVVRS, Boscarino (1995) concluded that level of exposure to combat seemed to have the greatest impact on a PTSD diagnosis. Boscarino investigated the link between PTSD, social support and psychiatric problems including generalized anxiety, depression, drug abuse and alcohol abuse in Vietnam era versus Vietnam theater veterans. Veterans with PTSD were more likely to have dysfunctional family relationships. Boscarino found that Vietnam theater veterans were 7.5 times more likely to have a PTSD diagnosis than were era veterans, controlling for other variables in the model. Theater status and level of social support were linked with current PTSD, generalized anxiety, current depression, and current alcohol abuse. Vietnam veterans who currently reported low levels of social support were approximately 80% more likely to develop a diagnosis of PTSD than veterans with average social support, but were nearly 180% more likely to have PTSD than veterans with high social support. Thus, social support may lessen distress by buffering reactions to the original trauma. On the other hand, veterans who experienced PTSD as a result of the trauma may have experienced a decrement in social support due to their symptoms.

Overholser and Adams (1997) stated that negative life events act as provoking agents that can elevate levels of stress and are related to hopelessness, anxiety and depression. It is the person's subjective appraisal of the situation that determines what is stressful; this perception may actually be more important than the event itself. Secondary appraisal follows, in which the person evaluates available resources for coping. If the person feels unable to cope, then stress reactions will occur, and levels of anxiety will rise. However, if social support networks are strong and provide tangible assistance and emotional support, an accompanying reduction in intensity and frequency of psychological problems occurs. Overholser and Adams (1997) found that higher levels of social support did reduce levels of depression, anxiety, and hopelessness and that lower levels of social support were related to psychological problems.

Paunovic (1998) found that persons who attributed negative outcomes to global factors thought they had fewer sources of social support. Paunovic also stated that self-blame led to a lower probability of involving family, friends and other people in the role of social support. Thus, if trauma survivors tend to blame themselves for the traumatic event, they are less likely to utilize their social network as a coping resource. Also, if survivors attribute negative outcomes to global factors, they may believe they have less sources of social support and will not attempt to utilize such coping methods.

### The Present Study

Purpose. The purpose of this study was to begin testing a theoretical model put forth by Sewell and Williams (in press), that differing types of trauma will yield differing presentations in social versus event processing domains. It was posited that social loss would produce disruption in the domain of social processing, invalidating one's beliefs

regarding social relationships. If the event was more horror and mortality-fear related, the disruption would be in the area of event processing and lead to higher levels of anxiety and re-experiencing symptoms of PTSD.

When the traumatic event occurs, depending on the stability of the person's construct system, shame and/or guilt reactions may be activated and may continue to lead to more maladaptive behaviors, increasing the symptoms of PTSD. If a person is shame-prone, increased anxiety levels may add to the disruption of social processing and lead to less perceived social support and higher levels of guilt. If the traumatic event was processed as more horror and mortality-fear related, event processing would focus more on survival and lead to lower levels of guilt.

Hypotheses. First, it was hypothesized that participants whose clinicians indicated guilt as a pressing treatment issue would have index trauma descriptions that were independently rated as involving less horror and mortality-fear than participants without substantial guilt issues. Glover (1988) found that combat veterans who could attribute their experiences to external causes experienced fewer combat stress reactions. Hendin and Haas (1991) reported that combat veterans experienced less guilt when they could externalize the cause for their behavior. Externalization is likely if a person fears for his/her life and does not have control over a situation.

Second, it was hypothesized that participants whose clinicians indicated guilt as a pressing treatment issue would have index trauma descriptions that were independently rated as involving more social loss than participants without substantial guilt issues. Henning and Frueh (1997) found that guilt related to acts of omission (the absence of actions to prevent a friendly soldier's death) led to higher levels of guilt. Kubany (2000)



proposed that if events are outside a person's control, the person is less likely to internalize attributions of causation (i.e., the person will feel less guilt). Conversely, if the traumatized person internalizes attribution of causation and believes he/she could have done more to prevent the trauma, then levels of guilt would be expected to be higher.

Third, it was hypothesized that participants who were rated as having high levels of shame by their individual clinicians would report significantly higher levels of anxiety both pre- and post-trauma than participants who were not identified as shame-ridden. Allen, Gilbert, and Goss (1994) found that shame-related beliefs have a high association with measures of psychopathology. Cook (1996) discussed shame as a construct that becomes part of the self-concept. As such, higher levels of anxiety were expected as the person attempts to hide the feelings of inadequacy and worthlessness that were part of the internal experience.

Fourth, it was hypothesized that participants whose index trauma descriptions were independently rated as involving substantial social loss would show greater decrement in perceived social support over pre-morbid levels than individuals whose index traumas contain less social loss. Overholser and Adams (1997) found that higher levels of social support reduced levels of depression, anxiety, and hopelessness and that lower levels of social support were related to psychological problems. Paunovic (1998) stated that self-blame led to lower probability of involving family, friends and others in the role of social support. Thus, if one feels responsible for the social loss, one may withdraw from available social support, but also perceive that less support is available.

For easier reference hereafter, the hypotheses are enumerated below without elaboration:

1. Participants whose clinicians indicated guilt as a pressing treatment issue would have index trauma descriptions that were independently rated as involving less horror and mortality fear than participants without substantial guilt issues.
2. Participants whose clinicians indicated guilt as a pressing treatment issue would have index trauma descriptions that were independently rated as involving more social loss than participants without substantial guilt issues.
3. Participants who were rated as having high levels of shame by their individual clinicians would report significantly higher levels of anxiety both pre- and post-trauma than participants who were not identified as shame-ridden.
4. Participants whose index trauma descriptions were independently rated as involving substantial social loss would show greater decrement in perceived social support over pre-morbid levels than individuals whose index traumas contain less social loss.

## CHAPTER 2

### METHOD

#### Participants

A total of 44 male Vietnam combat veterans with PTSD were recruited for participation from within their on-going treatment at the Dallas VA Medical Center. Of the 44 participants, one protocol was invalid when the participant denied symptoms of PTSD due to inability to remember events occurring in Vietnam. An incomplete protocol was used for analysis from another participant (Pressing Treatment Issues Questionnaire was not completed by clinician). Participants were all in outpatient treatment. Each participant was required to sign an informed consent form (Appendix A) and was given a copy to keep.

#### Measures

CAPS. The Clinician Administered PTSD Scale (CAPS; Blake et al., 1990) is a structured interview to assess the symptoms of PTSD as outlined in the DSM-IV (American Psychiatric Association, 1994) as well as several other associated symptoms and impact domains. The authors of the CAPS have established the psychometric qualities of the interview, showing excellent test-retest reliability as well as internal consistency. Agreement with the SCID PTSD module was also quite high ( $\kappa = .78$ ). The CAPS was employed to confirm clinical diagnoses of PTSD. Participants were given the Life Events Checklist as a precursor to the CAPS. If additional trauma events

were recorded by participants, they were asked to focus on their Vietnam experiences for the remainder of the interview.

Index Trauma Description. Each participant was asked to write a brief narrative describing his “index trauma” (Appendix B). Index trauma was defined as the single experience or most confined set of experiences that the participant believed “caused” his PTSD. The level of detail requested was sufficient for externally trained raters to dimensionalize the experiences in terms of their involvement of interpersonal loss as well as horror and subjective life threat. The Index Trauma Descriptions were later coded by sophisticated raters (graduate students in clinical psychology) to derive social loss and horror/mortality-fear variables. Raters were masked as to the specific hypotheses of the present study, and to the remainder of each participant’s data (e.g., anxiety and social support indices). Each rater coded each vignette on two non-exclusive continuous variables. One of the variables was “social loss” rated on a scale of “0” (none) to “100” (extreme). The other variable was “horror/mortality-fear” rated on a scale of “0” (none) to “100” (extreme). Three raters were trained using vignettes similar to those written by participants. Intraclass Correlation Coefficients for training vignettes exceeded .90 for both social loss and horror/mortality-fear dimensions. Then, the actual trauma descriptions were rated by each rater. Two raters rated the horror/mortality-fear variable first; the other rater rated the social loss variable first. The trauma descriptions were randomized for both variables to eliminate order effect. Raters were given separate copies of the trauma descriptions for each variable. They were permitted to go back and re-evaluate descriptions within a variable, but were prohibited from re-evaluating across

variables. The three raters' ratings were then averaged for each case. Even though each rater rated all cases to produce the final averaged indices, consistency among raters was also calculated on the actual cases. As might be expected, they exhibited more variability on actual cases than on training vignettes. On the social loss dimension, the Intraclass Correlation Coefficient was .79. On the horror/mortality-fear dimension, the Intraclass Correlation Coefficient was .67.

Pre-Morbid Perceived Social Support. The Perceived Social Support Scale (PSS; Procidano & Heller, 1983) is a 40-item self-report inventory that measures perceived availability of social support. The first half of the scale is a measure of perceived family (PSS-Fa) social support and the second half of the scale measures perceived friend (PSS-Fr) social support. The PSS has demonstrated good reliability with alpha coefficients approaching .90 (Procidano & Heller, 1983). Validity studies comparing PSS-Fa and PSS-Fr with three subscales of the California Psychological Inventory (CPI) showed that PSS-Fr was significantly and positively related to the three subscales: good impression ( $r = .35, p < .05$ ), sociability ( $r = .33, p < .005$ ), and social presence ( $r = .51, p < .001$ ). PSS-Fa did not approach significance with the CPI variables. The PSS scales were also compared to a short form of MMPI Scales (K, Depression, Psychasthenia, and Schizophrenia). PSS-Fr was significantly and negatively correlated to Psychasthenia, ( $r = -.23, p < .05$ ) and Schizophrenia ( $r = -.20, p < .05$ ). The PSS-Fa was significantly and negatively related to Depression ( $r = -.43, p < .001$ ), Psychasthenia ( $r = .33, p < .001$ ), and Schizophrenia ( $r = -.33, p < .001$ ), and positively related to K ( $r = .20, p < .05$ ; Procidano & Heller, 1983). To estimate pre-morbid perceived social support, participants

were asked to fill out the PSS as they believe they would have answered prior to their traumatic experience. Eleven items (five on PSS-Fa and six on PSS-Fr) were reverse scored. A total score was then obtained and used to operationalize perceived social support, pre-trauma. Scores were also obtained for PSS-Fa and PSS-Fr as separate scales, pre-trauma.

Post-Trauma Perceived Social Support. The same standardized measure of the perceived availability of social support (i.e., the PSS) was administered with specific instructions to focus on the period of time immediately after the onset of PTSD symptoms, or when they believed their PTSD symptoms were at their worst. Eleven items (five on PSS-Fa and six on PSS-Fr) were reverse scored. A total score was then obtained and used to operationalize perceived social support, post-trauma. Scores were also obtained for PSS-Fa and PSS-Fr as separate scales, post-trauma.

Pre-Morbid Anxiety Symptoms. The PTSD Symptom Scale-Self Report (PSS-SR; Foa, Riggs, Dancu, & Rothbaum, 1993) was used to quantify anxiety-based disruption of event processing. The PSS-SR is a 17-item scale which corresponds to the symptom criteria for PTSD. Items were rated by the participants in terms of their frequency (0 = not at all to 3 = very much/almost always). The PSS-SR has demonstrated good reliability with an overall alpha of .91 (Foa, et al., 1993). The PSS-SR total score significantly correlated to the Rape Aftermath Symptom Test ( $r = .81, p < .001$ ), Impact of Events Scale-Intrusion ( $r = .81, p < .001$ ), Beck Depression Inventory ( $r = .80, p < .001$ ), and State-Trait Anxiety Inventory ( $r = .56, p < .001$ ) (Foa et. al, 1993, p. 467). To estimate pre-morbid PTSD-related anxiety symptoms, items were altered so as

not to target a traumatic experience (e.g., the item, “Have you felt that your ability to experience emotion is less?” was altered to read, “Have you felt that your ability to experience emotion is hampered?”). In this pre-morbid administration, participants were asked to fill out the PSS-SR as they believe they would have answered prior to their traumatic experience. Scores were then totaled for the 17 items to obtain a pre-trauma score for each participant.

Post-Trauma Anxiety Symptoms. The standardized measure of the PSS-SR was administered with specific instructions to focus on the period of time immediately after the onset of PTSD symptoms, or when participants felt their symptoms of PTSD were at their worst. Scores were then totaled for the 17 items to obtain a post-trauma score for each participant.

Pressing Treatment Issues Questionnaire. Each participant’s therapist was asked to rate a variety of factors as representing “Pressing Treatment Issues” for the participant. Among these issues were elaboration of social network, recognition of social support, establishing control over re-experiencing phenomena, anxiety management, shame, and guilt. If any of the guilt or shame items were marked by clinicians as pressing treatment issues, they were collectively scored as present (“1”) for either guilt or shame, respectively. Clinicians then chose what they considered to be the five most pressing treatment issues and rank ordered them (Appendix C). If any of the guilt or shame items ranked in the top five pressing treatment issues, and additional presence score (“1”) was added to the participant’s score. Scores from the PTIQ for both guilt and shame were

later dichotomized by the investigator into absence (“0”) and presence (“1”) because clinician’s ratings of the top five pressing treatment issues were inconsistent.

Kubany (2000) noted that many clinicians do not identify nor treat guilt and shame issues in combat veterans. Because it was possible that clinicians would not rate any items in the guilt and shame domains, the examiner independently rated guilt and shame after administering the CAPS. Ratings for both guilt and shame were on the scale of “0” meaning absent or present but not significant, “1” meaning predominant and significant. A clinical psychologist was used as an independent rater to verify reliability on a subset of these ratings, based solely on CAPS data. Given a random sample of CAPS data from 10 participants, inter-rater reliability was achieved at 90% agreement for both the shame and guilt variable. Results using these variables instead of PTIQ variables are designated in the Results section as “Plan B.”

Demographic Data Sheet. Demographic data (Appendix D) was collected from each participant at the end of the testing session. The demographic data sheet was designed to collect a variety of data including age, ethnicity, education, marital status, number of tours in Vietnam, branch of service, and other pertinent information.

### Procedure

Participants were recruited from outpatient therapy groups for PTSD and mood disorders, from individual clinicians, and via brochures posted in the waiting areas for various outpatient clinical facilities at the Dallas VA. Volunteers were then scheduled for individual assessment sessions.



After obtaining informed consent, testing occurred in one session for each participant. Each participant completed the CAPS interview first, followed by the Index Trauma Description. Over half of the participants (25) requested that the researcher write the trauma description while they dictated what they wanted said. The researcher wrote what participants said verbatim. Most of these participants stated that writing about the traumatic experiences would be re-traumatizing, but telling their story would not. By establishing the CAPS and Index Trauma Description first, a comparison base was provided for participants to focus on pre-trauma and post-trauma for administration of the PSS and the PSS-SR (completed next). The demographic data were collected, which completed the testing session. The Pressing Treatment Issues Questionnaire was given to the treating clinician for completion at approximately the same time the participant was tested.

## CHAPTER 3

### RESULTS

#### Descriptive Statistics

Scores on the CAPS were used to determine if participants qualified for a diagnosis of PTSD prior to data being entered. Forty-three of the 44 participants met diagnostic criteria for a current diagnosis of PTSD. Descriptive statistics for the overall sample are shown in Table 1. The frequencies and percentages for dichotomized variables are shown in Table 2.

Demographic data for the participants follows. Ages ranged from 45 to 68, ( $M = 52.91$ ;  $SD = 4.50$ ). Ethnicity was as follows: 24 Caucasian (55.8%), 17 African-American (39.5%), and 2 Hispanic (4.7%). It should be noted that proportionally to the veteran population, a higher number of participants were African-American. Regarding education level, 10 (23.3%) participants had either a high school diploma or GED, 29 (67.4%) had some college, and 3 (7.0%) had college degrees. One participant had not completed high school. Over 95% of the participants were either unemployed or marginally employed (35 unemployed and 6 marginally employed). Only 2 (4.7%) participants were gainfully employed. Twenty-one (48.8%) were married, 18 (41.9%) divorced, 2 (4.7%) separated, 1 widowed and 1 never married. Army veterans numbered 24 (55.8%), Marines numbered 13 (30.2%), and Air Force veterans numbered 6 (14.0%). Most of the sample (35, or 81.4%) served one tour in Vietnam, with 8 (18.6%) having served 2 tours. Of the total, 32 (74.4%) veterans reported some type of combat related

Table 1

Descriptive Statistics of Study Variables

Variable	<u>n</u>	Minimum	Maximum	Mean	SD
Horror/Mortality-Fear	43	23.33	85.00	62.18	15.99
Social Loss	43	15.00	90.00	55.09	21.18
PSS Total Pre-Trauma	43	3.00	38.00	25.84	10.03
PSS Total Post-Trauma	43	1.00	35.00	12.95	9.48
PSS-Fa Pre-Trauma	43	1.00	19.00	12.84	5.15
PSS-Fr Pre-Trauma	43	1.00	20.00	12.93	6.07
PSS-Fa Post-Trauma	43	1.00	19.00	7.00	5.85
PSS-Fr Post-Trauma	43	0.00	19.00	5.95	5.28
PSS-SR Total Pre-Trauma	43	0.00	43.00	8.00	9.94
PSS-SR Total Post-Trauma	43	17.00	50.00	38.00	9.37

Note. Variables are as follows: Horror/Mortality-Fear and Social Loss = Average ratings for Index Trauma Descriptions; PSS Total = Perceived Social Support; PSS-Fa = Perceived Social Support Family Score; PSS-Fr = Perceived Social Support Friends Score; PSS-SR = PTSD Symptom Scale-Self Report.

physical impairment, while 11 (25.6%) did not. Range of time diagnosed with PTSD ranged from 0 to 360 months ( $M = 84.42$ ;  $SD = 73.56$ ). Approximately 51.2% (22 participants) denied current or previous substance dependence diagnosis or treatment, whereas 48.8% (21 participants) carried such a diagnosis or past treatment. A correlation

between PTIQ Shame and substance dependence diagnosis or past treatment was significant ( $r = .40$ ,  $p = .008$ ). Other correlations between substance dependence diagnosis or past treatment and major study variables (shown in Table 1) were not significant. Table 2

#### Frequencies and Percentages for Dichotomized Variables

<u>Variable</u>	<u>Frequency</u>	<u>Percentage</u>
PTIQ High Shame	31	72.1
PTIQ Low Shame	12	27.9
PTIQ High Guilt	25	58.1
PTIQ Low Guilt	18	41.9
Shame - High	19	44.2
Shame - Low	24	55.8
Guilt - High	15	34.9
Guilt - Low	28	65.1

Note. PTIQ = Pressing Treatment Issues Questionnaire; Shame and Guilt = Plan B (Investigator's ratings).

