

2010

Shame, Guilt, Anger, And Seeking Psychological Treatment Among A Trauma Exposed Population

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SHAME, GUILT, ANGER, AND SEEKING PSYCHOLOGICAL TREATMENT AMONG A
TRAUMA EXPOSED POPULATION

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Dissertation

presented in partial fulfillment of the requirements
for the degree of

Doctor of Psychology
in Clinical Psychology

The University of Montana
Missoula, MT

Spring 2010

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Shame, Guilt, Anger, and Seeking Psychological Treatment among A Trauma Population

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Abstract Content:

The purpose of this study was to examine the relationships between guilt-proneness, shame-proneness, trait anger, PTSD symptoms, and willingness to seek treatment. A sample of 202 introductory psychology students completed questionnaire measures of each of these variables. Based on a self-report measure of PTSD symptoms, the sample was divided into 3 groups: trauma-PTSD group ($n = 29$); trauma-no PTSD group ($n = 72$); and a no trauma group ($n = 101$). Group comparisons revealed a trend that the PTSD group and the no trauma group reported higher levels of shame than the trauma-no PTSD group. The PTSD group also reported higher levels of anger than the no trauma and trauma-no PTSD groups. There were no reported group differences on overall willingness to seek treatment, but the trauma-no PTSD group reported higher willingness to seek treatment despite the stigma associated with it. Measures of anger and shame were the most robust predictors of PTSD symptom severity [$F(1,100) = 22.569, p < .000$; $F(1,100) = 15.492, p < .001$ respectively], with anger being the strongest predictor. High levels of anger predicted less overall willingness to seek treatment [$F(1,100) = 6.160, p = .015$], while high levels of shame predicted less willingness to seek treatment when considering the stigma associated with doing so [$F(1,100) = 35.860, p < .001$]. Results indicate that shame and anger are very important emotional components of the trauma response and may affect treatment seeking behavior; however, guilt appears to be less important than other emotional variables assessed by this study. Treatment implications are discussed.

Acknowledgements

I would like to thank my family for their support and encouragement through my college years. I would specifically like to thank my parents for teaching me that I can accomplish seemingly insurmountable goals with a little patience, a lot of determination, and tons of hard work. I would like to thank my husband for his patience, support, and understanding throughout the years while I commandeered myself in order to study or get needed work done. I also would like to thank my son for providing me with breaks, from work, full of laughs and love and for giving me a new perspective on life and school. Lastly, I would like to thank my advisor, Jennifer Waltz, Ph.D., for her support and guidance throughout my four years at the University of Montana.

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Introduction

Trauma

Trauma is a common experience in the general population. For example, about half (approximately 50%; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993) of the women in the United States will experience at least one traumatic event in their lifetimes. Approximately 33% of the women in the United States will experience an assault, either sexual or nonsexual, during their lifetime (Resnick et al., 1993). Regarding traumatic experiences among men, Punamaki, Komproe, Qouta, Elmasri, and de Jong (2005) found that among a sample of Palestinians, men experienced significantly more traumatic events (mean = 4.68) than women (mean = 1.13). They also found that 86% of men and 44% of women experienced at least one traumatic event in their lifetime. Traumatic experiences also are particularly common among military soldiers. As of November, 2006, 1.4 million American troops had been deployed to Iraq and Afghanistan (Gulf War and Health, 2008). It is likely that in the subsequent two years this number has climbed to over 2 million.

Many people who experience psychological trauma develop posttraumatic stress disorder (PTSD; Feeny, Zoellner, & Foa, 2000). For example, Riggs, Rothbaum, and Foa (1995) and Rothbaum, Foa, Riggs, Murdock, and Walsh (1992) found that 94% of sexual assault victims and 71% of nonsexual assault victims met symptom criteria for PTSD, except duration criteria, immediately after the trauma. They also found that 47% of sexual assault victims and 21% of nonsexual assault victims met criteria for PTSD 3 months after the trauma.

PTSD symptoms also tend to last a long time, especially if they are untreated. For example, one study found that 18.7% of Vietnam veterans met criteria for lifetime PTSD, and 9.1% suffered from PTSD 11 to 12 years after the war (Dohrenwend et al., 2006). Among Gulf

War veterans, 3% met cut-off scores on the Mississippi Scale for PTSD immediately after returning home from the war, and 8% did so two years later (Wolfe, Erickson, Sharkansky, King, & King, 1999).

In order to qualify for a diagnosis of PTSD, one must experience a traumatic event, and have symptoms of re-experiencing the event, avoidance of experiences or situations that are reminiscent of the event, emotional numbing, and hyperarousal (*DSM-IV-TR*; American Psychiatric Association [APA], 2000). There are a number of reasons why PTSD has been of primary importance when investigating reactions to trauma. Without successful treatment the disorder is very debilitating and can last a lifetime. Symptoms of re-experiencing, including nightmares and flashbacks, often happen unexpectedly and can cause intense anxiety and a sense of loss of control for the victim (Sherman, Zanotti, & Jones, 2005). Avoidance symptoms include “anhedonia, emotional detachment, restricted range of affect, and avoidance of reminders of the trauma” (APA, 2000, p. 468). As described by Sherman et al. (2005), these symptoms can cause the victim to become socially isolated and detached, often causing the victim to quit activities that he or she used to enjoy. Symptoms of increased arousal can cause sleep disturbances, which lead to fatigue and exacerbate social withdrawal, anhedonia, and irritability within the victim. In addition, living in a chronic state of heightened arousal can cause tension and stress within the individual. A consequence of hyperarousal is easily becoming emotionally flooded, especially during stressful times. Traumatized individuals with PTSD often cannot handle such overwhelming emotions so they may “shut down.”

Traumatized individuals diagnosed with PTSD also tend to experience a variety of other problems in addition to their PTSD symptoms. For example, victims diagnosed with PTSD tend to have relationship difficulties with their partners and their children (Byrne & Riggs, 1996;

Carroll, Rueger, Foy, & Donahoe Jr., 1985; Jordan et al., 1992). They are likely to experience alcohol abuse and dependence (Schnitt & Nocks, 1984). For example, one study found that almost 8% of deployed veterans met criteria for substance dependence while only 4.8% of non-deployed veterans did so (Toomey et al., 2007).

Traumatized people also tend to have problems with anger, hostility, and suicidal thoughts and behavior (e.g., Hendin & Haas, 1991; Jakupcak et al., 2007). For example, research has found that traumatized victims are more angry than nontraumatized individuals (Riggs, Dancu, Gershuny, Greenberg, & Foa, 1992). Hendin and Haas (1991) found that among a sample of 100 Vietnam War veterans, 19 had made suicide attempts and 15 had been seriously preoccupied with suicidal ideation after the war. Seven percent of deployed Gulf War soldiers met criteria for major depression, compared to 4.1% of non-deployed soldiers (Toomey et al., 2007). As compared to nonvictimized individuals, rape victims have been found to have problems in their overall functioning for the first few months following their trauma (Resick, Calhoun, Atkeson, & Ellis, 1981).

In addition, recent research suggests that families of traumatized individuals may experience secondary traumatic stress reactions (Barnes & Figley, 2005). Secondary traumatic stress is the stress associated with living in close proximity to, and caring for, an individual who has PTSD (Figley, 1995; as cited in Barnes & Figley, 2005). In summary, PTSD is associated with intense individual pain and distress, and with a range of emotional and interpersonal difficulties.

Given that traumatic events, as defined by the DSM, cause reactions of “intense fear, helplessness, or horror,” (APA, 2000, p. 467) it makes sense that anxiety has been central to our conceptualization of the impact of such events; however, there are also other important

emotional reactions to trauma. There is fairly strong evidence that trauma survivors experience problematic levels of anger, guilt, and shame (Henning & Frueh, 1997; Jakupcak et al., 2007; Novaco & Chemtob, 2002; Orth, Cahill, Foa, & Maercker, 2008; Orth & Wieland, 2006). In addition, there is some evidence that these emotions are related to PTSD and affect treatment response (Foa, Riggs, Massie, & Yarczower, 1995; Henning & Frueh, 1997; Orth et al., 2008). In fact, Monson and Friedman (2006) suggest that PTSD be removed from the anxiety disorders and put into its own category of stress disorders. They also suggest that PTSD should include specifiers, such as “prominent anger.”

This study builds on previous research investigating the relationships between guilt, shame, and anger in trauma survivors. Previous research has found that guilt and shame, although related, have differential relationships to PTSD symptoms, with shame related to higher levels of PTSD. The current study will replicate and extend these findings, by examining the relationship of guilt and shame to anger, as well as the relationship of these emotions to trauma symptoms. Clinical experience and some research suggest that anger may at times be a secondary response to shame; that is, for some people, the experience of shame may automatically trigger anger (Tangney, Wagner, Fletcher, & Gramzow, 1992). Researchers in the trauma field have suggested that the tendency to avoid other emotions, such as fear, by experiencing anger instead interferes with trauma treatment (Foa et al., 1995). Some evidence supports this idea. The current study will investigate whether shame appears to be connected for traumatized individuals, and the extent to which the combination of shame and anger is predictive of trauma symptoms and distress.

Guilt and Shame in Response to Trauma

Guilt and shame appear to be important emotional reactions to trauma (Henning & Frueh, 1997; Kubany & Manke, 1995). Guilt or self-blame has been found to be a symptom among battered women, survivors of rape, childhood sexual abuse, burn patients, military veterans, and family members of suicide victims (Cascardi & O'Leary, 1992; Henning & Frueh, 1997; Janoff-Bulman, 1979; Jehu, 1989; Kiecolt-Glaser & Williams, 1987; McNiel, Hatcher, & Reubin, Sum 1988). In addition, guilt and shame have been documented as being related to a number of psychological disorders, such as depression, social anxiety, and PTSD (Andrews, Brewin, Rose, & Kirk, 2000; Kubany, Abueg, Kilauano, Manke, & Kaplan, 1997; Orsillo, Heimberg, Juster, & Garrett, 1996; Orth, Berking, & Burkhardt, 2006). In fact, survival guilt was added as a criteria for PTSD in the DSM-III (APA, 1980); however, it was removed in later editions, and currently the DSM-IV-TR lists guilt as a symptom of depression and an associated feature of PTSD (APA, 2000). Guilt and shame in trauma survivors are important emotional responses to understand for several reasons. First, as mentioned above guilt is found in both depression and PTSD, in fact many studies have commonly found comorbidity between depression and PTSD (Kaltman, Green, Mete, Shara, & Miranda, 2010; Scherrer et al., 2008; Taft, Resick, Watkins, & Panuzio, 2009). In fact Kaltman et al. (2010) found that experiencing four or more traumatic events was associated with an increase in comorbidity between depression and PTSD among Latina immigrants to the United States. Second, guilt has been found to be an important symptom cluster of PTSD among trauma survivors (Hovens et al., 1993). For example, Hovens et al. found guilt to be one of six symptom clusters of a Dutch PTSD scale, based on the DSM-III. Third, guilt and shame appear to be related to overall symptom severity. Kubany et al. (1995) found that guilt severity was related to PTSD symptoms among Vietnam veterans. Lastly,

research suggests that guilt and shame may interfere with PTSD treatment (e.g., Ehlers, Clark, et al., 1998).

Both guilt and shame are complex emotional responses, and they have been conceptualized in a variety of ways by different theorists (Baumeister, Stillwell, & Heatherton, 1994; Kubany & Manke, 1995; Opp & Samson, 1989; Seidler, Sum 1997; Wilson, Drozdek, & Turkovic, 2006). For this project, guilt and shame will be defined and discussed as described by Wilson et al. (2006). Wilson et al.'s conceptualization incorporates other important theories on the subject, by authors such as Kubany and Tangney, and they offer a comprehensive discussion of guilt and shame.

Definitions of guilt and shame. Guilt and shame are frequently thought of as the same concept, and the terms are often used interchangeably; however, theorists have recently made a distinction between the two concepts. Therefore, this section will begin by explaining the similarities and differences between guilt and shame. Both emotions involve concepts of “wrong” behavior or having done something “wrong,” either by omission or commission (Wilson et al., 2006). They also both involve negative emotions and cognitions related to the perceived offensive behavior (Wilson et al., 2006).

Wilson et al. (2006) propose that guilt is composed of negative emotions related to wrongdoings or perceived failures to act appropriately, whereas shame consists of a negative evaluation of one's own worth because he or she has acted “wrongly.” Thus, according to this conceptualization, guilt is concentrated on one's actions, while shame is directed toward one's moral integrity and self-worth, and/or past actions and how they are perceived.

In addition, shame is conceptualized as including feelings of “disgrace, disrepute, dishonor, loss of self-esteem, loss of virtue, and loss of personal integrity” (Wilson et al., 2006,

p. 123). Guilt, in contrast, includes feelings of sorrow, repentance, and disappointment in one's actions. Guilt and shame also differ in the focus of their associated negative cognitions (Wilson et al., 2006). Shameful cognitions focus on evaluating one's self, loss of self-esteem, and loss of one's moral integrity. Guilty cognitions focus on the evaluation of one's behavior and not one's personal integrity. A person who feels shameful may think that he or she is to blame for the immoral act and is therefore a bad person. Conversely, a person who feels guilty may believe that he or she acted wrongly and therefore feels that his or her actions were wrong, but they can still maintain a positive view of the self as a person.

While a number of authors and researchers have made distinctions between the emotions of guilt and shame, others have not, and suggest that guilt and shame are the same concepts. Therefore, at times this paper will refer to guilt and shame as separate emotional reactions and at times they will be combined. This is necessary because some research has combined them and other studies have looked at them independently.

Development of guilt and shame in response to trauma. It is clear from both clinical and empirical evidence that a significant proportion of people who live through traumatic events experience guilt and shame related to the trauma (e.g. Henning & Frueh, 1997; Kubany et al., 1995). Several theories have been developed to explain the link between traumatic events and guilt. Kubany and Manke (1995) suggest that guilt occurs when the individual experiences both distress and a feeling of responsibility for causing the traumatic event. There are many reasons why trauma survivors may feel that they are responsible for causing the traumatic event. For example, a rape survivor may feel that she/he caused the rape because of how he/she was dressed. A driver who has an accident and kills someone may feel that if he had been driving more slowly, the accident would not have occurred. Iraq veterans mistakenly shoot civilians

when engaging with the enemy while trying to protect fellow soldiers. Shooting victims, such as in school shootings, may feel that their harshness towards the shooter may have caused him/her to “snap.”

Kubany and Manke (1995) suggest that three other cognitive factors, in addition to believing that one was responsible for the event, can lead to an event producing guilt, and although the authors do not directly state that these factors also can lead to shame, it seems reasonable that they could. First, many trauma survivors have false beliefs about “preoutcome knowledge.” That is, they believe that they knew what was going to happen before the outcome took place. For example, a rape victim may believe that he/she should not have gotten a ride home with the rapist because he/she knew that he/she would be raped. This erroneous thinking is caused by hindsight bias (Kubany & Manke, 1995).

Second, many trauma survivors believe that their choices during the traumatic event were unjustified, even though their actions during the event might have been the best choice at the time. For example, a rape victim may believe that the rape was his/her fault because he/she did not yell out or fight back during the rape. After the trauma, this person may feel that his/her choice not to yell was wrong, despite the fact that the rapist told him/her that he would kill him/her if he/she yelled. A military platoon sergeant may feel responsible for the death of his soldiers during an ambush. He might feel that his choice to go down road A instead of road B caused the death of his soldiers, despite at the time having military intelligence stating that road A was more secure than road B.

