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THE ASSOCIATION BETWEEN NEGATIVE SELF-BASED EMOTIONS AND
SOCIAL SUPPORT ON MENTAL HEALTH FUNCTIONING:
THE CONSEQUENCES OF INTIMATE PARTNER VIOLENCE

by

Judiann M. Jones, M.S.

A Dissertation

Submitted in Partial Fulfillment of the

Requirements for the Degree of

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Major: Clinical Psychology

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Dedication

This dissertation is dedicated to my husband, Marcus Jones. He has stood by me through thick and thin, and made me a stronger person in the end. Without his endless love and encouragement, the pursuit of this project would have not been possible.

This dissertation is also dedicated in honor to my mom and dad, Judy and Dan McNiff. Had it not been for their encouragement from day one for me to reach for the stars, I would have been unable to achieve this accomplishment. Even though I know my dad may not be here on earth to share in this achievement, I know that he is looking down feeling very proud of his daughter. Cheers to you Mommy and Daddy!

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Abstract

Jones, Judiann McNiff. The University of Memphis. August 2015. The Association between Negative Self-Based Emotions and Social Support on Mental Health Functioning: The Consequences of Intimate Partner Violence. Major Professor: J. Gayle Beck, Ph.D.

The experience of intimate partner violence (IPV) is a type of trauma that can greatly affect health and social functioning. Posttraumatic stress disorder (PTSD) and depression are the two most common mental health problems that develop following IPV. IPV is also commonly associated with negative self-based emotions (shame and guilt) and lower levels of perceived social support. Few empirical studies have examined the unique impact that negative self-based emotions have on the maintenance of PTSD and depression, and the role that social support may have on these associations following IPV. This report will address the gaps in the current research and examine how social support may intervene in the association between negative self-based emotional states and mental health functioning. The present study included 152 help-seeking female IPV survivors. Results indicated that shame and guilt were significantly associated with both PTSD and depression. As well, shame and guilt were negatively associated with social support. There was a significant indirect association noted between shame and depression via social support such that higher perceptions of social support were associated with lower levels of shame and depression. No other significant indirect associations emerged. These results suggest that negative self-based emotions may contribute to mental health problems after IPV. Future interventions for IPV survivors should make an effort to address negative self-based emotions for women experiencing symptoms of both depression and PTSD. Additionally, interventions geared at increasing

perceptions of social support may also help in alleviating post-trauma depression.

Results are discussed in light of these findings.

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The Association between Negative Self-Based Emotions and Social Support on Mental Health Functioning: The Consequences of Intimate Partner Violence

The experience of intimate partner violence (IPV) can greatly affect health and social functioning. IPV is an interpersonal trauma that refers to physical, psychological, and emotional abuse (Tjaden & Thoennes, 2000). IPV affects a reported 1.5 million women in the United States per year, and nearly 1 in 4 women in the United States over a lifetime (Black et al., 2011; Tjaden & Thoennes, 2000). IPV is also unique relative to other life stressors as it is likely to occur over a protracted period of time and tends to be experienced within the confines of the home (Follingstad, Neckerman, & Vormbock, 1988), which may contradict general assumptions of safety (Janoff-Bulman, 1992). IPV itself is often an isolated stressor, but may be compounded by additional life circumstances that women experience (e.g., finances, children, etc.; Campbell, Kub, Belknap, & Templin, 1997). The compound nature of these additional stressors along with experiencing IPV may prevent or limit many women from utilizing available resources in the aftermath of abuse. Additionally, they may experience heightened levels of negative self-based emotions that may have deleterious effects on women who chronically experience IPV.

Similar to other extreme stressors, IPV can also have a serious impact on mental health. High rates of posttraumatic stress disorder (PTSD) and depression have been noted in the aftermath of IPV (Golding, 1999; Stein & Kennedy, 2001; Taft, Resick, Watkins, & Panuzio, 2009). Although significant advances have been made in understanding the etiology of post-trauma symptoms in IPV survivors, questions still remain about the specific factors that may contribute to the severity and maintenance of

psychopathology in response to the IPV. Specifically, with high rates of mental health problems noted in this population, few studies to date have explored factors that may be contributing to the maintenance of post-trauma symptomatology following IPV.

In the current study, we will first explore common self-based emotional responses to IPV and review literature that specifically examines the association between shame and guilt with PTSD and depression respectively in IPV survivors. Next, we will discuss how perceptions of social support may influence these mental health problems, and speculate how social support may also intervene in the association between these negative self-based emotions and PTSD and depression. Lastly, current limitations in the literature will be discussed, as well as rationale for the proposed examination of these factors/associations in the current study.

Intimate Partner Violence and Mental Health Functioning

IPV is a significant factor associated with mental health difficulties that often persists even after the abuse has ended. Cross-sectional studies have indicated an association between IPV and mental health functioning in women (Coker et al., 2002; Coker, Watkins, Smith, & Brandt, 2003). IPV is commonly associated with poor mental health functioning, and is often accompanied by symptoms of PTSD and depression (Cascardi, O’Leary, & Schlee, 1999; Taft et al., 2009).

When considering PTSD and depression as significant mental health problems for IPV survivors, a meta-analysis reported that the mean prevalence of PTSD for IPV survivors was 63% (range of 31% to 84%) followed by depression with a mean prevalence rate of 48% (range of 15% to 85%; Golding, 1999). Both PTSD and depression are often chronic in this population, and individuals may continue to

experience symptoms even after abuse from the romantic partner has ended (Campbell & Soeken, 1999; Zlotnick, Johnson, & Kohn, 2006). These mental health outcomes also tend to co-occur in the wake of IPV (Stein & Kennedy, 2001); thus, understanding both of these disorders is an important area of study following this type of interpersonal trauma. Housekamp and Foy (1991) were the first researchers to systematically examine PTSD in IPV survivors using a structured diagnostic interview, with 45% of the sample meeting criteria for PTSD. Other studies have also found high rates of PTSD in IPV survivors. In a study of women specifically seeking help from domestic violence shelters, 84% of the women met full diagnostic criteria for PTSD (Kemp, Rawlings, & Green, 1991). In most studies, the diagnostic assessment was conducted shortly after arrival to a shelter, which may suggest that the high rates of diagnosable PTSD may be confounded by general distress. Conceivably, women who seek services for domestic violence may not be more predisposed to mental health conditions relative to women who never seek help. However, it is possible that women who seek services may be more likely to have experienced IPV that occurred over protracted periods of time and may be currently experiencing significantly greater distress in the wake of the trauma.

Overall, research has documented that IPV survivors have an increased risk of PTSD and depression. In an effort to begin to understand this risk further, investigators have considered additional contributing factors, such as the severity and frequency of the partner abuse (e.g., Astin, Lawrence, & Foy, 1993). There is a strong association between the frequency and intensity of violence experienced at the hands of a romantic partner and increased rates of both PTSD and depression symptoms in IPV survivors (Astin et al., 1993; Golding, 1999; Housekamp & Foy, 1991). As such, the type of abuse

may also contribute to symptomatology, as potentially different effects have been reported from sexual, physical, and/or severe emotional abuse experiences (see Jones, Green, Hovantiz, & Rawlings, 2001, for a review). Post-trauma symptomatology is especially salient, considering that IPV is a trauma that is often chronic and cumulative in nature (Follingstad et al., 1988). In a sample of 53 women with a history of partner abuse, Astin and colleagues (1993) found that the frequency of abuse was strongly associated with PTSD severity. More recently, Cascardi and colleagues (1999) reported in a sample of married women, that as her husband's physical aggression increased, she experienced greater levels of fear and symptoms of comorbid PTSD and depression. In this study, the husband's dominance and social isolation also contributed to elevated symptoms of PTSD, whereas symptoms of depression were only associated with reductions in marital quality. These findings suggest that the adverse impact of IPV on mental health, as well as the severity and frequency of the abuse, may limit a woman's access to support and contribute more to PTSD symptoms relative to depression symptoms. In sum, these studies provide some insight into how the severity of abuse may contribute to psychopathology; however, they do not differentiate other processes that may be contributing to these psychological problems. Additionally, these studies fail to address rationale for the high rates of comorbidity of PTSD and depression in this population.

It is well established that PTSD and depression commonly co-occur in IPV survivors (e.g., Golding, 1999). This comorbidity has been found to be associated with greater severity in PTSD and depression symptoms when compared to individuals with PTSD or depression alone (Cascardi et al., 1999; Nixon, Resick, & Nishith, 2004; Stein

& Kennedy, 2001; Taft et al., 2009). Specifically, Stein and Kennedy (2001) examined different types and severity of IPV and noted that women with PTSD did not differ in the severity of abuse, relative to women with comorbid PTSD and depression. With the high rates of PTSD and depression comorbidity in IPV survivors, ranging from 43-56% (Cascardi et al., 1999; Stein & Kennedy, 2001), comorbidity in this population is a research area that warrants further study. In addition to these high rates of comorbidity, the impairment from these mental health conditions may potentially reduce a woman's ability to seek supportive resources during times of need (Campbell et al., 2007; Green et al., 2006; Sullivan & Bybee, 1999). In fact, examining both PTSD and depression, and its co-occurrence in this population may help to link potential factors, including protective factors (e.g., high social support) that may address mental health needs for these women.

Reactions to Trauma Associated with Posttraumatic Stress Disorder

When considering factors that contribute to the development and maintenance of PTSD symptomatology following a traumatic event, several theories are relevant. Classic models of PTSD suggest that emotional disruptions are common following the experience of a traumatic event but these responses can be exacerbated by cognitive and emotional appraisals (Foa & Riggs, 1993; Janoff-Bulman, 1992). Common responses to trauma are initially associated with re-experiencing, hyperarousal, and avoidance symptoms (APA, 2000, 2013). Over time, these symptoms may be maintained owing to changed worldviews and negative emotions.

Classic cognitive trauma theories posit that one's thoughts about a trauma play an integral role in how one understands and makes meaning of the traumatic experience. For

instance, the shattered assumptions view of the development of PTSD focuses on the role of cognitions associated with the world and self that provide meaning (Janoff-Bulman, 1992). Included among these assumptions are that the world is a benevolent and meaningful place, and that the self is worthy. These assumptions help individuals to make sense of the world that could otherwise be overwhelming and provide a sense of safety in a world that may at times be unsafe. Because traumatic experiences involve intense emotional responses, the individual may begin to question these assumptions. Moreover, the traumatic experience itself may challenge the basic assumptions that were once held regarding the self and the world. For example, prior to a traumatic event, an individual is likely to perceive the world as safe and meaningful. As the IPV occurs, which may include physical and sexual assault, the assumption that the world is safe is likely shattered. According to Janoff-Bulman's theoretical model (1992), through challenging this basic assumption, this individual is likely to become more distressed, which will exacerbate symptoms of PTSD.

A second cognitive-emotional model associated with the development of PTSD is an information-processing model (Brewin, Dalgleish, & Joseph, 1996; Ehlers & Clark, 2000; Foa & Riggs, 1993). This model suggests that PTSD is more likely to develop for individuals who have difficulty integrating memories of a traumatic experience into existing belief systems (Brewin et al., 1996; Foa & Riggs, 1993). This model is based on the assumption that a traumatic event is likely to activate a fear response. Although this response may be adaptive during the trauma and facilitate escaping danger, the fear response sets up a "network" wherein previously neutral cues acquire anxiety-provoking properties. Over time, this fear network interrupts previously held assumptions of safety.

One component of the fear network is escape/avoidance responding, which interrupts the person's ability to learn that the cues that were previously considered neutral are indeed still neutral. This fear response is problematic as this theory suggests that escape and avoidance interferes with processing distressing information. Generalization is a likely by-product of this fear network, particularly in the presence of avoidance responding, which compounds anxiety and helps to maintain PTSD symptomatology.

Reactions to Trauma Associated with Depression

Depression is a major health problem as it is likely to affect one-fifth of Americans; women are nearly twice as likely as men to develop this mental health problem (Kessler et al., 1994; Kessler et al., 2005). There is extensive evidence that the development or maintenance of depression may also occur in the aftermath of a traumatic event (O'Donnell, Creamer, & Pattison, 2004).

When considering factors that may contribute to the maintenance of depression, especially in the wake of a trauma, many theoretical models are relevant. Depression has been an area of significant study; depressed individuals have been described as having distorted beliefs and emotions that may develop from a sense of helplessness based on the uncontrollability of unpleasant situations (Beck, 1967, 1976; Seligman, 1975). Specifically, two theories have been discussed extensively in the depression literature. One theory, Beck's cognitive model of depression (1968, 1976; Beck, Rush, Shaw, & Emery, 1979) suggests that there are three major components that contribute to depressive episodes: negative self-statements, cognitive errors, and underlying schemas (core beliefs). Specifically, negative self-statements refers to both the automatic thoughts and cognitive distortions that contribute to negative mood; these thoughts may include

cognitive errors (e.g., all-or-nothing thinking, overgeneralization), and they may be derived from an individual's underlying core beliefs. Beck's cognitive theory has been studied extensively over time and empirical studies have supported this model in IPV survivors (e.g., Nixon et al., 2004).

A second theory, learned helplessness theory (Seligman, 1975; Peterson, Maier, & Seligman, 1993) suggests that individuals are depressed due to the belief that their current situation is futile and thus, are unable to reconcile or change current circumstances.

According to this theory (Abramson, Seligman, & Teasdale, 1978; Abramson, Matalsky, & Alloy, 1989), there are three essential beliefs that contribute to the maintenance of depression: personalization, pervasiveness, and permanence. First, personalization refers to how an individual characterizes the cause of an event (e.g., "It is my fault"). Second, pervasiveness refers to the specificity or universality of the belief (e.g., "I am always bad at everything"). Lastly, permanence refers to the extent to which the individual believes the problem is temporary or permanent. Most depressed individuals will report negative events as an internal, global, and somewhat permanent experience (e.g., "I'm responsible for why he hit me; I didn't do what he asked. If I would have only listened more carefully, he wouldn't hurt me all the time"). As a result of these distorted beliefs, learned helplessness may develop, and has been shown to be a common response in IPV survivors (Bargai, Ben-Shakhar, & Shalev, 2007; Kubany, Hill, & Owens, 2003) and has been shown to contribute to the maintenance of depression in this population.