#### Hypothesis Testing

First, it was hypothesized that participants whose clinicians indicate guilt as a pressing treatment issue would have index trauma descriptions that were independently rated as involving less horror and mortality fear than participants without substantial guilt issues. This was tested via analysis of variance (ANOVA) with guilt (high vs. low) as the independent variable and the horror/mortality-fear rating as the dependent variable. As

the hypothesis was directional (i.e., the high guilt group was predicted to have lower scores on the dependent variable than the low guilt group), the test of significance was one-tailed. Results ( $F = 0.97$ ,  $df = 1,41$ ,  $p > .33$ ) were non-significant (Low Guilt  $M = 59.35$ ;  $SD = 19.10$ ; High Guilt  $M = 64.21$ ;  $SD = 13.36$ ). Plan B results ( $F = 0.08$ ,  $df = 1,41$ ,  $p > .78$ ) were non-significant (Low Guilt  $M = 62.67$ ;  $SD = 16.19$ ; High Guilt  $M = 61.24$ ;  $SD = 16.12$ ).

Second, it was hypothesized that participants whose clinicians indicate guilt as a pressing treatment issue would have index trauma descriptions that are independently rated as involving more social loss than participants without substantial guilt issues. This was tested via ANOVA with guilt (high vs. low) as the independent variable and the social loss rating as the dependent variable. As the hypothesis was directional (i.e., the high guilt group was predicted to have higher scores on the dependent variable than the low guilt group), the test of significance was one-tailed. Results ( $F = 1.18$ ,  $df = 1,41$ ,  $p > .28$ ) were non-significant (Low Guilt  $M = 50.96$ ;  $SD = 20.46$ ; High Guilt  $M = 58.07$ ;  $SD = 21.59$ ). Plan B results ( $F = 2.94$ ,  $df = 1,41$ ,  $p > .09$ ) were at a marginal trend (Low Guilt  $M = 51.13$ ;  $SD = 21.20$ ; High Guilt  $M = 62.49$ ;  $SD = 19.71$ ).

Third, it was hypothesized that participants who were rated as having high levels of shame by their individual clinicians would report significantly higher levels of anxiety both pre- and post-trauma than participants who were not identified as shame-ridden. This was tested via multivariate analysis of variance (MANOVA) with shame (high vs. low) as the independent variable and the pre-trauma and post-trauma anxiety scores as the dependent variables. Interaction results were non-significant ( $F = 1.60$ ,  $df = 2,40$ ,  $p = .21$ ). Results for pre-trauma ( $F = 1.05$ ,  $df = 1, 41$ ,  $p > .31$ ) were non-significant (pre-

trauma low shame  $\underline{M} = 10.5$ ;  $\underline{SD} = 12.27$ ; high shame  $\underline{M} = 7.03$ ;  $\underline{SD} = 8.93$ ). Results for post-trauma ( $\underline{F} = 2.91$ ,  $\underline{df} = 1, 41$ ,  $\underline{p} > .09$ ) were at the level of a marginal trend (post-trauma low shame  $\underline{M} = 34.17$ ,  $\underline{SD} = 11.04$ ; high shame  $\underline{M} = 39.48$ ;  $\underline{SD} = 8.37$ ). The effect size for post-trauma ( $\underline{R}^2 = .26$ ) indicates a moderate effect. Plan B results indicate interaction was significant ( $\underline{F} = 3.62$ ,  $\underline{df} = 2,40$ ,  $\underline{p} < .04$ ). Further discussion of this interaction is given under the supplemental hypothesis section. Plan B results for pre-trauma ( $\underline{F} = 1.71$ ,  $\underline{df} = 1,41$ ,  $\underline{p} > .19$ ) were non-significant (pre-trauma low shame  $\underline{M} = 9.75$ ,  $\underline{SD} = 9.38$ ; high shame  $\underline{M} = 5.79$ ,  $\underline{SD} = 10.44$ ). Results for post-trauma ( $\underline{F} = 6.88$ ,  $\underline{df} = 1,41$ ,  $\underline{p} = .012$ ) were significant (post-trauma low shame  $\underline{M} = 34.87$ ;  $\underline{SD} = 9.71$ ; high shame  $\underline{M} = 42.95$ ;  $\underline{SD} = 7.42$ ). Effect size for post-trauma ( $\underline{R}^2 = .38$ ) indicates a moderate effect size. To look at the differences between pre- and post-trauma anxiety, a paired-samples t-test was conducted. Levels of anxiety were rated as significantly higher on the post-trauma measure than on the pre-trauma measure ( $\underline{t} = 12.72$ ,  $\underline{df} = 42$ ,  $\underline{p} < .001$ ).

Fourth, it was hypothesized that participants whose index trauma descriptions were independently rated as involving substantial social loss would show greater decrement in perceived social support over pre-morbid levels than individuals whose index traumas contained less social loss. This was tested via partial correlation. In accordance with the hypothesis, a negative correlation was predicted between social loss and post-trauma social support after pre-trauma social support was partialled out. As this was a directional hypothesis, the test for significance of the partial correlation was one-tailed. Results ( $\underline{r} = -.07$ ,  $\underline{p} = .33$ ) were non-significant. When controlling for pre-trauma social support, a significant negative correlation was found between post-trauma anxiety and social support ( $\underline{r} = -.45$ ,  $\underline{p} = .002$ ).

To further explore these relations, other partial correlations were calculated, using anxiety pre- and post-trauma measures. Post-trauma anxiety was significantly indirectly related both to post-trauma friend support and post-trauma family support, after partialling pre-trauma friend and family support ( $r = -.34$ ,  $p = .03$ , and  $r = -.43$ ,  $p = .005$ , respectively). A further significant result was found between perceived post-trauma social support from family versus from friends ( $r = .45$ ,  $p = .003$ ).

### Supplemental Hypotheses

Other analyses were explored for which there were no a priori hypotheses. Statistical tests on such analyses were two-tailed and obtained findings are interpreted cautiously.

A mixed model MANOVA assessed change in anxiety and social support levels from the pre- to the post-morbid timeframe using the independent variable of shame (high vs. low). The overall MANOVA (Wilks' Lambda = .77;  $F = 1.44$ ,  $df = 1,41$ ,  $p > .26$ ) was not significant. The interaction effect between anxiety, social support, and shame ( $F = 1.627$ ,  $df = 1,41$ ,  $p > .21$ ) was not significant. Significant changes pre- to post-trauma were found for anxiety ( $F = 4.80$ ,  $df = 1,41$ ,  $p = .03$ ), perceived social support ( $F = 36.85$ ,  $df = 1,41$ ,  $p < .001$ ), and the interaction between anxiety and social support ( $F = 112.84$ ,  $df = 1,41$ ,  $p < .001$ ). Other effects were not significant, notably those involving shame (high vs. low). Table 3 shows means and standard deviations for the variables in this analysis.

Results for Plan B approached significance (Wilks' Lambda = .79;  $F = 2.54$ ,  $df = 1,41$ ,  $p < .06$ ). The interaction was significant for anxiety, perceived social support, and shame ( $F = 8.98$ ,  $df = 1,41$ ,  $p = .005$ ). Significant pre- to post-trauma changes were

found for anxiety ( $F = 6.09$ ,  $df = 1,41$ ,  $p = .02$ ), perceived social support ( $F = 54.35$ ,  $df = 1,41$ ,  $p < .001$ ), and the interaction between anxiety and perceived social support ( $F = 189.30$ ,  $df = 1,41$ ,  $p < .0001$ ). Further analyses were explored to better understand the 3-way interaction between anxiety, perceived social support and shame. Table 4 shows means and standard deviations for the variables in this analysis. Figure 1 shows the interaction pre- to post-trauma for anxiety and perceived social support for persons designated as low shame; Figure 2 shows the interaction pre- to post-trauma for anxiety and perceived social support for persons high in shame.

To break down this interaction, several follow-up analyses were conducted.

Within the low shame group, perceived social support significantly decreased from pre- to post-trauma ( $F = 18.05$ ,  $df = 1,23$ ,  $p < .0001$ ), whereas anxiety increased significantly ( $F = 70.93$ ,  $df = 1,23$ ,  $p < .0001$ ). Within the high shame group, the pattern was similar with social support decreasing ( $F = 44.53$ ,  $df = 1,18$ ,  $p < .0001$ ) and anxiety increasing ( $F = 116.42$ ,  $df = 1,18$ ,  $p < .0001$ ). However, between subjects analyses (high vs. low shame groups) show that post-trauma levels of social support and anxiety were more extreme for the high shame group ( $F = 5.19$ ,  $df = 1,41$ ,  $p = .03$ ; and  $F = 6.88$ ,  $df = 1,41$ ,  $p = .01$ , respectively). Thus, the decrement in social support and the increment in anxiety appears more pronounced for high shame than for low shame veterans.



Table 3

Descriptive Statistics for Anxiety (PSS-SR) and Perceived Social Support (PSS) by Shame, High and Low

<u>Variable</u>	<u>M</u>	<u>SD</u>
PSS-SR, Pre-Trauma, Low Shame	10.50	12.27
PSS-SR, Pre-Trauma, High Shame	7.03	8.93
PSS-SR, Post-Trauma, Low Shame	34.17	11.04
PSS-SR, Post-Trauma, High Shame	39.48	8.37
PSS, Pre-Trauma, Low Shame	24.08	11.60
PSS, Pre-Trauma, High Shame	26.52	9.48
PSS, Post-Trauma, Low Shame	11.92	8.01
PSS, Post-Trauma, High Shame	13.35	10.09

Note. PSS-SR = PTSD Symptom Scale-Self Report Total, PSS = Perceived Social Support Total, Shame = Pressing Treatment Issues Questionnaire Shame Total Dichotomized.

Table 4

Descriptive Statistics for Anxiety (PSS-SR) and Perceived Social Support (PSS) by Shame, High and Low (Plan B)

<u>Variable</u>	<u>M</u>	<u>SD</u>
PSS-SR, Pre Trauma, Low Shame	9.75	9.38
PSS-SR, Pre-Trauma, High Shame	5.79	10.44
PSS-SR, Post-Trauma, Low Shame	34.87	9.71
PSS-SR, Post-Trauma, High Shame	41.95	7.42
PSS, Pre-Trauma, Low Shame	25.04	10.82
PSS, Pre-Trauma, High Shame	26.84	9.12
PSS, Post-Trauma, Low Shame	15.75	9.75
PSS, Post-Trauma, High Shame	9.42	8.04

Note. PSS-SR = PTSD Symptom Scale-Self Report Total, PSS = Perceived Social Support Total, Shame = Investigator's Shame Score, Dichotomized.

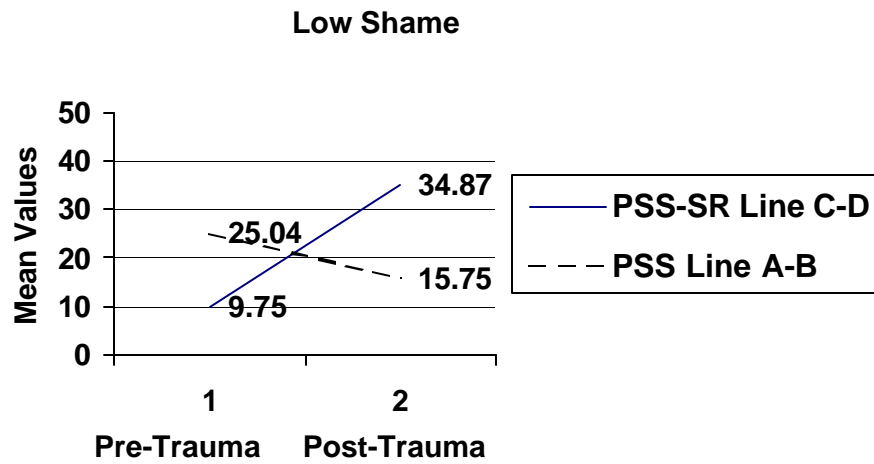


Figure 1

Low Shame for Anxiety (PSS-SR) and Perceived Social Support (PSS) Pre- and Post-Trauma

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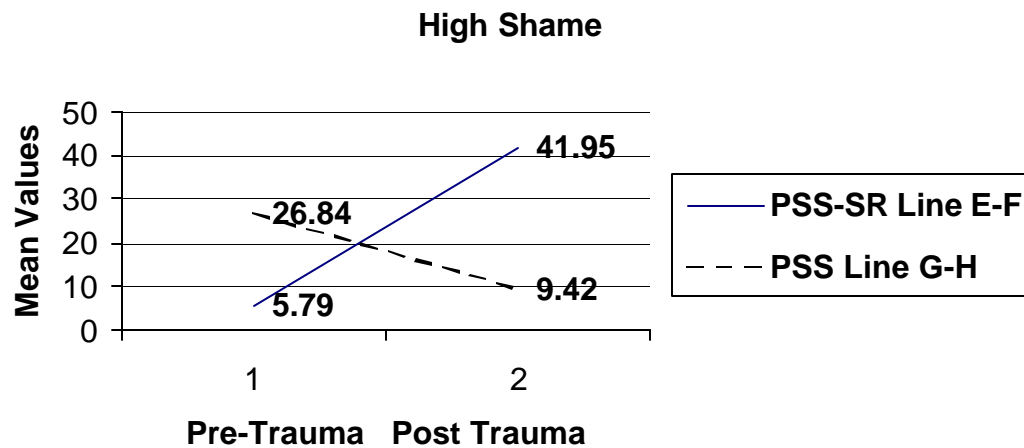


Figure 2

High Shame for Anxiety (PSS-SR) and Perceived Social Support for Pre- and Post-Trauma

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Another supplemental analysis explored the relation between shame and guilt scores as pressing treatment issues. The variables were dichotomized and cross tabulated. Chi square analysis and visual inspection of frequencies were conducted (see Table 5), expecting the cell for high guilt with low shame to be the lowest. Results ( $\chi^2 = 11.76$ ,  $df = 1$ ,  $p = .001$ ) were significant showing that guilt is present with shame. Plan B results ( $\chi^2 = 4.72$ ,  $df = 1$ ,  $p = .03$ ) were also significant. Plan B frequencies for this analysis are shown in Table 6.

A supplemental hypothesis predicted that participants whose index trauma descriptions were independently rated as involving substantial horror/mortality fear might show greater decrement in perceived social support over pre-morbid levels than individuals whose index traumas contain less horror/mortality fear. This possibility was tested via partial correlation. A negative correlation was expected between

Table 5

Frequencies for Shame and Guilt Dichotomized

	Shame		
	Low	High	Total
Low Guilt	10	8	18
High Guilt	2	23	25
Total	12	31	43

Note. Shame = Pressing Treatment Issues Questionnaire Shame Total Dichotomized, Guilt = Pressing Treatment Issues Questionnaire Guilt Dichotomized.

Table 6

Frequencies for Shame and Guilt Dichotomized (Plan B)

	<u>Shame</u>		
	Low	High	Total
Low Guilt	19	9	28
High Guilt	5	10	15
Total	24	19	43

Note. Shame = Investigator's Shame Rating Dichotomized, Guilt = Investigator's Guilt Rating Dichotomized.

horror/mortality-fear and post-trauma social support after pre-trauma social support had been partialled out. Results ( $r = -.26$ ,  $p > .09$ ) showed only a marginal trend.

Other supplemental analyses dichotomized the trauma type variable in two ways (high vs. low horror/mortality fear, and high vs. low social loss). Stepwise discriminant analyses, with predictor variables including PSS-SR (anxiety measure) for pre- and post-trauma and PSS (perceived social support measure) for pre- and post-trauma, yielded an overall classification rate of 62.8% when the Horror/Mortality-Fear variable was dichotomized. At Step 1, significant results include Wilks' Lambda = .81; ( $F = 9.45$ ,  $df = 1, 41$ ,  $p = .004$ ) with PSS-SR Post-Trauma entering the function. No other variables entered. Plan B yielded an overall classification rate of 62.8%. At Step 1, significant results include Wilks' Lambda = .81; ( $F = 9.45$ ,  $df = 1, 41$ ,  $p = .004$ ) with PSS-SR Post-Trauma entering the function. No other variables entered.