Third, some trauma survivors may believe that their actions violated their own standards of right and wrong, due to negative outcomes, even if their actions at the time were consistent with their moral standards. For example, an American soldier deployed to Iraq may fire into a

vehicle that is going to run over and kill fellow soldiers. Later, that soldier believes he was wrong for firing at the vehicle because he found out that there were children in the vehicle. Support for this theory was found in two separate samples of trauma survivors, one composed of Vietnam veterans and the other battered women (Kubany et al., 1995). Among these two samples, guilt about traumatic events was related to the strength of one's belief about personal responsibility, moral integrity, justification, and preoutcome knowledge.

Guilt-proneness and shame-proneness. In addition to understanding the experience of guilt or shame in response to particular events, researchers have examined people's guilt- or shame-*proneness*, their general tendency to respond to events with feelings of guilt or shame. Guilt-proneness and shame-proneness are also known as trait guilt or trait shame. Research has shown that guilt-proneness and shame-proneness are related to a number of psychological disorders (Kubany et al., 1995; Tangney, Wagner, & Gramzow, 1992) including PTSD (Leskela, Dieperink, & Thuras, 2002; Pineles, Street, & Koenen, 2006).

Interestingly, shame-proneness appears to put an individual at greater psychological risk than guilt-proneness. When the shared variance between guilt-proneness and shame-proneness is taken into account, most research finds that the unique characteristics of guilt-proneness are no longer a significant predictor of adverse psychological symptoms (Pineles, Street, & Koenen, 2006). For example, Pineles et al. (2006) found that in an undergraduate student population, the unique components of shame-proneness and the shared variance between shame-proneness and guilt-proneness were significantly related to PTSD symptoms; however, the unique components of guilt-proneness were not related to PTSD symptoms.

Research with veterans has found that guilt-proneness is actually negatively correlated with PTSD (Leskela et al., 2002). In addition, they found that each individual PTSD symptom cluster was related to shame-proneness but not guilt-proneness (Leskela et al., 2002).

Guilt and shame in trauma populations. Much of the research on guilt and shame in trauma survivors has focused on veterans, with research also addressing sexual assault, physical assault, child abuse, natural disasters, traffic accidents, and illness or injury. Each of these populations will be discussed here. Combat guilt or combat shame is guilt or shame specifically regarding combat experiences and has been found to be associated with PTSD symptoms among military veterans (Henning & Frueh, 1997). As discussed by Henning and Frueh (1997), combat guilt includes guilty feelings for experiences or behaviors during and after combat. Combat guilt may be experienced after surviving when other soldiers did not. This is also known as survival guilt. Witnessing violent behavior also can lead to guilty feelings. Other experiences that can contribute to combat guilt include acts of error or neglect, guilt concerning one's thoughts and feelings both during and after the war, and failing to keep other soldiers from being injured or killed (Kubany 1994; Kubany et al., 1995; Kubany et al., 1997; Opp & Samson, 1989).

Moscarello (1992) describes how shame may develop after a woman is sexually assaulted. Moscarello (1992) starts by suggesting that "hurt, anger, failure, and helplessness evoke shame. During sexual violation, all of the above occur when the most vulnerable, private aspects of a woman, her self, her body, and her sexuality are exposed" (p. 499). The author further adds that the shame that is experienced further traumatizes her self-identity, her womanliness, and sexuality. Moscarello further suggests that the function of self-blame or guilt is to reduce shame. If the woman blames her behaviors for the sexual assault, then she "asked

for it,” and she can always change her behavior to be safe again. Society also blames the victim for the same reason, to try to restore its illusion of a safe and just world (Moscarello, 1992).

Connected to the guilt and shame that women feel after being sexually assaulted, Binder (1981) found that among a sample of undergraduate, graduate, and faculty women of a university in the United States, only 18% of those who experienced a rape reported it to authorities. In this study, the primary reason for not reporting the sexual assault was guilt combined with embarrassment (e.g., the women believed that the rape was their fault or they would feel devalued by male and female peers).

Guilt over acts of omission and commission (behaviors performed or failed to be performed by the child to stop the traumatic event or during it) have also been found in children who have experienced traumatic events. Kletter, Weems, and Carrion (2009) assessed the relationship between guilt and PTSD among 87 children who had experienced interpersonal violence. The children ranged in age from 5 to 16 years-old. Using multiple regression analysis, the authors found that guilt over acts of omission and/or commission were highly related to PTSD severity (Kletter et al., 2009).

One study also has found guilt in natural disaster victims. Heir, Sandvik, and Weisaeth (2009) assessed Norwegian victims of the 2004 Southeast Asian tsunami. The authors found that PTSD symptoms and guilt correlated with direct exposure to the tsunami. Specifically, Norwegian tourists who were directly exposed to danger from the tsunami (e.g., caught in the wave or had to run from the wave) experienced significantly more PTSD symptoms (intrusion, hyperarousal, and avoidance) and guilt than Norwegian tourists who were exposed to other disaster related dangers. Both types of tourists also experienced more PTSD symptoms and guilt than Norwegian tourists who were not exposed to any tsunami dangers.

Guilt and shame also have been reported among victims other types of traumatic events. Amstadter and Vernon (2008) compared emotional responding of college students to different types of trauma. The students were divided into trauma groups of sexual assault, traffic accidents, physical assault, and illness or injury. The authors found that all groups reported experiencing guilt and shame during and after the trauma. The authors also found that levels of shame significantly increased after sexual and physical assault; however, shame did not significantly increase after transportation accidents, illness, or injury. In contrast to shame, all groups reported significantly more guilt after their trauma than during their trauma. Sexual assault victims reported significantly more guilt than all other types of trauma, and traffic accident victims reported more guilt than illness or injury victims. All of the above research lends support to the contention that feelings of guilt and/or shame are experienced across a variety of different types of trauma including war, sexual assault, physical assault, child abuse, natural disaster, traffic accidents, and illness or injury.

Regardless of the type of trauma that is experienced, Henning and Frueh (1997) acknowledge that little is known about the role that guilt or shame plays in the development or maintenance of PTSD and other psychological disorders. Kubany and Manke (1995) theorize that PTSD is maintained by guilt through a cyclic pattern. They suggest that guilt-related thoughts often accompany traumatic memories and these guilty thoughts also produce a negative emotional response (e.g. distress, guilt, anger) within the individual. Through this type of conditioning, traumatic memories trigger negative emotions, and the experience of the negative affect reinforces the aversive nature of the traumatic memory. This negative cycle also tends to increase avoidance of the traumatic memory which reduces the likelihood of improvement

through extinction and explains why these painful thoughts do not get better with the passage of time.

The authors also suggest that guilt is accompanied by a strong desire to undo the wrong behavior or to make reparations for it in some way (Kubany & Manke, 1995; Tangney, Wagner, & Gramzow, 1992). In many situations this is difficult, if not impossible. As the authors note, it is impossible to bring back to life someone who is dead. The inability to directly repair the wrongdoing or damage is another reason why guilt and shame are so painful and do not improve over time.

The research that has been conducted addressing guilt and shame has found that guilt is a major symptom cluster in PTSD. During a validation study of a new Dutch PTSD scale, based on DSM-III PTSD criteria, Hovens et al. (1993) assessed Dutch World War II Resistance veterans. They performed a component factor analysis on their new PTSD scale and found that guilt was one of six factors that were associated with PTSD. The guilt factor was composed of two items “I feel guilty when I think about those people who didn’t survive the war” and “I feel guilty when I think about the people who suffered during the war” (Hovens et al., 1993, p. 201). The other five factors that emerged included 1) intrusive memories from the war and sleep difficulties, 2) physiological arousal, 3) detachment, 4) rage, 5) active confrontation of war stimuli. Thus guilt, in particular about others’ suffering or death, appeared to be an important component of trauma response in this sample.

Guilt as a component of trauma response also has been found in Vietnam veterans. Glover, Pelesky, Bruno, & Sette (1990) assessed a sample of Vietnam combat veterans with diagnosed PTSD. The veterans were administered the Vietnam Related Experiences Questionnaire, which was constructed to assess combat related problems of fear-anxiety,

mistrust, survival guilt, and guilt secondary to aggression that were theorized to be associated with PTSD symptoms due to combat in Vietnam. The items for this measure were developed based on clients' self reports that these issues and experiences were most troubling to them. All of the 96 items from the measure were entered into a factor analysis. They found that guilt was one of five factors that comprised PTSD. The items that loaded on the guilt factor assessed survival guilt, guilt for abusive violence, thoughts of retribution, troubled self-image, and low self-worth. The other four factors were feelings of vulnerability, dreams of death/destruction, depression, and rebelliousness. Thus, survival guilt, guilt about behaviors and thoughts that they engaged in, and low self-esteem also appear to be components of trauma response in combat veterans.

Guilt also has been found to be related to PTSD symptom severity. Henning and Frueh (1997) employed a sample of 40 veterans who had been diagnosed with PTSD. Results from this study indicated that guilt severity was related to severity of PTSD symptoms. More specifically, guilt was positively related to PTSD symptoms of reexperiencing and avoidance. The authors noted that these relationships were independent of trait guilt and combat exposure. These results suggest that a person's tendency to react with guilt (guilt proneness or trait guilt) may not correlate with their actual reactions to a particular situation (e.g., combat guilt).

Thus, it appears that guilt and shame are common reactions to trauma. Guilt and self-blaming have been found among survivors of war, childhood abuse, sexual assault, physical assault, burn patients, natural disasters, traffic accidents, injury or illness, and families of suicide victims (Amstadter & Vernon, 2008; Cascardi & O'Leary, 1992; Heir et al., 2009; Janoff-Bulman, 1979; Jehu, 1989; Kiecolt-Glaser & Williams, 1987; McNiel et al., Sum 1988). This

research clearly establishes guilt and shame as components of trauma response and components of PTSD secondary to traumatic situations.

Anger

The DSM-IV-TR lists irritability or outbursts of anger as a symptom of PTSD (APA, 2000). Many studies have shown that anger is related to PTSD (e.g., Jakupcak et al., 2007; Orth et al., 2008; Orth & Wieland, 2006). Anger appears to be especially problematic for combat veterans, particularly veterans diagnosed with combat PTSD (Novaco & Chemtob, 2002). Novaco and Chemtob (2002) found that anger accounted for over 40% of the variance in PTSD symptoms, as measured by the Mississippi Scale with its anger items removed. In addition, all of the seven anger measures significantly differentiated combat veterans diagnosed with PTSD from combat veterans without a diagnosis of PTSD. Several studies also demonstrate the presence of anger in trauma survivors other than combat veterans. Women who have experienced unresolved childhood trauma also report high levels of anger and rage (Flemke, 2009). Flemke (2009) found that reported types of childhood trauma among these women included physical or sexual abuse, believing there would be no protection from caretakers, and witnessing domestic violence. Grey and Holmes (2008) assessed patients diagnosed with PTSD from an anxiety and trauma clinic located in London. They found that while these patients retold their trauma stories, the emotions they experienced the most were fear and anger.

Anger can cause a variety of behavioral and social problems for trauma survivors with PTSD. These problems appear to stem largely from a lack of behavioral control in the context of intense anger (Novaco & Chemtob, 2002). Traumatized individuals with anger problems tend to have relationship difficulties with their partners and their children (Byrne & Riggs, 1996; Carroll

et al., 1985; Jordan et al., 1992). They also are likely to experience alcohol abuse or dependence (Schnitt & Nocks, 1984).

It was initially believed that the relationship between anger and PTSD might be due to a methodological artifact, since anger is a symptom of PTSD. However, a number of studies have removed the items measuring anger and irritability from PTSD measures and found that the correlation between anger and PTSD was still significant (Novaco & Chemtob, 2002; Orth et al., 2008). Thus, the relationship between anger and PTSD does not appear to be due to the inclusion of anger difficulties within the diagnostic criteria.

Early research hinted that anger might be involved in the development of PTSD; however, subsequent research suggests the opposite that PTSD might lead to the development of anger problems (Orth et al., 2008; Riggs et al., 1992). In a longitudinal study, Riggs et al. (1992) found that among female crime victims, there was a strong positive correlation between anger shortly after the crime and development and maintenance of PTSD. These results suggest that anger may predict later development of PTSD symptoms. If this is true, anger may be involved in the development of PTSD. However, Orth et al. (2008) noted that in the Riggs et al. (1992) study, prior PTSD severity was not controlled for. Therefore, Orth et al. (2008) performed a similar study with a mixed gender sample investigating the temporal sequence of anger and PTSD while accounting for prior PTSD levels. They found that, contrary to the Riggs et al. (1992) study, PTSD symptoms predicted later levels of anger, but anger did not predict later development of PTSD symptoms (Orth et al., 2008). In addition, their research found that PTSD increases anger severity through rumination, suggesting that the more one ruminates about the trauma the angrier they become (Orth et al., 2008). More research on this relationship is needed,

but available evidence supports the conclusion that PTSD symptoms lead to the development of anger.

Orth et al. (2008) also found that rumination mediated the relationship between PTSD and anger, with PTSD increasing anger levels through rumination (Orth et al., 2008). However, the authors caution that this study employed a sample of crime victims, and therefore, it is uncertain whether the same results generalize to other types of traumatic events (e.g., combat experience) (Orth et al., 2008). The authors suggest that it is possible that the same psychological processes, such as rumination, affect the relationship between PTSD and anger in all types of trauma, but that there might be additional psychological processes involved in combat veterans because the correlation between anger and PTSD is higher among combat veterans (Orth et al., 2008).

The relationship between anger and PTSD appears to be problematic for all types of trauma experiences, but particularly so for combat veterans. A recent meta-analysis of adults exposed to different types of trauma found that severity of PTSD symptoms was significantly related to anger (Orth & Wieland, 2006). The same study also found that the correlation between anger and PTSD was higher among military war veterans relative to victims of other types of traumatic events (Orth & Wieland, 2006).

Although survivors of all types of traumatic experiences can have problems with anger, Iraq and Afghanistan War veterans seem to be a fast growing subpopulation that are having significant problems with anger. Jakupcak et al. (2007) found that Iraq and Afghanistan War veterans with PTSD reported significantly more anger and hostility symptoms than veterans with subthreshold-PTSD or veterans with no PTSD. In addition, the veterans with subthreshold-PTSD reported significantly more anger and hostility than the veterans with no PTSD. This

research suggests that veterans who have difficulties adjusting to life after combat also have significant problems with anger.

Theories Addressing the Relationship Between Anger, Trauma, and PTSD.

Several theories have been developed to explain the connection between anger, trauma, and PTSD symptomatology. Chemtob, Novaco, Hamada, Gross, & Smith (1997) suggest that trauma survivors suffering from PTSD routinely judge non-threatening situations as threatening; that is, their “survival mode” becomes maladaptive because it is inappropriately activated in non-threatening situations (Chemtob et al., 1997). Chemtob et al. (1997) further suggest that the activation of the “survival mode” also activates anger, and once these two responses become routinely associated with each other, the activation of anger can trigger the activation of “survival mode.” This results in the victim’s decreased ability to regulate anger and aggression (Chemtob et al., 1997).

Fear avoidance theory suggests that people who experience PTSD try to avoid feelings of fear or anxiety (Feeny et al., 2000; Foa et al., 1995; Orth & Wieland, 2006; Riggs et al., 1992). They suggest that anger functions as a distraction from traumatic memories that elicit fear and anxiety (Feeny et al., 2000; Foa et al., 1995; Orth & Wieland, 2006; Riggs et al., 1992). People focus their attention on trauma-related anger because it is less aversive than fear for most people (Feeny et al., 2000; Foa et al., 1995; Orth & Wieland, 2006; Riggs et al., 1992). In this way, anger enables the individual to emotionally disengage from the trauma memories (Feeny et al., 2000); however, it is proposed that fear avoidance and emotional disengagement also hinder the “natural” emotional processing of the trauma that is needed to recover (Feeny et al., 2000).