Negative Self-Based Emotions and Intimate Partner Violence

There are many different ways that individuals may emotionally respond to trauma, which at times may be maladaptive. Shame and guilt have been identified as two

negative self-based emotional responses that commonly occur in trauma survivors (Tangney, Wagner, & Gramzow, 1992; Wong & Cook, 1992); however, there has been little examination of these emotional reactions in IPV survivors. Both theory (e.g., Tangney et al., 1992; Tangney, Miller, Flicker, & Barlow, 1996) and some empirical work (e.g., Beck et al., 2011; Street & Arias, 2001) would suggest that traumatic situations give rise to these emotional responses and shape subsequent emotional functioning.

Shame responses and mental health problems. As highlighted above, shame is a common, negative affective response in trauma survivors (Andrews, Brewin, Rose, & Kirk, 2000; Harper & Arias, 2004; Tangney & Dearing, 2002). More specifically, shame is described as an affective reaction that involves a negative evaluation of the self (Tangney et al., 1992; Tangney, Stuewig, & Mashek, 2007). This feeling is generally accompanied by the desire to hide or escape from the stressful situation (Niedenthal, Tangney, & Gavinski, 1994). Similar to cognitive models of PTSD, shame may involve a response that is likely to challenge previously established assumptions of the self. Because negative thoughts about the self have been shown to contribute to PTSD symptoms (e.g., Andrews et al., 2000; Beck, Jacobs-Lentz, Jones, Olsen, & Clapp, 2014; Leskela, Dieperink, & Thuras, 2002), consideration of how negative emotions, such as shame, contribute to PTSD is important.

As noted in the influential work of Lewis (1971) on shame, individuals have different reactions in response to experiencing shame. In one of the earlier studies of the association between shame and psychopathology, Tangney et al. (1992) noted that shame-proneness was significantly associated with greater depression, anxiety, and other

symptoms of general distress via the Beck Depression Inventory (Beck, 1972), the State-Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970), and the Symptom Checklist 90 (Derogatis, Lipman, & Covi, 1973) in a sample of 250 college students. Related studies with community samples suggest that higher levels of shame are likely to be associated with greater levels of psychopathology, including PTSD symptoms in trauma samples (e.g., Andrews et al., 2000; Leskela et al., 2002; Wong & Cook, 1992). Specifically, Andrews and colleagues (2000) found in a sample of 157 male and female victims of violent crime that shame was a predictor of PTSD at both one month and six months after the crime. Additionally, of the 34 individuals who reported experiencing high levels of shame after the traumatic event, 62% attributed experiencing shame due to feeling they had not protected themselves, 29% reported experiencing shame due to feeling others would consider them unworthy as a result of their experiences with violence, and 15% endorsed experiencing shame related to the emotions they experienced following the traumatic experience. Leskela and colleagues (2002) also investigated the role of shame in the maintenance of PTSD. They found in a sample of male veterans ($n = 107$) who were former prisoners of war, that shame was positively associated with symptoms of PTSD. These findings suggest that shame-proneness may not only disrupt adaptive functioning, but may also increase one's risk of post-trauma responses, including the maintenance of PTSD symptomatology.

Shame has also been linked with depression (Lewis, 1987). In a recent meta-analysis, strong associations were noted between shame and depression ($r = .43$; Kim, Thibodeau, & Jorgensen, 2011). Independent empirical studies have also suggested that

shame plays a major role in the development and maintenance of depression in trauma samples (Andrews, 1995; Tangney et al., 1992). For example, Tangney and colleagues examined the link between negative self-based emotions and depressive symptoms in an undergraduate sample. Results of this study suggest that shame accounts for a substantial amount of the variance in depression relative to guilt.

Shame has received considerable attention within the trauma literature, however, few studies have empirically examined its association with depression following trauma. Wong and Cook (1992) were of the first researchers to examine self-reported shame among three groups of combat veterans which included a group diagnosed with PTSD, a group diagnosed with depression, and a group diagnosed with substance abuse. Both the depression and PTSD groups reported significantly higher levels of shame, relative to the substance abuse group. This study exemplifies how shame may contribute to the development and maintenance of mental health problems in trauma survivors.

Shame and intimate partner violence. In general, shame has been recognized as an important emotional response after a traumatic event, especially in IPV survivors. Despite the theoretical foundation of shame and its association with PTSD and depression, this emotion has been understudied in IPV survivor samples. To date, four studies have empirically tested the association between shame and PTSD (Beck et al., 2011; Kubany et al., 2003; Street & Arias, 2001; Wilson et al., 2011), and five studies have empirically tested the association between shame and depression in IPV survivors (Katz & Arias, 1999; Kubany et al., 1995; 1996; Shorey et al. 2011; Tuel & Russell, 1998). These studies demonstrate that shame is associated with poorer mental health functioning, specifically with more severe PTSD and depression symptoms.

In one of the first studies to examine the association between shame and PTSD in IPV survivors, Street and Arias (2001) found among a sample of women from 23 different domestic violence shelters ($n = 63$) that shame was directly associated with severity of PTSD symptoms. Additionally, shame also fully accounted for the association between emotional abuse and PTSD. Similarly, Beck and colleagues (2011) investigated the interaction between shame and psychological abuse in a help-seeking sample of 63 IPV survivors. Not only did this study also show the same positive association between shame and PTSD, but high levels of both emotional/verbal abuse and dominance/social isolation by the abusive partner significantly interacted with high levels of shame on PTSD. Results from both of these studies indicate that shame may be a key factor contributing to PTSD symptomatology following IPV; however, we must be cautious due to the paucity of studies in this type of sample and consider other factors that may also be playing a role.

Similar associations have been found between shame and depression in IPV samples. Katz and Arias (1999) examined the differential impact of emotional/verbal and domination/isolation forms of abuse in an undergraduate sample of women who were currently involved in a romantic relationship. Both forms of psychological abuse were significantly associated with depression; however, emotional/verbal abuse was more strongly associated with depression at the initial appointment, while the association between domination/isolation and depressive symptoms increased over time and was the only significant association noted longitudinally. Other studies have reported similar associations between shame and depression (e.g., Shorey et al., 2011); however, given the limited research in this area, additional study is needed.

Guilt responses and mental health problems. When considering other negative self-based emotions that may contribute to PTSD symptomatology, it is relevant to discuss guilt. Overall, there has been considerable conceptual overlap between the constructs of shame and guilt. Lewis' conceptual writings (1971) argued that the main distinction between shame and guilt is that shame is more directly associated with the role of the self while guilt responses are often associated with the need to make behavioral changes (Tangney & Dearing, 2002). Given that shame has shown to be a strong indicator of symptoms of PTSD (e.g., Street & Arias, 2001), it may be important to consider the role, or lack of role, that guilt has on overall functioning. Conceivably, guilt may also be an additional element involved in psychological maladjustment and post-trauma psychopathology. It is important to explore guilt alongside shame reactions, as they are both factors that often occur in the wake of traumatic experiences.

Guilt has been identified as an emotional response that develops post-trauma which has been associated with psychological difficulties in trauma survivors, including symptoms of PTSD and self-blame (Kubany et al., 1995; Kubany et al., 1996). Guilt has been defined as the negative internal evaluation of actions, or distress related to the inability to act, and increasingly has been associated with the development and persistence of PTSD symptoms (Kubany et al., 1996). Essentially, guilt may follow after a trauma survivor's world view has been shattered, and be related to the development and maintenance of PTSD symptoms (Janoff-Bulman, 1992). These initial feelings of guilt may in turn impact guilt-cognitions even after the trauma has ended. For example, a woman may begin to question her competency level and she may falsely blame herself for behaviors (or lack of behaviors) that occurred during the abuse. Additionally, guilt

may be associated with a change in her perception of control over the situation and therefore may be associated with an increased level of distrust and avoidance of others and an increase in PTSD symptoms (Foa & Riggs, 1993).

Guilt has also been shown to be associated with depression symptoms in trauma survivors (Kubany et al., 1996). Specifically, in a study that compared Vietnam veterans to IPV survivors, trauma-related guilt was shown to be strongly associated with depressive symptomatology (Kubany et al., 1995). It has also been suggested that trauma-related guilt may potentially be a major contributor to depression. Given the link noted between trauma-related guilt and depression combined with the limited research in this area, further empirical research is needed.

Guilt and intimate partner violence. Guilt has been considered a potential emotional response to IPV for over three decades (Walker, 1979). There has been limited empirical work examining guilt and mental health functioning in female survivors of IPV. Although only a handful of studies have examined this association, three studies have shown that guilt is directly associated with PTSD symptoms (Beck et al., 2011; Kubany et al., 1995; Kubany et al., 2003), and two studies that has shown that guilt is positively associated with depression (Kubany et al., 1995, 1996).

One of the first studies to examine guilt in IPV trauma survivors was conducted by Kubany and colleagues (1995), comparing combat veterans ($n = 58$) to IPV survivors ($n = 50$). This study highlighted the association between three specific aspects of guilt (global guilt, guilt related distress, and guilt-related cognitions) and both PTSD and depression. PTSD and depression were found to be positively associated with all aspects of trauma-related guilt. In a later study, Kubany and colleagues (1996) examined guilt

responses in different types of trauma survivors, which included college students, IPV survivors, and military veterans. Results from this study demonstrated that over half of the sample of IPV survivors ($n = 168$) reported moderate to high levels of guilt that were specifically related to their traumatic experiences. In sum, these researchers found that high levels of trauma-related guilt are reported in IPV survivors and that PTSD and depression were positively correlated with all aspects of trauma-related guilt (e.g., distress, global guilt), except for lack of justification, which is one aspect of guilt-related cognitions. These findings suggest that trauma-related guilt may play an important role in the development of both PTSD and depression symptoms.

In a more recent study, Beck and colleagues (2011) examined the association between guilt and PTSD in a help-seeking sample of IPV survivors ($N = 63$) using the same guilt measure developed by Kubany and colleagues (1995; 1996). Similar to Kubany and colleagues (1995), Beck et al. (2011) found that guilt-related distress and guilt-related cognitions were associated with PTSD, but no association was noted with global guilt. Relative to the shame findings in this study, there was no interaction between guilt and the type of abuse experienced on PTSD. The results of these two studies suggest that specific aspects of guilt, especially negative thoughts and emotional distress, are associated with PTSD.

Summary of Shame and Guilt in Intimate Partner Violence Survivors

Overall, these findings suggest that both shame and guilt are common affective responses following IPV. As well, both shame and guilt appear to be emotional reactions associated with PTSD and depression symptoms in IPV trauma survivors. Empirical evidence suggests that guilt feelings may be associated with some level of general

distress and guilt-related cognitions (e.g., Beck et al., 2011; Kubany et al., 1995), whereas shame feelings may be more directly related with PTSD in the aftermath of IPV (e.g., Street & Arias, 2001). Moreover, theoretical models of PTSD propose that negative thoughts, especially those associated with the self (e.g., shame) contribute to the maintenance of post-trauma symptoms. Theoretical models of depression also suggest that negative cognitions and perhaps learned helplessness may also contribute to these emotional responses as well. As indicated, both shame and guilt have been shown to be positively associated with PTSD (e.g., Beck et al., 2011) and depression (Katz & Arias, 1999), with findings suggesting that shame may make a larger contribution to mental health symptomatology when the severity of psychological abuse is higher. Relative to shame, Beck and colleagues (2011) did not note an interaction between psychological maltreatment and guilt in association with PTSD symptoms. These findings may also suggest that high levels of shame may be a more encompassing attribute of the psychological effects of abuse. Similarly, when examined longitudinally, Katz and Arias (1999) found that dominance/isolation contributed more long-term to depressive symptomatology relative to verbal/emotional abuse. Given these findings and the potential role that shame and guilt have on post-trauma functioning, further research is warranted to investigate other potential factors that may be influencing PTSD and depressive symptomatology.

Social Support Theory

Social support theory has evolved as a conceptual framework to explain the protective role that social support may have on reduced distress and improved mental health functioning (Cohen & Wills, 1985). Social support involves a complex association between a person and their network of support and resources. In general, the literature

suggests that individuals who are able to identify close relationships that provide both psychological and material resources are more likely to have improved psychological functioning relative to individuals without these resources readily available.

Two models of support have been extensively discussed in the literature. One model, and the model that is the focus of this report, is the main-effect model, which suggests that higher levels of social support are associated with increased levels of overall well-being regardless of whether the person is experiencing a stressor or actively utilizing their support system (Cohen & Wills, 1985). This model proposes that the structural aspects of support, such as levels of social integration and the number of members in her support network are associated with higher levels of positive affect, higher levels of self-worth, and less avoidance of negative experiences. Another aspect of this model is functional support, which refers to the roles and purposes of an individual's current social support members and the quality of the support they receive. For example, one individual may be the person's confidante while another individual may help the person with house or car repairs. Research has shown that functional support has a stronger role in overall well-being than structural social support, and may be more protective against stressful life events (e.g., Haber et al., 2007).