Stepwise discriminant analyses for the dichotomized social loss variable, with predictor variables including PSS-SR (anxiety measure) for pre- and post-trauma and PSS (perceived social support measure) for pre- and post-trauma, yielded an overall classification rate of 72.1%. PSS Pre-Trauma entered the function at Step 1 with significant results of Wilks' Lambda = .89; ( $F = 5.22$ ,  $df = 1,41$ ,  $p = .028$ ). At Step 2, Wilks' Lambda = .81; ( $F = 4.53$ ,  $df = 2,40$ ,  $p = .017$ ) with PSS-SR Post-Trauma entering the function. No other variables entered. Plan B yielded an overall classification rate of 72.1%. PSS Pre-Trauma entered the function at Step 1 with significant results of Wilks' Lambda = .89; ( $F = 5.22$ ,  $df = 1,41$ ,  $p = .028$ ). At Step 2, Wilks' Lambda = .81; ( $F = 4.53$ ,  $df = 2,40$ ,  $p = .017$ ) with PSS-SR Post-Trauma entering the function. No other variables entered.

One further supplemental analysis correlated clinicians' rating of shame with post-trauma perceived social support, controlling for pre-trauma social support. Results ( $r = .038$ ,  $p > .81$ ) were non-significant. Plan B results ( $r = -.38$ ,  $p = .013$ ) were significant.

An exploratory correlation matrix was calculated using all variables from all measures except as follows. The only variables used from the CAPS were those that the investigator used to determine guilt and shame ratings. No within measure correlations were included for measures that were previously determined to be psychometrically sound. For the remaining variables, correlations significant at the .05 level (two-tailed) are reported in Appendix E. For demographic variables, the following list of variables were dichotomized for the correlation matrix. Ethnicity was dichotomized into "Caucasian" (56% of the sample) and "all others" (44% of the sample). Education level

was dichotomized into categories of “some college” (67%) and “all others” (which included those with GEDs, high school diplomas, and college graduates and was 33% of the sample). Most recent occupation was dichotomized in those “marginally employed” (81%) and “all others” (19%). Marital status was categorized into those “married or living as married” (49%) and “all others” (which included participants who were divorced, widowed, never married, or separated and was 51% of the sample). Branch of service was dichotomized into “Army” (56%) and “all others” (which included Air Force and Marines and was 44% of the sample). For the variable, months in Vietnam, categorization included those who served one tour (12 months and included 47% of the sample) and “all others” (which varied from 1 to 24 months and included 53% of the sample). Number of times hospitalized in Vietnam was categorized in those who were never hospitalized (47%) and “all others” (which varied from 1 to 5 times and included 53% of the sample). Appendix E is non-redundant; each correlation is reported only once. For example, if Item 1 of pre-trauma Perceived Social Support Scale correlated with Pressing Treatment Issues Questionnaire Item 18, the correlation is shown only under Item 1.

## CHAPTER 4

### DISCUSSION

The first hypothesis proposed that participants who have experienced more horror/mortality-fear would have lower treatment needs relating to guilt issues. It was expected that if one had greater fear regarding self-preservation, feelings of guilt would be less intense. On the other hand, the second hypothesis proposed that participants who have experienced greater social loss would have higher treatment needs regarding guilt issues. Neither of these hypotheses were supported by the present findings. Joseph, Williams, and Yule (1997) found that the survivors' causal attributions affect their emotional state, such that soldiers believing their experiences were externally caused experienced less guilt. This may be the case for this sample. Treating clinicians did not consistently endorse guilt items as pressing treatment needs, which may indicate higher needs of symptom management rather than trauma processing in the recovery process. Henning and Frueh (1997) reported re-experiencing/intrusive phenomena and avoidance appeared to be specifically associated with guilt relating to combat. Again, treating clinicians did not significantly endorse such items as pressing treatment needs. Kubany (1997) discussed that in his experience many "clinicians are unaware of the scope of guilt issues among their veteran clients. As a result, many guilt issues not only do not get treated; they are often not even identified" (p. 241). This is a potential explanation for the lack of significance for guilt-related issues. Plan B results were also non-significant. For Hypothesis 1, it is possible that this group of veterans did not relate horror/mortality-



fear with lower feelings of guilt. Alternatively, because of the length of time since the trauma situation, they might not process guilt in the same manner as other clinical populations. Regarding social loss and guilt, Plan B results were more promising, which lends partial and cautious support to Hypothesis 2: that participants who have experienced greater social loss may have higher treatment needs regarding guilt issues.

A Chi Square analysis was calculated to explore the relation between shame and guilt as pressing treatment issues as determined by clinicians' ratings of pressing treatment needs. As expected, the cell for high guilt with low shame was the lowest, offering support for Nathanson's (1997) model stating that guilt cannot be present without shame. Differences in the Chi Square analysis between clinicians' guilt and shame ratings versus Plan B may once again be an indication of clinicians not recognizing guilt as a pressing treatment need, whereas the investigator was inclined to identify the relation between guilt and shame. Another possibility could be the method used in dichotomizing the variables. The investigator's ratings for shame and guilt were dichotomized such that only predominant and significant ratings of guilt and shame were rated as high guilt and shame. For clinicians' ratings, the variables were dichotomized into presence or absence.

The third hypothesis stated that participants high in shame would report higher levels of anxiety both pre-and post-trauma than participants not identified as shame ridden. The relation between shame and anxiety has been discussed by several theorists (Cook, 1996; Nathanson, 1987; Tomkins, 1987). On a theoretical level, it would be expected that higher levels of anxiety would result from attempts to hide feelings of shame, including inadequacy, worthlessness, inferiority, and a tendency to want to

disappear or hide. The present study confirmed a relation between anxiety and shame, albeit less consistently than anticipated. Results using clinicians' ratings of shame indicate participants reported lower anxiety levels pre-trauma than post-trauma, with marginal differences caused by shame.

Plan B results demonstrate a significant interaction between shame and anxiety, particularly at the post-trauma level. These results may have been affected by most participants' beliefs that their pre-trauma anxiety levels were almost non-existent. Part of the discrepancy might be accounted for by clinicians recognizing anger management as a pressing treatment need, but not seeing this as relating to shame. According to Tangney, et. al (1992), shame tends to initiate an irrational and counterproductive rage reaction, probably similar to what veterans report as anger problems. Gilbert (1998) stated that anger and aggression can substitute for shame. Such anger is activated so quickly that the person may not be aware of the shame feelings; this is especially true in situations where men believe they must "save face," which is known to be a source of male violence. This may also be applicable when looking at correlations of shame with perceived social support. Using clinicians' ratings of shame and controlling for pre-trauma perceived social support, there appeared to be only a minimal relation. However, when using investigator's ratings of shame (Plan B), there appears to be an inverse relation between current levels of social support and the amount of shame participants are experiencing. As shame feelings increase, levels of perceived social support are likely to decrease. Such results support Macdonald's (1998) finding that shame diminishes affiliative tendencies and is a strong motivator for socially avoidant behavior. He further elaborated that "shame involves an impulse to get away from other people, an action

tendency of interpersonal avoidance” (p. 142). Feelings of shame can be experienced such that they prompt preemptive functions or behaviors (persons may actually anticipate a shame reaction and thus use avoidance behaviors to prevent situations where feelings of shame could occur). Again, this demonstrates maladaptive patterns for social withdrawal from those who could potentially offer social support.

What might account for the significant difference between pre- and post-trauma anxiety levels? Factors such as the age of the participants (most were barely out of high school) might be helpful in this regard. Their youth at the time of traumatization may have influenced their current perceptions of their pre-trauma anxiety levels. Post-trauma anxiety levels, on the other hand, have remained elevated in this sample of severely traumatized combat veterans. Litz and Keane (1989) suggested that persons with PTSD are more likely to experience partially activated arousal systems at all times. The amount of horror/mortality-fear this population experienced in the Vietnam theater may help validate Litz and Keane’s (1989) findings. Muraoka, Carlson, and Chemtob (1998), using ambulatory monitoring (in a naturalistic setting) of blood pressure and heart rate in Vietnam combat veterans, found significant elevations in blood pressure and heart rate among veterans with PTSD. Their findings supported earlier laboratory research by Blanchard (1990). Higher anxiety rates post-trauma also agree with Kolb’s (1991) theory that even successfully treated veterans know everyday events can oftentimes trigger re-experiencing phenomenon leading to increased anxiety levels.

Further investigation of the shame relation broke down the 3-way interaction between shame, social support, and anxiety symptoms. It would be expected from earlier discussion that pre- to post-morbid levels of perceived social support and anxiety would

demonstrate significant decrements in social support and intensification in levels of anxiety. The slope of the line for anxiety, Line A-B for Low Shame (Figure 1) and Line E-F for High Shame (Figure 2), indicates the significant escalation in anxiety pre- to post-trauma. Likewise, the slope of the line for perceived social support, Line C-D (Figure 1) for Low Shame and Line G-H (Figure 2) for High Shame, indicates the significant decrease in social support experienced by this Vietnam veteran sample. Interestingly, people who can be described as experiencing high levels of shame are more extreme in their disruption on anxiety and social support than low shame people. Thus, it appears that shame affects veterans' coping with traumatic events by more severely increasing anxiety and more severely impairing social support.

Because 48.8% (21 participants) carried a prior substance dependence diagnosis or treatment, it was possible that such substance use might be related to perceived social support levels. The following partial correlations controlled for PTSD symptoms. Clinicians' ratings of shame were significantly related to substance dependence diagnosis or past treatment ( $r = .44$ ,  $p = .004$ ). Also, perceived social support was significantly related to substance dependence diagnosis or past treatment ( $r = -.46$ ,  $p = .011$ ). Plan B ratings were not significant, although a trend in the low shame group was observed for perceived social support and prior substance dependence diagnosis or treatment ( $r = -.36$ ,  $p = .094$ ). The significant relation between shame and substance dependence diagnosis or past treatment in the clinicians' ratings may be linked to the fact that the VA requires veterans be substance-free for a minimum of 60 days before they can be accepted for treatment for their PTSD symptoms.

The fourth hypothesis stated that participants whose index trauma descriptions were rated as exhibiting higher social loss would show greater decrement in perceived social support over pre-morbid levels than participants whose index traumas contained less social loss. Lack of the predicted significant negative correlation at this level raises questions about how this population copes with social loss. During the interview process with the participants, the examiner found many examples in which veterans preferred not to associate with others who had no Vietnam experiences. Their mindset seemed to be that others did not understand what they had gone through. Catherall and Shelton (1996) confirm that when PTSD survivors become preoccupied with their trauma and symptoms, “they are shunned by others” (p. 324). After 30 or more years, most veterans interviewed have “given up” on supportive relationships and are not interested in pursuing relationships. If veterans are attributing the negative outcomes to global factors, they may believe they have less sources of social support and will not attempt to utilize such coping methods, according to Paunovic (1998). Using theater veterans from the NVVRS, Fontana and Rosenheck (1999) developed structural equation modeling that found the undermining of basic assumptions of the benevolence and meaningfulness of the world may have contributed to PTSD in this population. Using a variable they named insufficiency or malevolence of the environment (meaning lack of appropriate supplies, munitions, equipment, and harsh physical conditions) they suggested that such conditions could lead to exacerbation and perpetuation of symptomatic reactions to trauma. This provides further evidence for the Sewell and Williams model (in press) that event disruption invalidates expectations of “how the world is supposed to work” versus social disruption that invalidates “with whom and how I am socially related” (p. 4). They

further stated disruptions are likely in both domains, but that either one could dominate an individual's clinical presentation. Lack of support for Hypothesis 4 may be a result of veterans' inability to process the trauma in either domain due to a lack of containment of overwhelming, unameliorated symptoms, as well as constricted social roles (Sewell 1997) related to the trauma experience.

When the trauma type variables were dichotomized and discriminant analyses performed, those experiencing high social loss demonstrated a decrement in perceived social support post-trauma. According to descriptive statistics, levels of perceived social support decreased by about 50% (Pre-Trauma  $\underline{M} = 25.84$ ,  $\underline{SD} = 10.03$ ; Post-Trauma  $\underline{M} = 12.95$ ,  $\underline{SD} = 9.48$ ). Post-trauma levels of anxiety increased approximately 450% (Pre-Trauma  $\underline{M} = 8.00$ ,  $\underline{SD} = 9.94$ , Post-trauma  $\underline{M} = 38.00$ ,  $\underline{SD} = 9.37$ ). Procidano and Smith (1997) stated the absence of social support leads to feelings of distress, anxiety, and anger, which may explain the higher levels of anxiety experienced post-trauma by this population. Taft, Stern, King, and King (1999) stated that severe stressors affect the perception of available support. They found that stressors appear to have the effect of diminishing personal resources about three-fourths of the time. The significant negative correlation between post-trauma anxiety and social support, when controlling for pre-trauma social support, supports Horowitz' (1986) finding that PTSD symptoms and lack of hope may become stable characteristics if the trauma occurs during the formative, young adult years. Procidano and Heller (1983) stated that long-standing traits can influence perceived social support, and persons with negative perceptions tend to withdraw from the object of the negative perceptions. Such a theory may explain why

veterans experience increased feelings of isolation and loss of social support concomitant with anxiety in the post-trauma period.

### Study Limitations

As cited in Catherall and Shelton (1996), Herman outlined three stages of recovery for persons diagnosed with PTSD. The first is safety, whereby persons suffering from post-traumatic stress must feel safe and secure before they are willing to begin the process of uncovering the traumatic events that are causing the multiple symptoms of PTSD. Greenberg and Paivio (1997) also discussed the importance of safety and security needs prior to exploration of the trauma.

Clinicians reported anger management as the most frequent pressing treatment need for 33.3% (14) of the participants. This is by far the highest frequency of pressing treatment issues. By focusing on symptom management of anger, clinicians may not have given equal consideration to other areas of treatment needs. For example, anger is often used by men to cover feelings of shame that are not socially acceptable in a male population. By clinicians focusing on anger management as the most pressing treatment need, it may indicate the sample was in the earlier stages of recovery (i.e., Herman's first stage) in which issues of symptom management and safety and security may tend towards under-evaluation of other pressing treatment needs.

Herman's second stage, designated as remembrance and mourning, requires reasonable control of symptoms, reliable social support, and having life circumstances that allow for the engagement of intense emotional processing. The third stage Herman referred to as reconnecting, during which the person is able to reconnect with close others, as well as attaining the ability to reconnect with outside society. It should be

noted that, particularly in group work, different persons may be at different stages of recovery and may have different areas of vulnerability. Because most of the participants in this study were involved in group psychotherapy at the VA, it is possible that many may have been at various stages of the recovery process and therefore results may lack consistency based on individual treatment needs, safety issues regarding group membership (members were not consistent in attendance of groups), lack of clinician understanding and consistency, and individual differences among participants' willingness to work toward recovery (i.e., many of these men have been experiencing chronic symptoms of PTSD for 30 or more years and are of the mindset "things will never get any better"). Stone (1996) described alexithymia as an "absence of words for mood or feeling" (p. 293). Such persons have little awareness of their affect. Stone quoted Krystal as describing the alexithymic as "weak in 'the cognitive aspect of emotion,' which includes the sense of 'meaning . . . and . . . the story behind it' as well as the ability to identify and express feeling" (p. 294). Because half the sample requested the investigator to write their stories, they may not process emotions well at the verbal level.

Van der Kolk (1996), using positron emission tomography (PET) scans, found that people with PTSD, when exposed to stimuli reminiscent to their trauma, show perfusion in right hemisphere areas associated with emotional states and a simultaneous decrease in oxygen utilization in Broca's area (the area responsible for generating words to attach to internal experience). He associated this with the "speechless terror" some people feel when traumatized. Vietnam veterans may have used numbing as a coping mechanism for so many years, some are unable to experience the emotional and affective



world safely, regardless of the environment. Once again, this is a safety issue regarding what veterans are willing to report, not only to researchers, but in group therapy settings as well, and may explain the lack of significant findings for some of the hypotheses.

One limitation of the study was the size of the sample. Some of the hypotheses appeared to be borne out by mean differences, but the small sample size decreased the possibility of reaching statistical significance. Another limitation may have been clinician's limited willingness to participate and complete the Pressing Treatment Issues Questionnaires. Participants saw a variety of clinicians from nurse practitioners, social workers, physician assistants, licensed psychologists, and psychiatrists. Interpretation of the pressing treatment issues may have differed from different professional perspectives. Some clinicians admitted they did not know some of the participants well, only seeing them for group therapy once a week or less. Approximately half the sample admitted to substance dependence or abuse treatment in the past. If participants were currently using substances, outcomes may have been affected.

Adequate measures of shame and guilt were not used in the study. An effort was made to keep participant load to a minimum to encourage participation. Reliance on clinicians' judgment regarding these constructs may have been less adequate than originally assumed. Some amount of researcher bias may have been introduced into the study when evaluating Plan B results. However, random scoring for guilt and shame variables by a licensed psychologist demonstrated high inter-rater reliability.