Therefore, this theory proposes that anger both leads to the development of PTSD, and inhibits recovery from PTSD (Feeny et al., 2000; Riggs et al., 1992).

A third theory utilizes a cognitive model and suggests that anger affects PTSD symptom severity via rumination about the event (Ehlers, Mayou, & Bryant, 1998; El Leithy, Brown, & Robbins, 2006; Orth et al., 2008). This theory proposes that people ruminate about how the traumatic event has changed their lives, or how the event could have been prevented. Rumination may increase the association between cognitive and emotional elements of a memory; such as, cognitive (e.g. my life has changed drastically since the trauma) and emotional (I am angry because my life has changed) elements of a traumatic event. Therefore, they hypothesize that rumination can increase the depressive affect (Nolen-Hoeksema & Morrow, 1991) and the angry affect (Rusting & Nolen-Hoeksema, 1998) that is associated with a traumatic memory. Lastly, this theory suggests that this links PTSD intrusive memories to anger; therefore, rumination about the traumatic event strengthens the association between PTSD symptoms and anger.

The Role of Anger, Guilt, and Shame in PTSD Treatment

Many treatments for PTSD currently focus on habituation to reduce excessive fear associated with the trauma (Grey, Holmes, & Brewin, 2001); however, this approach may not be the most effective treatment if other emotions and related cognitions (e.g. anger, shame, or guilt) exist with fear or instead of fear (Grey et al., 2001). Research has demonstrated that the presence of anger may interfere with exposure-based treatment of PTSD (Paunovic, 1998). Foa et al. (1995) studied the efficacy of prolonged exposure (PE) treatment in a sample of female assault victims diagnosed with PTSD. Those participants who experienced more fear during their first

reliving of the assault in therapy had better outcomes than those who experienced less fear. Importantly, they also found that participants who endorsed high levels of anger prior to treatment expressed less fear during the first reliving of the trauma and benefitted less from therapy than clients who reported less anger prior to treatment. Results of this study suggest that fear activation during treatment is necessary for emotional processing of the trauma, and that anger may interfere with fear activation, therefore reducing the efficacy of PE treatment.

Similar results were found in a study of 103 male Vietnam veterans who were attending a veterans' PTSD program (Forbes et al., 2008). The authors found that anger correlated negatively with PTSD treatment outcome. Furthermore, they found that fear of one's anger was more predictive than general anger. These results suggest that veterans who are afraid of their inability to control their angry responses may be more hesitant to explore trauma memories than veterans who do not fear their anger. The authors suggest that this may be because veterans who are afraid of their anger are fearful that accessing the trauma memory may trigger an aggressive and harmful response.

There are some theories addressing why anger may interfere with cognitive-behavioral PTSD treatment (Paunovic, 1998). First, anger may interfere with treatment by disrupting emotional processing of the trauma. This hypothesis is consistent with the above mentioned Foa et al. (1995) study. Paunovic (1998) suggests that anger may impede fear activation because the two share many of the same stimuli, responses, and meaning cues. Second, anger may hinder cognitive behavioral treatment because it can interfere with realistic evaluations of who is to blame for the traumatic event. Ruminations about injustice often lead to anger. Angry individuals often have a difficult time rationally determining if the trauma was intentional or

avoidable. Third, anger may destroy an individual's core schema about the goodness of other people and meaningfulness of the world.

Paunovic (1998) also suggests that guilt and shame may interfere with PTSD treatment. The author indicates that guilt and shame lead to intrusive memories and avoidance of the trauma, thereby maintaining PTSD symptoms. He further suggests that exposure therapies, by themselves, do not adequately address the faulty cognitive appraisals associated with guilt and shame. Some research has supported this contention (e.g. Ehlers, Clark, et al., 1998; Rothbaum, Rief, Litz, Han, & Hodges, 2003). For example, Ehlers, Clark, et al. (1998) studied the therapy transcripts of 20 women who had received exposure therapy and stress inoculation training after a sexual assault. They compared 10 of the women who experienced good treatment outcome to 10 women who experienced poor treatment outcome on the experience of mental defeat and alienation. They found significant correlations between experiencing mental defeat and alienation and poor treatment outcome. The authors suggest that the reason for alienation after the trauma is due to feelings of shame and guilt. Mental defeat themes are also reminiscent of guilt and shame, such as "I am worthless," "I am to blame for what happened," and "I am a bad person" (Ehlers, Clark, et al., 1998, p. 466). Thus, it is possible that guilt and shame are related to poor treatment outcomes, and the authors suggest that cognitive components should be added to exposure therapy to address guilt and shame appraisals.

Some research has addressed the addition of therapeutic techniques designed to focus on guilt, shame, and anger problems within PTSD treatment. Rothbaum et al. (2003) report on a case study in which they utilized exposure therapy with a Vietnam veteran who experienced PTSD symptoms, guilt and anger. They describe that most of the veteran's distress came from acts that he had committed during Vietnam, and this distress led to feelings of guilt and anger.

They found that the most effective part of treatment occurred after exposure therapy when they discussed material that had come up during the exposure intervention in a more cognitive discussion. Therefore, exposure treatments may need an added cognitive component to address guilt and shame appraisals, or professionals may need to create other new approaches to PTSD treatment that more adequately address guilt, shame, and anger.

In addition to the contention that anger, shame, and guilt interfere with PTSD symptom reduction, some authors have warned that standard PTSD treatments, especially prolonged exposure, will not reduce these negative emotions and may even cause them to worsen (e.g., Pitman et al., 1991). In response to this assertion, Stapleton, Taylor, and Asmundson (2006) conducted a study in which they examined the impact of exposure therapy, eye movement desensitization and reprocessing, and relaxation training on levels of anger and guilt associated with PTSD. The results suggested that all three treatments reduced average levels of anger and guilt associated with PTSD. Of note, the investigators also found that anger, shame, and guilt levels did worsen in some participants; however, Stapleton et al. (2006) reported that worsening of negative emotions was uncommon. The authors suggested that while these three treatments did reduce anger and guilt levels, it may be important to use other types of interventions that directly target anger, guilt, and shame (Stapleton et al., 2006).

The existing data seem to suggest that anger, guilt, and shame may interfere with standard treatment of PTSD, at least for some people. Some of the more prominent theories about this relationship suggest that anger interferes with emotional processing of the trauma (Foa et al., 1995; Paunovic, 1998) and that guilt and shame maintain PTSD; therefore, they need to be addressed before PTSD symptoms will subside (Paunovic, 1998). In addition, in a number of people, some therapies may reduce anger, guilt, and shame levels; however, PTSD treatment also

is associated with an increase in anger, guilt, and shame levels in a minority of individuals (Stapleton et al., 2006). Although the exact role of anger, guilt, and shame in PTSD treatment is unclear, it does appear that they do affect treatment in some fashion. More research is needed to clearly determine this relationship, including understanding why symptoms worsen in some individuals.

Understanding the Relationship between Anger, Guilt, and Shame in Trauma Survivors

Anger, guilt, and shame are not isolated emotional reactions to traumatic experiences. Given the prevalence of problems with these emotions in trauma survivors, clearly many people experience problems with more than one of them. This section will explore the possibility that shame, guilt, and anger may at times be primary emotions that trigger one another as secondary emotions. Primary emotions, for purposes of this study, are understood as emotions that are immediate, direct reactions to events and thoughts. Secondary emotions are those that are responses to other emotions.

Some research has explored the question of whether guilt and shame each have an independent relationship to anger, and whether anger may be a secondary response to shame. Tangney et al. (1992) assessed 243 and 252 undergraduate students in two studies to determine the relationship of their guilt-proneness and shame-proneness to their anger, hostility, and aggression. They utilized two measures of guilt and shame, the Self-Conscious Affect and Attribution Inventory (SCAAI) and the Test of Self-Conscious Affect (TOSCA). The authors found that shame-proneness was positively related to most indices of anger, while guilt-proneness was negatively related to some indices of anger and unrelated to the rest.

In addition, they found that shame-proneness and guilt-proneness were significantly related to each other. Therefore, they factored out shame from guilt and vice versa to find unique aspects of each. The unique aspects of shame-proneness were positively related to blaming others for negative events, while unique aspects of guilt-proneness were negatively related to externalizing blame. As for the anger indices, the unique aspects of proneness to shame were positively related to trait anger, reacting with anger, hostility, paranoid ideation, indirect hostility, irritability, negativism, resentment, and suspicion across both measures of shame. However, only the unique aspects of the TOSCA shame scale were found to correlate positively with an angry temperament. The unique aspects of guilt-proneness were negatively related to hostility and resentment across both measures of guilt, while only the unique aspects of the SCAAI guilt scale were negatively related to trait anger, paranoid ideation, negativism, suspicion, assault, and verbal hostility. Thus, shame appears to be more related to aspects of anger than guilt is.

Some research has also explored the relationship between anger and guilt in trauma survivors. Reynolds and Brewin (1999) found that anger was inversely related to guilt among an adult clinical sample attending a hospital for the treatment of PTSD or depression. Of the participants diagnosed with PTSD, 42 out of 43 reported experiencing intrusive memories, while 45 of the 62 depressed participants also experienced traumatic memories. The participants were asked to recall intrusive memories about their traumatic event. Fifty-nine of the participants reported experiencing anger associated with their traumatic memories, 43 experienced sadness, 35 experienced fear, 25 experienced helplessness, and 16 experienced guilt. The authors divided the memories into categories according to content. The categories were 1) family death, illness, or injury, 2) personal illness or injury, 3) personal assault, and 4) interpersonal problems. The

authors then analyzed whether the various emotions were significantly related to specific types of traumatic memories. They found that sadness was related to events pertaining to other people, specifically family death, illness, or injury and interpersonal problems. Fear was related to events pertaining to oneself, such as personal assault, illness, or injury. Guilt was associated with family death, illness, or injury and helplessness was related to personal illness or injury. Anger was commonly reported across all types of events. Thus, anger was reportedly experienced more than guilt in trauma reactions, and anger tended to be associated with multiple types of trauma, while guilt was a reaction to more specific types of trauma, especially death or injury of others.

Because these two studies are correlational no conclusions can be drawn from them about causal links between the emotions of guilt, shame, and anger (Tangney, Wagner, Fletcher, et al., 1992). However, Tangney, Wagner, Fletcher, et al. (1992) discuss two possible links between shame and anger as primary and secondary emotions. The first hypothesis suggests that anger is a primary emotion and shame is a secondary emotion. In this theory, the individual may be ashamed of his/her anger, especially if he/she has acted in a hostile or aggressive way towards others (Miller, 1985; as cited by Tangney, Wagner, Fletcher, et al., 1992). However, the authors suggest that this anger-to-shame link is not very likely since the results of their study show that shame is correlated to indirect anger and not direct anger like physical or verbal aggression. The second hypothesis suggests that shame is the primary emotion while anger is the secondary emotion. This is a shame-to-anger link in which the individual's shame leads to feelings of anger. Shame is a very painful and global negative emotion that may result in undirected anger. This anger may become focused on others since feelings of shame include the belief that other people would not approve of the individual. As discussed previously in this paper, anger also

may serve as a welcome distraction from the intolerable feelings of shame and anxiety (Feeny et al., 2000; Foa et al., 1995; Orth & Wieland, 2006; Riggs et al., 1992; Tangney, Wagner, Fletcher, et al., 1992). The results from the Tangney, Wagner, Fletcher, et al. (1992) support this second theory in that shame-proneness was related to blaming others.

Seeking Psychological Treatment in Trauma Survivors

Factors that affect trauma survivors' willingness to seek psychological treatment are very important given the devastating effects of PTSD. For example, victims diagnosed with PTSD tend to have relationship difficulties with their partners and their children (Byrne & Riggs, 1996; Carroll et al., 1985; Jordan et al., 1992). They are likely to experience alcohol abuse and dependence (Schnitt & Nocks, 1984). They also tend to have problems with anger, hostility, and suicidal thoughts and behavior (e.g., Hendin & Haas, 1991; Jakupcak et al., 2007).

Research has found that many trauma survivors do seek psychological help for their problems; however, there is still a substantial proportion of trauma survivors who never seek treatment. For example, one study found that about two-thirds (62%) of Canadian military members with PTSD had sought treatment in their lifetime and 35% never sought any type of psychological treatment (Fikretoglu, Brunet, Guay, & Pedlar, 2007). Approximately half (54%) reported receiving treatment in the last year. The types of professionals seen for treatment were numerous (e.g., psychologists, religious or spiritual advisors, nurses, physician assistants). The authors also found that some characteristics of the trauma predicted treatment seeking. For example, those who had experienced a civilian nonsexual trauma were less likely to seek treatment than those who experienced a civilian sexual trauma. Those who had experienced 2 or 3 different traumas were less likely to seek treatment than those who experienced 5 or more

traumas. The most powerful predictor of treatment seeking was depression; those who experienced co-morbid depression were 3.75 times more likely to seek treatment than those without depression.

Prior research has also found that PTSD symptoms are related to seeking psychological treatment. For example, Boscarino, Adams, and Figley (2004) surveyed citizens of New York City after the September 11, 2001 terrorist attacks. Employing multivariate analyses, they found that utilization of mental health services related to the 9-11 attacks was positively related to PTSD and depression. Zlotnick, Franklin, and Zimmerman (2002) also found that PTSD symptom severity was related to seeking treatment. They specifically found that patients with symptoms severe enough to meet criteria for a diagnosis of PTSD were more likely to want psychiatric treatment and had more psychiatric hospitalizations than patients whose symptoms were less severe and only met criteria for a subthreshold PTSD diagnosis.

While PTSD symptoms may increase a trauma survivor's willingness to seek treatment, it may be that anger, guilt, and shame hinder trauma survivors from seeking psychiatric treatment. In fact, there is some support for this contention. Jakobsson, Hensing, and Spak (2008) found that women and men with alcohol problems reported that feelings of shame were a hindrance to seeking psychological help. Therefore, it is likely that guilt may interfere with seeking psychological help in trauma victims if they are ashamed of their actions and most likely do not want to talk about them. Avoidance is a key feature of PTSD. Avoidance could lead to a decrease in seeking treatment if trauma survivors are afraid to discuss their trauma and believe they may need to do so if they enter treatment.

Stigma also is related to decreased likelihood of seeking psychological treatment. Rusch et al. (2009) define stigma as a stressor if one believes that their stigma related harm will exceed

their perceived coping resources. Sherwood, Salkovskis, and Rimes (2007) found that stigma was negatively associated with seeking treatment for depression among a sample in London despite the fact that their community had recently been targeted by a public campaign to reduce the stigma associated with seeking psychological help. Stigma shows this relationship most likely because a person who believes that psychological treatment also has a stigma associated with it, in that treatment indicates personal weakness, will also be likely not to seek psychological treatment for fear of being disgraced (Fisher & Turner, 1970). In support of this contention, Rusch et al. (2009) found that high levels of stress associated with stigma were significantly related to increased social anxiety and shame. Further, social anxiety and shame were significantly related to lower self-esteem and higher levels of hopelessness.

Summary

Guilt has been associated with PTSD symptoms among trauma survivors (e.g., Henning & Frueh, 1997). Most trauma survivors experience guilt about their experiences, especially guilt over acts that they either did or failed to do (Henning & Frueh, 1997). Research addressing the relationship between guilt, shame, and anger suggests that anger may at times be a secondary response to shame, whereas this does not appear to be the case for guilt. This relationship has not been explored in a PTSD population. Research with traumatized individuals suggests that spontaneously reported anger is substantially more common than spontaneously reported guilt (56% compared to 15%; Reynolds & Brewin, 1999). It may be that anger is simply a more prevalent reaction; however, these results would also be consistent with a situation where people escape from feelings of guilt or shame into anger, and experience the anger as more prominent. Guilt and shame also are important variables to investigate because they may interfere with

PTSD treatment (Ehlers, Clark, et al., 1998). Therefore, it is important to learn as much as possible about these emotions in order to determine how best to treat trauma survivors and decrease their symptoms of guilt, shame, and PTSD.