A large body of research suggests perceived social support plays a mediating role in the in the aftermath of stress and the development of mental health problems (Cohen & Wills, 1985). In the current study, social support is conceptualized as the general perception of the availability of external resources in the aftermath of a negative life event. This definition incorporates aspects of both functional and structural support. Specifically, there is a well-documented association between mental health functioning

following a trauma and social support. In a meta-analysis by Brewin, Andrews, and Valentine (2000), a robust association was noted between the lack of available social support and PTSD (effect size of $r = .40$). In studies involving IPV survivors, high levels of perceived social support were associated with lower levels of both PTSD and depression (Coker et al., 2002; Coker et al., 2003). A longitudinal study which followed IPV survivors six times over two years indicated that higher perceptions of social support were associated with lower levels of depression and greater perceptions of life quality (Beeble, Bybee, Sullivan, & Adams, 2009). Similar findings were found in a population-based sample (Mburia-Mwalili, Clements-Nolle, Lee, Shadley, & Yang, 2010) and a help-seeking sample (Suvak, Taft, Goodman, & Dutton, 2013) of IPV survivors. These studies suggest that perceptions of supportive relationships may be an important factor associated with improved mental health functioning and the ability to cope after IPV experiences.

Social Support and Intimate Partner Violence

Although aspects of social support have been linked to PTSD and depression in individuals who have experienced trauma, few studies have examined aspects of social support as mediating factors for women in abusive romantic relationships. It has been suggested that structural aspects of support from informal resources, such as friends, during times of distress may be beneficial (e.g., Lerner & Kennedy, 2000). Additionally, the frequency of positive experiences from formal resources (e.g., clergy, law enforcement, counselors) may also influence how social support is perceived. However, most women who are in abusive relationships do not access formal aspects of social

support due to shame and embarrassment, as well as a lack of awareness of formal resources that are readily available (e.g., Simmons, Farrar, Frazier, & Thompson, 2011).

In IPV survivors, there may be differences between perceptions of social support and the actual support that is received. IPV survivors may intentionally isolate themselves from others (e.g., friends and family) due to feeling shame or guilt that their IPV experience may be judged or criticized negatively (e.g., Thompson et al., 2000), and in turn may feel that support is unavailable. However, other women may share their IPV experiences with others, even if they risk being potentially stigmatized (e.g., Levendosky et al., 2004). As such, Levendosky and colleagues (2004) found that IPV survivors ($n = 145$) were more likely to share negative abuse experiences they had with a romantic partner if they perceived the individual in their support system as empathetic. Further, having a supportive friend or family member with which to share negative experiences can have a positive effect on mental health (e.g., received support). Coker et al. (2002) and Thompson et al. (2000) also found a similar association, with lower levels of PTSD and depression among individuals who perceived their resources as supportive.

To date, studies have suggested that IPV survivors may have perceptions of reduced social support (e.g., Coker et al., 2002). Coker and colleagues (2002) examined the impact of social support on PTSD and depression in a sample of 1,152 women receiving medical care. Results indicated that women who reported experiencing IPV and also reported high levels of social support were at a significantly lower risk for symptoms of PTSD and depression. Most studies report similar associations between social support and mental health problems, including both PTSD and depression, among female IPV victims (Astin et al., 1993; Bradley, Schwartz, & Kaslow, 2008; Coker et al.,

2002; Kocot & Goodman, 2003; Wright & Johnson, 2009). For example, Bradley and colleagues (2005) investigated the association of IPV and PTSD severity on social support in a sample of low-income African American women ($n = 134$). They found that both IPV and PTSD severity were negatively associated with social support. Three studies, however, fail to note such an association (Fowler & Hill, 2004; O'Keefe, 1998; Perez & Johnson, 2008). It can be speculated that no association was noted between social support and PTSD in these three studies due to distinct differences in the composition of the samples studied, as they consisted of only African American women (not ethnically diverse), women who were incarcerated, and women who were not currently help seeking, respectively. In contrast, the studies that demonstrated a significant negative association between social support and PTSD were primarily comprised of help-seeking women in domestic violence shelters or mental health clinics. In sum, it appears that the effects of ongoing abuse may greatly impact perceptions of social support, but most notably for women who are actively seeking help.

In general, individuals are likely to utilize romantic partners, family, and friends for support after a stressful life event. However, for IPV survivors, the romantic partner is the individual responsible for the abuse and chronic levels of distress, and so, is likely not to be perceived as supportive. Numerous authors have noted that abusive relationships tend to socially isolate the IPV survivor (e.g., Arias & Pape, 1999; Cascardi et al., 1999; Follingstad, Rutledge, Berg, Hause, & Polek, 1990), which may contribute to a perceived lack of support. Additionally, women who have experienced IPV may also lack supportive resources from friends and family due to overlap in their social support network with their abuser (Levendosky et al., 2004). Inevitably, IPV survivors may feel

estranged from their support system as they become more isolated by their partner and may be cautious about sharing their experiences with others, owing to negative emotions such as shame, embarrassment, or self-blame. Furthermore, the experience of chronic abuse may adversely impact the woman's perceptions of self, which may then compound isolation and withdrawal from her support network (e.g., Cascardi et al., 1999). In contrast, other studies have noted friends to be helpful resources in times of need for IPV survivors (Rose, Campbell, & Kub, 2000), which suggests when social support is perceived to be present, it is directly associated with improvement in PTSD and depressive symptomatology (e.g., Coker et al., 2002).

Social support has been identified as a potential protective factor for women who may be psychologically affected by the effects of IPV (e.g., Coker et al., 2002). When controlling for the frequency of IPV, social support has been shown to be negatively associated with PTSD, as well as other mental health problems including depression (Anderson, Saunders, Yoshihama, Bybee, & Sullivan, 2003; Coker et al., 2002; Nurius et al., 2003). Overall, perceiving strong levels of support from others has been related to improved mental health functioning post-IPV; however given the small number of studies that have examined this association, future research is needed.

Limitations of Current Research

The research on IPV has been growing substantially in recent years; however, there are several limitations that need to be addressed as this area of study is still in its infancy. First, prior research has rarely addressed in the same study how specific emotional factors may differentially influence the maintenance of mental health problems following IPV. Given the high rates of PTSD and depression and the co-occurrence of these disorders in this population, examination of possible factors that may contribute to

post-trauma symptomatology is warranted. Second, although the literature has identified a robust association between social support and PTSD in IPV survivors (Brewin et al., 2000); to our knowledge no study to date has examined how specific negative self-based emotions may influence this association. This is a critical gap in the literature, given the significant direct associations noted between shame, guilt, and social support on both PTSD and depression. Lastly, most previous work has relied primarily on self-report measures when assessing PTSD and depression. Structured measures of psychopathology, such as interviewer-rated instruments will allow researchers to obtain a more reliable measure of these post-trauma mental health conditions.

Present Study

This study will begin to address the current gaps in the literature and clarify the associations between shame, guilt, and perceptions of social support, on PTSD and depression symptoms. With the revisions of the diagnostic criteria for PTSD and the emphasis of negative emotions (APA, 2013), including shame and guilt as variables in this report will help to inform future studies of the complexity of post-trauma symptoms, especially those interpersonal in nature, like IPV.

This study will specifically address the following question: does social support influence how shame and guilt are associated with symptoms of both PTSD and depression in IPV survivors? Some of these associations have been investigated singularly but not together in the same study. In this study, interviewer-rated measures of PTSD and depression will be used to obtain a more reliable assessment of post-trauma symptomatology, relative to previous studies that have primarily used self-report measures. In this study we propose the following hypotheses:

H1: Consistent with previous reports (e.g., Beck et al., 2011), we expect that shame and guilt will be positively associated with PTSD symptoms and depression symptoms, with shame being more highly correlated with PTSD and depression relative to guilt. We also expect social support will be negatively associated with both PTSD and depression symptoms (e.g., Coker et al., 2002).

H2: A hypothesized model will be tested using path analysis using Structural Equation Modeling (SEM; Figure 1). The hypothesized model will allow for examination of direct and indirect pathways using cross-sectional data collected from IPV survivors. First, a significant positive relationship is expected for shame and guilt on PTSD respectively (paths c1 and c2, respectively). With respect to the indirect relationship of shame and PTSD through social support (path a1xb2), shame is expected to hold an inverse relationship with social support (path a1), and social support is expected to hold an inverse relationship with PTSD (path b1). Moreover, social support is expected to indirectly effect the association between shame and PTSD, such that higher levels of social support will be indirectly related to lower levels of PTSD (path a1xb2). Similar associations are expected for the relationship between guilt and PTSD via social support; guilt is expected to hold an inverse relationship with social support (path a2), and social support is expected to hold an inverse relationship with PTSD (path b1). Further, social support is expected to indirectly effect the association between guilt and PTSD, such that higher levels of social support are expected to be indirectly related to lower levels of PTSD (path a2xb1). Number of directly experienced non-IPV stressful life events will be controlled in this model to reduce the confounding effect these additional experiences may have on a participant's current mental health functioning. This statistical technique

will also help to account for the variance associated with exposure to additional stressful life events in IPV survivors.

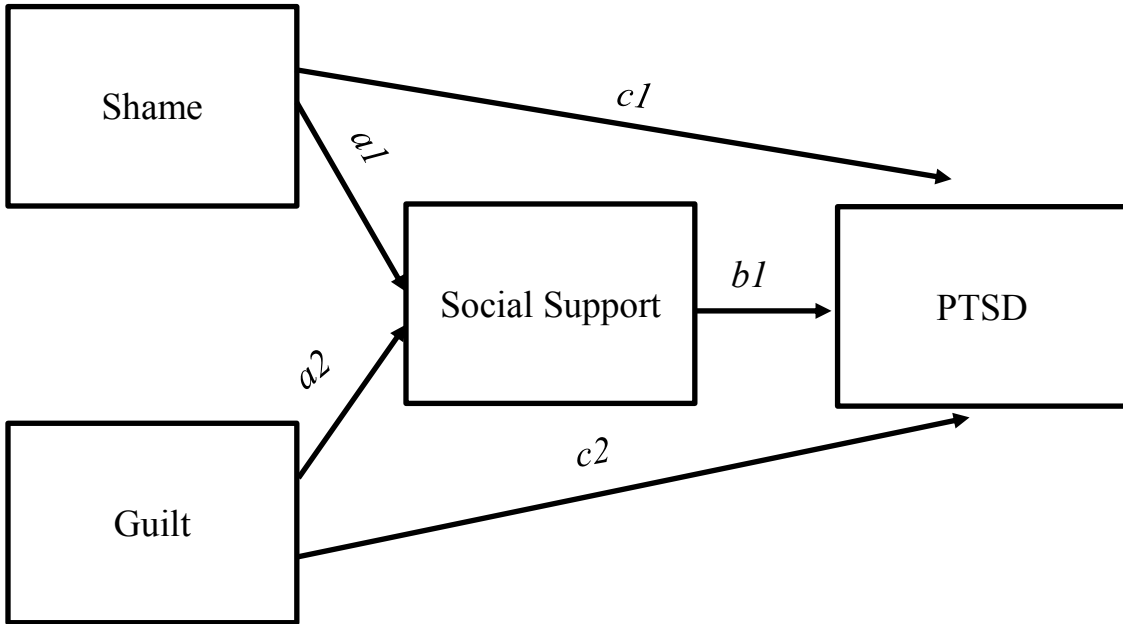


Figure 1. Proposed model for PTSD symptoms on shame and guilt via social support after controlling for the number of non-intimate partner violence life stress events. PTSD = Posttraumatic stress disorder.

H3: A hypothesized model will be tested using path analysis using SEM (Figure 2). The hypothesized model will allow for examination of direct and indirect pathways using cross-sectional data collected from IPV survivors. First, a significant positive relationship is expected for shame and guilt on depression respectively (paths $c1$ and $c2$, respectively). With respect to the indirect relationship of shame and depression through social support (path $a1 \times b2$), shame is expected to hold an inverse relationship with social support (path $a1$), and social support is expected to hold an inverse relationship with depression (path $b1$). Moreover, social support is expected to indirectly effect the

association between shame and depression, such that higher levels of social support will be indirectly related to lower levels of depression (path $a_1 \times b_2$). Similar associations are expected for the relationship between guilt and depression via social support; guilt is expected to hold an inverse relationship with social support (path a_2), and social support is expected to hold an inverse relationship with depression (path b_1). Further, social support is expected to indirectly effect the association between guilt and depression, such that higher levels of social support are expected to be indirectly related to lower levels of depression (path $a_2 \times b_1$). As in the first model, the number of directly experienced non-IPV stressful life events will also be controlled for in this model.

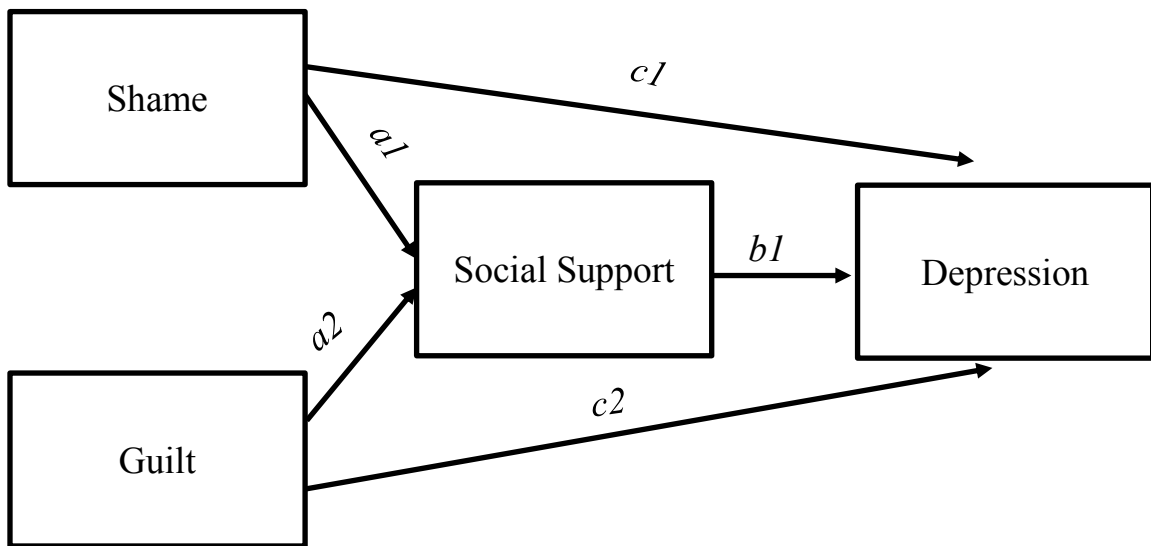


Figure 2. Proposed model for depression on shame and guilt via social support after controlling for the number of non-intimate partner violence life stress events.