Another limitation of the study may be the length of time since the traumatic experiences for the participants. Several participants related to the researcher the difficulty in remembering what life was like "before Vietnam" and thus had difficulty

completing measures of perceived social support and anxiety prior to their war experiences. Also, many had just completed high school at the time of service entry, and remembered “feeling on top of the world with great futures ahead of them” before they went to Vietnam. Such global conceptions may have affected their memories when completing pre-trauma measures.

A further limitation of the sample was the use of Vietnam veterans. These veterans appear to be unique in a number of ways. First, they trained as a group, but did not remain as a group in Vietnam. Many were replacements for others who had been killed or returned home when their tour of duty was over. The same is true for those returning home—they did not return as a group; they returned as individuals who may never have been able to recontact fellow soldiers. Second, most were not greeted as returning victorious soldiers, but instead were treated as losers, called names, and despised by anti-war protestors. Some experienced physical violence for having done their duty for their country. Many were unable to find gainful employment if employers found out they were Vietnam veterans. Because this war was a unique situation for these veterans, results of the study may not be generalizable to other populations. Also, women were not included in the study so any results may not be appropriate for female populations.

### Clinical Implications

Based on the background literature, issues of shame in Post-Traumatic Stress Disorder are typically hidden and present as other types of psychopathology. Kubany (2000) stated that trauma survivors commonly experience shame. If it can be assumed that many of the anger problems reported as pressing treatment issues by clinicians are

shame related, it would be appropriate for group therapy to offer education on how males tend to react to shame by using anger. Exploration of the relationship between shame and anger in this population may lead to a lessening of the anger issues on which clinicians focus. Current psychoeducational group therapy on anger management could add a dimension on the relationship between anger and shame, encouraging group participants to explore this construct within themselves. A homework assignment asking questions such as, “When you become angry is it because you believe you must save face and not appear weak or vulnerable? Describe such an incident.” Such homework could then be brought back to group and processed to give a greater understanding of the relationship between shame and anger. Further educational focus might demonstrate how vague or negative experiences tend to reinforce feelings of worthlessness, badness and lead to excessive feelings of guilt in those who are shame-prone.

It may also be helpful to look at other ways of restructuring group therapy for veterans with PTSD. Groups focusing on particular symptoms or facets of treatment may lead to more improvement than generalized groups for PTSD. This would require indepth testing of patients presenting with PTSD to determine treatment needs. For many of these men who have been in treatment for extended time periods with no demonstrable improvement, it may be possible to look at specific treatment needs and assign them to more appropriate and specific target groups. An example could relate to shame-proneness. If group participants fundamentally understand how their anger is related to shame (as mentioned above), then those who are shame-prone could attend a group specifically designed to focus on shame issues. It would be important to ascertain the stage of recovery for group members to maintain safety and security of each participant.

One of the roles of the therapist would be to look for shame characteristics (i.e., eyes averted, facial blush, hanging of the head, confusion). When the group becomes shame-sensitive, curiosity replaces defensiveness, members listen in an accepting manner, fears of abandonment diminish, and a new sense of self emerges.

Another group format may work specifically on how Vietnam veterans process affect, or use numbing to avoid affective reactions. Such a group could focus on hyperarousal symptoms, on the aspects of the “speechless terror” for which veterans may not have verbal expression. If group work could help focus on the strong emotional reactions and empower the participants to find verbal expressions for such emotions, according to Kubany and Manke (1995), the experiences then lose some of their terror. By lessening this fearful reaction, persons could determine other options and make healthier choices. As improvement occurs, group support may lead to more social competence that may lead to improved social support and additional buffering of stress reactions. As demonstrated in the findings of this paper, the relation between anxiety and perceived social support is such that lessening symptoms of anxiety may increase the participants’ interest in social support. This was illustrated by one participant who told the researcher about forcing himself to attend a family reunion (he had not done so since his return from Vietnam). Although he admitted how difficult it was at the beginning of the reunion, by the end of the day he experienced feelings of achievement, understanding, belonging, and well-being he had not attained since Vietnam. He became an “encourager” for his therapy group, telling others there is support available to them.

Anxiety pre-trauma did not appear to be associated with levels of shame. It was hoped that such a finding would substantiate a shame-prone individual, whose treatment

needs would differ from those who are not shame-prone. Because the results of this study are not generalizable to populations other than Vietnam Veterans, this research question may need to be pursued further. For this particular population, shame-proneness may not be a factor worth pursuing. The results do indicate a decrement of perceived social support for both family and friends post-trauma. Many veterans stated their families no longer “understood” them since they came back from Vietnam. Such results may indicate a need for more family therapy to give families a more realistic understanding of what happened to these men in Vietnam. Unfortunately, because of the 30 year time-lag, many failed marriages, disrupted family relationships with children (many now grown), and substance abuse problems make such therapy less likely to occur.

#### Future Research

Future research in the areas of guilt and shame would best be served by the use of appropriate instruments to measure the constructs. This in itself produces a problem because of the overlap in the constructs. Some researchers have stated it is impossible to look at the constructs independently, but admit there are differences. Older measures of guilt have actually turned out to be better measures of shame than guilt. Shame measures are difficult to find. Perhaps researchers should determine how best to tease apart the constructs so that they may be measured separately. Kubany (2000) has accomplished preliminary work in structuring differences between guilt and shame by advancing guilt constructs in terms of behavior and shame in terms of “I feel” statements (where shame affect reflects core values). Further development of a shame measure would be necessary before this study could be implemented. Once that is accomplished, then using current

measures of guilt, such as Kubany et al.'s Trauma-Related Guilt Inventory (TRGI; 1996) with a properly validated measure of shame would allow more appropriate measuring of trauma-related guilt and shame constructs. Because treatment for each construct is different, clinicians would be well served to be able to determine which construct should be the focus of treatment.

The next study should focus on a mixed gender sample of trauma survivors so that more generalizable results might be obtained. Further, persons for whom the traumatic experiences are more current may also prove more fruitful in determining how the trauma has affected areas of perceived social support and anxiety as well as guilt and shame. Providing definitions of constructs to participants may also prove beneficial in helping tease out the differences in such constructs.

To illustrate the needed direction of future research, a potential study will be briefly outlined. A study could focus on adults who have experienced childhood abuse, both emotional and physical. In such a study, a mixed gender population would be tested. Participants would not include incest survivors, as this population may experience increased levels of pathology relative to other abuse victims. Measures would include a PTSD measure (perhaps the CAPS or a self-report inventory, such as the Penn PTSD Inventory) to determine if PTSD is present. The Trauma Related Guilt Inventory (TRGI) would measure the guilt construct, and the Internalized Shame Scale (ISS) would measure the shame construct. Perceived Social Support could be measured using the PSS; however one would expect levels of PSS to be low both pre- and post-trauma. Demographic data would also be collected, as well as information about the primary abuser (i.e., parent, step-parent, other family member, foster parent). Expected results

would show higher levels of shame than guilt, although the two should be highly correlated as most adult survivors of childhood trauma believe they “caused” the abuse either by their “badness” or inability to “please” the abuser. If participants grouped into one category or the other (i.e., emotional or physical abuse), it would be possible to look at the different effects by trauma type.

### Summary and Conclusions

This study began testing a theoretical model put forth by Sewell and Williams (in press), that differing types of trauma would yield differing presentations in social versus event processing domains. Guilt was evaluated to determine if trauma type would influence levels of guilt. Shame was evaluated to determine if anxiety levels would be higher for participants who appeared to experience shame-proneness. Evaluations of perceived social support were also assessed to determine whether participants experienced differential decrements in perceived social support depending on trauma type. Statistical evaluations were conducted from the perspective of how clinicians rated pressing treatment issues for each participant and how the examiner evaluated guilt and shame based on information gathered during a structured clinical interview.

Testing of trauma type in regard to guilt produced non-significant results. However, there was a trend supporting the model that participants who experienced greater social loss have higher treatment needs regarding guilt issues (when using examiner data rather than clinician ratings). Effect size for post-trauma anxiety and shame was moderate, and significant results were found when using researcher ratings. This was expected because those experiencing shame tend to want to hide or disappear due to feelings of inferiority, inadequacy, or worthlessness. Although partial correlation

did not indicate a significant decrement in perceived social support post-trauma when controlling for pre-trauma social support for participants who had experienced substantial social loss, there was a significant negative correlation between anxiety and perceived social support post-trauma when controlling for pre-trauma social support. Other analyses that dichotomized the shame variable (high vs. low) found significant differences between pre- and post-trauma results for both anxiety and social support for high shame persons.

Although testing did not consistently support the Sewell and Williams model (in press), and the guilt and shame implications derived therefrom, sufficient trends make further testing appropriate. The decrement in post-trauma social support as anxiety increases in the high shame group suggests differences in how a person who is more shame-prone constructs his/her worldview. A larger sample size and mixed-gender study would make results more generalizable to other populations. Use of specific guilt and shame measures would further enhance future results.



APPENDIX A  
CONSENT FORM

Subject Name: \_\_\_\_\_ Date: \_\_\_\_\_

Title of the Study: Social Versus Symptomatic Disruption in Relation to Trauma ContentPrincipal Investigator: James Besyner, Ph.D. VAMC: Dallas, TXCo-Investigators: Kenneth W. Sewell, Ph.D., Reagan Andrews, Ph.D.

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the proposed procedures. It describes the procedures, benefits, risks, discomforts of the study. It also describes the alternative treatments that are available to you and your right to withdraw from the study at any time. It is important for you to understand that no guarantees or assurances can be made as to the results of the study.

**PURPOSE OF THE STUDY AND HOW LONG IT WILL LAST:**

You are being asked to volunteer for a research study investigating factors that can contribute to differences in the symptoms of posttraumatic stress disorder (PTSD). All in all, your involvement should take approximately one and a half to two hours in one session.

**DESCRIPTION OF THE STUDY INCLUDING THE PROCEDURES TO BE USED:**


You will be asked a series of questions regarding your specific trauma, your symptoms of PTSD, and your treatment. You will be asked to complete four brief psychological tests that measure your symptoms and social support; and you will be asked to write a description of your worst traumatic experience. Also as part of your participation in the study, your therapist will be asked to identify the most pressing of your current treatment needs. Finally, your medical records will be consulted to code your demographic information (date of birth, education, etc.).

**DESCRIPTION OF EXPERIMENTAL PROCEDURES/ELEMENTS WHICH MAY RESULT IN DISCOMFORT OR INCONVENIENCE:**

Because some of the interview and test questions are in reference to your trauma and PTSD symptoms, it is possible that you might experience some emotional discomfort during your involvement in the study. You are free to discontinue at any time should your discomfort become unacceptable. Also, your therapist or another appropriate professional will be made available should you desire to discuss any discomfort that might be experienced.

SUBJECTS IDENTIFICATION (i.e., date of give name, sex, race, etc.)

Initials: \_\_\_\_\_ Date: \_\_\_\_\_

 <b>Department of Veterans Affairs</b>	<b>VA RESEARCH CONSENT FORM</b> <small>(Continuation Page 2 of 4)</small>
Subject Name: _____ Date: _____	
Title of the Study: <u>Social Versus Symptomatic Disruption in Relation to Trauma Content</u>	
Principal Investigator: <u>James Besyner, Ph.D.</u> VAMC: <u>Dallas, TX</u>	
Co-Investigators: <u>Kenneth W. Sewell, Ph.D., Reagan Andrews, Ph.D.</u>	
<p><b><u>DESCRIPTION OF EXPERIMENTAL PROCEDURES/ELEMENTS WHICH ARE ASSOCIATED WITH FORESEEABLE RISKS:</u></b></p> <p>There are no foreseeable risks associated with the procedures of this research study.</p> <p><b><u>ALTERNATIVE TREATMENTS:</u></b></p> <p>As this research study does not involve any experimental treatment components (only interview and questionnaires), there will be no disruption in your on-going treatment.</p> <p><b><u>BENEFITS TO THE PATIENT OR TO OTHERS:</u></b></p> <p>As this research study does not involve any treatment per se (only assessment), there are no specific benefits associated with your involvement. However, a better understanding of how different types of traumatic experiences affect PTSD symptoms will result in a professional community (psychologists, psychiatrists, social workers, and policy-makers) that is better equipped to assist persons with PTSD. Thus, your involvement in the project might indirectly benefit persons who are treated for PTSD.</p> <p><b><u>CONFIDENTIALITY OF RESEARCH RECORDS:</u></b></p> <p>The investigators maintain confidentiality of your research records in the same way as your other medical records. No one has access to your records except as required by law. You are, however, authorizing the Dallas VA Institutional Review Board to inspect your medical and research records. If you choose to participate in the study, the FDA has the right to examine your research records. Your name as a subject in this study is confidential, and will not be included in any publication prepared as a result of this study.</p>	
Initials: _____ Date: _____	


**Department of Veterans Affairs**
**VA RESEARCH CONSENT FORM**

 (Continuation Page 3 of 4)

Subject Name: \_\_\_\_\_ Date: \_\_\_\_\_

 Title of the Study: Social Versus Symptomatic Disruption in Relation to Trauma Content

 Principal Investigator: James Besyner, Ph.D. VAMC: Dallas, TX

 Co-Investigators: Kenneth W. Sewell, Ph.D., Reagan Andrews, Ph.D.
**COMPENSATION FOR ANY RESEARCH RELATED INJURY:**

The investigators will make every effort to prevent injury that could result from this research. While there is no requirement for the VA to provide compensation for injuries related to research, it will provide reasonable medical treatment for injuries related to research in accordance with Federal law. You do not give up any legal rights to compensation for injuries related to research by signing this form. The Federal Tort Claims Act is a way to request compensation from the government for injuries related to research in VA research subjects. Investigators at the VA will advise you about medical treatment available at the Dallas VA Medical Center in case of bad effects, which you should report to them promptly. Investigator's phone numbers are at the end of this form.

**REVIEW FOR PROTECTION OF PARTICIPANTS:**

This research study has been reviewed and approved by the Institutional Review Board of the Dallas VA Medical Center, and the Institutional Review Board of the University of North Texas.

RESEARCH SUBJECTS'S RIGHTS: I have read or have had read to me all of the above.

\_\_\_\_\_ has explained the study to me and answered all of my questions. I have been told the risks or discomforts and possible benefits of the study. I have been told of other choices of treatment available to me.

I understand that I do not have to take part in this study, and my refusal to participate will involve no penalty or loss of rights to which I am entitled. I may withdraw at any time without penalty or loss of VA or other benefits to which I am entitled. The study personnel can stop my participation at any time if it appears to be harmful to me, if I fail to follow directions for participation in the study, if it is discovered that I do not meet the study requirements, or if the study is canceled

In case there are problems or questions, I have been told that I can call Dr. Besyner at 214-857-0534 during the day or at 800-725-4436 after hours.

Initials: \_\_\_\_\_ Date: \_\_\_\_\_


**Department of Veterans Affairs**
**VA RESEARCH CONSENT FORM**

(Continuation Page 4 of 4)

Subject Name: \_\_\_\_\_ Date: \_\_\_\_\_

 Title of the Study: Social Versus Symptomatic Disruption in Relation to Trauma Content

 Principal Investigator: James Besyner, Ph.D. VAMC: Dallas, TX

 Co-Investigators: Kenneth W. Sewell, Ph.D., Reagan Andrews, Ph.D.

 If you have any questions about your rights as a participant in this study, you may contact the Chairman, Subcommittee or Human Studies at the Dallas VA Medical Center: **(214) 857-0291**.

I understand my rights as a research subject, and I voluntarily consent to participate in this study. I understand what the study is about and how and why it is being done. I will receive a signed copy of this consent form.

 \_\_\_\_\_  
 Subject's Signature

 \_\_\_\_\_  
 Date

 \_\_\_\_\_  
 Signature of Subject's Representative\*

 \_\_\_\_\_  
 Subject's Representative (Print)

 \_\_\_\_\_  
 Signature of Witness

 \_\_\_\_\_  
 Witness (Print)

\*only required if subject is not competent

For the Investigator or Designee:

I certify that I have reviewed the contents of this form with the person signing above, who, in my opinion, understood the explanation. I have explained the known side effects and benefits of the research.

 \_\_\_\_\_  
 Principal Investigator's Signature  
 (or authorized representative)

 \_\_\_\_\_  
 Date

Telephone Number: 214-857-0534

IF MORE THAN ONE PAGE IS USED, EACH PAGE (VAF 10-1086A) MUST BE CONSECUTIVELY NUMBERED AND SIGNED.

## **INVESTIGATIONAL PATIENTS' BILL OF RIGHTS**

1. Be informed of the nature and purpose of the experiment.
2. Be given an explanation of the procedures to be followed in the medical experiment, and any drug or device to be utilized.
3. Be given a description of any discomforts and risks reasonable to be expected from the experiment.
4. Be given an explanation of any benefits to the patient reasonable to be expected from the experiment, if applicable.
5. Be given a disclosure of any appropriate alternative procedures, drugs, or devices that might be advantageous to the patient, and their relative risks and benefits.
6. Be informed of the avenues of medical treatment, if any, available to the patient after the experiment if complications should arise.
7. Be given an opportunity to ask any questions concerning the experiment or the procedures involved.
8. Be instructed that consent to participate in the medical experiment may be withdrawn at any time and the patient may discontinue participation in the medical experiment without prejudice.
9. Be given a copy of the signed and dated written consent form.
10. Be given the opportunity to decide to consent or not to consent to a medical experiment without the intervention of any element of force, fraud, deceit, duress, coercion, or undue influence on the patient's decision.