Currently available research suggests that frequent and intense anger are a part of life for many trauma survivors. Research has established a relationship between anger symptoms and PTSD among trauma survivors (e.g., Jakupcak et al., 2007). Longitudinal research has tried to clarify this relationship and found that PTSD is suspected to lead to later anger problems (Orth et al., 2008). Research has established that anger in trauma survivors is related to difficulties with partners and children, (Byrne & Riggs, 1996; Carroll et al., 1985; Jordan et al., 1992) and is related to poor outcomes after PTSD treatment (Foa et al., 1995). Clearly, understanding the nature of anger in trauma survivors is an important priority.

Research also suggests that PTSD symptom severity is related to seeking psychological help (Boscarino et al., 2004; Zlotnick et al., 2002). However, little research has investigated emotional factors (e.g., guilt, shame, or anger) that may interfere with seeking help among trauma survivors. One study did find that men and women with alcohol problems reported that feelings of shame decreased their willingness to seek treatment for their alcohol problems (Jakobsson et al., 2008).

Purposes of the Current Study

The broadest purpose of the current study was to expand our understanding of the emotions of guilt, shame, and anger in trauma survivors. Although available research has established that most victims struggle with these emotions, especially people experiencing PTSD symptoms, there are still many unanswered questions about these complex emotions. This study

explored the relationships between the emotions of anger, guilt, and shame in trauma survivors, as well as the relationships between these emotions and PTSD symptoms.

This study compared people who have experienced trauma to those who have not in terms of the experiences of guilt, shame, and anger. More specifically, this study determined how three different groups 1) those who have experienced a trauma and developed PTSD [as defined by the Posttraumatic Stress Diagnostic Scale (PDS; Foa, Cashman, Jaycox, & Perry, 1997) as experiencing a trauma in which they or someone else was either physically injured or they thought that their or someone else's life was in danger], 2) those who have experienced a trauma and have not developed PTSD, and 3) those who have had no trauma differ in terms of the tendency to experience guilt, shame, and anger [Question 1; Please note, the PTSD and non-PTSD groups were based on a self-report measure (PTSD Checklist – Civilian Version; PCL-C; Weathers, Litz, Huska, & Keane, 1994), not interview, and thus only reflect "caseness" as assessed by the PCL-C]. For purposes of this study, guilt and shame assessed via a measure of "proneness" to these emotions; anger was assessed via a measure of trait anger. We hypothesized that the PTSD group would experience more guilt, shame, and anger than the trauma-no PTSD and no trauma groups.

Next, this study examined how the emotions of guilt, shame, and anger were related to each other within people who have experienced trauma. First, the relationship between guilt and shame was examined (Question 2) to determine if these emotions were meaningfully viewed as separate constructs. Next, some studies investigating the relationship between guilt and anger among trauma survivors have found that they are positively correlated (Dewane, 1984; Rothbaum et al., 2003), whereas others have found them to be inversely correlated (Reynolds & Brewin, 1999; Tangney, Wagner, Fletcher, et al., 1992). Therefore, the relationship between

guilt and anger (Question 3) was examined to add to this literature. Finally, some research with college students, as well as clinical experience, suggests that anger may at times function as a secondary emotion in response to guilt or shame. This study explored this question by looking at the pattern of correlations between these three emotions. The hypothesis here, based on research with a non-clinical population, is that anger sometimes serves as a secondary emotion to shame, which should result in a strong, positive correlation between shame and anger. Therefore, the relationship between shame and anger (Question 4) was examined and then compared to the relationship between guilt and anger (Question 3) to determine if anger may serve as a secondary emotion to either guilt or shame. Based on previous research, we hypothesized that guilt and shame would be positively related, guilt and anger would be positively related, and shame and anger would be positively related to each other suggesting that anger may be a secondary emotion to shame.

This study also investigated how guilt, shame, and anger were related to PTSD symptoms in people who have experienced trauma. Correlations between guilt and PTSD symptoms, and shame and PTSD symptoms, were examined, to explore the relationships between these two emotions and PTSD symptoms, and to examine whether either appears to be more specifically related to symptoms (Question 5). Some prior research, as well as clinical experience, suggests that shame and guilt, although conceptually similar, may play different roles in response to trauma. Therefore based on prior research, we hypothesized that only shame would have a significant positive relationship to PTSD symptoms.. Next, the relationship between anger and PTSD symptoms was investigated (Question 6) in order to replicate and add to prior literature in this area. It was hypothesized that anger would have a positive relationship to PTSD symptoms. This study also examined which combination of the emotions of anger, shame, and guilt resulted

in the best prediction of PTSD symptoms (Question 7). Prior theory and research suggest that anger and shame are poor prognostic indicators in trauma treatment. The combination of shame and anger seems especially likely to result in difficulty processing trauma, and thus was expected to be related to high levels of trauma symptoms.

Finally, this study also explored attitudes toward seeking psychological treatment and the stigma related to seeking psychological help. More specifically, this study examined how individuals in the no trauma group, trauma-no PTSD group, and PTSD group compare in terms of willingness to seek psychological help and ability to tolerate the stigma associated with seeking psychological help (Question 8). In addition, prior research has found that PTSD symptoms are related to seeking psychological help, and feelings of shame hinder one's willingness to seek help. Therefore, an exploratory analysis, with no predictions, was performed to look at the relationship between guilt, shame, anger and one's overall willingness to seek psychological help (Question 9). Lastly, another exploratory analysis looked at the relationship between guilt, shame, anger and one's ability to tolerate the stigma associated with seeking psychological treatment (Question 10).

Methods

Recruitment

College students were recruited through the University of Montana's Psychology 100 subject pool. Participation was voluntary and confidential. Credit for their Psychology 100 class was given to all students regardless if they completed the questionnaires or not.

Participants

Participants consisted of Introductory Psychology students ($N = 202$; 113 females), 18 years or older. The ages of the participants ranged from 18 to 55, with 21 being the average age. Exactly half ($n = 101$) of the participants reported a DSM-IV criterion A trauma. Twenty-nine (14.4%) of the participants who reported a criterion A trauma also met the other criteria required for PTSD caseness, as defined by the PCL-C (Weathers et al., 1994). (See Table 1 for more detailed demographic information). Participants were divided into three groups according to their trauma and trauma symptom status. Participants who did not experience a trauma comprised the control no-trauma group ($n = 101$). Participants who experienced a criterion A trauma but did not meet requirements for a PTSD diagnosis comprised the trauma-no PTSD group ($n = 72$). Participants who experienced a criteria A trauma and met all criterion for a PTSD diagnosis comprised the PTSD group ($n = 29$).

Traumatic events endorsed by the participants are represented in Table 2 (the entire sample), Table 3 (females only), and Table 4 (males only). Each table also reports percentages for each of the three trauma groups (i.e., no trauma group, trauma-no PTSD group, and trauma PTSD group). Of note, some of the participants in the no trauma group did endorse experiencing a trauma, but the reported event did not meet DSM-IV criterion A for a trauma because the

participant did not report experiencing helplessness, fear, or horror. Therefore, those participants were assigned to the no trauma group.

Table 1

Demographics of Total and Trauma Samples

	Total Sample (<i>N</i> = 202)	No Trauma (<i>n</i> = 101)	Trauma-No PTSD (<i>n</i> = 72)	Trauma-PTSD (<i>n</i> = 29)
Age in years				
Mean (S.D.)	20.9 (4.6)	20.9 (5.0)	21.0 (4.2)	21.1 (4.3)
Range	18-55	18-55	18-48	18-36
Number female (%)	113 (55.9%)	57 (56.4%)	37 (51.4%)	19 (65.5%)
Ethnicity (%)				
Caucasian	179 (88.6%)	88 (87.1%)	64 (88.9%)	27 (93.1%)
African American	4 (2%)	3 (3%)	1 (1.4%)	0
Native American	8 (4%)	5 (5%)	3 (4.2%)	0
Asian American	4 (2%)	2 (2%)	1 (1.4%)	1 (3.4%)
Hispanic	4 (2%)	1 (1%)	2 (2.8%)	1 (3.4%)
Other	3 (1.5%)	2 (2%)	1 (1.4%)	0
Military experience (%)				
	9 (4.5%)	2 (2%)	4 (5.6%)	3 (10.3%)
Criterion A trauma (%)				
	101 (50%)			
Met criteria for PCL-C PTSD diagnosis				
	29 (14.4%)			

Table 2

Percent of Participants Endorsing Specific Traumatic Events on the Posttraumatic Stress Diagnostic Scale for the Entire Sample and the Three Trauma Groups Separately (No Trauma, Trauma-No PTSD, and Trauma – PTSD)

	Total Sample (<i>N</i> = 202)	No Trauma (<i>n</i> = 101)	Trauma-No PTSD (<i>n</i> = 72)	Trauma-PTSD (<i>n</i> = 29)
Serious accident, fire, or explosion	73 (36.1%)	19 (18.8%)	40 (55.6%)	14 (48.3%)
Natural disaster	47 (23.3%)	15 (14.9%)	24 (33.3%)	8 (27.6%)
Non-sexual assault by family member or acquaintance	45 (22.3%)	12 (11.9%)	21 (29.2%)	12 (41.4%)
Non-sexual assault by a stranger	36 (17.8%)	10 (9.9%)	17 (23.6%)	9 (31.0%)
Sexual assault by family member or acquaintance	21 (10.4%)	9 (8.9%)	5 (2.9%)	7 (24.1%)
Sexual assault stranger	16 (7.9%)	5 (5.0%)	6 (8.3%)	5 (17.2%)
Military combat or war zone	7 (3.5%)	1 (1.0%)	3 (4.2%)	3 (10.3%)
Child sexual abuse	43 (21.3%)	18 (17.8%)	17 (23.6%)	8 (27.6%)
Imprisonment	11 (5.4%)	3 (3.0%)	5 (6.9%)	3 (10.3%)
Torture	4 (2%)	1 (1.0%)	2 (2.8%)	1 (3.4%)
Life-threatening illness	41 (20.3%)	10 (9.9%)	24 (33.3%)	7 (24.1%)
Other traumatic events	29 (14.4%)	10 (9.9%)	12 (16.7%)	7 (24.1%)

Note: For full description of each traumata item, see the PDS in the Appendix.

Table 3

Percent of Female Participants Endorsing Specific Traumatic Events on the Posttraumatic Stress Diagnostic Scale for the Entire Sample and the Three Trauma Groups Separately (No Trauma, Trauma-No PTSD, and Trauma – PTSD).

	Total Sample (<i>N</i> = 113)	No Trauma (<i>n</i> = 57)	Trauma-No PTSD (<i>n</i> = 37)	Trauma-PTSD (<i>n</i> = 19)
Serious accident, fire, or explosion	36 (31.9%)	8 (14.0%)	19 (51.4%)	9 (47.4%)
Natural disaster	27 (23.9%)	8 (14.0%)	13 (35.1%)	6 (31.6%)
Non-sexual assault by a family member or acquaintance	29 (25.7%)	8 (14.0%)	12 (32.4%)	9 (47.4%)
Non-sexual assault by a stranger	13 (11.5%)	3 (5.3%)	7 (18.9%)	3 (15.8%)
Sexual assault by family member or acquaintance	17 (15.0%)	8 (14.0%)	2 (5.4%)	7 (36.8%)
Sexual assault by stranger	10 (8.8%)	4 (7.0%)	2 (5.4%)	4 (21.1%)
Military combat or war zone	1 (0.9%)	0 (0%)	1 (2.7%)	0 (0%)
Child sexual abuse	27 (23.9%)	13 (22.8%)	9 (24.3%)	5 (26.3%)
Imprisonment	6 (5.3%)	0 (0%)	4 (10.8%)	2 (10.5%)
Torture	2 (1.8%)	0 (0%)	2 (5.4%)	0 (0%)
Life-threatening illness	22 (19.5%)	6 (10.5%)	12 (32.4%)	4 (21.1%)
Other traumatic events	14 (12.4%)	4 (7.0%)	5 (13.5%)	5 (26.3%)

Note: For full description of each traumata item, see the PDS in the Appendix.

Table 4

Percent of Male Participants Endorsing Specific Traumatic Events on the Posttraumatic Stress Diagnostic Scale for the Entire Sample and the Three Trauma Groups Separately (No Trauma, Trauma-No PTSD, and Trauma – PTSD).

	Total Sample (<i>N</i> = 89)	No Trauma (<i>n</i> = 44)	Trauma-No PTSD (<i>n</i> = 35)	Trauma-PTSD (<i>n</i> = 10)
Serious accident, fire, or explosion	37 (41.6%)	11 (25.0%)	21 (60.0%)	5 (50.0%)
Natural disaster	20 (22.5%)	7 (15.9%)	11 (31.4%)	2 (20.0%)
Non-sexual assault by a family member or acquaintance	16 (18.0%)	4 (9.1%)	9 (25.7%)	3 (30.0%)
Non-sexual assault by a stranger	23 (25.8%)	7 (15.9%)	10 (28.6%)	6 (60.0%)
Sexual assault by a family member or acquaintance	4 (4.5%)	1 (2.3%)	3 (8.6%)	0 (0%)
Sexual assault by stranger	6 (6.7%)	1 (2.3%)	4 (11.4%)	1 (10.0%)
Military combat or war zone	6 (6.7%)	1 (2.3%)	2 (5.7%)	3 (30.0%)
Child sexual abuse	16 (18.0%)	5 (11.4%)	8 (22.9%)	3 (30.0%)
Imprisonment	5 (5.6%)	3 (6.8%)	1 (2.9%)	1 (10.0%)
Torture	2 (2.2%)	1 (2.3%)	0 (0%)	1 (10.0%)
Life-threatening illness	19 (21.3%)	4 (9.1%)	12 (34.3%)	3 (30.0%)
Other traumatic events	15 (16.9%)	6 (13.6%)	7 (20.0%)	2 (20.0%)

Note: For full description of each traumata item, see the PDS in the Appendix.

The traumatic experience most frequently endorsed by all participants was a serious accident, fire, or explosion ($n = 73, 36.1\%$). The second most highly endorsed traumatic event was natural disasters ($n = 47, 23.3\%$), followed by a non-sexual assault by a family member or acquaintance ($n = 45, 22.3\%$). The women in the sample endorsed serious accident, fire, or explosion ($n = 36, 31.9\%$) as the most frequently experienced trauma; however, women endorsed non-sexual assault by a family member or acquaintance ($n = 29, 25.7\%$) as the second most frequently experienced trauma. Natural disasters ($n = 27, 23.9\%$) and childhood sexual abuse ($n = 27, 23.9\%$) were the third most common. Men reported serious accident, fire, or explosion ($n = 37, 41.6\%$) as the most frequently endorsed trauma. Men endorsed non-sexual assault by a stranger ($n = 23, 25.8\%$) as the second most frequently endorsed trauma, followed by natural disasters ($n = 20, 22.5\%$).

Instruments

Demographics. Participants filled out a demographics form that inquired about their current age, sex, ethnicity, and Military Veteran Status.

State Trait Anger Expression Inventory-2 (STAXI-2). The STAXI-2 is a 57 item measure of the experience and expression of anger and was developed by Spielberger (1999; the trait anger scale was employed in this study). The trait anger scale measures one's tendency to experience anger over time. Participants rate 10 items on a Likert-type scale (1 "almost never" to 4 "almost always") which assesses how they generally feel. Scores on the trait anger scale range from 10 to 40, with higher scores indicating more trait anger. The STAXI-2 trait anger scale has acceptable concurrent validity with other anger and hostility scales (Spielberger, 1999).