Method

Participants

Data were collected from an ongoing research study that examines the impact of IPV on psychological functioning. Participants were recruited from college campuses, churches, advocacy centers, and health fairs, as well as public service announcements. The current report included 152 help-seeking women who had experienced IPV. All participants received a comprehensive psychological evaluation that included a series of semi-structured interviews assessing for abuse history and other non-IPV trauma, as well as current PTSD symptomatology, and comorbid anxiety, mood or substance abuse disorders. Participants also completed a series of self-report questionnaires that included the Multidimensional Scale of Social Support (MSPSS), the Trauma-Related Guilt Inventory (TRGI), and the Internalized Shame Scale (ISS). Only women who experienced IPV that met Criterion A for PTSD as defined by the DSM-IV, which involves threatened death or physical injury [A1] *and* feelings of intense fear, helplessness, and horror [A2] (APA, 2000), were included in this study. A semi-structured IPV interview was administered to assess these features and determine if Criterion A has been met (see below). Eighteen women were excluded who did not meet A2 diagnostic criteria for PTSD. An additional 23 women were excluded due to psychotic symptoms ($n = 9$), cognitive impairment based on interviewer's clinical judgment ($n = 8$), and inconsistent/unreliable reporting during the assessment ($n = 6$). Demographics for the final sample are presented in Table 1.

Measures

IPV. IPV was measured using the Domestic Violence Interview (DVI); a semi-structured interview developed by the clinic director and was administered by a trained

interviewer. This interview was designed to assess exposure to physical, sexual and emotional abuse within the context of IPV and was used to determine their response(s) to the IPV, which includes fear, helplessness, or horror (APA, 2000). Responses to the IPV were rated on a Likert scale ranging from 0 (*not at all*) to 100 (*extreme*). A score of 50 or higher rating on fear, helplessness, or horror indicate that the nature of the IPV experience was perceived by the individual as traumatic. This cut score has been used successfully in related studies involving motor vehicle accident survivors (e.g., Beck et al., 2004).

PTSD measure. The Clinician-Administered PTSD Scale (CAPS; Blake et al., 1990) is a semi-structured interview used to assess PTSD; symptoms were anchored in the woman's IPV experience as evaluated by the DVI. The frequency and intensity of PTSD symptoms of the DSM-IV were assessed (APA, 2000)¹. In the CAPS, 17 standardized questions were administered to assess symptoms of PTSD and are calculated using a 5-point Likert scale ranging from 0 (*the symptom does not occur or does not cause distress*) to 4 (*the symptom occurs every day or causes extreme distress*). The CAPS is widely considered the gold standard for assessing PTSD and has excellent reliability and validity, with alpha coefficients ranging from .73 to .98 (Weathers, Keane, & Davidson, 2001). A total CAPS score was calculated by summing the frequency and intensity ratings of each symptom of PTSD (range 0 to 136).

¹ Data were collected prior to the release of the Fifth Edition of the Diagnostic Statistical Manual (DSM-5; American Psychiatric Association, 2013); therefore, the PTSD and depression assessments as well as the symptoms summed to create the CAPS Total Score and determine the Depression Clinical Severity Rating were based on the DSM-IV criteria.

Table 1

Sample Description

	Participants (N = 152)	
	<i>n</i>	%
Age ($M = 36.67$, $SD = 12.51$)		
Race		
Caucasian	83	54.6
African-American	52	34.2
Hispanic	3	2.0
Asian	3	2.0
Other or no answer	11	7.3
Educational background		
Elementary school	3	2.0
High school	15	9.9
Some College	65	42.8
Associates Degree	12	7.9
Bachelor's Degree	22	14.5
Some Graduate	9	5.9
2-Year Advanced Degree	13	8.6
Doctoral degree	13	8.6
Reported annual household income		
Below \$10,000	32	21.1
\$10,000 to \$20,000	35	23.0
\$20,000 to \$30,000	20	13.2
\$30,000 to \$40,000	13	8.6
\$40,000 to \$50,000	11	7.2
Over \$50,000	28	19.9
Declined to respond	12	7.9
Relationship Status		
Married	24	15.8
Cohabiting	12	7.9
Non-Cohabiting Partner	1	0.7
Separated/Divorced	67	44.0
Single	46	30.3
Widowed	2	1.3
Employment Status		
Full-Time	46	30.3
Part-Time	48	31.6
Unemployed/Disabled	49	32.2
Homemaker	6	3.9
Retired	2	1.3
Declined to Respond	1	0.7

Depression. The Anxiety Disorders Interview Schedule – IV (ADIS-IV, DiNardo, Brown, & Barlow, 1994) is a semi-structured interview used to assess and diagnose anxiety, mood, somatoform, and substance use disorders¹. This measure has been shown to have good psychometric properties for the diagnosis of mood disorders, including depression and dysthymia (Brown, DiNardo, Lehman, & Campbell, 2001). In the major depressive disorder and dysthymic disorder sections, the severity of depressive symptoms were rated on a 9-point Likert scale, from 0 = *not at all disturbing/disabling* to 8 = *very disturbing/disabling* representing the degree of distress or impairment in functioning, with a clinical severity rating (CSR) of 4 or greater indicative of clinical depression. For the purposes of this study, and based on the guidelines set by other researchers, major depressive disorder and dysthymic disorder were collapsed into one category (Brown et al., 2001).

The CAPS and ADIS-IV interviews were administered by trained interviewers. All interviews were videotaped and 30.6% ($n = 48$) of the study sample was randomly selected and rated by an independent clinician. Inter-rater agreement on the CAPS total score, reflected using Pearson correlation was excellent ($r = .92$), as well as the sample coefficient alpha at .90. The inter-rater agreement on the ADIS-IV depression CSR was also excellent ($r = .83$).

Social support. The Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988) is a 12-item self-report scale used to assess perceptions of social support from friends (“I can count on my friends when things go wrong”), family (“My family really tries to help me”) and special others (“There is a special person who is around when I am in need”). All statements were rated on a 7-

point Likert scale ranging from 1 (*very strongly disagree*) to 7 (*very strongly agree*). The total MSPSS score was calculated as an average score of all items, with higher scores indicating greater levels of perceived social support. The MSPSS has shown to have very good internal reliability with alpha levels ranging from .81 to .98 (Zimet et al., 1988). In the current sample, the coefficient alpha for the MSPSS was excellent at .92.

Shame. The Internalized Shame Scale (ISS; Cook, 1987, 1996) is a 30-item self-report measure that is designed to measure shame. The scale consists of 2 subscales including shame and self-esteem. Each item was rated on a 5-point Likert scale from 0 (*never*) to 4 (*always*). A total score was calculated by summing each item, with higher scores associated with greater levels of shame. For the purposes of the present study, only the shame subscale was examined. Sample items on this scale include “I think people look down on me,” and “At times I feel so exposed that I wish the earth would open up and swallow me.” The shame subscale has been shown have high internal consistency ($\alpha = 0.95$), and good test-retest reliability ($r = 0.84$, Cook, 1996). The ISS also has good support for its validity (see Cook, 1996). Coefficient alpha for the shame subscale in this study was excellent at .97.

Guilt. The Trauma-Related Guilt Inventory (TRGI; Kubany et al., 1996) is a 32-item self-report measure designed to examine three distinct aspects of guilt, including Global Guilt (4 items), Distress (6 items), and Guilt Related Cognitions (22 items). Items were anchored to the woman’s IPV, in keeping with theoretical perspectives on guilt. Items were scored on a 5-point Likert scale, with anchors ranging from 4 (*extremely true*) to 0 (*not at all true*). Higher scores indicate greater guilt levels for each subscale. Internal consistency was strong for each subscale with alphas ranging from .86 to .90.

Test-retest reliability is also good with r 's ranging from .73 to .86. For the purposes of this present study, only the guilt related cognitions subscale was examined, as it is the largest subscale and has shown to be significantly associated with PTSD symptoms in this trauma sample (see Beck et al., 2011). This subscale consists of items including hindsight-bias, perceptions of responsibility/lack of justification for one's behavior, and wrongdoing. Sample items on this subscale include, "I blame myself for something I did, thought, or felt," and "What I did was inconsistent with my beliefs." The internal consistency for the guilt cognitions subscale in this sample was good at .89.

Life Events Checklist. Additional life stress event history was assessed through the Life Events Checklist (LEC; Blake et al., 1990). The LEC is a 19-item self-report measure, which screens for the individual's type of exposure to specific traumatic life events (e.g., direct exposure, heard about the event, etc.). All stressful life events that the participant directly experienced that were non-IPV related were summed to create a total non-IPV direct stressful life event variable.

Procedure. Women interested in services contacted the clinic director via telephone, were screened for romantic partner abuse, were provided with information about the research clinic, and if appropriate for the study, were scheduled for an assessment. Following provision of informed consent, each participant was interviewed by a trained graduate student, who was supervised by a licensed clinical psychologist. Participants were first administered the DVI, followed by the LEC, CAPS and the ADIS-IV. If the woman reported current safety concerns regarding an IPV relationship, a safety plan was discussed. The participant then completed the MSPSS, TRGI, and ISS. Following the assessment, participants returned for a final session where she was given

feedback concerning the evaluation, debriefed, and provided with referrals for services and support groups when appropriate. All procedures were reviewed by the Institutional Review Board.

Results

Participant Characteristics

Fifty-one women (33.3%) in this sample met diagnostic threshold for PTSD according to the cutoff guidelines suggested by Weathers and colleagues (2001; see Table 2). Fifty-nine women (39.1%) in this sample met diagnostic criteria for depression according to the CSR cutoff of 4 or greater indicated by DiNardo and colleagues (1994; see Table 3). On average, the women in this sample directly experienced 3.63 ($SD = 2.31$) stressful life experiences in addition to the IPV. Thirty-four women (21.7 %) reported current involvement in an IPV relationship with 67.6% denying current safety concerns. The remaining 119 women reported being separated from their most recent abusive partner for approximately 3 years 9 months ($SD = 6$ years 9 months).

Table 2
Threshold and Sub-threshold Symptoms of PTSD Calculated from CAPS Total Score

CAPS Total Severity Score	<i>N</i>	%
0-19 = Asymptomatic/ Few Symptoms	54	35.5
20-39 = Mild PTSD/Sub-threshold	47	30.9
40-59 = Moderate PTSD/Threshold	35	23.0
60-78 = Severe PTSD/Threshold	16	10.5

Note. $N = 152$; PTSD = Posttraumatic stress disorder; CAPS = Clinician Administered PTSD Scale.

Table 3
Threshold and Sub-threshold Symptoms of Depression Calculated from ADIS-IV Clinical Severity Rating

Depression CSR	<i>N</i>	%
0-3 = Absent/Mild Depression/Sub-threshold	92	60.5
4-5 = Moderate Depression/Threshold	36	23.7
6-7 = Severe Depression/Threshold	23	15.1
8 = Very Severe Depression/Threshold	0	0.0

Note. *n* = 151. ADIS-IV = Anxiety Disorders Interview Schedule; CSR = Clinical Severity Rating.

Data Analytic Procedures

Preliminary analyses were conducted using SPSS PASW 18.0. Data were screened and cleaned based on the recommendations by Tabachnick and Fidell (2011). The ranges, means, and standard deviations were inspected, as well as univariate/multivariate outliers; all were within normal limits. Skew and kurtosis were also examined for normality using the recommendations of Kline (2011); no outliers indicated. Pearson correlations and t-tests were used to examine the basic associations between demographics, negative self-based emotional reactions, and perceptions of social support; all *p*'s > .05. Collinearity diagnostics were performed on the study variables and were within the acceptable range for tolerance (> 0.1) and the variance inflation factor (VIF < 4).

Structural Equation Modeling Approach

Data were analyzed using structural equation modeling (SEM). Data analyses were conducted using Muthén and Muthén's (1998-2010) MPlus version 7.0, to examine the main hypotheses of this study (see Figures 1-8). All exogenous variables were co-varied in each model and standardized path coefficients were reported for each parameter. Pathways were examined using the path coefficients. A path model is just-

identified and perfectly reproduces the observed covariance matrix (Kline, 2011). This model design allows the examination of both direct effects and indirect effects. Rucker, Preacher, Tormala, and Petty (2011) recommend when interpreting indirect effects to emphasize both the detection of a significant effect (i.e., statistically significant), and the actual size of the indirect effect (e.g., standardized path coefficient). Coefficients within the ranges of .10, .30, and .50 are consistent with small, medium, and large effect sizes respectively (Kline, 2011). Confidence intervals for indirect effects were calculated using bias-corrected bootstrap procedures with resampling of the original data (MacKinnon, Lockwood, & Williams, 2004).

Examining Correlations

As proposed in Hypothesis 1, shame and guilt were positively associated with both PTSD and depression symptoms with a correlation ranging from .22-.28 (see Table 4). Perceptions of social support was also negatively associated with both PTSD ($r = -.22, p = .01$) and depression ($r = -.34, p < .001$). As expected, there was a strong association between shame and guilt ($r = .51, p < .001$). See Table 4 for additional sample descriptives including zero-order correlations, means, standard deviations, skewness and kurtosis.

PTSD Model

The initial model proposed in Hypothesis 2 (Figure 1) for PTSD was tested. The standardized path coefficients are presented in Figure 3. After controlling for the number of directly experienced non-IPV stressful life events, the association between shame and guilt on PTSD via perceptions of social support was explored. The only significant

association was between shame and social support ($B = -.03$, $\beta = -.40$, $p < .001$), such that higher levels of shame were associated with lowered perceptions of social support. No other significant pathways were noted.