APPENDIX B  
INDEX TRAUMA DESCRIPTION





APPENDIX C

PRESSING TREATMENT ISSUES QUESTIONNAIRE

Pressing Treatment Issues Questionnaire  
(completed by participant's therapist)

In your perception, which of the following statements appear to be pressing treatment issues for this client? Please check all items that apply.

- |   |   |
|---|---|
| <p>_____ 1. self doubt</p> <p>_____ 2. view of self as inadequate</p> <p>_____ 3. blaming himself for what happened</p> <p>_____ 4. beliefs that his behaviors are unforgivable</p> <p>_____ 5. beliefs that he did something against his personal values</p> <p>_____ 6. impaired social life</p> <p>_____ 7. anger management problems</p> <p>_____ 8. difficulty making friends</p> <p>_____ 9. avoidance of people</p> <p>_____ 10. avoidance social activities</p> <p>_____ 11. lack of friends</p> <p>_____ 12. feeling responsible for event</p> <p>_____ 13. lack of contact with biological children</p> <p>_____ 14. repeated flashbacks</p> <p>_____ 15. intrusive thoughts</p> <p>_____ 16. reliving of trauma</p> <p>_____ 17. impaired family relationships</p> <p>_____ 18. uses emotional numbing to cope</p> | <p>_____ 19. sleep disturbance problems</p> <p>_____ 20. hypervigilance</p> <p>_____ 21. derealization</p> <p>_____ 22. subjective distress</p> <p>_____ 23. view of self as defective</p> <p>_____ 24. startle response</p> <p>_____ 25. difficulty concentrating</p> <p>_____ 26. panic attacks</p> <p>_____ 27. symptoms of agoraphobia</p> <p>_____ 28. dissociation a significant amount of time</p> <p>_____ 29. sense of a foreshortened future</p> <p>_____ 30. cannot remember aspects of trauma</p> <p>_____ 31. client thinks others see defects</p> <p>_____ 32. view of self as inferior</p> <p>_____ 33. being a social outcast</p> <p>_____ 34. view of self as a total loser</p> <p>_____ 35. view of self as damaged goods</p> <p>_____ 36. the client's behavior that has harmed others</p> |
|---|---|

Using the item numbers from the above statements, rank the 5 most pressing treatment issues. Number 1 below should correspond to the item number above that you feel is the most pressing treatment issue. Number 2 below should correspond to the item number you feel is the second most pressing treatment issue, and so on until you rank what you consider to be the 5 most pressing treatment issues. Please fill in all 5 blanks.

1. \_\_\_\_\_ (Use the statement number for the most pressing treatment issue)
2. \_\_\_\_\_ (Use the statement number for the second most pressing treatment issue)
3. \_\_\_\_\_ (Use the statement number for the third most pressing treatment issue)
4. \_\_\_\_\_ (Use the statement number for the fourth most pressing treatment issue)
5. \_\_\_\_\_ (Use the statement number for the fifth most pressing treatment issue)

APPENDIX D  
DEMOGRAPHICS WORKSHEET

**2000 UNT-VA Studies -- Demographic Information**  
**Besyner, Sewell, et al.**

1. Date of Birth \_\_\_\_\_
2. Ethnicity (1=Caucasian (White), 2=African American, 3=Hispanic, 4=Asian/Pacific Islander, 5= Native American, 6=Other (specify) \_\_\_\_\_)
3. Education Level (1=High School Diploma, 2=GED, 3=Some College, 4=College Graduate, 5=Graduate Degree)
4. Most Recent Occupation (to be coded later): \_\_\_\_\_ (include year and income if available)
5. Marital Status (1=Married, 2=Divorced, 3=Separated, 4=Widowed, 5=Never Married)
6. Branch of Service (1=Army, 2=Marines, 3=Navy, 4=Air Force)
7. Months of Military Active Duty: From \_\_\_\_\_ to \_\_\_\_\_
8. Post Active Duty Reserve (1=Yes, 2=No)
9. Rank Achieved (to be coded later): \_\_\_\_\_
10. Months in Vietnam: From \_\_\_\_\_ to \_\_\_\_\_
11. Number of Tours \_\_\_\_\_
12. Number of Times Wounded or Hospitalized in Vietnam \_\_\_\_\_
13. Significant Combat-Related Physical Impairment (1=Yes, 2=No, If Yes, specify: \_\_\_\_\_)
14. Prisoner of War (1=Yes, 2=No)
15. Date Entered VA System \_\_\_\_\_
16. Number of VA Hospitalizations \_\_\_\_\_
17. Date of First PTSD Diagnosis \_\_\_\_\_
18. Substance Dependence Diagnosis **OR** Past Treatment (1=Yes, 2=No)
19. Other Diagnoses (to be coded later): \_\_\_\_\_

**Note to File Reviewer:** All items except for numbers 4, 9, and 19 are to be coded in the left-hand blank at the time of the file review. Any item that cannot be completed because of missing information is to be coded with a "-9".

APPENDIX E

SELECTED SIGNIFICANT CORRELATION MATRIX

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### SELECTED SIGNIFICANT CORRELATION MATRIX

#### PERCEIVED SOCIAL SUPPORT (PSS) – PRE-TRAUMA

##### Family

##### Item 1 - Family Gives Moral Support

Trauma Social Loss Rater, Number 3	-.344	.024
Trauma Horror/Loss Rater, Number 3	.328	.032
Trauma Description, Social Loss, Average	-.303	.048
Trauma Description Horror/Mortality-Fear avg.	.317	.038
Branch of Service Dichotomized	.317	.038

##### Item 2 - Gets Good Ideas from Family

Ethnicity Dichotomized	-.305	.047
PSS-SR Pre-Trauma, Angry outbursts	.321	.036
Trauma Description Social Loss, Average	-.321	.036

##### Item 3 - Most People Closer to their Family than I am

PSS-Post-Trauma, Total	-.384	.011
PTIQ Shame, Dichotomized	-.306	.046
Guilt Dichotomized (Investigator's Rating)	.306	.046

##### Item 4 – Family Members Uncomfortable When I Confide

PSS-SR, Pre-Trauma, Difficulty concentrating	-.408	.007
PSS-SR, Post-Trauma, Avoid thoughts and feelings	.345	.023
PSS-SR, Post-Trauma, Avoid activities, situations	.320	.036
PSS-SR, Post-Trauma, Hypervigilance	.323	.035

##### Item 5 – Family Enjoys Hearing What I Think

PSS-SR, Post-Trauma, Lost interest in activities	-.320	.036
PTIQ Item 24, Startle response	-.360	.019
Trauma Description Social Loss, Average	-.365	.016

##### Item 6 – Family Shares My Interests

PTIQ Item 26, Panic attacks	.319	.039
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##### Item 7 – Family Members Come to Me for Advice

PSS-SR Post-Trauma, Sleep disturbance	.327	.032
PSS-SR Post-Trauma, Angry outbursts	.300	.050
PTIQ Item 26, Panic attacks	.343	.026

##### Item 8 – I Rely on my Family for Emotional Support

PTIQ Item 3, Blames self for what happened	.312	.044
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<u>Item 9 – Family Member I Could Go To if Feeling Down</u>		
CAPS Guilt over acts of commission/omission	-.406	.007
<u>Item 10 – Family and I are Open About What We Think</u>		
PSS-SR Post Trauma, Avoids thoughts and feelings	.423	.005
PSS-SR Post Trauma, Avoids activities	.308	.045
PTIQ Item 7, Anger management	.335	.030
Substance Dependence Dx. or Tx.	-.314	.040
Trauma Description Social Loss, Average	-.491	.001
<u>Item 11 – Family is Sensitive to My Needs</u>		
PSS-SR Pre-Trauma, Intensely emotionally upset	-.346	.023
PTIQ Item 10, Avoids of social activities	.316	.041
PTIQ Item 26, Panic attacks	.362	.019
PTIQ Item 35, Views self as damaged goods	.361	.019
<u>Item 12 – Family Comes to Me for Emotional Support</u>		
Trauma Description Social Loss, Average	-.350	.021
<u>Item 13 – Family Good at Helping Me Solve Problems</u>		
Mos. in Vietnam Dichotomized	.309	.044
<u>Item 14 – Sharing Relationship with Family</u>		
PTIQ Item 26, Panic attacks	.325	.036
<u>Item 15 – Family Gets Good Ideas From Me</u>		
PSS-SR Pre-Trauma, Avoids activities	-.313	.041
PSS-SR Pre-Trauma, Detachment	-.347	.023
PSS-SR Pre-Trauma, Foreshortened future	-.373	.014
PSS-SR Pre-Trauma, Sleep disturbance	-.320	.037
PSS-SR Pre-Trauma, Angry outbursts	-.340	.026
PSS-SR Pre-Trauma, Difficulty concentrating	-.410	.006
PSS-SR Post-Trauma, Flashbacks	.309	.046
PSS-SR Post-Trauma, Intensely emotionally upset	.344	.024
PSS-SR Post-Trauma, Avoids thoughts and feelings	.354	.020
PSS-SR Post-Trauma, Avoids activities	.398	.008
PSS-SR Post-Trauma, Detachment	.340	.026
PSS-SR Post-Trauma, Angry outbursts	.374	.013
PTIQ Item 2, Sees self as inadequate	.373	.015
PTIQ Item 32, Sees self as Inferior	.426	.005
Education Dichotomized	.318	.037
PSS-SR Post-Trauma, Total	.384	.011
PSS-SR Pre-Trauma, Total	-.315	.040

	<u>r</u>	<u>p</u>
<u>Item 16 – Uncomfortable Confiding in Family</u>		
PSS-SR Post Trauma, Sleep disturbance	-.303	.048
PSS-SR Post Trauma, Startle response	-.309	.044
PSS-SR Post-Trauma, Intense physical reactions	-.316	.039
PTIQ Item 22, Subjective distress	-.408	.007
Guilt Dichotomized (Investigator's Rating)	-.300	.050
<u>Item 17 – Family Seeks My Companionship</u>		
Substance Dependence Dx. or Tx.	-.303	.049
<u>Item 18 – Family Thinks I Help Solve Problems</u>		
Months in Vietnam Dichotomized	.309	.044
Substance Dependence Dx. or Tx.	-.395	.009
Trauma Description Social Loss, Average	-.413	.006
<u>Item 19 – Other's Family Relationships More Intimate</u>		
PSS-SR Post-Trauma, Lost interest in activities	-.309	.044
Occupation Dichotomized	-.332	.030
<u>Item 20 – I Wish My Family Were Much Different</u>		
PSS-SR Pre-Trauma, Lost interest in activities	-.314	.043
PSS-SR Pre-Trauma, Detachment	-.330	.030
PSS-SR Pre-Trauma, Difficulty concentrating	-.345	.023
<u>Friends</u>		
<u>Item 1 – Friends Give Me Moral Support</u>		
PSS-SR Post-Trauma, Avoids activities	.345	.024
PSS-SR Post-Trauma, Hypervigilance	.331	.030
<u>Item 2 – Other People's Friendships Closer Than Mine</u>		
PSS-SR Pre-Trauma, Lost interest in activities	-.362	.018
PSS-SR Post-Trauma, Inability to recall events	.327	.032
PTIQ Item 23, Views self as defective	.307	.048
PTIQ Item 33, Social outcast	.354	.022
<u>Item 3 – Friends Enjoy Hearing What I Think</u>		
PSS-SR Pre-Trauma, Avoids thoughts and feelings	-.311	.043
PSS-SR Pre-Trauma, Inability to recall events	-.379	.012
PSS-SR Pre-Trauma, Lost interest in activities	-.400	.009
PSS-SR Pre-Trauma, Detachment	-.368	.015
PSS-SR Post-Trauma, Avoids activities	.358	.018
PSS-SR Post Trauma, Hypervigilance	.367	.016
PTIQ Item 9, Avoidance of people	-.342	.027
Trauma Description Social Loss, Average	-.316	.039



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<u>Item 4 – Friends Come to Me For Advice</u>		
CAPS C-4, Diminished interest in activities	.423	.005
PSS-SR Pre-Trauma, Inability to recall events	-.321	.036
PSS-SR Pre-Trauma, Lost interest in activities	-.332	.032
PSS-SR Post-Trauma, Avoids thoughts and feelings	.410	.006
PSS-SR Post Trauma, Avoids activities	.345	.024
PSS-SR Post Trauma, Foreshortened future	.333	.029
PSS-SR Post Trauma, Sleep disturbance	.398	.008
PSS-SR Post Trauma, Hypervigilance	.579	<.0001
PTIQ Item 9, Avoidance of people	-.337	.029
PTIQ Item 23, Subjective distress	.342	.027
PSS-SR Post-Trauma, Total	.410	.006
<u>Item 5 – I Rely on Friends for Emotional Support</u>		
PSS-SR Post-Trauma, Hypervigilance	.474	.001
PTIQ Item 2, Views self as inadequate	.304	.050
PTIQ Item 9, Avoidance of people	-.402	.008
<u>Item 6 – Friends Upset, I'd Keep it to Myself</u>		
PSS-SR Post-Trauma, Lost interest in activities	-.304	.048
PTIQ Item 22, Subjective distress	.304	.050
<u>Item 7 – I'm on the Fringe of my Circle of Friends</u>		
PSS-SR Pre-Trauma, Detachment	-.349	.022
PSS-SR Post-Trauma, Avoids activities	.409	.006
PSS-SR Post-Trauma, Sleep disturbance	.379	.012
PSS-SR Post-Trauma, Total	.339	.026
<u>Item 8 – Friend I Could Go to if Feeling Down</u>		
CAPS Guilt over acts of commission/omission	-.368	.015
PSS-SR Post-Trauma, Hypervigilance	.393	.009
PTIQ Item 1, Self-Doubt	.329	.033
PTIQ Item 32, Sees Self as Inferior	.337	.029
Marital Status, Dichotomized	-.370	.015
<u>Item 9 – My Friends and I are Open</u>		
PSS-SR Pre-Trauma, Intensely emotionally upset	-.450	.002
PSS-SR Pre-Trauma, Avoids thoughts and feelings	-.407	.007
PSS-SR Pre-Trauma, Avoids activities	-.312	.041
PSS-SR Pre-Trauma, Lost interest in activities	-.409	.007
PSS-SR Pre-Trauma, Detachment	-.409	.007
PSS-SR Pre-Trauma, Restricted range of affect	-.316	.039
PSS-SR Post-Trauma, Intensely emotionally upset	.320	.036
PSS-SR Post-Trauma, Avoids thoughts and feelings	.423	.005
PSS-SR Post-Trauma, Avoids activities	.465	.002
PSS-SR Post-Trauma, Foreshortened future	.343	.025

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<u>Item 9 – My Friends and I are Open (Cont'd)</u>		
PSS-SR Post-Trauma, Hypervigilance	.415	.006
PSS-SR Pre-Trauma, Total	-.338	.026
Months Dx. with PTSD	.329	.031
<u>Item 10 – Friends Sensitive to Personal Needs</u>		
CAPS Guilt over acts of commission/omission	-.321	.036
PSS-SR Pre-Trauma, Inability to recall events	-.351	.021
PSS-SR Post-Trauma, Avoids activities	.334	.029
PTIQ Item 18, Emotional numbing	-.392	.010
Education Dichotomized	.314	.040
Trauma Description Social Loss, Average	-.445	.003
<u>Item 11 – Friends Come to Me for Emotional Support</u>		
PSS-SR Post-Trauma, Sleep disturbance	.321	.036
PTIQ Item 2, Views self as inadequate	.322	.038
PTIQ Item 9, Avoidance of people	-.342	.027
<u>Item 12 – Friends Help Me Solve Problems</u>		
PSS-SR Pre-Trauma, Intrusive thoughts	.305	.047
PSS-SR Post-Trauma, Hypervigilance	.318	.038
Trauma Description Social Loss, Average	-.374	.014
<u>Item 13 – Sharing Relationship With Number of Friends</u>		
CAPS C-4, Diminished interest in activities	.323	.035
PSS-SR Pre-Trauma, Inability to recall events	-.349	.022
PSS-SR Post-Trauma, Re-experiencing	.368	.017
PSS-SR Post-Trauma, Intensely emotionally upset	.398	.008
PSS-SR Post-Trauma, Avoids thoughts and feelings	.373	.014
PSS-SR Post-Trauma, Avoids activities	.479	.001
PSS-SR Post-Trauma, Hypervigilance	.378	.013
PSS-SR Post-Trauma, Startle response	.326	.033
PTIQ Item 2, Views self as inadequate	.344	.026
PTIQ Item 13, Lack of contact with biological children	.304	.050
Trauma Description Social Loss, Average	-.315	.039
PSS-SR, Total	.337	.027
<u>Item 14 – Friends Get Good Ideas From Me</u>		
PSS-SR Pre-Trauma, Inability to recall events	-.381	.012
PSS-SR Post-Trauma, Avoids thoughts and feelings	.334	.029
PSS-SR Post Trauma, Avoids activities	.314	.040
PSS-SR Post-Trauma, Detachment	.341	.025
PSS-SR Post-Trauma, Angry outbursts	.329	.031
PTIQ Item 18, Emotional numbing	-.430	.004
Trauma Description Social Loss, Average	-.558	<.0001
PSS-SR Post-Trauma, Total	.267	.084