Cronbach's alpha coefficients for nonclinical adults, psychiatric patients, and college students were found to be 0.82 and above for the trait anger scale (Spielberger, 1999).

Test of Self-Conscious Affect (TOSCA). The TOSCA was developed by Tangney, Wagner, and Gramzow (1989). It measured trait guilt and trait shame. The TOSCA identifies cognitive, affective, and behavioral components of shame and guilt (Tangney, Wagner, & Gramzow, 1992). The TOSCA consists of 15 brief scenarios (10 negative and 5 positive). The TOSCA yields four subscales of negative events: shame, guilt, externalization of cause or blame, and detachment/unconcern. The positive scenarios also yield four subscales: shame, guilt, alpha pride (feelings of pride in the entire self), and beta pride (feelings of pride from the behavior performed). This study will only employ the shame and guilt subscales of the TOSCA. Participants rate on a five-point scale (ranging from 1 "completely unlikely" to 5 "extremely likely") their likeliness to respond to the scenario in the designated fashion (Pineles et al., 2006). Internal consistency (Cronbach's alphas) for the shame and guilt subscales are .76 and .66, respectively. Pineles et al. (2006) found similar internal consistency, .70 for shame and .73 for guilt. Tangney et al. (1989) found that test-retest reliability for shame-proneness was .85 and .74 for guilt-proneness (as cited by Pineles et al., 2006).

PTSD Checklist – Civilian Version (PCL-C). The PCL-C was developed by Weathers et al., (1994). As described by Blanchard, Jones-Alexander, Buckley and Forneris (1996) the PCL-C consists of 17 symptoms that correspond to PTSD symptoms as listed in the DSM-IV. Participants rate the 17 PTSD symptoms on a scale from 1 (not at all) to 5 (extremely) indicating the degree to which they have experienced each symptom in the past month. A cut-off score of 50 is recommended (Blanchard et al. 1996). When utilizing this recommended cut-off score, other researchers have found acceptable specificity (0.79) and sensitivity (0.86) scores with

overall diagnostic efficiency of 0.80 as compared to the Clinician-Administered PTSD Scale (CAPS) as the criterion measure (Bollinger, Cuevas, Vielhauer, Morgan, Keane, 2008).

However, employing a cut-off score does not ensure that the required categories of symptoms are endorsed as outlined in the DSM. Therefore, this study employed the DSM's scoring rules, in that a participant must be symptomatic in at least 1 criterion B item, 3 criterion C items, and 2 criterion D items to screen positive for PTSD. Participants must rate the item "moderately" (by scoring the item with a 3 or above) to be considered symptomatic. In utilizing the DSM scoring rules, Ruggiero, Del Ben, Scotti, and Rabalais (2003) found sensitivity (0.62), specificity (0.99), positive predictive power (0.92), negative predictive power (.94), and diagnostic efficacy of 0.94 as compared to utilizing a cut-off score of 50 on the PCL. Internal consistency (Cronbach's alpha) for the entire scale was .94 (Blanchard et al., 1996).

Posttraumatic Stress Diagnostic Scale (PDS; Foa et al., 1997). The PDS is a self-report measure of PTSD that corresponds to *DSM-IV* criteria. The first portion of the PDS was used to determine if participants had experienced a criteria A trauma according to the *DSM-IV*.

Participants are offered a checklist of 12 traumatic events that can be chosen (including "other") and are then asked which disturbed them the most in the past month. In order to screen positive for experiencing a trauma the participants must indicate that they or someone else was either physically injured or they thought that their or someone else's life was in danger.

Attitudes Towards Seeking Professional Psychological Help (Fischer & Turner, 1970). The Attitudes Towards Seeking Professional Psychological Help scale was developed by Fischer and Turner (1970). A factor analysis on three independent samples revealed four dimensions of the scale: recognition of need for psychological help, stigma tolerance, interpersonal openness, and confidence in mental health professionals. Each dimension of the measure was designated

as a subscale for a total of four subscales. The current study only utilized the stigma tolerance subscale, which had a reliability of $r = .70$ utilizing Tryon's (1957) method across a sample of 406 participants, and the whole scale ($r = .83$) denoting overall willingness to seek help. The measure consists of 29 items that are rated on a scale from 0 to 3. Each subscale score and total score is determined by summing across all items with a total possible score ranging from 0 – 87 and a possible score on the stigma tolerance scale (this paper uses the term WDS to denote stigma tolerance) ranging from 0 – 15 (this subscale is composed of 5 items). Higher scores indicate a more positive attitude towards seeking help. Internal reliability for the entire scale was .86 and .83 for two independent samples. Test-retest reliability for five days, two weeks, four weeks, six weeks, and two months was $r = .86$, $r = .89$, $r = .82$, $r = .73$, and $r = .84$ respectively. An example of a stigma tolerance question includes “I would feel uneasy about going to a psychiatrist because of what some people would think” (Fischer & Turner, 1970).

Procedure

This study was administered in small groups. The participants first completed the informed consent form. After instructions were given as a group, participants were seated in individual rooms to maintain privacy. The participants completed the demographics form, Attitudes Towards Seeking Professional Psychological Help, PDS, PCL, STAXI-2, and the TOSCA. The demographics measure was always administered first; order of other measures was counter-balanced. After completing these questionnaires the participants completed a brief measure assessing their current level of emotional distress. The researcher checked in with any participant who reported more than minimal current distress to provide an opportunity to debrief,

and give referrals if needed. All participants received a debriefing form that contained contact information for counseling services and contact information for the researchers.

Results

Oneway ANOVAs (See Table 5) were conducted to determine how the three groups (no trauma, trauma- no PTSD, PTSD) compared in terms of tendency to experience guilt, shame, and anger (Question 1; Note: “guilt” and “guilt-proneness,” “shame” and “shame-proneness,” and “anger” and “trait anger” will be used interchangeably in the paper). We hypothesized that the PTSD group would experience more guilt, shame, and anger than the trauma-no PTSD and no trauma groups. Contrary to our hypothesis, the control, trauma-no PTSD, and PTSD groups did not differ on the measure of guilt-proneness ($F = .026, p = .975$); however, they did differ on shame-proneness ($F = 3.343, p = .037$). Subsequent post hoc tests were run (Tukey’s HSDs) which found no significant differences between the three groups; however, a trend was found indicating that the PTSD group had a higher level of shame-proneness than the trauma-no PTSD group ($p = .067$, See Table 5 for means and standard deviations for each group). There was also a trend for the control group reporting higher levels of shame-proneness than the trauma-no PTSD group ($p = .087$). The control group’s level of shame-proneness did not significantly differ from the PTSD group’s level of shame-proneness ($p = .720$).

A oneway ANOVA was also conducted to examine the extent to which trait anger, as measured by the STAXI, differed across the three groups. A significant difference was found ($F = 11.284, p < .001$); therefore, post hoc tests (Tukey’s HSDs) were performed to determine which groups differed. As expected, the PTSD group reported higher levels of anger on the STAXI than the trauma-no PTSD group ($p < .001$, See Table 5 for means and standard deviations for each group). The PTSD group also reported significantly higher levels of anger than the control group ($p < .001$). There was no significant difference between the control and trauma-no PTSD groups on reported levels of anger ($p = .561$).

Table 5

Results of ANOVA's Comparing the Control, Trauma-no PTSD, and PTSD Groups on Levels of Shame, Guilt, and Anger.

	<u>Control</u>		<u>Trauma-no PTSD</u>		<u>PTSD</u>	
	<i>n</i> = 101		<i>n</i> = 72		<i>n</i> = 29	
	M	SD	M	SD	M	SD
TOSCA Shame (c, d)	45.62	9.45	42.38	9.57	47.24	12.29
TOSCA Guilt	64.13	6.97	64.26	6.54	64.45	7.45
STAXI Trait Anger (a, b)	16.51	4.63	17.31	4.82	21.55	6.84

Note: M = mean; SD = standard deviation; TOSCA = Test of Self-Conscious Affect; STAXI = State Trait Anger Expression Inventory; a = significant different between control and PTSD groups; b = significant difference between trauma-no PTSD and PTSD groups; c = a trend indicating difference between control and trauma-no PTSD groups; d = a trend indicating difference between trauma-no PTSD and PTSD groups.

Next, we examined how guilt, shame, and anger are related to each other in people who have experienced a trauma. Subjects from the trauma-no PTSD and PTSD groups were combined for these analyses, creating a group in which everyone had experienced a traumatic event. Pearson product-moment correlation coefficients were calculated between the measures of these emotions (See Table 6). First, guilt-proneness and shame-proneness were found to be correlated ($r = .382, p < .001$; Question 2) supporting the hypothesis that they are related constructs; however, the size of this correlation suggests that they are overlapping but not identical constructs. Guilt-proneness and anger were not significantly related to each other ($r = -.175, p = .081$; Question 3). Anger and shame-proneness were found to have a significant positive relationship ($r = .261, p = .008$; Question 4).

Table 6

Pearson Product-Moment Correlation Coefficients for the Trauma Sample (N = 101) Between Shame, Guilt, Anger, and PTSD Symptoms

Measures	1	2	3	4
1. TOSCA Shame	-			
2. TOSCA Guilt	.38**	-		
3. STAXI Trait Ang	.26**	-.18	-	
4. PTSD Total	.34**	.12	.43**	-

Note: TOSCA = Test of Self-Conscious Affect; STAXI = State Trait Anger Expression Inventory; PTSD Total = Total Score on the PTSD Checklist – Civilian Version. High scores on TOSCA Shame mean more shame, high scores on TOSCA Guilt mean more guilt, high scores on STAXI Anger mean higher levels of anger, and high scores on PTSD Total means more PTSD symptoms.

* $p < .05$ (2-tailed)

** $p < .01$ (2-tailed)

Next, the relationships of guilt, shame, and anger with PTSD symptoms were investigated (see Table 6). Shame-proneness was found to have a significant positive correlation with PTSD symptoms ($r = .338, p = .001$) while guilt-proneness was not related to PTSD symptoms ($r = .117, p = .245$; Question 5). Like shame-proneness, trait anger was found to have a significant positive relationship with PTSD symptoms ($r = .431, p < .001$; Question 6).

The next analysis employed stepwise multiple regression, with PTSD symptoms as the dependent variable, and examined the contributions of shame-proneness, guilt-proneness, and trait anger to the prediction of PTSD symptoms (Question 7). It was predicted that anger and shame in combination would have the most predictive power for PTSD symptoms. Consistent with the hypothesis, trait anger and shame-proneness were found to be the only significant predictors of PTSD symptomatology. Trait anger accounted for 18% of the variance [$F(1,100) = 22.569, p < .000$] in the first step. In the second step, the addition of shame-proneness added to

the predictive power of trait anger [$F(1,100) = 15.492, p < .001$] and accounted for an additional 5% of the variance in the prediction of PTSD symptom scores. (See Table 7).

Table 7

Hierarchical Regression Analyses for the Entire Sample Predicting Participant's PTSD Total Score

	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Step 1				
Constant	16.57	4.34		
STAXI Trait Anger	1.07	0.23	0.43	.00
Step 2				
Constant	5.12	6.05		
STAXI Trait Anger	0.91	0.23	0.37	.00
TOSCA Shame	0.33	0.12	0.24	.01

Note: STAXI = State Trait Anger Expression Inventory; TOSCA = Test of Self-Conscious Affect. $adj R^2 = .18$ for Step 1, $\Delta R^2 = .05$ for Step 2

The last group of analyses explored 1) overall willingness to seek psychological treatment, and 2) willingness to seek psychological treatment despite the stigma associated with it. (Note: willingness to seek psychological treatment despite the stigma associated with it will be referred to as “willingness despite stigma,” or WDS). First, oneway ANOVAs were conducted to examine the extent to which overall willingness to seek psychological help and WDS differed across the three groups (Question 8). We made no predictions about this analysis, as it was exploratory. The no trauma, trauma-no PTSD, and PTSD groups did not differ on their total scores for overall willingness to seek psychological help as measured by the Attitudes Towards Seeking Psychological Help ($F = 1.587, p = .207$; See Table 8). The groups did have a significant difference on their reported WDS ($F = 4.197, p = .016$). Post hoc tests (Tukey’s HSDs) revealed that the trauma-no PTSD group reported more WDS than the control group ($p =$

.034, See Table 8 for means and standard deviations for each group) and the PTSD group ($p = .047$); therefore the trauma-no PTSD group reported being more willing to seek psychological help than the other two groups, despite the stigma associated with it. There was no difference between the control and PTSD groups' WDS ($p = .793$).

Table 8

Comparison of Control, Trauma-no PTSD, and PTSD Groups on Overall Willingness to Seek Psychological Help and on Stigma Associated with Seeking Psychological Help (WDS).

	<u>Control</u>		<u>Trauma-no PTSD</u>		<u>PTSD</u>	
	$n = 101$		$n = 72$		$n = 29$	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Psy Help Total	48.86	10.78	52.13	13.24	49.16	14.44
Psy Help Stigma (b, c)	9.01	2.46	10.10	3.17	8.62	3.22

Note: M = mean; SD = standard deviation; Psy Help Total = overall willingness to seek help as measured by the Attitudes Towards Seeking Professional Psychological Help; Psy Help Stigma = willingness to seek help despite the stigma associated with it as measured by the Attitudes Towards Seeking Professional Psychological Help; a = significant difference between control and PTSD groups; b = significant difference between trauma-no PTSD and PTSD groups; c = significant difference between control and trauma-no PTSD groups.

Next, the relationships of anger, guilt, shame, and PTSD symptoms with overall willingness to seek psychological help were examined (Question 9). First, Pearson product-moment correlation coefficients were calculated between the measures of the emotions, PTSD symptoms, and Attitudes Towards Seeking Psychological Help to determine their relationships among the trauma sample (See Table 9). Trait anger ($r = -.24, p = .02$) and PTSD symptoms ($r = -.21, p = .03$) both had significant negative relationships with overall willingness to seek psychological treatment, meaning the angrier the person was, or the more PTSD symptoms the person reported, the less willing that person was to seek psychological help. Shame-proneness

and guilt-proneness were not significantly related to overall willingness to seek treatment ($r = -.16, p = .12$; $r = .18, p = .07$ respectively). A stepwise regression analysis was performed employing the total score on the Attitudes Towards Seeking Psychological Help measure as the dependent variable. This analysis looked at the ability of trait anger, guilt-proneness, and shame-proneness to predict overall willingness to seek psychological help. This analysis was exploratory, with no specific predictions made. Trait anger accounted for 5% of the variance [$F(1,100) = 6.160, p = .015$], while shame-proneness and guilt-proneness did not significantly predict overall willingness to seek psychological help beyond trait anger by itself. Note that trait anger and overall willingness have an inverse relationship, meaning a higher level of trait anger correlates with less overall willingness to seek psychological help. (See Table 10).

Table 9

Pearson Product-Moment Correlation Coefficients for Trauma Sample (N = 101) Between Overall Willingness to Seek Psychological Help and Shame, Guilt, Anger, and PTSD Symptoms.

Measure: Psy Help Total	
1. TOSCA Shame	-.16
2. TOSCA Guilt	.18
3. STAXI Trait Ang	-.24*
4. PTSD Total	-.21*

Note: TOSCA = Test of Self-Conscious Affect; STAXI = State Trait Anger Expression Inventory; Psy Help Total = Total Score on the Attitudes Towards Seeking Professional Psychological Help; PTSD Total = Total Score on the PTSD Checklist – Civilian Version. High scores on TOSCA Shame mean more shame, high scores on TOSCA Guilt mean more guilt, high scores on STAXI Anger mean higher levels of anger, high scores on Psy Help Total mean more positive attitudes towards seeking psychological treatment, and high scores on PTSD Total means more PTSD symptoms.