Table 4
Zero-order Correlations, Means, Standard Deviations, Skewness, and Kurtosis among Study Variables.

	1	2	3	4	5
	--	--	--	--	--
1. Shame					
2. Guilt	0.51***	--	--	--	
3. Social Support	-0.39***	-0.15 ⁺	--	--	
4. PTSD	0.28**	0.22**	-0.22**	--	
5. Depression	0.25***	0.24**	-0.34**	0.33***	
Mean	48.27	1.99	4.68	29.91	2.62
SD	22.46	0.83	1.47	21.89	2.37
Skewness	-0.15	0.03	-0.64	0.44	0.15
Kurtosis	-0.66	-0.41	-0.03	-0.54	-1.51

Note. n 's range from 149-152. Shame = Internalized Shame Subscale; Guilt = Trauma-Related Guilt Cognitions – Guilt Cognitions Subscale; Social Support = Multidimensional Scale of Perceived Social Support; PTSD = Clinician Administered PTSD Scale – Total Score; Depression = Anxiety Disorders Interview Schedule. ** $p < .01$, *** $p < .001$, ⁺ $p = .06$.

Depression Model

The initial model proposed in Hypothesis 3 (Figure 2) for depression was tested. The standardized path coefficients are presented in Figure 4. After controlling for the number of directly experienced non-IPV stressful life events, the association between shame and guilt on depression via perceptions of social support was explored. A significant direct association was noted between shame and depression ($B = 0.04$, $\beta = 0.35$, $p < .001$), but not for guilt ($p = .72$), such that higher levels are of shame were directly associated with higher levels of depression. There was also a significant

association between shame and social support ($B = -0.03$, $\beta = -0.40$, $p < .001$), but not for guilt ($p = .18$). The indirect effect of depression on shame via social support was significant ($\beta = .07$, $p = .04$), with a 95% confidence interval of $[.015, .129]$ (see Figure 4). Given that zero was not included in the confidence interval, it can be concluded that social support indirectly effects the association between shame and depression, such that higher levels of social support are associated with lower levels of shame and depression. The indirect effect between guilt and depression via social support was not significant ($p = .80$).

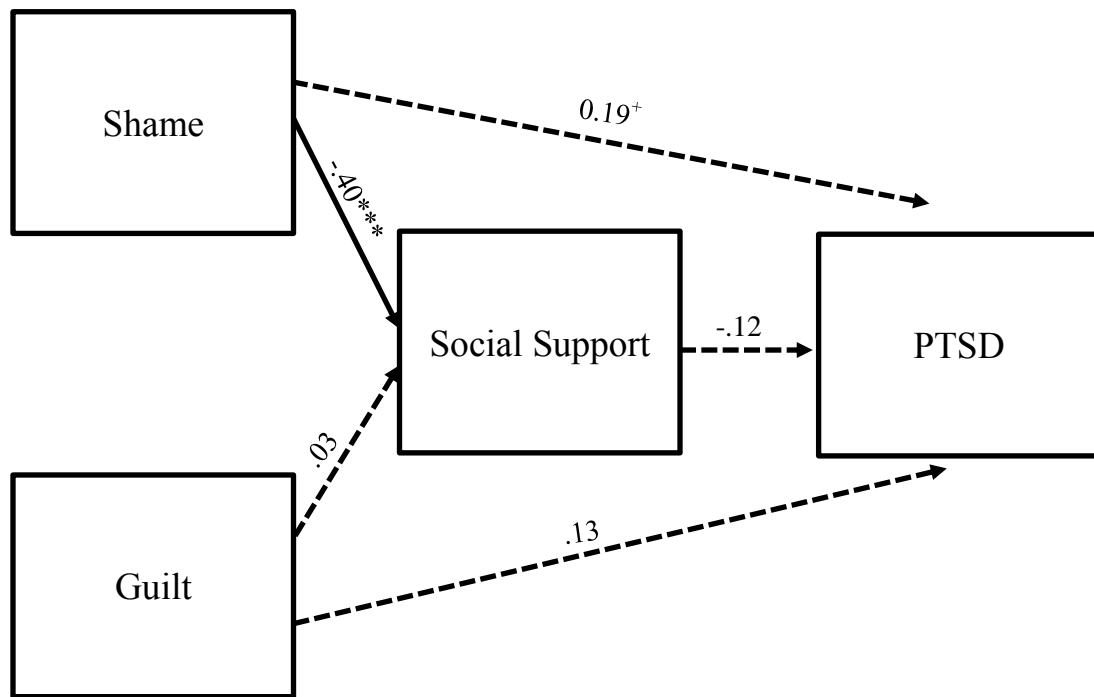


Figure 3. Path model using standardized regression coefficients for PTSD symptoms on shame and guilt via social support after controlling for the number of non-intimate partner violence life stress events. Dotted lines denote non-significant pathways. PTSD = Posttraumatic stress disorder. $*** p < .001$. $^+ p = .06$.

Secondary Data Analysis

A high correlation was noted between shame and guilt, $r = .51, p < .001$ (see Table 4). This level of intercorrelation may create a suppression effect between the exogenous variables (e.g., shame and guilt) and the endogenous variables (e.g., social support, PTSD) in the proposed model (Paulhus, Robins, Trzesniewski, & Tracy, 2004; see Figure 3). In particular, suppression variables are likely to artificially

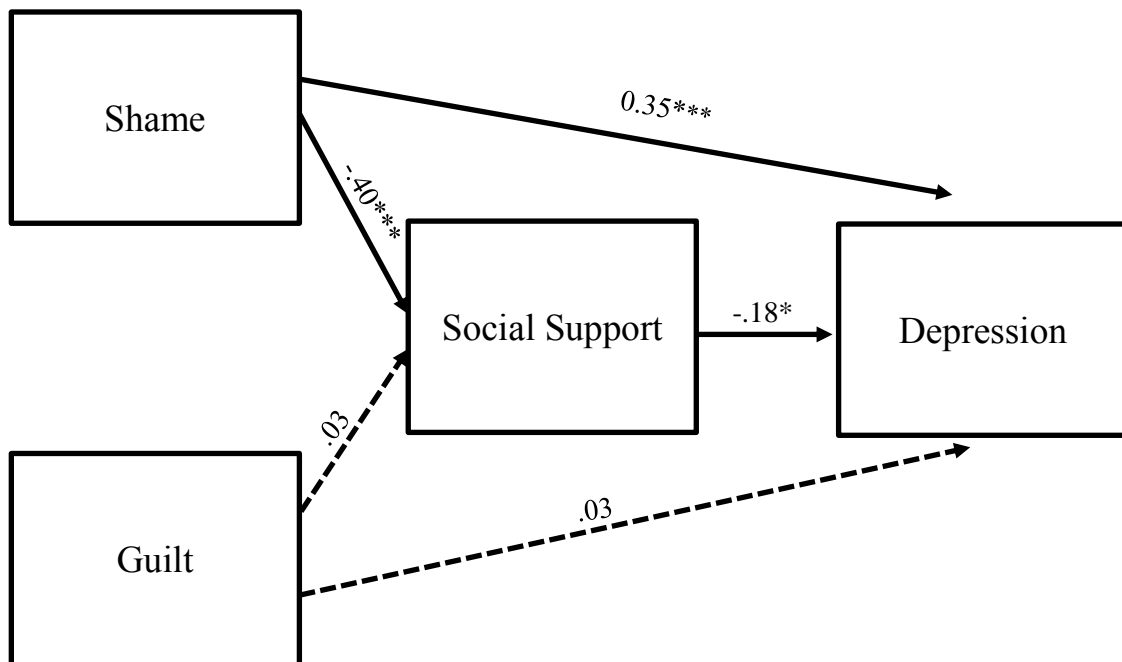


Figure 4. Path model using standardized regression coefficients for depression on shame and guilt via social support after controlling for the number of non-intimate partner violence life stress events. Dotted lines denote non-significant pathways. $*** p < .001$. $* p < .05$.

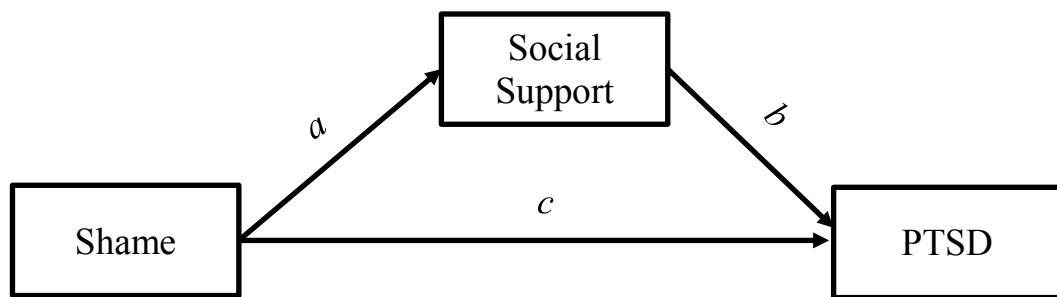
increase/decrease the associations among other variables when included in the analyses. For example, in the current study, higher levels of shame may be associated with higher levels of PTSD symptoms. However, the association of shame as it increases PTSD symptoms could be due to the amount of shared variance between shame and guilt. A

suppressor variable, such as guilt, may be artificially influencing the magnitude of the association between shame and PTSD. Therefore, in order to reduce the potential for suppression effects that artificially influence the obtained results, four simplified structural equation models were run. These simplified models were explored to identify specific associations between the study variables and to help clarify the independent association shame and guilt have on both PTSD and depression.

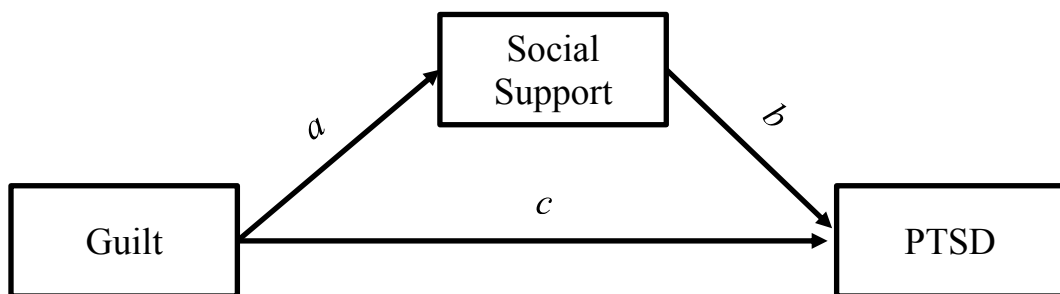
Secondary analyses were conducted using the proposed simplified path models. The first set of analyses separately examined in two models the association between shame (see Figure 5, Model 1) and guilt (see Figures 5, Model 2) on PTSD via social support. Similarly, the second set of analyses examined in two additional models the association between shame (see Figure 6, Model 1) and guilt (see Figure 6, Model 2) on depression via social support.

Secondary PTSD models. The secondary analyses proposed for PTSD were tested (see Figure 5). The standardized path coefficients are presented in Figure 7. After controlling for the number of directly experienced non-IPV stressful life events, two models were explored. In the first model, the association between shame and PTSD via perceptions of social support was examined (Figure 7, Model 1). A direct association was noted between shame and PTSD, such that higher levels of shame were associated with significantly higher levels of PTSD ($B = 0.24$, $\beta = 0.24$, $p = .004$). A significant association was also noted between shame and social support ($B = -0.03$, $\beta = -0.40$, $p < .001$), which suggests that higher levels of shame were associated with lowered perceptions of social support. No other significant pathways or indirect effects were noted. In the second model, the association between guilt and PTSD via perceptions of

social support was examined (Figure 7, Model 2). A direct association was noted between guilt and PTSD ($B = 5.19, \beta = 0.20, p = .02$), such that higher levels of guilt were associated with significantly higher levels of PTSD. A significant association was also noted between guilt and social support ($B = -0.29, \beta = -0.16, p = .05$), which suggests that higher levels of guilt were associated with lowered perceptions of social support. There was also a trend for the association between social support and PTSD ($B = -2.75, \beta = -0.18, p = .06$). The indirect association between guilt and PTSD via social support was not significant ($p = .84$).

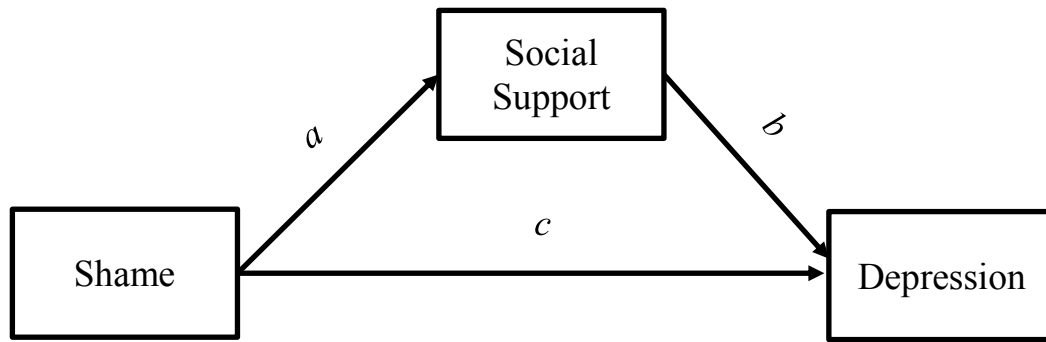


Model 1.