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<u>Item 15 – Feel Uncomfortable Confiding in Friends</u>		
PTIQ Item 23, Views self as defective	.311	.045
<u>Item 16 – Friends Seek Me Out For Companionship</u>		
CAPS C-4, Diminished interest in activities	.457	.002
CAPS C-5, Detachment	.320	.036
PSS-SR Pre-Trauma, Avoids thoughts and feelings	-.341	.025
PSS-SR Pre-Trauma, Avoids activities	-.307	.045
PSS-SR Pre-Trauma, Inability to recall events	-.364	.016
PSS-SR Pre-Trauma, Lost interest in activities	-.327	.035
PSS-SR Pre-Trauma, Detachment	-.400	.008
PSS-SR Pre-Trauma, Restricted range of affect	-.314	.041
PSS-SR Pre-Trauma, Foreshortened future	-.316	.039
PSS-SR Pre-Trauma, Difficulty concentrating	-.331	.030
PSS-SR Post-Trauma, Flashbacks	.310	.046
PSS-SR Post-Trauma, Hypervigilance	.460	.002
PSS-SR Post-Trauma, Startle response	.343	.024
PTIQ Item 2, Views self as inadequate	.382	.013
PTIQ Item 23, Views self as defective	.347	.024
PTIQ Item 24, Startle response	-.319	.040
PTIQ Item 32, Views self as inferior	.313	.043
PTIQ Item 33, Social outcast	.323	.037
Substance Dependence Dx. or Tx.	-.307	.045
PSS-SR Pre-Trauma, Total	-.343	.024
PSS-SR Post-Trauma, Total	.384	.011
Mos. Dx. with PTSD	.363	.017
<u>Item 17 – Friends Feel I’m Good at Helping Them</u>		
CAPS C-4, Diminished interest in activities	.366	.016
PSS-SR Pre-Trauma, Detachment	-.307	.045
PSS-SR Post-Trauma, Intensely emotionally upset	.314	.041
PSS-SR Post-Trauma, Avoids activities	.308	.045
PSS-SR Post-Trauma, Hypervigilance	.483	.001
PSS-SR Post-Trauma, Startle response	.417	.005
PSS-SR Post-Trauma, Intense physical reactions	.413	.006
PTIQ Item 9, Avoidance of people	-.342	.027
PTIQ Item 10, Avoidance of social activities	-.377	.014
PSS-SR Post-Trauma, Total	.359	.018
Mos. Dx. with PTSD	.304	.047
<u>Item 18 – Other’s Relationships are More Intimate Than Mine</u>		
CAPS C-5, Detachment	.328	.032
CAPS Guilt over acts of commission/omission	-.334	.029
No. of Vietnam Hospitalizations Dichotomized	.400	.008

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<u>Item 19 – Gotten Good Ideas from Friends</u>		
Trauma Description Social Loss, Average	-.319	.037
<u>Item 20 – I Wish My Friends Were Much Different</u>		
PSS-SR Pre-Trauma, Intensely emotionally upset	-.362	.017
PSS-SR Pre-Trauma, Avoids thoughts and feelings	-.302	.049
PSS-SR Pre-Trauma, Detachment	-.349	.022
PSS-SR Pre-Trauma, Restricted range of affect	-.304	.047
PTIQ Item 24, Startle response	-.357	.020
PSS-SR Pre-Trauma, Total	-.303	.049
<u>PERCEIVED SOCIAL SUPPORT (PSS) POST-TRAUMA</u>		
<u>Family</u>		
<u>Item 1 – Family Gives Moral Support</u>		
CAPS D-2, Angry Outbursts	-.303	.048
CAPS Guilt over acts of commission/omission	-.374	.013
PSS-SR Pre-Trauma, Intrusive thoughts	-.303	.048
PSS-SR Post-Trauma, Sleep disturbance	-.372	.014
PSS-SR Post-Trauma, Angry outbursts	-.333	.029
PSS-SR Post Trauma, Intense physical reactions	-.327	.032
PTIQ Item 8, Difficulty making friends	.306	.049
PTIQ Item 11, Lack of friends	.304	.050
PSS-SR Post-Trauma, Total	-.313	.041
<u>Item 2 - Gets Good Ideas from Family</u>		
CAPS C-4, Diminished interest in activities	-.372	.014
CAPS C-5, Detachment	-.349	.022
CAPS Guilt over acts of commission/omission	-.463	.002
PSS-SR Post-Trauma, Inability to recall events	-.312	.041
PSS-SR Post-Trauma, Lost interest in activities	-.305	.047
PSS-SR Post-Trauma, Detachment	-.367	.015
PSS-SR Post-Trauma, Sleep disturbance	-.303	.048
PSS-SR Post-Trauma, Difficulty concentrating	-.310	.043
PSS-SR Post-Trauma, Intense physical reactions	-.316	.039
PSS-SR Post-Trauma, Total	-.359	.018
Shame Dichotomized (Investigator's Rating)	-.318	.037
<u>Item 3 - Most People Closer to Their Family Than I am</u>		
CAPS C-2, Avoids activities	.305	.047
CAPS C-4, Diminished interest in activities	.457	.002
CAPS Guilt over acts of commission/omission	.374	.013
PSS-SR Post-Trauma, Lost interest in activities	.358	.019
PSS-SR Post-Trauma, Detachment	.492	.001
PSS-SR Post-Trauma, Restricted range of affect	.607	<.0001
PSS-SR Post-Trauma, Foreshortened future	.402	.008

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<u>Item 3 - Most People Closer to Their Family Than I am (Cont'd)</u>		
PSS-SR Post-Trauma, Angry outbursts	.441	.003
PSS-SR Post-Trauma, Difficulty concentrating	.498	.001
PSS-SR Post-Trauma, Intense physical reactions	.441	.003
PTIQ Item 3, Blames self for what happened	.371	.016
PTIQ Item 10, Avoids social activities	-.306	.049
PTIQ Item 18, Uses emotional numbing	-.311	.045
PTIQ Item 27, Sx. Of agoraphobia	-.420	.006
Ethnicity Dichotomized	.340	.026
PSS-SR Post-Trauma, Total	.465	.002
Shame Dichotomized (Investigator's Rating)	.414	.006
<u>Item 4 – Family Members Uncomfortable When I Confide</u>		
CAPS C-4, Diminished interest in activities	-.366	.016
PTIQ Item 10, Avoids social activities	.440	.004
PTIQ Item 24, Startle response	.346	.025
<u>Item 5 – Family Enjoys Hearing What I Think</u>		
CAPS C-4, Diminished interest in activities	-.409	.006
CAPS C-5, Detachment	-.302	.049
PSS-SR Post-Trauma, Lost interest in activities	-.417	.005
PSS-SR Post-Trauma, Detachment	-.319	.037
PSS-SR Post-Trauma, Restricted range of affect	-.321	.036
PTIQ Item 10, Avoids social activities	.369	.016
Occupation Dichotomized	-.342	.025
<u>Item 6 – Family Shares My Interests</u>		
CAPS C-2, Avoids activities	-.388	.010
CAPS C-4, Detachment	-.369	.015
PSS-SR Post-Trauma, Inability to recall events	-.399	.008
<u>Item 7 – Family Members Come to Me for Advice</u>		
CAPS C-4, Diminished interest in activities	-.328	.032
CAPS Guilt over acts of commission/omission	-.338	.027
PSS-SR Pre-Trauma, Hypervigilance	.328	.032
PTIQ Item 3, Blames self for what happened	-.374	.015
PSS-SR Pre-Trauma, Total	.309	.044
Shame Dichotomized (Investigator's Rating)	-.382	.012
<u>Item 8 – I Rely on my Family for Emotional Support</u>		
PSS-SR Post-Trauma, Lost interest in activities	-.362	.017
PTIQ Item 19, Sleep disturbance	.309	.046
PTIQ Item 27, Sx. Of agoraphobia	.362	.018

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<u>Item 9 – Family Member I could go to if Feeling Down</u>		
PSS-SR Post-Trauma, Foreshortened future	-.336	.027
PSS-SR Post-Trauma, Angry outbursts	-.337	.027
PTIQ Item 22, Subjective distress	-.361	.019
PTIQ Item 25, Difficulty concentrating	.304	.050
PTIQ Item 27, Sx. Of agoraphobia	.307	.048
<u>Item 10 – Family and I are Open About What We Think</u>		
CAPS C-4, Diminished interest in activities	-.325	.033
PSS-SR Pre-Trauma, Restricted range of affect	.301	.050
PSS-SR Pre-Trauma, Angry outbursts	.352	.021
PSS-SR Pre-Trauma, Hypervigilance	.437	.003
PSS-SR Pre-Trauma, Startle response	.354	.020
PSS-SR Pre-Trauma, Intense physical reactions	.326	.033
PTIQ Item 8, Difficulty making friends	.393	.010
Occupation Dichotomized	-.305	.046
PSS-SR Pre-Trauma, Total	.318	.038
<u>Item 11 – Family is Sensitive to My Needs</u>		
CAPS Guilt over acts of commission/omission	-.347	.023
PSS-SR Post-Trauma, Foreshortened future	-.374	.013
<u>Item 12 – Family Comes to Me for Emotional Support</u>		
CAPS C-2, Avoids activities	-.436	.004
CAPS C-4, Diminished interest in activities	-.346	.023
PSS-SR Pre-Trauma, Angry outbursts	.312	.042
PSS-SR Pre-Trauma, Startle response	.309	.044
PSS-SR Pre-Trauma, Intense physical reactions	.372	.014
PSS-SR Post-Trauma, Lost interest in activities	-.311	.042
PTIQ Item 3, Blames self for what happened	-.313	.044
PTIQ Item 14, Repeated flashbacks	-.347	.024
Occupation Dichotomized	-.303	.049
Shame Dichotomized (Investigator's Rating)	-.490	.001
<u>Item 13 – Family Helps Solve Problems</u>		
CAPS Guilt over acts of commission/omission	-.415	.006
<u>Item 14 – Sharing Relationship with Family</u>		
PSS-SR Post-Trauma, Difficulty concentrating	-.360	.018
PTIQ Item 3, Blames self for what happened	-.333	.031
<u>Item 15 – Family Gets Good Ideas From Me</u>		
CAPS C-2, Avoids activities	-.338	.027
CAPS Guilt over acts of commission/omission	-.333	.029
PSS-SR Post-Trauma, Lost interest in activities	-.402	.008

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<u>Item 15 – Family Gets Good Ideas From Me (Cont'd)</u>		
PSS-SR Post-Trauma, Detachment	-.400	.008
PSS-SR Post-Trauma, Sleep disturbance	-.352	.021
PSS-SR Post-Trauma, Difficulty concentrating	-.360	.018
PTIQ Item 3, Blames self for what happened	-.333	.031
PSS-SR Post-Trauma, Total	-.328	.032
<u>Item 16 – Family Seeks My Companionship</u>		
CAPS C-4, Diminished interest in activities	-.367	.015
PSS-SR Post Trauma, Inability to recall events	-.376	.013
PSS-SR Post-Trauma, Lost interest in activities	-.403	.007
PSS-SR Post-Trauma, Detachment	-.400	.008
PSS-SR Post-Trauma, Sleep disturbance	-.344	.024
PSS-SR Post-Trauma, Angry outbursts	-.383	.011
PSS-SR Post-Trauma, Difficulty concentrating	-.558	<.0001
PTIQ Item 2, Views self as inadequate	-.304	.050
PTIQ Item 3, Blames self for what happened	-.396	.009
PTIQ Item 25, Difficulty concentrating	-.327	.034
PSS-SR Post-Trauma, Total	-.433	.004
Shame Dichotomized (Investigator's Rating)	-.360	.018
<u>Item 17 – Family Feels I'm Good at Helping Them</u>		
PSS-SR Post-Trauma, Restricted range of affect	-.336	.027
CAPS Guilt over acts of commission/omission	-.351	.021
PSS-SR Post-Trauma, Angry outbursts	-.418	.005
PSS-SR Post-Trauma, Difficulty concentrating	-.360	.018
PSS-SR Post-Trauma, Intense physical reactions	-.336	.027
PSS-SR Post-Trauma, Total	-.303	.048
<u>Item 18 – Family Thinks I Help Solve Problems</u>		
CAPS C-2, Avoids activities	-.396	.009
PSS-SR Pre-Trauma, Intense physical reactions	.320	.036
PTIQ Item 14, Repeated flashbacks	-.312	.044
Shame Dichotomized (Investigator's Rating)	-.458	.002
<u>Item 19 – Other's Family Relationships More Intimate</u>		
CAPS C-4, Diminished interest in activities	-.414	.006
PSS-SR Pre-Trauma, Hypervigilance	.350	.021
PSS-SR Post-Trauma, Intrusive thoughts	-.302	.049
PSS-SR Post-Trauma, Flashbacks	-.310	.046
PSS-SR Post-Trauma, Lost interest in activities	-.306	.046
PSS-SR Post-Trauma, Detachment	-.330	.031
PSS-SR Post-Trauma, Restricted range of affect	-.477	.001
PSS-SR Post-Trauma, Angry outbursts	-.300	.050
PSS-SR Post-Trauma, Difficulty concentrating	-.370	.015
PSS-SR Post-Trauma, Intense physical reactions	-.328	.032
PTIQ Item 1, Self-doubt	.337	.029

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<u>Item 19 – Other’s Family Relationships More Intimate (Cont’d)</u>		
PTIQ Item 10, Avoids social activities	.393	.010
PTIQ Item 18, Emotional numbing	.381	.013
PTIQ Item 24, Startle response	.338	.028
PTIQ Item 27, Sx. Of Agoraphobia	.316	.041
Ethnicity Dichotomized	-.331	.030
Occupation Dichotomized	-.402	.007
Trauma Description, Horror/Mortality-Fear Avg.	-.338	.027
PSS-SR Post-Trauma, Total	-.358	.018
<u>Item 20 – I Wish My Family Were Much Different</u>		
CAPS D-2, Angry Outbursts	-.325	.033
PTIQ Item 20, Hypervigilance	.323	.037
<u>Friends</u>		
<u>Item 1 - Friends Give Me Moral Support</u>		
CAPS C-2, Avoids activities	-.379	.012
CAPS C-4, Diminished interest in activities	-.381	.012
PSS-SR Post-Trauma, Lost interest in activities	-.351	.021
PSS-SR Post-Trauma, Restricted range of affect	-.303	.048
PTIQ Item 9, Avoidance of people	-.375	.015
<u>Item 2 – Other People’s Friendships Closer Than Mine</u>		
CAPS C-2, Avoids activities	-.376	.013
CAPS C-4, Diminished interest in activities	-.506	.001
PSS-SR Post-Trauma, Lost interest in activities	-.435	.004
PSS-SR Post-Trauma, Detachment	-.391	.009
PSS-SR Post-Trauma, Difficulty concentrating	-.370	.015
PTIQ Item 2, Views self as inadequate	-.344	.026
<u>Item 3 – Friends Enjoy Hearing What I Think</u>		
CAPS C-2, Avoids activities	-.317	.038
CAPS C-4, Diminished interest in activities	-.536	.0001
PSS-SR Pre-Trauma, Hypervigilance	.343	.024
PSS-SR Post-Trauma, Lost interest in activities	-.375	.013
Occupation Dichotomized	-.386	.011
Trauma Description Social Loss, Average	-.311	.042
Trauma Description Horror/Mortality-Fear Avg.	-.331	.030
Shame Dichotomized (Investigator’s Rating)	-.305	.047
<u>Item 4 – Friends Come to Me For Advice</u>		
CAPS C-2, Avoids activities	-.323	.035
PSS-SR Pre-Trauma, Inability to recall events	.321	.036
PSS-SR Post Trauma, Avoids thoughts and feelings	-.344	.024
PSS-SR Post Trauma, Avoids activities	-.398	.008
PTIQ Item 2, Views self as inadequate	-.372	.015



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<u>Item 4 – Friends Come to Me For Advice (Cont'd)</u>		
PTIQ Item 9, Avoidance of people	-.443	.003
PTIQ Item 14, Repeated flashbacks	-.447	.003
PTIQ Item 31, Others see defects	-.364	.018
PTIQ Item 32, Views self as inferior	-.337	.029
<u>Item 5 – I Rely on Friends for Emotional Support</u>		
CAPS C-2, Avoids activities	-.436	.004
CAPS C-4, Diminished interest in activities	.366	.016
PSS-SR Post-Trauma, Intrusive recollections	-.302	.049
PTIQ Item 9, Avoidance of people	-.472	.002
PTIQ Item 11, Lack of friends	-.390	.011
<u>Item 6 – Friends Upset, I'd Keep it to Myself</u>		
CAPS C-4, Diminished interest in activities	-.337	.027
PTIQ Item 17, Impaired family relationships	.323	.037
PTIQ Item 24, Startle response	.327	.034
Trauma Description, Horror/Mortality-Fear avg.	-.343	.024
<u>Item 7 – I'm on the Fringe of my Circle of Friends</u>		
CAPS C-4, Diminished interest in activities	-.457	.002
PSS-SR Post-Trauma, Lost interest in activities	-.326	.033
PTIQ Item 14, Repeated flashbacks	-.340	.028
Ethnicity Dichotomized	-.349	.022
<u>Item 8 – Friend I Could Go to if Feeling Down</u>		
CAPS C-4, Diminished interest in activities	-.323	.035
PSS-SR Post-Trauma, Lost interest in activities	-.349	.022
Branch of service Dichotomized	-.331	.030
<u>Item 9 – My Friends and I are Open</u>		
CAPS C-2, Avoids activities	-.413	.006
CAPS C-4, Diminished interest in activities	-.527	<.0001
PSS-SR Post-Trauma, Lost interest in activities	-.306	.046
PSS-SR Post-Trauma, Detachment	-.385	.011
<u>Item 10 – Friends Sensitive to Personal Needs</u>		
CAPS Guilt over acts of commission/omission	-.357	.019
Occupation Dichotomized	-.369	.015
<u>Item 11 – Friends Come to Me for Emotional Support</u>		
CAPS C-4, Diminished interest in activities	.410	.006
PTIQ Item 9, Avoidance of people	-.315	.042
PTIQ Item 14, Flashbacks	-.337	.029