* $p < .05$ (2-tailed)

** $p < .01$ (2-tailed)

Table 10

Hierarchical Regression Analyses for the Entire Sample Predicting the Participants' Overall Willingness to Seek Psychological Help by Anger, Guilt, and Shame

	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Step 1				
Constant	61.83	4.45		
STAXI Trait Anger	-0.57	0.23	-0.24	.02

Note: STAXI = State Trait Anger Expression Inventory. $adj R^2 = .05$ for Step 1.

The relationships between emotions, PTSD symptoms, and WDS also were explored. First, Pearson product-moment correlation coefficients were calculated between the measures of emotions, PTSD symptoms, and WDS (See Table 11). WDS was found to have a significant negative relationship with shame-proneness ($r = -.516, p < .001$), trait anger ($r = -.266, p = .007$), and PTSD symptoms ($r = -.337, p = .001$). This means that people who report higher levels of shame, anger, or PTSD symptoms are less willing to seek psychological treatment due to the stigma associated with it. Guilt-proneness was not significantly related to WDS ($r = -.077, p = .447$). Finally, a stepwise multiple regression was performed with WDS as the dependent variable. This analysis looked at the ability of shame-proneness, trait anger, and guilt-proneness to predict WDS (Question 10). This analysis was exploratory, with no specific predictions made. Shame-proneness accounted for 26% of the variance [$F(1,100) = 35.860, p < .001$], while guilt-proneness and trait anger did not significantly predict WDS beyond shame-proneness by itself. Of note, shame-proneness and WDS were negatively correlated, meaning higher levels of shame-proneness are related to a lower WDS. (See Table 12).

Table 11

Pearson Product-Moment Correlation Coefficients for Trauma Sample (N = 101) Between the Stigma Associated with Seeking Psychological Help and Shame, Guilt, Anger, and PTSD Symptoms.

Measure: Psy Help Stigma	
1. TOSCA Shame	-.52**
2. TOSCA Guilt	-.08
3. STAXI Trait Ang	-.27*
4. PTSD Total	-.34**

Note: TOSCA = Test of Self-Conscious Affect; STAXI = State Trait Anger Expression Inventory; Psy Help Stigma = Tolerance of Stigma Score on the Attitudes Towards Seeking Professional Psychological Help; PTSD Total = Total Score on the PTSD Checklist – Civilian Version. High scores on TOSCA Shame mean more shame, high scores on TOSCA Guilt mean more guilt, high scores on STAXI Anger mean higher levels of anger, high scores on Psy Help Stigma means better ability to tolerate the stigma associated with seeking psychological help, and high scores on PTSD Total means more PTSD symptoms.

* $p < .05$ (2-tailed)

** $p < .01$ (2-tailed)

Table 12

Hierarchical Regression Analyses for the Entire Sample Predicting Stigma Associated with Seeking Psychological Help (WDS) by Shame, Guilt, and Anger

	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Step 1				
Constant	16.59	1.19		
TOSCA Shame	-0.16	0.03	-0.52	< .01

Note: TOSCA = Test of Self-Conscious Affect. $adj R^2 = .26$ for Step 1

Discussion

This study examined the experience of guilt, shame, and anger in survivors of trauma and looked at the relationships of these emotions to each other, to PTSD symptoms, and to willingness to seek treatment. Anger and shame emerged as particularly important emotions, with guilt somewhat less related. Shame and anger, in particular, may play an important role in trauma response. Shame, anger, and PTSD symptoms also may influence some aspects of a trauma survivor's willingness to seek treatment.

Shame, Anger, and PTSD

The hypothesis that anger and shame would predict PTSD symptoms was supported. Anger accounted for 18% of the variance with PTSD, shame accounted for 5% of the variance, and guilt did not significantly add to the predictive power beyond anger and shame. The results of the current study, in combination with results from other studies, may suggest one possible model for understanding the relationships between anger, shame and PTSD symptoms.

First, this study found a significant positive relationship between anger and PTSD symptoms. Prior research also has found this relationship between anger symptoms and PTSD among trauma survivors (e.g., Jakupcak et al., 2007). Longitudinal research has tried to clarify this relationship and found that PTSD leads to later anger problems (Orth et al., 2008). Second, anger and shame were found to be positively correlated with each other. This result supports previous findings by Tangney, Wagner, Fletcher, et al. (1992), who also found a positive correlation between shame and anger. Furthermore, Tangney, Wagner, Fletcher et al. suggest that anger is a secondary emotion to shame. However, due to the correlational nature of this study and the Tangney, Wagner, Fletcher et al. (1992) study, this relationship could also go the

other direction, shame could be a secondary emotion to anger. In this relationship, the individual might feel ashamed of their anger or angry behavior such as verbal or physical aggression.

Tangney, Wagner, Fletcher et al. (1992) suggest that this anger-to-shame link is not very likely since the results of their study show that shame is correlated to indirect anger and not direct anger like physical or verbal aggression. Therefore, they suggest that shame is the primary emotion while anger is the secondary emotion, in which the individual's shame leads to feelings of anger. Shame is a very painful and global negative emotion that may result in undirected anger. This anger may become focused on others since feelings of shame include the belief that other people would not approve of the individual. The results from the Tangney, Wagner, Fletcher, et al. (1992) support this hypothesis because in their study they found that shame-proneness was related to blaming others.

As stated before, Paunovic (1998) suggests that anger may impede fear activation and Foa et al. (1995) found that trauma survivors who experienced more fear during prolonged exposure had better treatment outcomes. Importantly, they also found that participants who endorsed high levels of anger prior to treatment expressed less fear during the first reliving of the trauma and benefitted less from therapy than clients who reported less anger prior to treatment. Therefore, anger may interfere with fear activation during processing/exposure, thereby maintaining PTSD symptoms.

In summary, this line of reasoning proposes that PTSD symptoms lead to the development of anger (Orth et al., 2008). Anger interferes with the needed activation of fear during processing/exposure to decrease PTSD symptoms (Foa et al., 1995; Paunovic, 1998). Shame triggers anger as a secondary emotion; therefore, shame is also related indirectly to PTSD symptoms. Obviously, future research utilizing path analysis is needed to investigate this

proposed model explaining the relationships between shame, anger, and PTSD. Although shame was found to be related to PTSD, longitudinal research is also needed to determine whether shame leads to the development of PTSD symptoms or if PTSD leads to the development of shame.

To illustrate this line of reasoning, we will use a hypothetical example of a veteran who has been deployed to Iraq. The veteran was involved in an incident where his unit was ambushed in a residential area. The enemy engaged in a close range fire fight and killed many of the veteran's friends. During the ambush, the veteran accidentally killed civilians in a speeding car when it approached the veteran and his unit with unidentified intent. The veteran later developed PTSD as a result of the ambush. The veteran responded with intense anger directed at the enemy for killing his friends. He also experienced shame, for killing innocent civilians, which triggered even more anger at the enemy for ambushing the unit in a residential area. During therapy designed to process the trauma, the veteran continued to experience intense anger at the enemy during exposure sessions and very little fear. Therefore, processing of the trauma was directly inhibited by anger and indirectly inhibited by shame since the veteran's anger was partially triggered by his shame. Since anger and shame interfered with successful processing of the trauma, they also are maintaining his PTSD symptoms.

Guilt

Interestingly, the only significant result found with guilt was its positive significant relationship to shame. These results support prior research (e.g., Tangney, Wagner, Fletcher, et al., 1992) which found a positive relationship between the two emotions. This relationship raises a question about the conceptual overlap of guilt and shame, something researchers have been

evaluating for some time. The pattern of relationships between guilt, shame, and other variables in this study suggests that guilt and shame, while similar, are also different. For example, shame was related to anger, PTSD symptoms, and WDS, while guilt was unrelated to all of these variables. These results suggest that while shame and guilt may be conceptually similar, they also play different roles in response to trauma.

The lack of a relationship between guilt and PTSD is contrary to previous research. For instance, Leskela et al. (2002) found that guilt-proneness was negatively correlated to PTSD symptom scores in former prisoners of war. Henning and Frueh (1997) found that guilt was related to PTSD symptom severity among veterans. The difference between the current study's results and prior research may be due to differences in the measures used or differences between the samples.

The lack of a relationship between guilt and anger in the current study is also contrary to previous research. For example, Tangney, Wagner, Fletcher, et al. (1992) assessed undergraduate students and found that guilt-proneness was negatively related to some indices of anger and unrelated to the rest. While Reynolds and Brewin (1999) found that anger was inversely related to guilt among an adult clinical sample. Again, this difference may be due to differences in the measures utilized and their definition of guilt or differences between the samples.

Trauma-No PTSD Group Versus No Trauma Group and Posttraumatic Growth

Identifying why some people who experience trauma go on to develop PTSD and others do not is important to understanding the disorder. In the current study, the three groups were found to differ significantly in terms of their levels of shame-proneness. Follow-up tests

comparing each group to each other revealed that there were trends toward the trauma-no PTSD group reporting lower levels of shame-proneness than both the PTSD and control groups. The control and PTSD groups did not differ on reported levels of shame. Given that these differences between specific groups were trends, the results must be viewed with caution; clearly replication with a larger sample is needed. Possible explanations for the findings will be explored here in a tentative manner.

It may be that the trauma-no PTSD group was particularly low in shame-proneness prior to the traumatic event, and low shame-proneness was a protective factor, especially given that shame had a positive relationship with PTSD symptoms. Consistent with this line of reasoning, individuals who experience a trauma and have high levels of shame-proneness may be more likely to go on to develop PTSD (i.e., trauma PTSD group), but those who experience a trauma and have low levels of shame-proneness are more protected from developing PTSD (i.e., trauma-no PTSD group).

Alternatively, a post-traumatic growth explanation would suggest that people in the trauma-no PTSD group may have become less shame-prone through processing the trauma. This explanation is consistent with a post-traumatic growth perspective, which suggests that individuals who have experienced a trauma sometimes achieve and maintain positive personal psychological growth or benefits after a traumatic experience via the experience of working through the traumatic event (Karanci & Acarturk, 2005; Taku, Calhoun, Cann, & Tedeschi, 2008). Posttraumatic growth has been found after a multitude of different types of traumas; for example, in sexual assault and family violence victims (Frazier et al., 2009), earthquake survivors (Karanci & Acarturk, 2005), loss of a significant person (Taku et al., 2008), and war survivors (Powell, Rosner, Butollo, Tedeschi, & Calhoun, 2003).

Posttraumatic growth is a relatively new area of research in need of more attention and focus. Despite this, research has found some possible predictors of posttraumatic growth. Specifically, the use of "problem-focused/optimistic coping" and "fatalistic coping" (which involves acceptance) were found to be related to posttraumatic growth (Karanci & Acarturk, 2005). Age may also be an important factor in post-traumatic growth. Powell et al. (2003) found young age to be positively correlated with posttraumatic growth. This is particularly relevant to the current study, given the mean age of the sample (21).

Taku et al. (2008) investigated the relationship of rumination to posttraumatic growth. These authors divided rumination into two types: intrusive rumination, which represents repetitive distressing and unwanted thoughts; and deliberate rumination, which is as purposeful repetitive thoughts with the purpose of dealing with the trauma. Although the authors found no relationship between intrusive rumination and posttraumatic growth, they did find that intrusive rumination was positively related to distress and deliberate rumination was positively related to posttraumatic growth. Interestingly, intrusive rumination is conceptually similar to shame in that both contain repetitive distressing and unwanted thoughts. However, shame has many more features associated with it as defined in this study. Therefore, the current research adds to the posttraumatic growth literature in that it suggests that low levels of shame-proneness may be related to posttraumatic growth. For instance, low levels of shame-proneness before the trauma may lead to posttraumatic growth after the trauma, or posttraumatic growth after the trauma may lead to low levels of shame-proneness after positive resolution of the experience. Of note, the Taku et al. (2008) study employed bereaved Japanese college students. While this is similar to the current study in that they both utilized a college population, cultural differences between the two samples may result in differences that may restrict generalization of findings from the

Japanese research to an American population. For instance, the Japanese culture may view intrusive rumination as a culturally unsanctioned response to death. This deviation from the culturally acceptable mourning process, and not the act of experiencing intrusive rumination, may be responsible for the observed relationship between intrusive rumination and distress. Therefore, the Taku et al. (2008) findings may not generalize to a different population that does not have the same cultural views.

Willingness to Seek Treatment

Participants' willingness to seek treatment was assessed two ways, overall willingness to seek treatment and willingness to seek treatment despite the associated stigma (WDS). Comparison of the three groups on WDS showed that the trauma-no PTSD group reported higher levels of WDS than the no trauma group and the trauma PTSD group. This pattern of results is the same as the trend found for shame-proneness. It may be that shame-proneness interferes with seeking treatment in the face of stigma. In a regression analysis including shame, guilt, and anger as independent variables predicting WDS, shame accounted for 28% of the variance, while guilt and anger did not contribute any significant amount of variance. This is consistent with other research in this area. For example, Rusch et al. (2009) found that stigma associated with therapy was related to higher levels of social anxiety and shame. Similarly, Jakobsson et al. (2008) also found that shame hindered one's willingness to seek psychological help.

As described above regarding shame-proneness, it is also possible that posttraumatic growth may account for some of this group's willingness to attend therapy, in that the growth they experience in processing their trauma may result in more openness to therapy in the future. It may be that individuals in the trauma-no PTSD group have more often had treatment that

successfully addressed trauma effects, leading to greater willingness to seek treatment.

Unfortunately, no data were collected on treatment history, or success of past treatment. Future research is needed to fully explore the relationships between, trauma, shame, WDS, and posttraumatic growth.

Interestingly, one's overall willingness to seek psychological help showed a distinctly different pattern in relation to the emotions assessed in this study than WDS. First, there was no difference between the three groups in overall willingness to seek psychological help. In other words, the no trauma group, trauma-no PTSD group, and trauma PTSD group all reported similar overall willingness to seek psychological help. Further, anger and PTSD symptoms were the only variables (not shame or guilt) that were related to one's overall willingness to seek therapy. Anger and PTSD symptoms had a negative relationship with one's overall willingness to seek psychological support, meaning the angrier a person is or the more PTSD symptoms a person experiences, the less willingness they express to seek psychological help. Anger (and none of the other emotions) negatively predicted one's overall willingness to seek treatment accounting for 5% of the variance. Thus, individuals who have higher levels of anger appear to be less likely to seek treatment.

Many traumatized individuals become very angry and blame others or themselves for the trauma. Perhaps these people become so invested in their anger that they are unwilling to seek treatment knowing that they will have to address their anger. They may think "why do I need therapy, it was not my fault" or "I already know everything was my fault and no amount of therapy is going to change that." It is also possible that if anger serves as an escape from shame, as the previous model proposed, then people with high levels of anger may avoid seeking therapy to avoid having to experience the underlying shame. They may have a general tendency to

protect themselves through anger and defensiveness, whereas therapy may be associated with vulnerability and willingness to open up.

Interestingly, the negative relationship between PTSD symptoms and willingness to seek treatment conflict with the current literature. Both Zlotnick et al. (2002) and Boscarino et al. (2004) found that PTSD symptoms had a positive relationship with willingness to seek treatment. This difference may be due to differences between the study populations or the measures utilized.