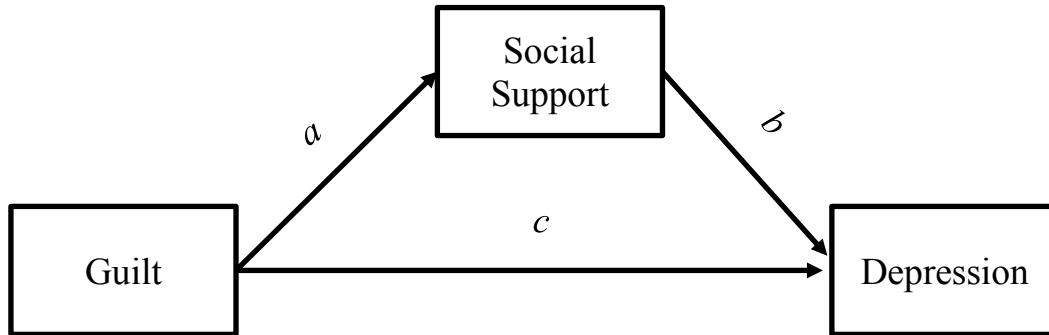


Model 2.

Figure 5. Proposed model for the associations between shame (Model 1) and guilt (Model 2) on PTSD through social support after controlling for the number of non-intimate partner violence life stress events. PTSD = posttraumatic stress disorder.



Model 1.



Model 2.

Figure 6. Path model for the associations between shame (Model 1) and guilt (Model 2) on depression through social support after controlling for the number of non-intimate partner violence life stress events.

Secondary depression models. The secondary data analyses for depression was also tested in order to directly compare the results with the simplified depression models (see Figure 6). The standardized path coefficients are presented in Figure 8. After controlling for the number of directly experienced non-IPV stressful life events, two models were explored. In the first model, the association between shame and depression via perceptions of social support was examined (Figure 8, Model 1). A direct association

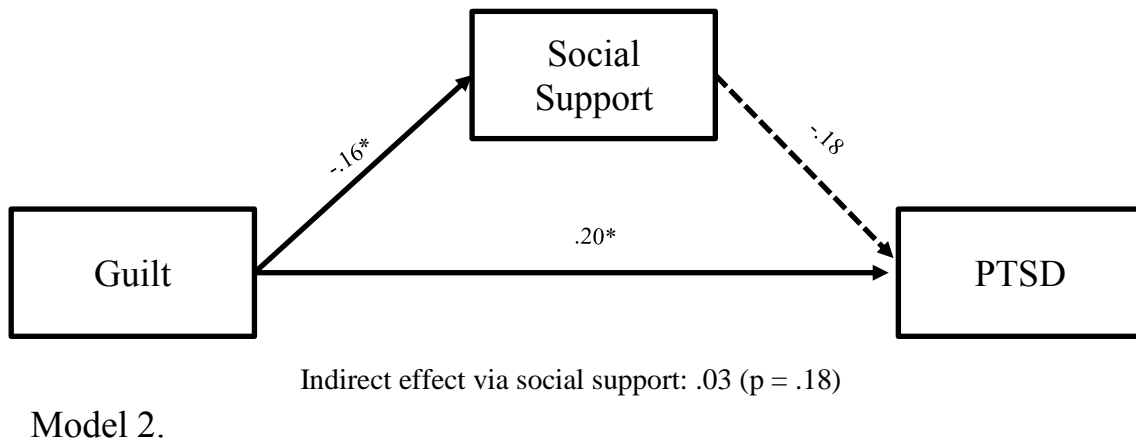
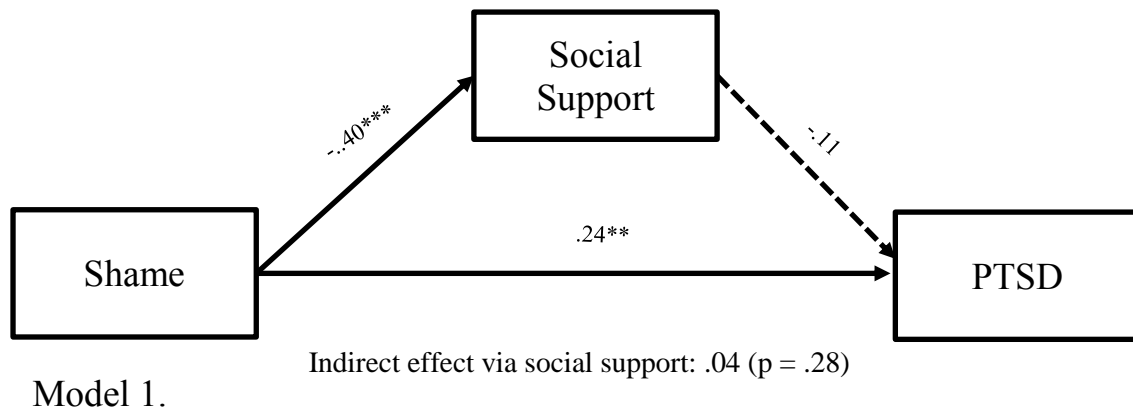
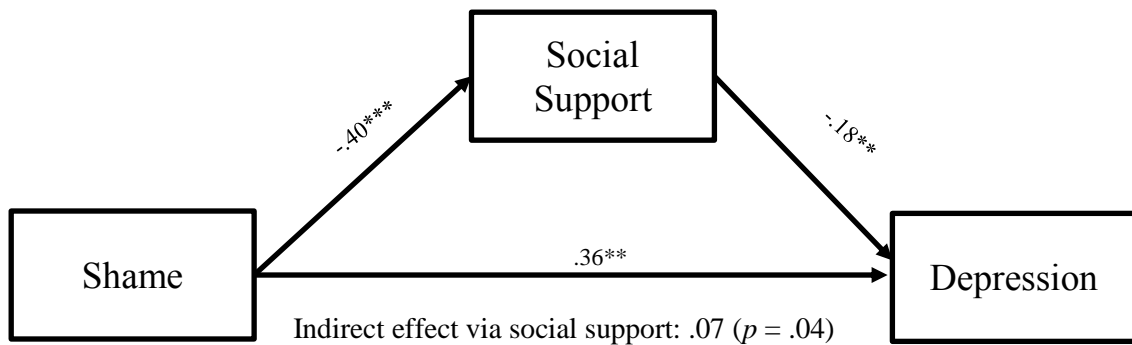
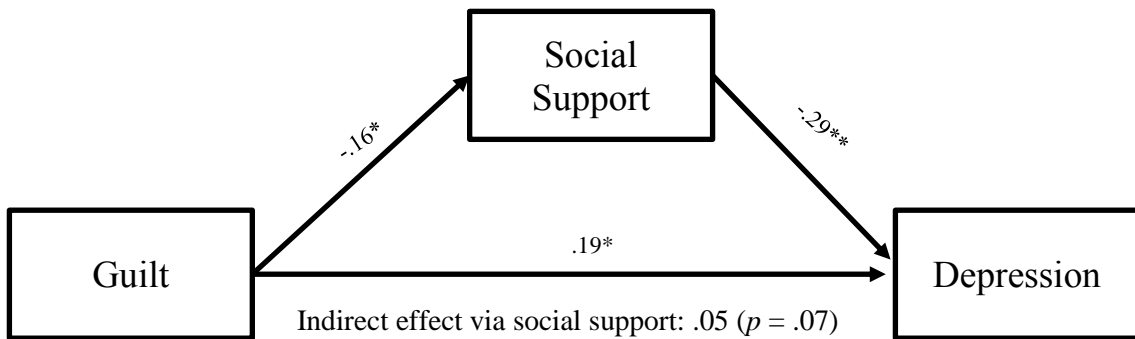


Figure 7. Proposed model for the associations between shame (Model 1) and guilt (Model 2) on PTSD through social support after controlling for the number of non-intimate partner violence life stress events. Dotted lines denote non-significant pathways. PTSD = posttraumatic stress disorder. *** $p < .001$. * $p < .05$.

models were explored. In the first model, the association between shame and depression via perceptions of social support was examined (Figure 8, Model 1). A direct association was noted between shame and depression, such that higher levels of shame were associated with significantly higher levels of depression ($B = 0.04$, $\beta = 0.36$, $p < .001$). A significant negative association was also noted between shame and social support



Model 1.



Model 2.

Figure 8. Path model for the associations between shame (Model 1) and guilt (Model 2) on depression through social support after controlling for the number of non-intimate partner violence life stress events. Dotted lines denote non-significant pathways.

*** $p < .001$. ** $p < .05$. * $p < .05$.

($B = -0.03$, $\beta = -0.40$, $p < .001$), which suggests that higher levels of shame were associated with lowered perceptions of social support. The indirect effect of depression on shame via social support was significant ($\beta = .07$, $p = .04$), with a 95% confidence interval of $[.015, .129]$ (see Figure 8, Model 2). Given that zero was not included in the confidence interval, it can be concluded that social support indirectly effects the

association between shame and depression, such that higher levels of social support are associated with lower levels of shame and depression. In the second model, the association between guilt and depression via perceptions of social support was examined (Figure 8, Model 2). A direct association was noted between guilt and depression, such that higher levels of guilt were associated with significantly higher levels of depression ($B = 0.53$, $\beta = 0.19$, $p = .01$). A significant association was also noted between guilt and social support ($B = -0.29$, $\beta = -0.16$, $p = .03$), which suggests that higher levels of guilt were associated with lowered perceptions of social support. There was a trend for the indirect effect of depression on guilt via social support ($\beta = .05$, $p = .07$), with a 95% confidence interval of [.033, .272] (see Figure 8, Model 2).

Discussion

Currently there is limited research investigating the relationship that negative self-based emotions have on social support and mental health functioning in IPV survivors. The present study sought to expand on previous work (Beck et al., 2011; Coker et al. 2002) and examined the unique contribution that shame and guilt have on PTSD and depression in IPV survivors and how social support may indirectly effect these associations. For the initial analyses, there was a potential suppression effect noted between shame and guilt given the large intercorrelation between these variables (Paulhus et al., 2004; $r = .51$). In considering the potential statistical confound, the models were simplified and secondary data analyses were conducted to isolate the effects of shame and guilt. Consistent with previous research, shame and guilt were both positively associated with PTSD (e.g., Beck et al., 2011), and negatively associated with social support (Coker et al., 2002). Similar associations were noted for depression, with shame and guilt both positively associated with depression, and negatively associated

with social support. In contrast to previous work, social support was not significantly associated with PTSD. However, as expected, higher levels of social support were associated with lower levels of depression. Further, in the depression model, social support was also indirectly associated with shame and depression, such that higher levels of social support were associated with reduced levels of both shame and depression.

Negative Self-Based Emotions and Post-Trauma Functioning

Shame and guilt were both positively associated with PTSD which is consistent with previous research suggesting that these emotions may be associated with the maintenance of PTSD symptoms (Beck et al. 2011; Kubany et al., 1995; Kubany et al., 2003). These findings highlight the major role both shame and guilt have on psychological difficulties. Specifically, shame and guilt may follow after an IPV survivor's world view has been shattered (e.g., Janoff-Bulman, 1992), and persist even after the trauma has ended. In particular, these negative thoughts have shown to contribute to the severity of PTSD symptoms (e.g., Beck, Jacobs-Lentz et. al, 2014). As hypothesized, the current report further illustrates the finding that shame and guilt in response to IPV may contribute to PTSD.

Shame and guilt were both positively associated with depression which is also consistent with previous work that has noted the same association (Katz & Arias, 1999; Kubany et al., 1995). Depression is a major health problem and there is evidence that similar to PTSD, it commonly occurs and persists after traumatic life experiences have ended (O'Donnell et al., 2004). Classic theories of depression (e.g., Beck, 1967; Seligman, 1976) also lend support for the robust associations noted in this study, especially the saliency of negative self-based emotions and how these feelings contribute

to the maintenance of depressive symptoms (Beck, 1967, 1976; Seligman, 1976). This finding is consistent with previous reports that suggest women with a history of IPV are more likely to report higher levels of shame and guilt, and greater depression severity (e.g., Harper & Arias, 2004).

Overall, these findings highlight the salience of negative self-based emotions in the maintenance of mental health problems in IPV survivors. The two initial models examined simultaneously the relationship between shame and guilt on PTSD and depression through perceptions of social support, respectively. In both initial models, there was a medium negative association noted between shame and social support. No other significant associations were present in the initial PTSD model; however, in the depression model, social support had an indirect effect on the relationship between shame and depression, which then indirectly attenuated the direct association between shame and depression.

The secondary analyses were a major strength to this study. They allowed for the independent exploration of the association between shame and guilt on both PTSD and depression through social support. Examining shame and guilt independently in association with both PTSD and depression adds to the literature as it helps to address how each of these negative-self based emotions may contribute to the maintenance of post-trauma symptomatology. In particular, separating both negative self-based emotions into independent analyses demonstrates how unique aspects of shame and guilt contribute to PTSD and depression. In the simplified PTSD analyses, in addition to shame, guilt was also a significant predictor for PTSD. Additionally, in the simplified models, the association noted between shame and perceptions of social support increased slightly in

strength. Also, when the association between guilt and social support was examined independently, there was a small negative association noted between guilt and social support. In the simplified depression analyses, in addition to the major findings already noted in the complex model (significant indirect effect between shame and depression though social support), guilt was also negatively associated with social support, and positively associated with depression. Like the simplified PTSD models, the association between shame and social support increased slightly in strength, and the association between guilt and social support was now significant. The findings noted in these simplified models lend further support for the presence of a suppression effect between shame and guilt when they were concurrently examined in the initial complex models.

These data support the relevance of shame and guilt in post-trauma symptomatology and support the inclusion of these negative self-based emotions in the DSM-5 criteria for PTSD (APA, 2013). Prior to the DSM-5, PTSD was classified as an anxiety disorder with fear as the primary emotion (APA, 2000). Although fear is still a major aspect of the diagnosis of PTSD, there has been research to suggest that both shame and guilt should be considered affective states central to complex PTSD (Ford, Stockton, Kaltman, & Green, 2006). Particularly, research has indicated that shame and guilt can have deleterious effects in that they have shown to have a negative effect on social functioning, especially help-seeking behaviors (Andrews, 1995; Tracy & Robins, 2006). Although shame and guilt are frequently used interchangeably as negative self-based affective states, theory and some empirical work (including the current report; Beck et al. 2011), suggest they have different implications on psychological well-being (Kim et al., 2011; Tangney et al., 2002). Given that there were strong unique

associations noted in this report between shame and guilt on both PTSD and depression respectively, there is further evidence to suggest that these affective states should continue to be considered in the conceptualization of PTSD in the DSM-5 (APA, 2013).