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<u>Item 12 – Friends Help Me Solve Problems</u>		
CAPS C-2, Avoids activities	-.433	.004
CAPS C-4, Diminished interest in activities	-.463	.002
CAPS D-2, Angry Outbursts	-.317	.039
PSS-SR Pre-Trauma, Inability to recall events	.328	.032
PSS-SR Post-Trauma, Nightmares	-.369	.015
PSS-SR Post-Trauma, Reliving event	-.352	.022
PSS-SR Post-Trauma, Intensely emotionally upset	-.308	.045
PSS-SR Post-Trauma, Lost interest in activities	-.467	.002
PSS-SR Post-Trauma, Detachment	-.536	<.0001
PSS-SR Post-Trauma, Angry outbursts	-.304	.047
PSS-SR Post-Trauma, Total	-.327	.032
<u>Item 13 – Sharing Relationship With Number of Friends</u>		
CAPS C-4, Diminished interest in activities	-.384	.011
PSS-SR Pre-Trauma, Hypervigilance	.340	.026
PSS-SR Post-Trauma, Foreshortened future	-.603	<.0001
PSS-SR Post-Trauma, Difficulty concentrating	-.303	.049
Education Dichotomized	.306	.046
PSS-SR Post-Trauma, Total	-.306	.046
<u>Item 14 – Friends Get Good Ideas From Me</u>		
CAPS C-2, Avoids activities	-.310	.043
PSS-SR Pre-Trauma, Lost interest in activities	.336	.029
PSS-SR Pre-Trauma, Angry outbursts	.468	.002
PSS-SR Pre-Trauma, Difficulty concentrating	.408	.007
PSS-SR Pre-Trauma, Startle response	.358	.018
PSS-SR Pre-Trauma, Intense physical reactions	.467	.002
PTIQ Item 9, Avoidance of people	-.315	.042
PSS-SR Pre-Trauma, Total	.342	.025
<u>Item 15 – Feel Uncomfortable Confiding in Friends</u>		
PTIQ Item 19, Sleep disturbance	-.367	.017
<u>Item 16 – Friends Seek Me Out For Companionship</u>		
CAPS C-2, Avoids activities	-.400	.008
PTIQ Item 9, Avoidance of people	-.351	.023
<u>Item 17 – Friends Feel I’m Good at Helping Them</u>		
CAPS C-2, Avoids activities	-.360	.018
CAPS C-4, Diminished interest in activities	-.302	.049
PSS-SR Post-Trauma, Intensely emotionally upset	-.308	.045
PTIQ Item 9, Avoidance of people	-.331	.032
PTIQ Item 14, Repeated flashbacks	-.400	.009
PTIQ Item 20, Hypervigilance	-.331	.032

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<u>Item 18 – Other’s Relationships Are More Intimate Than Mine</u>		
PSS-SR Post-Trauma, Intrusive thoughts	-.334	.029
PSS-SR Post-Trauma, Repeated flashbacks	-.305	.049
PSS-SR Post-Trauma, Lost interest in activities	-.352	.021
PSS-SR Post-Trauma, Detachment	-.380	.012
PTIQ Item 7, Anger management	-.337	.029
Occupation Dichotomized	-.347	.023
Vietnam hospitalizations Dichotomized	.352	.021
<u>Item 19 – Gotten Good Ideas from Friends</u>		
CAPS C-4, Diminished interest in activities	-.372	.014
CAPS C-5, Detachment	-.402	.008
CAPS, Survival guilt	-.351	.021
PSS-SR Post-Trauma, Nightmares	-.384	.011
PSS-SR Post-Trauma, Lost interest in activities	-.349	.022
PTIQ Item 4, Behaviors unforgivable	-.350	.023
Trauma Description, Social Loss average	-.397	.008
PTIQ Guilt Dichotomized (Investigator’s Rating)	-.316	.039
<u>Item 20 – I Wish My Friends Were Much Different</u>		
PSS-SR Post-Trauma, Intensely emotionally upset	-.308	.044
Trauma Description, Horror/Mortality-Fear avg.	-.327	.033
<u>PTSD SYMPTOM SCALE – PRE-TRAUMA VERSION</u>		
<u>Item 1 – Intrusive Thoughts</u>		
CAPS Guilt over acts of commission/omission	-.403	.007
PTIQ Item 3, Blames self for what happened	-.338	.028
Combat physical impairment	-.306	.046
Vietnam hospitalizations Dichotomized	.304	.047
Guilt Dichotomized (Investigator’s Rating)	-.305	.047
<u>Item 2 – Nightmares</u>		
CAPS Guilt over acts of commission/omission	-.524	<.0001
PTIQ Item 3, Blames self for what happened	-.304	.050
Shame Dichotomized (Investigator’s Rating)	-.327	.032
<u>Item 3 – Flashbacks</u>		
CAPS Guilt over acts of commission/omission	-.335	.028
PTIQ Item 3, Blames self for what happened	-.357	.020
PTIQ Item 5, Did something against values	-.426	.005
PTIQ Item 12, Responsible for the event	-.452	.003
PTIQ Guilt Dichotomized	-.362	.017
Mos. Dx. with PTSD	-.372	.014
Vietnam hospitalizations Dichotomized	.317	.038
Guilt Dichotomized (Investigator’s Rating)	-.366	.016

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<u>Item 4 – Intensely Emotionally Upset</u>		
CAPS Survivor guilt	-.339	.026
PTIQ Item 3, Blames self for what happened	-.326	.035
PTIQ Item 12, Responsible for the event	-.309	.046
PTIQ Item 14, Flashbacks	-.338	.028
<u>Item 5 – Avoids Thoughts and Feelings</u>		
CAPS Survivor guilt	-.438	.003
<u>Item 6 – Avoids Activities</u>		
CAPS Survivor guilt	-.348	.022
<u>Item 7 – Inability to Recall Events</u>		
CAPS C-4, Diminished interest in activities	-.424	.005
PTIQ Item 8 – Difficulty making friends	.345	.025
<u>Item 8 – Lost Interest in Activities</u>		
PTIQ Item 5, Did something against values	-.349	.025
PTIQ Guilt Dichotomized	-.351	.022
<u>Item 9 – Detachment</u>		
CAPS Survivor guilt	-.345	.024
<u>Item 10 – Restricted Range of Affect</u>		
CAPS Guilt over acts of commission/omission	-.310	.043
<u>Item 11 – Foreshortened Future</u>		
CAPS Guilt over acts of commission/omission	-.372	.014
CAPS Survivor guilt	-.343	.024
PTIQ Item 8, Difficulty making friends	.360	.019
PTIQ Item 24, Startle response	.304	.050
Mos. Dx. with PTSD	-.305	.047
<u>Item 12 – Sleep Disturbance</u>		
CAPS Guilt over acts of commission/omission	-.364	.017
PTIQ Item 12, Feeling responsible for the event	-.329	.033
Vietnam hospitalizations Dichotomized	.321	.036
Guilt Dichotomized (Investigator's Rating)	-.305	.047
<u>Item 13 – Angry Outbursts</u>		
Mos. Dx. with PTSD	-.349	.022
vietnam hospitalizations Dichotomized	.367	.015

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<u>Item 14 – Difficulty Concentrating</u>		
CAPS C-4, Diminished interest in activities	-.307	.045
PTIQ Item 32, Views self as inferior	-.347	.024
PTIQ Shame Dichotomized	-.308	.045
<u>Item 15 – Hypervigilance</u>		
PTIQ Item 13, Lack of contact with bio. children	.410	.007
Mos. Dx. with PTSD	-.320	.036
<u>Item 16 – Startle Response</u>		
PTIQ Item 12, Feels responsible for event	-.306	.049
Vietnam hospitalizations Dichotomized	.326	.033
Guilt Dichotomized (Investigator's Rating)	-.337	.027
<u>Item 17 – Intense Physical Reactions</u>		
PTIQ Shame Dichotomized	.609	<.0001
PTIQ Guilt Dichotomized	-.301	.050
<u>PTSD SYMPTOM SCALE-REVISED POST-TRAUMA VERSION</u>		
<u>Item 1 – Intrusive Thoughts</u>		
CAPS Guilt over acts of commission/omission	.341	.025
PTIQ Item 1, Self-Doubt	.374	.015
PTIQ Item 2, Views self as inadequate	.483	.001
Vietnam hospitalizations Dichotomized	-.594	<.0001
<u>Item 1 – Intrusive Thoughts (Cont'd)</u>		
PTIQ Item 12, Feels responsible for the event	.347	.025
PTIQ Item 16, Reliving of trauma	.354	.021
PTIQ Item 23, Views self as defective	.376	.014
PTIQ Item 32, Views self as inferior	.347	.025
PTIQ Item 35, Views self as damaged goods	.305	.049
PTIQ Guilt Dichotomized	.415	.006
<u>Item 2 – Nightmares</u>		
CAPS D-2, Angry Outbursts	.357	.019
CAPS Guilt over acts of commission/omission	.392	.009
PTIQ Item 2, Views self as inadequate	.349	.023
PTIQ Item 26, Panic attacks	-.318	.040
<u>Item 3 – Flashbacks</u>		
CAPS C-4, Diminished interest in activities	.307	.048
CAPS D-2, Angry Outbursts	.437	.004
CAPS Guilt over acts of commission/omission	.367	.017

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<u>Item 3 – Flashbacks (Cont'd)</u>		
TIQ Item 2, Views self as inadequate	.467	.002
PTIQ Item 26, Panic attacks	-.316	.044
Vietnam hospitalizations Dichotomized	-.360	.019
<u>Item 4 – Intensely Emotionally Upset</u>		
CAPS D-2, Angry Outbursts	.317	.038
CAPS Guilt over acts of commission/omission	.321	.036
PTIQ Item 2, Views self as inadequate	.410	.007
PTIQ Item 32, Views self as inferior	.440	.004
Vietnam hospitalizations Dichotomized	-.508	.001
PTIQ Guilt Dichotomized	.333	.029
<u>Item 5 – Avoids Thoughts and Feelings</u>		
CAPS C-2, Avoids activities	.456	.002
PTIQ Item 2, Views self as inadequate	.434	.004
PTIQ Item 3, Believes behaviors are unforgivable	.336	.030
PTIQ Item 22, Subjective distress	.372	.015
PTIQ Item 23, Views self as defective	.458	.002
PTIQ Item 32, Views self as inferior	.376	.014
Vietnam hospitalizations Dichotomized	-.414	.006
Combat related physical impairment	.375	.013
PSS Pre-Trauma, Total	.349	.022
Shame Dichotomized (Investigator's Rating)	.354	.020
<u>Item 6 – Avoids Activities</u>		
CAPS D-2, Angry Outbursts	.332	.029
PTIQ Item 2, Views self as inadequate	.367	.017
PTIQ Item 22, Subjective distress	.317	.041
PTIQ Item 23, Views self as defective	.392	.010
PTIQ Item 32, Views self as inferior	.401	.009
Vietnam hospitalizations Dichotomized	-.383	.011
PSS Pre-Trauma, Total	.320	.037
Shame Dichotomized (Investigator's Rating)	.349	.022
<u>Item 7 – Inability to Recall Events</u>		
PTIQ Item 6, Impaired social life	-.367	.017
<u>Item 8 – Lost Interest in Activities</u>		
CAPS C-4, Diminished interest in activities	.474	.001
CAPS Guilt over acts of commission/omission	.317	.039
PTIQ Item 16, Reliving of trauma	.332	.031
PTIQ Item 32, Views self as inferior	.321	.038
PSS Post-Trauma, Total	-.427	.004
Shame Dichotomized (Investigator's Rating)	.345	.023

	<u>r</u>	<u>p</u>
<u>Item 9 – Detachment</u>		
CAPS C-2, Avoids activities	.411	.006
CAPS C-4, Diminished interest in activities	.402	.007
CAPS D-2, Angry Outbursts	.311	.042
CAPS Guilt over acts of commission/omission	.409	.006
PTIQ Item 2, Views self as inadequate	.329	.033
PTIQ Item 32, Views self as inferior	.312	.044
PTIQ Item 35, Views self as damaged goods	.351	.023
Vietnam hospitalizations Dichotomized	-.428	.004
Combat related physical impairment	.313	.041
PSS Post-Trauma, Total	-.393	.009
Shame Dichotomized (Investigator's Rating)	.340	.026
<u>Item 10 – Restricted Range of Affect</u>		
CAPS Survivor guilt	.388	.010
PTIQ Item 2, Views self as inadequate	.321	.038
PTIQ Item 23, Views self as defective	.350	.023
Trauma Description, Horror/Mortality-Fear avg.	.302	.049
PSS Post-Trauma, Total	-.334	.029
Shame Dichotomized (Investigator's Rating)	.317	.038
<u>Item 11 – Foreshortened Future</u>		
CAPS Survivor guilt	.416	.006
PTIQ Item 3, Blames self for what happened	.333	.031
PTIQ Item 22, Subjective distress	.324	.036
Shame Dichotomized (Investigator's Rating)	.428	.004
<u>Item 12 – Sleep Disturbance</u>		
CAPS D-2, Angry Outbursts	.448	.003
PTIQ Item 22, Subjective distress	.418	.006
PSS Pre-Trauma, Total	.332	.030
<u>Item 13 – Angry Outbursts</u>		
CAPS D-2, Angry Outbursts	.385	.011
CAPS Guilt over acts of commission/omission	.332	.030
PTIQ Item 2, Views self as inadequate	.412	.007
PTIQ Item 22, Subjective distress	.412	.007
PTIQ Item 29, Dissociation	.323	.037
Combat related physical impairment	.341	.025
PSS Post-Trauma, Total	-.308	.044
Shame Dichotomized (Investigator's Rating)	.320	.037
<u>Item 14 – Difficulty Concentrating</u>		
CAPS C-2, Avoids activities	.428	.004
CAPS C-4, Diminished interest in activities	.425	.004

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<u>Item 14 – Difficulty Concentrating (Cont'd)</u>		
APS Survivor guilt	.326	.033
PTIQ Item 2, Views self as inadequate	.333	.031
PTIQ Item 3, Blames self for what happened	.369	.016
PTIQ Item 4, Believes behaviors unforgivable	.332	.032
PTIQ Item 23, Views self as defective	.402	.008
PTIQ Item 35, Views self as damaged goods	.322	.037
Trauma Description, Horror/Mortality-Fear avg.	.432	.004
PSS Post-Trauma, Total	-.381	.012
Shame Dichotomized (Investigator's Rating)	.390	.010
<u>Item 15 – Hypervigilance</u>		
PTIQ Item 2, Views self as inadequate	.317	.041
PTIQ Item 24, Startle response	-.346	.025
PSS Pre-Trauma, Total	.377	.013
<u>Item 16 – Startle Response</u>		
CAPS D-2, Angry Outbursts	.369	.015
PTIQ Item 16, Reliving of trauma	.339	.028
<u>Item 17 – Intense Physical Reactions</u>		
CAPS C-4, Diminished interest in activities	.321	.036
CAPS D-2, Angry Outbursts	.332	.029
CAPS Guilt over acts of commission/omission	..501	.001
PTIQ Item 35, Views self as damaged goods	.327	.035
<u>PRESSING TREATMENT ISSUES QUESTIONNAIRE (PTIQ)</u>		
<u>Item 1 – Self-Doubt</u>		
PTIQ Item 2, Views self as inadequate	.523	<.0001
PTIQ Item5, Believes did something against values	.176	.001
PTIQ Item 8, Difficulty making friends	.472	.002
PTIQ Item 9, Avoids people	.329	.033
PTIQ Item 10, Avoids social activities	.472	.002
PTIQ Item 11, Lack of friends	.388	.011
PTIQ Item 15, Intrusive thoughts	.638	<.0001
PTIQ Item 16, Reliving of trauma	.381	.013
PTIQ Item 18 Emotional numbing	.430	.004
PTIQ Item 19, Sleep disturbance	.309	.046
PTIQ Item 20, Hypervigilance	.432	.004
PTIQ Item 23, Views self as defective	.379	.013
PTIQ Item 26, Panic attacks	.388	.011
PTIQ Item 31, Thinks others see defects	.438	.004
PTIQ Item 32, Views self as inferior	.496	.001
Vietnam hospitalizations Dichotomized	-.381	.013
PTIQ Shame Dichotomized	.568	<.0001
PTIQ Guilt Dichotomized	.592	<.0001