Trauma and PTSD

Results of this study indicated that 50% of the participants (101 out of 202) experienced a DSM Criterion A trauma over their lifetime, as measured by the PDS. Comparing this trauma rate to previous findings can be difficult due to differences in the measures utilized and how the study defines a trauma. For example, one study found that 85% of undergraduate students experienced a trauma during their lifetime, which is substantially higher than the current study's 50% (Frazier et al., 2009). However, the Frazier et al. (2009) study employed the Traumatic Life Events Questionnaire (TLEQ) which assesses a broader array of traumas (e.g., abortion and miscarriage) than the PDS. Several other studies have also found higher trauma prevalence rates among college undergraduates (84% to 94%) when utilizing a broad array of traumatic events (Vrana & Lauterbach, 1994; Watson & Haynes, 2007). More conservative trauma prevalence rates among undergraduate students range from 52% to 72% (Bernat, Ronfeldt, Calhoun, & Arias, 1998; Goodman, Corcoran, Turner, Yuan, & Green, 1998; Green et al., 2000; Owens & Chard, 2006). One of these studies also found a PTSD prevalence rate of 12% among those who experienced a trauma (Bernat et al., 1998; Watson & Haynes, 2007). However, the current study

found that 29% of trauma survivors met criteria for a diagnosis of PTSD. Again, the difference between these two PTSD prevalence rates most likely is due to differences in the undergraduate students or differences in the measures used to assess trauma and PTSD.

Limitations

Although this study contributes to the existing knowledge about PTSD symptoms, emotions, and willingness to seek treatment among a trauma population, it is limited in several ways. First, a sample of undergraduate college students were employed which mainly consisted of female and Caucasian students. This limits the generalizability of the results. While the PCL has demonstrated acceptable sensitivity (0.62) and specificity (0.99), PTSD was not assessed employing a structured clinical interview, the preferred assessment method. Third, past treatment history was not assessed. Treatment history could certainly affect emotions such as guilt, shame and anger, as well as PTSD symptoms and willingness to seek treatment. Fourth, power was limited in the current study due to the relatively small size of the PTSD group. This may have affected the ability to detect differences between the three groups. Finally, due to the nature of correlational data, no conclusions can be drawn about causal relationships. For example, a third variable may be responsible for the relationship between PTSD symptoms and any of the emotional variables, especially given the historical nature of the data collection.

Implications for Research

Despite the limitations of this study, the findings have several implications for future research. One implication concerns the importance of assessing shame-proneness as a protective factor after experiencing a trauma. In this study, a trend was found indicating that the group that

experienced a trauma but did not develop PTSD also reported the lowest level of shame-proneness; therefore, more research, particularly utilizing prospective designs, is needed to explore this relationship. Prospective research could address questions such as: whether high shame-proneness leads to PTSD symptoms or whether PTSD leads to later development of shame? Of particular importance is assessing the relationship between shame-proneness and posttraumatic growth to help determine if the low levels of shame-proneness indicated in the trauma-no PTSD group result from successfully dealing with the traumatic events, if low levels of shame-proneness prior to experiencing the traumatic event protect the individual from later development of PTSD, or both. This study also found that low levels of shame-proneness may have important implications for treatment seeking behaviors. More specifically, low levels of shame-proneness may allow individuals to cope with the stigma associated with seeking therapy, thereby allowing them to receive more therapeutic support for their difficulties. Clearly, future research is needed to more adequately assess this relationship, especially research aimed at clarifying the trend between the three groups regarding shame-proneness.

This research has important implications for future study of anger and trauma. Findings from this study supported a connection between shame and anger, possibly as primary and secondary emotions to each other. Prospective research to assess shame as a primary emotion to anger is needed to explore this relationship. Based on these results and prior research, this study proposed that PTSD may lead to later development of anger and anger may be maintaining PTSD by not allowing needed fear activation during processing or treatment (Ehlers, Clark, et al., 1998; Foa et al., 1995; Paunovic, 1998 Rothbaum et al., 2003). However, less is known about shame and where it may fit into this model. If shame is triggering anger, then shame may be contributing to the maintenance of PTSD through anger.

This research also has implications for examining variables that interfere with trauma survivors' therapy seeking behaviors. The current study found that higher levels of shame-proneness, anger, and PTSD symptoms were related to lower WDS. In fact, the current study found that high shame-proneness predicted lower WDS in trauma survivors. Jakobsson et al. (2008) similarly found that shame was negatively related to help seeking behaviors. The current research found that the trauma-no PTSD group reported more WDS than the no trauma group and the trauma PTSD group. Of note, a trend indicated that the trauma-no PTSD group also might have the lowest levels of shame-proneness lending further support to the contention that shame inhibits WDS. However, the nature of the relationships between anger, shame, PTSD symptoms, and WDS are not clear, and future research could address questions such as: whether anger and PTSD symptoms only relate to WDS because they are also related to shame? Does contemplating what it would be like to seek treatment and the stigma associated with it increase shame levels, making treatment seeking behaviors seem impossible for trauma survivors?

Interestingly, while shame was a significant variable related to WDS, it does not seem to contribute to one's overall willingness to seek therapy. Anger and PTSD symptoms were the only significant variables that were related to lower levels of overall willingness to seek therapy. These results suggest further questions. What is it about anger and PTSD symptoms that are related to a decrease in one's overall willingness to seek therapy? Is it the fear of "rehashing" the trauma? Is it the fear of having to let go of their anger? Obviously there are still many unanswered questions that need to be addressed by research when looking at how anger, shame, and PTSD symptoms affect treatment seeking behaviors.

This study also has important implications for future guilt research, in that guilt's only significant relationship was with shame. This suggests that guilt may be less related to PTSD

symptoms than shame or anger. Further research is needed to confirm or disprove the results of this study. Additionally, the current study assessed the relationship of guilt-proneness to trait anger, shame-proneness, PTSD, and treatment seeking behaviors. Development of measures to directly assess guilt, shame, and anger in relation to trauma would help to assess these variables in a more direct way and may show a different pattern of relationships than this study found.

Implications for Clinical Practice

Results from this study suggest that it may be important to assess, and potentially target, shame if a trauma survivor presents for therapy with significant levels of anger. Anger may be more apparent on initial presentation than shame. If shame is indeed a primary emotion to anger, then targeting anger alone may not reduce the underlying shame. Resolving the shame that is triggering the anger may help alleviate it. Given the correlational relationship of the current study, this relationship could go the other direction and it would be wise to also assess and target anger if the trauma survivor presents with significant levels of shame. Prior research (e.g., Ehlers, Clark, et al., 1998; Foa et al., 1995; Paunovic, 1998 Rothbaum et al., 2003) indicates that shame and anger interfere with trauma therapies such as prolonged exposure. Therefore, it may be advantageous to work on decreasing shame and anger levels before starting exposure therapy or at least addressing anger and shame in combination with delivering exposure therapy. A trend from this study also suggested that trauma survivors who experience low levels of shame are less likely to experience PTSD, further signifying the importance of addressing shame during trauma therapy.

To ensure that trauma survivors attend therapy, reducing the stigma that is associated with seeking psychological help also appears to be important. Although shame was not a

significant factor in one's overall willingness to attend therapy, shame did predict one's willingness to seek treatment despite the stigma associated with it (WDS). Therefore, since stigma appears to be related to shame-proneness, reducing the stigma associated with seeking psychological help may increase the chances that more trauma survivors may seek treatment. More educational and outreach programs should be developed to teach the general public about mental health treatment with the purpose of reducing the stigma associated with seeking treatment.

Finally, outreach or educational programs addressing PTSD should be designed and implemented. These programs should be designed to target trauma survivors who are not currently seeking treatment, since high levels of PTSD symptoms are related to less willingness to seek treatment. These programs could be designed to deliver psychoeducation regarding PTSD symptoms, available treatments, and the effectiveness of these treatments. These programs would also increase trauma survivors' abilities to seek out and determine their own course of treatment for their particular symptoms. Once this population becomes more educated about their symptoms, treatment options, and that many trauma survivors develop the same pattern of symptoms, they may be more likely to seek treatment.

References

- American Psychiatric Association (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: Author.
- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- Amstadter, A. B. & Vernon, L. L (2008). Emotional reactions during and after trauma: A comparison of trauma types. *Journal of Aggression, Maltreatment & Trauma, 16*, 391-408.
- Andrews, B., Brewin, C. R., Rose, S., & Kirk, M. (2000). Predicting PTSD symptoms in victims of violent crime: The role of shame, anger, and childhood abuse. *Journal of Abnormal Psychology, 109*(1), 69-73.
- Barnes, M. F., & Figley, C. R. (2005). Family therapy: Working with traumatized families. In J. L. Lebow (Ed.), *Handbook of Clinical Family Therapy* (pp. 309-326). Hoboken, NJ: John Wiley & Sons, Inc.
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt an interpersonal approach. *Psychological Bulletin, 115*(2), 243-267.
- Bernat, J. A., Ronfeldt, H. M., Calhoun, K. S., & Arias, I. (1998). Prevalence of traumatic events and peritraumatic predictors of posttraumatic stress symptoms in a nonclinical sample of college students. *Journal of Traumatic Stress, 11*(4), 645-664.
- Binder, R. L. (1981). Why women don't report sexual assault. *The Journal of Clinical Psychiatry, 11*, 437-438.

- Blanchard, E. B., Jones-Alexander, J., Buckley, T. C., & Forneris, C. A. (1996). Psychometric properties of the PTSD Checklist (PCL). *Behaviour Research and Therapy, 34*(8), 669-673.
- Bollinger, A. R., Cuevas, C. A., Vielhauer, M. J., Morgan, E. E., & Keane, T. M. (2008). The operating characteristics of the PTSD Checklist in detecting PTSD in HIV+ substance abusers. *Journal of Psychological Trauma, 7*(4), 213-234.
- Boscarino, J. A., Adams, R. E., & Figley, C. R. (2004). Mental health service use 1-year after the World Trade Center disaster: Implications for mental health care. *General Hospital Psychiatry, 26*(5), 346-358.
- Byrne, C. A., & Riggs, D. S. (1996). The cycle of trauma: Relationship aggression in male Vietnam veterans with symptoms of posttraumatic stress disorder. *Violence and Victims, 11*(3), 213-225.
- Carroll, E. M., Rueger, D. B., Foy, D. W., & Donahoe Jr., C. P. (1985). Vietnam combat veterans with posttraumatic stress disorder: Analysis of marital and cohabitating adjustment. *Journal of Abnormal Psychology, 94*, 329-337.
- Cascardi, M., & O'Leary, K. D. (1992). Depressive symptomatology, self-esteem, and self-blame in battered women. *Journal of Family Violence, 7*(4), 249-259.
- Chemtob, C. M., Novaco, R. W., Hamada, R. S., Gross, D. M., & Smith, G. (1997). Anger regulation deficits in combat-related posttraumatic stress disorder. *Journal of Traumatic Stress, 10*, 17-36.
- Dewane, C. J. (1984). Posttraumatic stress disorder in medical personnel in Vietnam. *Hospital and Community Psychiatry, 35*(12), 1232-1234.

- Dohrenwend, B. P., Turner, J. B., Turse, N. A., Adams, B. G., Koenen, K. C., & Marshall, R. (2006). The psychological risks of Vietnam for U.S. veterans: A revisit with new data and methods. *Science, 313*, 979-982.
- Ehlers, A., Clark, D. M., Dunmore, E., Jaycox, L., Meadows, E., & Foa, E. D. (1998). Predicting response to exposure treatment in PTSD: The role of mental defeat and alienation. *Journal of Traumatic Stress, 3*, 457-471.
- Ehlers, A., Mayou, R. A., & Bryant, B. (1998). Psychological predictors of chronic posttraumatic stress disorder after motor vehicle accidents. *Journal of Abnormal Psychology, 107*, 508-519.
- El Leithy, S., Brown, G. P., & Robbins, I. (2006). Counterfactual thinking and posttraumatic stress reactions. *Journal of Abnormal Psychology, 115*, 629-635.
- Feeny, N. C., Zoellner, L. A., & Foa, E. B. (2000). Anger, dissociation, and posttraumatic stress disorder among female assault victims. *Journal of Traumatic Stress, 13*, 89-100.
- Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder: An overview. In C. R. Figley (Ed.), *Compassion fatigue: Secondary traumatic stress disorder in treating the traumatized* (pp. 1-20). New York: Brunner/Mazel.
- Fikretoglu, D., Brunet, A., Guay, S., & Pedlar, D. (2007). Mental health treatment seeking by military members with posttraumatic stress disorder: Finding on rates, characteristics, and predictors from a nationally representative Canadian military sample. *Canadian Journal of Psychiatry, 52*, 103-110.
- Fischer, E. H. & Turner, J. L. (1970). Orientations to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology, 35*, 79-90.

- Flemke, K. (2009). Triggering rage: Unresolved trauma in women's lives. *Contemporary Family Therapy: An International Journal*, 31, 123-139.
- Foa, E. B., Cashman, L., Jaycox, L., & Perry, K. (1997). The validation of a self-report measure of posttraumatic stress disorder: The Posttraumatic Diagnostic Scale. *Psychological Assessment*, 9, 445-451.
- Foa, E. B., Riggs, D. S., Massie, E. D., & Yarczower, M. (1995). The impact of fear activation and anger on the efficacy of exposure treatment for posttraumatic stress disorder. *Behavior Therapy*, 26, 487-499.
- Forbes, D., Parslow, R., Creamer, M., Allen, N., McHugh, T., & Hopwood, M. (2008). Mechanisms of anger and treatment outcome in combat veterans with posttraumatic stress disorder. *Journal of Traumatic Stress*, 21, 142-149.
- Frazier, P., Anders, S., Perera, S., Tomich, P., Tennen, H., Park, C., et al. (2009). Traumatic events among undergraduate students: Prevalence and associated symptoms. *Journal of Counseling Psychology*, 56(3), 450-460.
- Glover, H., Pelesky, C. A., Bruno, R., & Sette, R. (1990). Post-traumatic stress disorder conflicts in Vietnam combat veterans: A confirmatory factor analytic study. *Journal of Traumatic Stress*, 3, 573-591.
- Goodman, L. A., Corcoran, C., Turner, K., Yuan, N., & Green, B. L. (1998). Assessing traumatic event exposure: General issues and preliminary findings for the stressful life events screening questionnaire. *Journal of Traumatic Stress*, 11, 521-542.
- Green, B. L., Goodman, L. A., Krupnick, J. L., Corcoran, C. B., Petty, R. M., Stockton, P., et al. (2000). Outcomes of single versus multiple trauma exposure in a screening sample. *Journal of Traumatic Stress*, 13, 271-286.

- Grey, N. & Holmes, E. (2008). "Hotspots" in trauma memories in the treatment of post-traumatic stress disorder: A replication. *Memory, 16*(7), 788-796.
- Grey, N., Holmes, E., & Brewin, C. R. (2001). Peritraumatic emotional "hot spots" in memory. *Behavioural and Cognitive Psychotherapy, 29*, 367-372.
- Gulf War and Health: Volume 6. Physiologic, Psychologic, and Psychosocial Effects of Deployment-Related Stress (Free Executive Summary). (2008). Retrieved on October 4, 2008, from <http://www.nap.edu/catalog/11922.html>.
- Heir, T, Sandvik, L., & Weisaeth, L. (2009). Hallmarks of Posttraumatic Stress: Symptom z-scores in a tsunami-affected tourist population. *Psychopathology, 42*, 157-164.
- Hendin, H. & Haas, A. P. (1991). Suicide and guilt as manifestations of PTSD in Vietnam combat veterans. *American Journal of Psychiatry, 148*(5), 586-591.
- Henning, K. R., & Frueh, B. C. (1997). Combat guilt and its relationship to PTSD symptoms. *Journal of Clinical Psychology, 53*(8), 801-808.
- Hovens, J. E., Falger, P. R. J., Op De Velde, W., Meijer, P., De Groen, J. H. M., & Van Duijn, H. (1993). A self-rating scale for the assessment of posttraumatic stress disorder in Dutch resistance veterans of World War II. *Journal of Clinical Psychology, 49*(2), 196-203.
- Janoff-Bulman, R. (1979). Characterological versus behavioral self-blame: Inquires into depression and rape. *Journal of Personality and Social Psychology, 37*(10), 1798-1809.
- Jakobsson, A., Hensing, G., & Spak, F. (2008). The role of gendered concepts in treatment seeking for alcohol problems. *Scandinavian Journal of Caring Sciences, 22*(2), 196-202.