These results build upon previous studies involving shame and guilt in IPV survivors (e.g., Beck et al., 2011; Street & Arias, 2001), which also reported that shame was significantly associated with PTSD. Similar to this report, Beck and colleagues (2011) found that specific aspects of guilt, including guilt related cognitions were associated with PTSD. This study expanded on previous work and highlighted some potential conceptual differences between shame and guilt responses in IPV survivors. It is possible that in IPV survivors, shame can be considered more of an emotional response (related to self) and guilt can be considered more of a cognitive response (related to the failure to act; Tangney & Dearing, 2002). The continued conceptualization and distinction between shame and guilt responses will be essential in future reports.

The Role of Social Support and Negative Self-Based Emotions on Mental Health Functioning

Shame and guilt were both negatively associated with perceptions of social support. This finding helps close a gap in the current literature and suggests that higher levels of negative self-based emotions may be a contributor to decreased perceptions of social support. In particular, these negative self-based emotions may be associated with greater social withdrawal or social isolation which may in turn be associated with reduced levels of social support perceived by the IPV survivor. Researchers have noted that abusive relationships are commonly associated with social isolation (e.g., Arias & Pape, 1999; Campbell & Soeken, 1999), often due to the fear of retaliation from the abusive partner. IPV survivors may then continue to distance themselves from friends

and family, as well as more formal aspects (e.g., advocacy centers) of support due to the shame and guilt they feel from the abuse experienced (Constantino & Bricker, 1997; Simmons et al., 2011). The findings of the current report suggest these negative self-based emotions may uniquely decrease perceptions of overall social support, and in turn are associated with greater post-trauma symptom severity. Future reports may want to consider different forms of social support (e.g., family vs. friends; informal vs. formal), and how the sources of support may uniquely contribute to mental health and emotional functioning. One would speculate that previous experiences with different types of social support may potentially influence the likelihood of seeking support from those individuals in the future. For example, if an IPV survivor feels she was judged and criticized when seeking help from a formal or informal resource, she may be reluctant to seek out help from that person/group in the future. Further examination of these factors is needed as this is one of the first studies to examine these associations concurrently.

Future studies should attempt to further clarify the relationship between shame and guilt on mental health functioning and how perceptions of social support may help indirectly effect these associations. Given the findings of this study, special attention should focus on how high perceptions of social support could intervene and aid in reducing reported levels of shame and symptoms of depression. Additionally, replication is warranted as it will be important for larger scale research studies to explore how other negative self-based emotions (e.g., anger) contribute to perceptions of social support in order to ascertain additional factors that may be contributing to psychological difficulties in this population.

Previous studies have suggested that social support may impact both PTSD and depression in IPV survivors (Astin et al., 1993; Bradley et al., 2008; Coker et al., 2002). In particular, a study involving women receiving medical care suggests that those who reported experiencing IPV and also reported high levels of social support, were at significantly lower risk of PTSD and depression symptoms (Coker et al., 2002). In the current report, a negative association was noted between social support and depression, but not for PTSD (e.g., Anderson et al., 2003; Coker et al., 2002; Mburia-Mwalili et al., 2010). In contrast to previous studies, these findings suggest perceptions of social support may not be playing a role in PTSD symptomatology in this IPV sample. This is different from what one would expect given the robust association noted between social support and PTSD across multiple trauma samples (e.g., Brewin et al., 2000). It can be speculated that the lack of association noted between social support and PTSD may reflect differences in the nature of the sample studied in this report. An explanation for this finding may be due to interpersonal traumas, such as IPV, being more ‘complex’ and likely to involve a wider range of emotional difficulties, in addition to PTSD (e.g., van der Kolk, Roth, Percovtiz, Sunday, & Spinazzola, 2005). As such, the association between social support and PTSD may not be expressed due to the chronicity and complexity of this interpersonal traumatic experience which occurs for an extended period of time and by its nature, isolates the victim. One study examining the effect of protective factors on mental health functioning in IPV survivors suggests that social support may no longer be as effective against mental health problems after severe abuse over protracted periods of (Carlson, McNutt, Choi, & Rose, 2002). Thus, even though women in this report may be experiencing a wide range of emotional difficulties

(including depressive symptoms), social support may not be aiding in the relief of symptoms most directly linked with PTSD. Future studies may want to control for severity and frequency of abuse to determine if they effect the association between social support and mental health functioning.

This was the first study to examine the associations between negative self-based emotions and social support on PTSD and depression in an IPV sample. Consistent with hypotheses, social support emerged to indirectly influence the relationship between shame and depression in IPV survivors, such that higher levels of shame were associated with lower levels of social support, and higher levels of social support were associated with lower levels of depression. Additional research is needed to broaden our understanding of how social support may influence the relationship between shame and guilt on psychopathology following IPV. It is possible that high levels of social support may serve as a catalyst in decreasing the extent that an individual experiences shame, along with a reduction in symptoms of depression. In particular, higher levels of perceived social support may effectively challenge these negative emotions related to the self. Conceivably reducing these negative emotions may be associated with reduced levels of depression. Interestingly, and contrary to hypotheses, an indirect association was not noted between guilt and depression through social support. These findings suggest that negative emotions related to the failure to act or make behavioral changes in association with depression, may not be influenced by perceptions of social support. It will be important in future work to examine other factors that may be associated with social support, including the length of time and severity of the IPV, in order to capture the complexity of one's response following IPV. We can speculate that the longer the

duration and greater the severity of the abuse in the context of the IPV, the higher the likelihood that a woman will experience more severe mental health problems, and report lower levels of social support.

Implications for these findings suggest that increasing perceptions of social support may improve one's overall well-being, especially for individuals experiencing depression. No association was noted between social support and PTSD which is contrary to what we would expect from the literature (Brewin et al., 2000). These findings suggest that symptoms of PTSD and depression may function differently in this type of trauma, such that perceptions of social support may have a differing influence, depending on the type of psychopathology. It is also possible, given that IPV is considered a 'complex' interpersonal trauma, that perceptions of social support may have a different impact than expected relative to how this association has been established in previous work (Charuvastra & Cloitre, 2008). Future research may want to explore whether other social processes may influence post-trauma functioning, such as one's likelihood to utilize support.

Clinical Implications

The results of the present study highlight the significance of negative self-based emotions on the maintenance of PTSD and depression following IPV. There are several clinical implications of these findings. Clearly, IPV survivors are adversely impacted by the violence experienced within the context of a romantic relationship and thus, experience high levels of shame and guilt which can then contribute to a decrease in perceptions of social support. These findings support the continued development of treatments that target both shame and guilt in IPV survivors (Kubany et al. 1996).

Interventions aimed at increasing one's social support have shown to be effective in mental health outcomes in IPV survivors (Constantino, Kim, & Crane, 2005).

IPV is often associated with isolation (e.g., Cascardi et al., 1999; Katz & Arias, 1999), and focusing on social support in treatment can be a complicated process.

Interventions should be tailored to increase an IPV survivor's knowledge of resources available for support, which may foster the client's efficacy and judgment in selecting friends and close others in who she selects to be involved in treatment. It may also be important to develop group interventions to help foster support among individuals with similar domestic violence experiences. Group based treatments for trauma survivors have shown to be associated with reductions in PTSD symptoms (Shea, McDevitt-Murphy, Ready, & Schnurr, 2009; Sloan, Feinstein, Gallagher, Beck, & Keane, 2013).

The current report is the first study to suggest that both shame and guilt negatively influence a woman's perception of available support. As such, in treatment it may also be important to discuss how shame and guilt may impact the availability of support.

Treatments aimed at challenging feelings of shame and guilt may then in turn increase her likelihood to seek out and perceive social support as available during times of need.

Limitations and Future Directions

These findings should be interpreted with several limitations in mind. The cross-sectional nature of this sample is a limitation, as temporality cannot be statistically determined. Future studies may want to examine these constructs longitudinally in order to detect any significant changes over time in negative self-based emotions, social support, and mental health functioning.

The sample used in this study was help-seeking, and may not generalize to male IPV survivors or other community trauma survivors. Future studies may want to replicate these findings in other trauma samples, and may want to include women from domestic violence shelters and advocacy centers to allow for broader interpretations to be made. Additionally, the assessment of PTSD and depression in this report were limited to the DSM-IV criteria given the time period when the data were collected. Future studies may want to use the DSM-5 diagnostic criteria given the addition of negative trauma related emotions to Cluster D; negative alterations in cognition and mood (APA, 2013). Lastly, this study does not take into account bidirectional violence that may be occurring in romantic relationships. Research suggests that bidirectional violence in abusive relationships is the norm, and more common in African American relationships relative to Caucasian (Caetano, Ramisetty-Mikler, & Field, 2005). It may be valuable in future studies to assess the frequency and severity of bidirectional violence.

Furthermore, this is the first study to take into account the influence of social support on the association between negative self-based emotions and mental health functioning. Even though previous reports have found that increased social support is associated with lower levels of PTSD, this area of research is still very much in its infancy in this population. Additional research is warranted to replicate study findings. It is also possible that the length of time since the last incident of IPV may also be contributing to perceptions of social support and overall functioning. IPV has shown to have long-term consequences even after the abuse has ended (Campbell et al., 2002), such that both recentness and duration of the IPV have shown to be associated with poorer functioning. Future studies may want to determine if the temporal proximity of

abuse or length of the abuse is related to more severe psychological difficulties, and explore longitudinally if these problems improve over time.

Conclusion

This study intended to address gaps in the current literature and examine how social support may intervene in the association between negative self-based emotions and mental health functioning in a sample of IPV survivors. Results suggest that shame and guilt are both associated with PTSD and depression. Additionally, shame and guilt were also negatively associated with social support, highlighting the role shame and guilt may have on reducing perceptions of social support. These findings are similar to previous research involving trauma survivors and established models of PTSD and depression. Social support also had an indirect effect on the association between shame and depression, which helps to bridge the gap in the current literature and highlights the importance of social support in the improvement of one's overall well-being. However, social support did not indirectly effect the association between negative self-based emotions and PTSD. These results suggest for IPV survivors, treatments and interventions should be tailored and not only focus on addressing negative self-based emotions, but should also include interventions that target bolstering one's perceptions of her social support network. Finally, treatment efforts should also consider addressing not only symptoms of PTSD, but also symptoms of depression, which tend to commonly co-occur post-trauma.

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Appendix A

IRB Approval

The University of Memphis Institutional Review Board, FWA00006815, has reviewed and approved your submission in accordance with all applicable statuses and regulations as well as ethical principles.

PI NAME: J Beck

CO-PI:

PROJECT TITLE: Psychological consequences of domestic violence: Assessment

FACULTY ADVISOR NAME (if applicable): N/A

IRB ID: #2295

APPROVAL DATE: 8/16/2013

EXPIRATION DATE: 8/16/2014

LEVEL OF REVIEW: Expedited

Please Note: Modifications do not extend the expiration of the original approval

Approval of this project is given with the following obligations:

- 1. If this IRB approval has an expiration date, an approved renewal must be in effect to continue the project prior to that date. If approval is not obtained, the human consent form(s) and recruiting material(s) are no longer valid and any research activities involving human subjects must stop.**
- 2. When the project is finished or terminated, a completion form must be completed and sent to the board.**
- 3. No change may be made in the approved protocol without prior board approval, whether the approved protocol was reviewed at the Exempt, Expedited or Full Board level.**
- 4. Exempt approval are considered to have no expiration date and no further review is necessary unless the protocol needs modification.**

Approval of this project is given with the following special obligations:

Thank you,

Ronnie Priest, PhD

Institutional Review Board Chair

The University of Memphis.

Note: Review outcomes will be communicated to the email address on file. This email should be considered an official communication from the UM IRB. Consent Forms are no longer being stamped as well. Please contact the IRB at IRB@memphis.edu if a letter on IRB letterhead is required.

Appendix B

IPV Interview

Thank you for agreeing to complete a psychological evaluation with us. I'd like to start by asking you to tell me about significant relationships (i.e., those that lasted 4 months or longer) in your life, such as male friends, boyfriends, spouses, or male partners.

Now that I have a sense of the significant relationships in your life, I would like to talk with you about your experiences in some of these relationships. In this part of the interview, we are going to be talking about three kinds of abuse. The first is physical abuse, which includes such experiences as being slapped, punched, kicked, or beaten up. The second is sexual abuse, which includes times in which someone might have touched sexual parts of your body or made you touch sexual parts of his body against your will or without your consent. The third is emotional abuse. This includes, *but is not limited to*, being threatened to be killed or seriously hurt, being stalked, being controlled so you could not do the things you wanted to do, or being repeatedly told you were bad in some way (e.g., crazy, ugly, stupid).

Now, with this information in mind, think back over your past relationships we just talked about. What was the first relationship in which a male partner physically, sexually, or emotionally abused you? Could you tell me a briefly about the abuse you suffered?

Could you tell me about your most recent abusive relationship?

Is your most recent abuse relationship the worst you have been involved in?

YES NO

If not, could you tell me about your worst abusive relationship?

Now, I would like to ask you some questions about your relationship with [INSERT NAME OF MOST RECENT ABUSER or MOST ABUSIVE].

1. When were you involved in a relationship with [Partner #1] ?
From _____ To _____
2. Was [Partner #1] a: (circle one)
 - a. Husband
 - b. Boyfriend
 - c. Partner
 - d. Friend
 - e. Other _____
3. Did [Partner #1] ever physically abuse you (slap, punch, kick, or beat you up)?