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<u>Item 2 – Views Self as Inadequate</u>		
CAPS C-4, Diminished interest in activities	.389	.011
CAPS C-5, Detachment	.343	.026
PTIQ Item 3, Blames self for what happened	.307	.048
PTIQ Item 7, Anger management	.335	.030
PTIQ Item 10, Avoids social activities	.306	.049
PTIQ Item 11, Lack of friends	.304	.050
PTIQ Item 18, Emotional numbing	.311	.045
PTIQ Item 20, Hypervigilance	.372	.015
PTIQ Item 22, Subjective distress	.319	.039
PTIQ Item 23, Views self as defective	.560	<.0001
PTIQ Item 26, Panic attacks	.304	.050
PTIQ Item 31, Thinks others see defects	.510	.001
PTIQ Item 32, Views self as inferior	.669	<.0001
PTIQ Item 33, Social outcast	.307	.048
PTIQ Item 34, Views self as total loser	.320	.039
PTIQ Item 35, Views self as damaged goods	.411	.007
PTIQ Item 36, Behavior has harmed others	.375	.015
Vietnam hospitalizations Dichotomized	-.481	.001
PSS-SR Post-Trauma, Total	.518	<.0001
PTIQ Shame Dichotomized	.516	<.0001
PTIQ Guilt Dichotomized	.420	.006
<u>PTIQ Item 3 – Blames Self for What Happened</u>		
CAPS Survivor Guilt	.389	.011
PTIQ Item 2, Views self as inadequate	.307	.048
PTIQ Item 4, Believes behaviors are unforgivable	.525	<.0001
PTIQ Item 12, Feels responsible for event	.701	<.0001
PTIQ Item 14, Repeated flashbacks	.450	.003
PTIQ Item 16, Reliving of trauma	.335	.030
PTIQ Item 21, Derealization	.312	.004
PTIQ Item 23, Views self as defective	.678	<.0001
PTIQ Item 28, Dissociation	.400	.009
PTIQ Item 31, Thinks others see defects	.316	.041
PTIQ Item 33, Social outcast	.344	.026
Education Dichotomized	-.351	.023
PSS Pre-Trauma, Total	-.321	.038
PSS-SR Pre-Trauma, Total	-.322	.038
PSS-SR Post Trauma, Total	.336	.030
PTIQ Guilt Dichotomized	.461	.002
<u>PTIQ Item 4 – Believes Behaviors are Unforgivable</u>		
CAPS C-2, Avoids activities	.305	.050
CAPS Survivor guilt	.363	.018
PTIQ Item 3, Blames self for what happened	.525	<.0001

	<u>r</u>	<u>p</u>
<u>PTIQ Item 4 – Believes Behaviors are Unforgivable (Cont'd)</u>		
PTIQ Item 12, Feels responsible for event	.529	<.0001
PTIQ Item 18, Emotional numbing	.307	.048
PTIQ Item 23, Views self as defective	.397	.009
PTIQ Item 27, Sx. of agoraphobia	.389	.011
PTIQ Item 31, Thinks others see defects	.369	.016
PTIQ Item 33, Social outcast	.389	.011
PTIQ Item 34, Views self as total loser	.306	.049
PTIQ Item 35, Views self as damaged goods	.312	.044
Branch of service Dichotomized	.358	.020
PTIQ Guilt Dichotomized	.431	.004
<u>PTIQ Item 5 – Did Something Against Personal Values</u>		
CAPS C-5, Detachment	-.320	.039
PTIQ Item 1, Self-doubt	.473	.001
PTIQ Item 10, Avoids social activities	.377	.014
PTIQ Item 12, Feels responsible for event	.392	.010
PTIQ Item 15, Intrusive thoughts	.342	.027
PTIQ Item 19, Sleep disturbance	.347	.024
PTIQ Item 34, Views self as total loser	.336	.029
PTIQ Item 35, Views self as damaged goods	.337	.029
Marital Status Dichotomized	.379	.013
PTIQ Guilt Dichotomized	.680	<.0001
<u>PTIQ Item 6 – Impaired Social Life</u>		
PTIQ Item 8, Difficulty making friends	.510	.001
PTIQ Item 9, Avoids people	.332	.032
PTIQ Item 10, Avoids social activities	.510	.001
PTIQ Item 11, Lack of friends	.530	<.0001
PTIQ Item 15, Intrusive thoughts	.332	.032
PTIQ Item 16, Reliving of trauma	.340	.028
PTIQ Item 19, Sleep disturbance	.351	.023
PTIQ Item 26, Panic attacks	.325	.036
PTIQ Item 32, Views self as inferior	.327	.029
PTIQ Item 35, Views self as damaged goods	.423	.005
<u>PTIQ Item 7 – Anger Management Problems</u>		
PTIQ Item 2, Views self as inadequate	.335	.030
<u>PTIQ Item 8 – Difficulty Making Friends</u>		
PTIQ Item 1, Self-doubt	.472	.002
PTIQ Item 6, Impaired social life	.510	.001
PTIQ Item 10, Avoids social activities	.357	.020
PTIQ Item 11, Lack of friends	.474	.002
PTIQ Item 15, Intrusive thoughts	.510	.001
PTIQ Item 19, Sleep disturbance	.435	.004

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<u>PTIQ Item 8 – Difficulty Making Friends (Cont'd)</u>		
PTIQ Item 23, Views self as defective	.377	.014
PTIQ Item 25, Difficulty concentrating	.372	.015
PSS-SR Pre-Trauma, Total	.347	.024
PTIQ Shame Dichotomized	.383	.012
PTIQ Guilt Dichotomized	.343	.026
<u>PTIQ Item 9 – Avoids People</u>		
CAPS C-2, Avoids activities	.451	.003
PTIQ Item 1, Self-doubt	.329	.033
PTIQ Item 6, Impaired social life	.332	.032
PTIQ Item 10, Avoids social activities	.510	.001
PTIQ Item 11, Lack of friends	.633	<.0001
PTIQ Item 15, Intrusive thoughts	.554	<.0001
PTIQ Item 24, Startle response	.426	.005
PTIQ Item 31, Thinks others see defects	.473	.002
PTIQ Item 32, Views self as inferior	.448	.003
PTIQ Shame Dichotomized	.421	.005
PTIQ Guilt Dichotomized	.392	.010
<u>PTIQ Item 10 – Avoids Social Activities</u>		
PTIQ Item 1, Self-doubt	.472	.002
PTIQ Item 2, Views self as inadequate	.306	.049
PTIQ Item 5, Believes did something against values	.377	.014
PTIQ Item 6, Impaired social life	.510	.001
PTIQ Item 8, Difficulty making friends	.357	.020
PTIQ Item 9, Avoids people	.510	.001
PTIQ Item 11, Lack of friends	.575	<.0001
PTIQ Item 15, Intrusive thoughts	.510	.001
PTIQ Item 19, Sleep disturbance	.435	.004
PTIQ Item 26, Panic attacks	.343	.026
PTIQ Item 31, Thinks others see defects	.393	.010
PTIQ Item 35, Views self as damaged goods	.335	.030
PTIQ Shame Dichotomized	.498	.001
PTIQ Guilt Dichotomized	.343	.026
<u>PTIQ Item 11 – Lack of Friends</u>		
PTIQ Item 15, Intrusive thoughts	.530	<.0001
PTIQ Item 19, Sleep disturbance	.615	<.0001
PTIQ Item 20, Hypervigilance	.426	.005
PTIQ Item 24, Startle response	.423	.005
PTIQ Item 25, Difficulty concentrating	.327	.034
PTIQ Item 26, Panic attacks	.319	.039
PTIQ Item 27, Sx. of agoraphobia	.396	.009
PTIQ Item 31, Thinks others see defects	.338	.028
PTIQ Item 32, Views self as inferior	.505	.001

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<u>PTIQ Item 11 – Lack of Friends (Cont'd)</u>		
PTIQ Item 35, Views self as damaged goods	.363	.018
PTIQ Shame Dichotomized	.438	.004
PTIQ Guilt Dichotomized	.323	.037
<u>PTIQ Item 12 – Feels Responsible for Event</u>		
CAPS Guilt over acts of commission/omission	.326	.035
PTIQ Item 14, Repeated flashbacks	.392	.010
PTIQ Item 15, Intrusive thoughts	.337	.029
PTIQ Item 15, Reliving trauma	.464	.002
PTIQ Item 23, View self as defective	.497	.001
PTIQ Item 28, Dissociation	.334	.031
PTIQ Item 33, Social outcast	.351	.023
Education Dichotomized	-.332	.032
PSS-SR Pre-Trauma, Total	-.312	.044
PTIQ Guilt Dichotomized	.552	<.0001
<u>PTIQ Item 13 – Lack of Contact with Biological Children</u>		
PTIQ Item 15, Intrusive thoughts	-.315	.042
PTIQ Item 30, Inability to remember trauma	.563	<.0001
Guilt Dichotomized (Investigator's Rating)	-.304	.050
<u>PTIQ Item 14 – Repeated Flashbacks</u>		
CAPS C-4, Diminished interest in activities	.350	.023
PTIQ Item 12, Feels responsible for event	.392	.010
PTIQ Item 16, Reliving trauma	.437	.004
PTIQ Item 20, Hypervigilance	.342	.027
PTIQ Item 23, Views self as defective	.308	.047
PTIQ Item 31, Thinks others see defects	.343	.026
<u>PTIQ Item 15 – Intrusive Thoughts</u>		
PTIQ Item 19, Sleep disturbance	.351	.023
PTIQ Item 20, Hypervigilance	.443	.003
Vietnam hospitalizations Dichotomized	-.361	.019
<u>PTIQ Item 16 – Reliving of Trauma</u>		
PTIQ Item 15, Intrusive thoughts	.464	.002
PTIQ Item 19, Sleep disturbance	.335	.030
PTIQ Item 24, Startle response	.335	.030
PTIQ Item 27, Sx. of agoraphobia	.335	.030
PTIQ Item 31, Thinks others see defects	.404	.008
Vietnam hospitalizations Dichotomized	-.333	.031
PTIQ Guilt Dichotomized	.340	.028
<u>PTIQ Item 17 – Impaired Family Relationships</u>		
PTIQ Item 25, Difficulty concentrating	.319	.040

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<u>PTIQ Item 18 – Emotional Numbing</u>		
PTIQ Item 15, Intrusive thoughts	.313	.043
<u>PTIQ Item 19 – Sleep Disturbance</u>		
PTIQ Item 27, Sx. of agoraphobia	.312	.044
Vietnam hospitalizations Dichotomized	-.447	.003
PTIQ Guilt Dichotomized	.326	.029
<u>PTIQ Item 20 – Hypervigilance</u>		
PTIQ Item 24, Startle response	.426	<.0001
PTIQ Item 25, Difficulty concentrating	.426	.005
PTIQ Item 31, Thinks others see defects	.473	.002
PTIQ Item 32, Views self as inferior	.337	.029
Vietnam hospitalizations Dichotomized	-.361	.019
Substance dependence dx. or tx.	.361	.019
PTIQ Shame Dichotomized	.421	.005
<u>PTIQ Item 21 – Derealization</u>		
PTIQ Item 36, Behavior has harmed others	.508	.001
<u>PTIQ Item 22 – Subjective Distress</u>		
PTIQ Item 31, Thinks others see defects	.306	.049
PTIQ Item 34, Views self as total loser	.320	.039
Ethnicity Dichotomized	-.373	.015
<u>PTIQ Item 23 – Views Self as Defective</u>		
PTIQ Item 31, Thinks others see defects	.343	.026
PTIQ Item 32, Views self as inferior	.497	.001
PTIQ Item 33, Social outcast	.564	<.0001
PTIQ Item 35, Views self as damaged goods	.445	.003
PSS-SR Post-Trauma, Total	.375	.014
PTIQ Guilt Dichotomized	.581	<.0001
<u>PTIQ Item 24 – Startle Response</u>		
CAPS C-5, Detachment	-.375	.015
PTIQ Item 31, Thinks others see defects	.440	.004
PTIQ Shame Dichotomized	.329	.033
PTIQ Item 35, Views self as damaged goods	.309	.046
PTIQ Shame Dichotomized	.538	<.0001
PTIQ Guilt Dichotomized	.392	.010
<u>PTIQ Item 25 – Difficulty Concentrating</u>		
PTIQ Shame Dichotomized	.438	.003
Occupation Dichotomized	-.319	.039
Branch of service Dichotomized	.327	.034
Shame Dichotomized (Investigator’s Rating)	.346	.025

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<u>PTIQ Item 26 – Panic Attacks</u>		
PTIQ Item 24, Startle response	.319	.039
PTIQ Item 25, Difficulty concentrating	.319	.039
PTIQ Item 29, Foreshortened future	-.307	.048
PTIQ Item 32, Views self as inferior	.331	.032
PTIQ Item 34, Views self as total loser	.336	.029
Trauma Description Social Loss, Total	-.305	.050
<u>PTIQ Item 27 – Symptoms of Agoraphobia</u>		
Branch of service Dichotomized	.396	.009
<u>PTIQ Item 28 – Dissociation a Significant Amount of Time</u>		
PTIQ Item 31, Thinks others see defects	.316	.041
PTIQ Item 32, Views self as inferior	.334	.031
PTIQ Item 34, Views self as total loser	.342	.015
PTIQ Item 35, Views self as damaged goods	.354	.022
PTIQ Item 36, Behavior has harmed others	.308	.047
<u>PTIQ Item 29 – Sense of Foreshortened Future</u>		
CAPS C-5, Detachment	-.417	.006
<u>PTIQ Item 30 – Inability to Remember Trauma</u>		
Trauma Description Horror/Mortality-Fear, avg.	-.343	.026
PTIQ Shame Dichotomized	-.360	.019
<u>PTIQ Item 31 – Things Others See Defects</u>		
CAPS C-2, Avoids activities	.438	.004
PTIQ Item 35, Views self as damaged goods	.447	.003
Ethnicity Dichotomized	-.372	.015
PTIQ Shame Dichotomized	.421	.005
<u>PTIQ Item 32 – Views Self as Inferior</u>		
CAPS C-5, Detachment	.338	.029
PTIQ Item 31, Thinks others see defects	.510	.001
PTIQ Item 34, Views self as total loser	.414	.006
PTIQ Item 35, Views self as damaged goods	.489	.001
PTIQ Item 36, Behavior has harmed others	.309	.046
Vietnam hospitalizations Dichotomized	-.464	.002
PSS-SR Post-Trauma, Total	.394	.010
PTIQ Shame Dichotomized	.399	.009
PTIQ Guilt Dichotomized	.447	.003
Shame Dichotomized (Investigator's Rating)	.323	.037

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<u>PTIQ Item 33 – Being a Social Outcast</u>		
PTIQ Item 35, Views self as damaged goods	.389	.011
PTIQ Shame Dichotomized	.333	.031
PTIQ Guilt Dichotomized	.347	.024
<u>PTIQ Item 34 – Views Self as a Total Loser</u>		
Shame Dichotomized (Investigator’s Rating)	.305	.049
<u>PTIQ Item 35 – Views Self as Damaged Goods</u>		
PTIQ Item 34, Views self as total loser	.439	.004
PSS-SR Post-Trauma, Total	.365	.018
PTIQ Shame Dichotomized	.377	.014
PTIQ Guilt Dichotomized	.307	.048
<u>PTIQ Item 36 – Client’s Behavior Has Harmed Others</u>		
Shame Dichotomized (Investigator’s Rating)	.357	.020
<u>CAPS C-2, Avoids Activities</u>		
PSS-SR Post Trauma, Total	-.381	.012
<u>CAPS C-4, Diminished Interest in Activities</u>		
Occupation Dichotomized	.312	.042
PSS Post-Trauma, Total	-.486	.001
PSS-SR Post-Trauma, Total	.396	.009
<u>CAPS D-2, Angry Outbursts</u>		
PSS Post-Trauma, Total	-.306	.046
PSS-SR Post-Trauma, Total	.491	.001
<u>CAPS Guilt Over Acts of Commission/Omission</u>		
No. of Vietnam Hospitalizations Dichotomized	-.360	.016
PSS Post-Trauma, Total	-.357	.019
PSS-SR Pre-Trauma, Total	-.325	.033
PSS-SR Post Trauma, Total	.430	.004
Guilt Dichotomized (Investigator’s Rating)	.503	.001
<u>CAPS Survivor Guilt</u>		
Substance dependence dx.	-.319	.037
PSS-SR Pre-Trauma, Total	-.343	.024
Guilt Dichotomized (Investigator’s Rating)	.357	.019

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<u>Months in Vietnam</u>		
Mos. Dx. with PTSD	.319	.037
<u>Number of Tours</u>		
Ethnicity Dichotomized	.305	.047
Vietnam hospitalizations Dichotomized	-.348	.022
Months in Vietnam Dichotomized	-.446	.003
<u>Months in the VA System</u>		
Mos. Dx. with PTSD	.366	.016
<u>PSS-SR Pre-Trauma Total</u>		
Vietnam hospitalizations Dichotomized	.303	.048
<u>PSS-SR Post-Trauma Total</u>		
Vietnam hospitalizations Dichotomized	-.336	.027
<u>PTIQ Guilt Dichotomized</u>		
Vietnam hospitalizations Dichotomized	-.303	.049
<u>Guilt Dichotomized</u>		
Vietnam hospitalizations Dichotomized	-.520	<.0001



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