- Jakupcak, M., Conybeare, D., Phelps, L., Hunt, S., Holmes, H. A., Felker, B., et al. (2007). Anger, hostility, and aggression among Iraq and Afghanistan War Veterans reporting PTSD and subthreshold PTSD. *Journal of Traumatic Stress, 20*(6), 945-954.
- Jehu, D. (1989). Mood disturbances among women clients sexually abused in childhood; prevalence, etiology, treatment. *Journal of Interpersonal Violence, 4*(2), 164-184.
- Jordan, B. K., Marmar, C. R., Fairbank, J. A., Schlenger, W. E., Kulka, R. A., Hough, R. L., et al. (1992). Problems in families of male Vietnam veterans with posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology, 60*(6), 916-926.
- Kaltman, S., Green, B. L., Mete, M., Shara, N., & Miranda, J. (2010). Trauma, depression, and comorbid PTSD/depression in a community sample of Latina immigrants. *Psychological Trauma: Theory, Research, Practice, and Policy 2*(1), 31-39.
- Karanci, N. A. & Acarturk, C. (2005). Post-traumatic growth among Marmara earthquake survivors involved in disaster preparedness as volunteers. *Traumatology, 11*(4), 307-322.
- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the National Comorbidity Study. *Archives of General Psychiatry, 52*, 1048-1060.
- Kiecolt-Glaser, J. K. & Williams, D. A. (1987). Self-blame, compliance, and distress among burn patients. *Journal of Personality and Social Psychology, 53*(1), 187-193.
- Kletter, H., Weems, C. F., & Carrion, V. G. (2009). Guilt and posttraumatic stress symptoms in child victims of interpersonal violence. *Clinical Child Psychology and Psychiatry, 14*, 71-84.
- Kubany, E. S. (1994). A cognitive model of guilt typology in combat-related PTSD. *Journal of Traumatic Stress, 7*(1), 3-19.

- Kubany, E. S., Abueg, F. R., Kilauano, W. L., Manke, F. P., & Kaplan, A. S. (1997). Development and validation of the sources of Trauma-Related Guilt Survey—War-Zone Version. *Journal of Traumatic Stress, 10*(2), 235-258.
- Kubany, E. S., Abueg, F. R., Owens, J. A., Brennan, J. M., Kaplan, A. S., & Watson, S. B. (1995). Initial examination of a multidimensional model of trauma-related guilt: Applications to combat veterans and battered women. *Journal of Psychopathology and Behavioral Assessment, 17*(4), 353-376.
- Kubany, E. S., & Manke, F. P. (1995). Cognitive therapy for trauma-related guilt: Conceptual bases and treatment outlines. *Cognitive and Behavioral Practice, 2*, 27-61.
- Leskela, J., Dieperink, M., & Thuras, R. (2002). Shame and posttraumatic stress disorder. *Journal of Traumatic Stress, 15*(3), 223-226.
- McNiel, D. E., Hatcher, C., & Reubin, R. (Summer 1988). Family survivors of suicide and accidental death: Consequences for widows. *Suicide and Life Threatening Behavior, 18*(2), 137-148.
- Miller, S. (1985). *The shame experience*. Hillsdale, NJ: Erlbaum.
- Monson, C. M., & Friedman, M. J. (2006). Back to the future of understanding trauma. In V. M. Follette & J. I. Ruzek (Eds.), *Cognitive-Behavioral Therapies for Trauma* (pp. 1-13). New York, NY: The Guilford Press.
- Moscarello, R. (1992). Victims of violence: Aspects of the “victim-to-patient” process in women. *Canadian Journal of Psychiatry, 37*, 497-502.
- Nolen-Hoeksema, S., & Morrow, J. (1991). A prospective study of depression and posttraumatic stress symptoms after a natural disaster: The 1989 Loma Prieta earthquake. *Journal of Personality and Social Psychology, 61*, 115-121.

- Novaco, R. W., & Chemtob, C. M. (2002). Anger and combat-related posttraumatic stress disorder. *Journal of Traumatic Stress, 15*, 123-132.
- Opp, R. E., & Samson, A. Y. (1989). Taxonomy of guilt for combat veterans. *Professional Psychology: Research and Practice, 20*(3), 159-165.
- Orsillo, S. M., Heimberg, R. G., Juster, H. R., & Garrett, J. (1996). Social phobia and PTSD in Vietnam Veterans. *Journal of Traumatic Stress, 9*(2), 235-252.
- Orth, U., Berking, M., & Burkhardt, S. (2006). Self-conscious emotions and depression: Rumination explains why shame but not guilt is maladaptive. *Personality and Social Psychology Bulletin, 32*, 1608-1619.
- Orth, U., Cahill, S. P., Foa, E. B., & Maercker, A. (2008). Anger and posttraumatic stress disorder symptoms in crime victims: A longitudinal analysis. *Journal of Consulting and Clinical Psychology, 76*, 208-218.
- Orth, U., & Wieland, E. (2006). Anger, hostility, and posttraumatic stress disorder in trauma-exposed adults: A meta-analysis. *Journal of Consulting and Clinical Psychology, 74*, 698-706.
- Owens, G. P., & Chard, K. M. (2006). PTSD severity and cognitive reactions to trauma among a college sample: An exploratory study. *Journal of Aggression, Maltreatment & Trauma, 13*(2), 23-36.
- Paunovic, N. (1998). Cognitive factors in the maintenance of PTSD. *Scandinavian Journal of Behaviour Therapy, 27*(4), 167-178.
- Pineles, S. L., Street, A. E., & Koenen, K. C. (2006). The differential relationships of shame-proneness and guilt-proneness to psychological and somatization symptoms. *Journal of Social and Clinical Psychology, 25*(6), 688-704.

- Pitman, R. K., Altman, B., Greenwald, E., Longpre, R. E., Macklin, M. L., Poire, R. E., et al. (1991). Psychiatric complications during flooding therapy for posttraumatic stress disorder. *Journal of Clinical Psychiatry, 52*, 17-20.
- Powell, S., Rosner, R., Butollo, W., Tedeschi, R. G., & Calhoun, L. G. (2003). Posttraumatic growth after war: A study with former refugees and displaced people in Sarajevo. *Journal of Clinical Psychology 59*(1), 71-83.
- Punamaki, R. L., Komproe, I. H., Qouta, S., Elmasri, M., & de Jong, J. (2005). The role of peritraumatic dissociation and gender in the association between trauma and mental health in a Palestinian community sample. *American Journal of Psychiatry, 162*, 545-551.
- Resick, P. A., Calhoun, K. S., Atkeson, B. M., & Ellis, E. M. (1981). Social adjustment in victims of sexual assault. *Journal of Consulting and Clinical Psychology, 49*(5), 705-712.
- Resnick, H. S., Kilpatrick, D. G., Dansky, B. S., Saunders, B. E., & Best, C. L. (1993). Prevalence of civilian trauma and posttraumatic stress disorder in a representative national sample of women. *Journal of Consulting and Clinical Psychology, 61*, 984-991.
- Reynolds, M., & Brewin, C. R. (1999). Intrusive memories in depression and posttraumatic stress disorder. *Behaviour Research and Therapy, 37*, 201-215.
- Riggs, D. S., Dancu, C. V., Gershuny, B. S., Greenberg, D., & Foa, E. B. (1992). Anger and post-traumatic stress disorder in female crime victims. *Journal of Traumatic Stress, 5*, 613-625.

- Riggs, D. S., Rothbaum, B. O., & Foa, E. B. (1995). A prospective examination of symptoms of posttraumatic stress disorder in victims of nonsexual assault. *Journal of Interpersonal Violence, 10*(2), 201-214.
- Rothbaum, B. O., Ruef, A. M., Litz, B. T., Han, H., & Hodges, L. (2003). Virtual reality exposure therapy of combat-related PTSD: A case study using psychophysiological indicators of outcome. *Journal of Cognitive Psychotherapy: An International Quarterly, 17*(2), 163-177.
- Rothbaum, B. O., Foa, E. B., Riggs, D. S., Murdock, T., & Walsh, T. (1992). A prospective examination of post-traumatic stress disorder in rape victims. *Journal of Traumatic Stress, 5*(3), 455-475.
- Ruggiero, K. J., Del Ben, K., Scotti, J. R., & Rabalais, A. E. (2003). Psychometric properties of the PTSD Checklist-Civilian Version. *Journal of Traumatic Stress, 16*(5), 495-502.
- Rusch, N., Corrigan, P. W., Powell, K., Rajah, A., Olschewski, M., Wilkniss, S., et al. (2009). A stress-coping model of mental illness stigma: II. Emotional stress responses, coping behavior and outcome. *Schizophrenia Research, 110*, 65-71.
- Rusting, C. L., & Nolen-Hoeksema, S. (1998). Regulating responses to anger: Effects of rumination and distraction on angry mood. *Journal of Personality and Social Psychology, 74*, 790-803.
- Scherrer, J. F., Xian, H., Lyons, M. J., Goldberg, J., Eisen, S. A., True, W. R. et al. (2008). Posttraumatic stress disorder; combat exposure; and nicotine dependence, alcohol dependence, and major depression in male twins. *Comprehensive Psychiatry, 49*(3), 297-304.

- Schnitt, J. M., & Nocks, J. J. (1984). Alcoholism treatment of Vietnam veterans with post-traumatic stress disorder. *Journal of Substance Abuse Treatment, 1*, 179-189.
- Seidler, G. H. (Summer 1997). From object-relations theory to the theory of alterity: Shame as an intermediary between the interpersonal world and the inner world of psychic structure. *American Journal of Psychotherapy, 51*(3), 343-356.
- Sherman, M. D., Zanotti, D. K., & Jones, D. E. (2005). Key elements in couples therapy with veterans with combat-related posttraumatic stress disorder. *Professional Psychology: Research and Practice, 36*(6), 626-633.
- Sherwood, C., Salkovskis, P. M., & Rimes, K. A. (2007). Help-seeking for depression: The role of beliefs, attitudes and mood. *Behavioural and Cognitive Psychotherapy, 35*, 541-554.
- Speilberger, C. D. (1999). *State-Trait Anger Expression Inventory-2 Professional Manual*. Odessa, FL: Psychological Assessment Resources, Inc.
- Stapleton, J. A., Taylor, S., & Asmundson, G. J. G. (2006). Effects of three PTSD treatments on anger and guilt: Exposure therapy, eye movement desensitization and reprocessing, and relaxation training. *Journal of Traumatic Stress, 19*, 19-28.
- Taft, C. T., Resick, P. A., Watkins, L. W., & Panuzio, J. (2009). An investigation of posttraumatic stress disorder and depressive symptomatology among female victims of interpersonal trauma. *Journal of Family Violence, 24*(6), 407-415.
- Taku, K., Calhoun, L. G., Cann, A., & Tedeschi, R. G. (2008). The role of rumination in the coexistence of distress and posttraumatic growth among bereaved Japanese university students. *Death Studies, 32*, 428-444.

- Tangney, J. P., Wagner, P., Fletcher, C., & Gramzow, R. (1992). Shamed into Anger? The relation of shame and guilt to anger and self-reported aggression. *Journal of Personality and Social Psychology, 4*, 669-675.
- Tangney, J. P., Wagner, P., & Gramzow, R. (1992). Proneness to shame, proneness to guilt, and psychopathology. *Journal of Abnormal Psychology, 101*(3), 469-478.
- Tangney, J. P., Wagner, P., & Gramzow, R. (1989). *The Test of Self-conscious Affect*. Fairfax, VA: George Mason University.
- Toomey, R., Kang, H. K., Karlinsky, J., Baker, D. G., Vasterling, J. J., Alpern, R., et al. (2007). Mental health of US Gulf War veterans 10 years after the war. *British Journal of Psychiatry, 190*, 385-393.
- Vrana, S., & Lauterbach, D. (1994). Prevalence of traumatic events and post-traumatic psychological symptoms in a nonclinical sample of college students. *Journal of Traumatic Stress, 7*, 289-302.
- Watson, S. B. & Haynes, S. N. (2007). Brief screening for traumatic life events in female undergraduate health service patients. *International Journal of Clinical and Health Psychology, 7*, 261-282.
- Weathers, F., Litz, B. T., Huska, J. A., & Keane, T. M. (1994). *PTSD Symptom Checklist*. Boston, MA: National Center for PTSD, Behavioral Science Division.
- Wilson, J. P., Drozdek, B., & Turkovic, S. (2006). Posttraumatic shame and guilt. *Trauma, Violence, & Abuse, 7*(2), 122-141.
- Wolfe, J., Erickson, D. J., Sharkansky, E. J., King, D. W., & King, L. A. (1999). Course and predictors of posttraumatic stress disorder among Gulf War veterans: A prospective analysis. *Journal of Consulting and Clinical Psychology, 67*, 520-528.

Zlotnick, C., Franklin, C. L., & Zimmerman, M. (2002). Does “subthreshold” posttraumatic stress disorder have any clinical relevance? *Comprehensive Psychiatry*, 43(6), 413-419.

Appendix

Many people have lived through or witnessed a very stressful and traumatic event at some point in their lives. Indicate whether or not you have experienced or witnessed each traumatic event listed below by circling yes or no after each event.

1. Serious accident, fire, or explosion (for example, an industrial, farm, car, plane, or boating accident)
Yes No
2. Natural disaster (for example, tornado, hurricane, flood, or major earthquake)
Yes No
3. Non-sexual assault by a family member or someone you know (for example, being mugged, physically attacked, shot, stabbed, or held at gunpoint)
Yes No
4. Non-sexual assault by a stranger (for example, being mugged, physically attacked, shot, stabbed, or held at gunpoint)
Yes No
5. Sexual assault by a family member or someone you know (for example, rape or attempted rape)
Yes No
6. Sexual assault by a stranger (for example, rape or attempted rape)
Yes No
7. Military combat or a war zone
Yes No
8. Sexual contact when you were younger than 18 with someone who was 5 or more years older than you (for example, contact with genitals, breasts)
Yes No
9. Imprisonment (for example, prison inmate, prisoner of war, hostage)
Yes No
10. Torture
Yes No
11. Life-threatening illness
Yes No

12. Other traumatic Event

Yes No

13. If you answered Yes to Item 12, specify the traumatic event below this statement.

IF YOU MARKED YES TO ANY OF THE ITEMS ABOVE, CONTINUE. IF NOT STOP HERE.

14. If you marked Yes for more than one traumatic event on the previous page, circle *which one bothers you the most below*. If you marked Yes for only one traumatic event on the previous page, circle the same one below.

1. Accident
2. Disaster
3. Non-sexual assault/someone you know
4. Non-sexual assault/stranger
5. Sexual assault/someone you know
6. sexual assault/stranger
7. Combat
8. Sexual contact under 18 with someone 5 or more years older
9. Imprisonment
10. Torture
11. Life-threatening illness
12. Other traumatic event

Below are several questions about the traumatic event you marked in Item 14.

15. How long ago did the traumatic event happen? (circle one)

1. Less than 1 month
2. 1 to 3 months
3. 3 to 6 months
4. 6 months to 3 years
5. 3 to 5 years
6. More than 5 years

For the following questions, circle Yes or No

16. Were you physically injured? Yes No
17. Was someone else physically injured? Yes No
18. Did you think that your life was in danger? Yes No
19. Did you think that someone else's life was in danger? Yes No
20. Did you feel helpless? Yes No
21. Did you feel terrified? Yes No