YES NO

If so, please describe what happened.

- a. How many times did this occur? _____

OR

What was the frequency with which this occurred?

- b. Please describe the extent of your physical injuries.
- c. Did you ever lose consciousness due to injuries he inflicted? **YES NO**
- d. Did you ever have to go to the hospital as a result of any of these injuries?
YES NO If **NO**, Should you have gone to the hospital? **YES NO**

- i. How many times did you go the hospital? _____
- ii. When did you go to the hospital?
Record (approximate)
dates _____
- iii. Were you ever admitted to the hospital due to these injuries (e.g., needed to stay overnight)? **YES NO**
- e. Interviewer code for injury severity of participant during worst incident:
 - 0 No injury
 - 1 Minor injury (no need for medical attention)

- 2 Moderate injury (needed medical attention, whether it was sought or not. Not hospitalized. No overnight stay needed)
- 3 Major injury (hospitalization – i.e., overnight stay, not major surgery OR should have been hospitalized)
- 4 Severe injury (major surgery)

4. Did [Partner #1] ever sexually abuse you? This includes times in which Partner #1 might have touched sexual parts of your body or made you touch sexual parts of his body against your will or without your consent.

YES NO

If so, please describe what happened.

a. How many times did this occur? _____

OR

What was the frequency with which this occurred?

b. Please describe the extent of any physical injuries you incurred as a result of the sexual abuse.

c. Did you ever have to go to the hospital as a result of any of the injuries suffered during the sexual abuse? **YES NO** If **NO**, Should you have gone to the hospital? **YES NO**

i. How many times did you go the hospital? _____

ii. When did you go to the hospital?

Record (approximate)

dates _____

iii. Were you ever admitted to the hospital due to these injuries (e.g., needed to stay overnight)? **YES NO**

d. Interviewer code for injury severity of participant during worst incident:

0. No injury

1. Minor injury (no need for medical attention)

2. Moderate injury (needed medical attention, whether it was sought or not. Not hospitalized. No overnight stay needed)

3. Major injury (hospitalization – i.e., overnight stay, not major surgery OR should have been hospitalized)
4. Severe injury (major surgery)
5. Did _____ [Partner #1] _____ ever emotionally abuse you? This includes but is not limited to being threatened to be killed or seriously hurt, being stalked, being controlled so you could not do the things you wanted to do, or being repeatedly told you were bad in some way (e.g., crazy, ugly, stupid). **YES NO**

If so, please describe what happened.

- a. How many times did this occur? _____ OR

What was the frequency with which this occurred?

6. Were drugs and/or alcohol frequently used before or during the episodes of abuse with _____ [Partner #1] _____?
 - a. NO
 - b. YES-by partner only
 - c. YES-by client only
 - d. YES-by both partner and client

7. Did you ever try to leave _____ [Partner #1] _____? **YES NO**

If so, please describe what happened.

8. Did you seek help from any social service agencies? **YES NO**

If so, please describe what happened.

Did you ever call the police due to violence experienced during your relationship with _____ [Partner #1] _____? **YES NO**

9. Did you ever press charges against _____ [Partner #1] _____? **YES NO**

10. Did you ever get a restraining order against _____ [Partner #1] _____? **YES NO**

11. If client has children: Did _____ [Partner #1] _____ ever abuse your child(ren)? **YES NO**

- a. If so, please describe the extent of this abuse.
- b. Was this reported to the authorities? **YES NO**
- c. Are your children safe now? **YES NO**

12. Do you still live with _____ [Partner #1] _____? **YES NO**

13. Which of the following best describes your relationship with _____ [Partner #1] _____ ?

- a. On-going, with no intention of divorce/breaking up
- b. On-going, with intention of divorce/breaking up
- c. In the process of divorce/breaking up with some chance of getting back together
- d. In the process of divorce/breaking up with no chance of getting back together
- e. Completely over (i.e., you no longer consider him your boyfriend/partner/spouse)

14. Are you currently living in a situation in which you feel safe from potential harm from _____ Partner #1 _____? **YESNO**

15. Think about the worst period of time in your relationship with _____ [Partner #1] _____. I want to ask you about how you felt during this time. We are going to use a scale from 0-100, where 0 is not at all and 100 is the most.

- a. During the worst period of time with _____ [Partner #1] _____, how fearful or afraid were you?
- b. During the worst period of time with _____ [Partner #1] _____, how helpless did you feel?
- c. During the worst period of time with _____ [Partner #1] _____, how much danger did you feel you were in?
- d. During the worst period of time with _____ [Partner #1] _____, how certain were you that you were going to die?

- e. During the worst period of time with ____ [Partner #1] ____, how much control did you feel you had?
- f. During the worst period of time with ____ [Partner #1] ____, how much at fault was he for the abuse you experienced?
- g. During the worst period of time with ____ [Partner #1] ____, how responsible do you feel for the abuse you experienced?
- h. How vulnerable do you currently feel with respect to your relationship with [Partner #1]?

Appendix C

Clinician-Administered PTSD Scale (CAPS Summary Sheet)

A. Traumatic Event

B. Reexperiencing symptoms	CURRENT		
	Freq	Int	F + I
(1) intrusive recollections			
(2) distressing dreams			
(3) acting or feeling as if event were recurring			
(4) psychological distress at exposure to cues			
(5) Physiological reactivity to exposure to cues			
B subtotals			
Number of Criterion B symptoms (need 1)			
C. Avoidance and Numbing symptoms	CURRENT		
	Freq	Int	F + I
(6) avoidance of thoughts, feelings or conversations			
(7) avoidance of activities, places or people			
(8) Inability to recall important aspects of trauma			
(9) diminished interest or participation in activities			
(10) detached or estrangement			
(11) restricted range of affect			
(12) sense of a foreshortened future			
C subtotals			
Number of Criterion C symptoms (need 3)			
D. Hyperarousal symptoms	CURRENT		
	Freq	Int	F + I
(13) difficulty falling or staying asleep			
(14) irritability or outbursts of anger			
(15) difficulty concentrating			
(16) hypervigilance			
(17) exaggerated startle response			
D subtotals			
Number of Criterion D symptoms (need 2)			

E. Duration of disturbance	CURRENT	
(19) duration of disturbance at least one month	NO	YES

F. Significant distress or impairment in functioning	CURRENT	
(20) Subjective distress		
(21) impairment in social functioning		
(22) impairment in occupational functioning		
AT LEAST ONE \geq 2?	NO	YES

PTSD DIAGNOSIS	CURRENT	
PTSD PRESENT – ALL CRITERIA (A-F) MET?	NO	YES
Specify: (18) with delayed onset (> 6 months delay)	NO	YES
(19) acute (< 3 months) or chronic (> 3 months)	Acute	chronic

Global ratings	CURRENT	
(23) global validity		
(24) global severity		
(25) global improvement		

Associated features	CURRENT	
---------------------	---------	--

	Freq	Int	F + I
(26) guilt over acts of commission or omission			
(27) survivor guilt			
(28) reduction in awareness of surroundings			
(29) derealization			
(30) depersonalization			

Appendix D

Anxiety Disorders Interview Schedule-IV (Major Depressive Disorder and Dysthymic Disorder Sections)

MAJOR DEPRESSIVE EPISODE

I. INITIAL INQUIRY

1a. Currently, have you been feeling depressed, sad, empty, or have you lost interest or pleasure in almost all of your usual activities?

Depressed: YES _____ NO _____

Loss of Interest: YES _____ NO _____

b. Currently, have other people commented to you that you appear down or tearful or that you seem less interested in your usual activities?

Depressed: YES _____ NO _____

Loss of Interest: YES _____ NO _____

If YES to either 1a, or 1b, continue to Part II.

If NO, continue to 1c.

c. Have things ever been so bad that you were thinking a lot about death or hurting yourself? Have you ever done anything to hurt your self?

.....

If YES, to either 1a or 1b, or uncertain, continue inquiry.

Otherwise skip to **DYSTHYMIC DISORDER** (pg. 34)

.....

II. CURRENT EPISODE

If evidence of a discrete past episode, preface inquiry in this section with: **Now I want to ask you a series of questions about this current period of time when you felt [depressed/loss of interest] that began roughly in _____ (specify month/year).**

1. Have you been experiencing the feelings of [depression/loss of interest in usual activities] nearly every day over the past 2 weeks?

Depressed: YES _____ NO _____

Loss of Interest: YES _____ NO _____

2. Over the past 2 weeks, have you experienced _____? Have you experienced _____ nearly every day over the past 2 weeks?

(Record symptoms that have been present during the same two-week period and represent a change from previous functioning.)

0-----1-----2-----3-----4-----5-----6-----7-----8
 None Mild Moderate Severe Very severe

SEVERIT
Y NEARLY
EVERY DAY

a. Significant weight loss or weight gain (5% of body weight within a month); decrease or increase in appetite _____ Y N

b. Insomnia or hypersomnia _____ Y N

c. Psychomotor agitation or retardation. **Unable to sit still or so slowed down that you can hardly move or carry on a conversation?** (must be observable) _____ Y N

d. Loss of energy or fatigue _____ Y N

e. Worthlessness or excessive, inappropriate guilt. **Do you** _____ Y N

blame yourself for anything or feel guilty? _____

f. Impaired concentration, slowed thinking, or indecisiveness. **Thinking been slowed down, hard to make decisions?** _____ Y N

g. Recurrent thoughts of death or suicide. **Think about death or hurting yourself? How much do you think about it?** _____ Y N

If YES to 2g, inquire about the extent of suicidal ideation or intent (e.g. history of prior attempts, presence/extent of current plan, access to method for carrying out plan, ability to state reasons for living):

3. In what ways have these symptoms of depression interfered with your life (e.g. daily routine, job, social activities)? How much are you bothered about having these symptoms?

Rate interference: _____ distress: _____

0-----1-----2-----3-----4-----5-----6-----7-----8
None Mild Moderate Severe Very severe

MAJOR DEPRESSION

4. Over this entire current period of time when you've been experiencing these feelings, have you been regularly taking any types of drugs (include drugs of abuse, medication)?

YES___ NO___

Specify (type, amount, dates of use):

5. During this current period of time when you've been having these feelings, have you had any physical condition (e.g. pregnancy, hypothyroidism, hypoglycemia)?

YES____ NO____

Specify (type, date of onset/remission):

6a. For this current period of time, when did the depression and the symptoms accompanying the depression become a problem in that they occurred persistently (i.e., occurred nearly every day), you were bothered by these symptoms, or they interfered with your life in some way?

(Note: If patient is vague in date of onset, attempt to ascertain more specific information, e.g., by linking onset to objective life events.)

Date of Onset: _____ Month _____ Year

b. Can you recall anything that might have led to this problem?

c. Were you under any type of stress during this time?

YES____ NO____

What was happening in your life at the time?

Were you experiencing difficulties or changes in:

1) Family/relationships?

2) Work/school?

3) Finances?

4) Legal matters?

5) Health (self/others)?

Note: If symptoms or depression occur within 2 months of the loss of a loved one, consider the diagnosis of Bereavement.

MAJOR DEPRESSION

6. Besides this current period of depression and/or loss of interest in usual activities, have there been other, separate periods of time before this when you have had the same problems?

YES _____ NO

If NO, skip to DYSTHYMIC DISORDER (pg. 34)

If YES, inquire about time course:

Consider if Dysthymic Disorder may be more appropriate.

DYSTHYMIC DISORDER

I. INITIAL INQUIRY

If patient has met criteria for MAJOR DEPRESSION, preface the items in INITIAL INQUIRY with “Other than during _____ (specify time frame of MDE)”

1a. Over the past 2 years, have you frequently had days where you felt down, blue, or depressed for most of the day?

YES___ NO___

b. Over the past 2 years, have other people commented to you that you often appear down, blue, or depressed?

YES___ NO___

IF YES to either 1a or 1b, continue.

.....
If YES to either 1a or 1b, or uncertain continue inquiry.

Otherwise skip to **MANIA/CYCLOTHYMIA** (pg. 37)
.....

II. CURRENT EPISODE

If evidence of a discrete past episode, preface inquiry in this section with: **Now I want to ask you a series of questions about this current period of time when you felt down or depressed that began roughly in _____ (specify month/year).**

1. What percentage of the days over the past 2 years have you experienced a depressed mood for most of the day?

__%

If uncertain, **Have you felt this way more days than not over the past 2 years?**

YES___ NO___

2. Over the past 2 years, have you had periods of 2 months or more when your mood was normal?

YES___ NO___

If YES, **When?** FROM _____ TO _____

DYSTHYMIC DISORDER

**3. Over the past 2 years, have you often experienced _____ while depressed?
Over the past 2 years, has _____ occurred persistently without a period of
two months or more when this symptom was not present?**

0-----1-----2-----3-----4-----5-----6-----7-----8
None Mild Moderate Severe Very severe

	SEVERITY	PERSISTENT
a. Poor appetite or overeating	_____	Y N
b. Insomnia or hypersomnia. Have trouble sleeping or sleeping too much?	_____	Y N
c. Low energy or fatigue. Tired all the time?	_____	Y N
d. Low self-esteem. Down on yourself, feeling like a failure?	_____	Y N
e. Poor concentration or difficulty making decisions	_____	Y N
f. Feelings of hopelessness. Feeling pessimistic about the future?	_____	Y N

4. In what ways have these symptoms of depression interfered with your life (e.g., daily routine, job, social activities)?; How much are you bothered about having these symptoms?

Rate interference: _____ distress: _____

0-----1-----2-----3-----4-----5-----6-----7-----8
None Mild Moderate Severe Very severe

5. Over this entire current period of time when you've been experiencing these feelings, have you been regularly taking any types of drugs? (Include drugs of abuse, medication)

YES___ NO___

Specify (type, amount, dates of use):

6. During this current period of time when you've been having these feelings, have you had any physical condition (e.g., pregnancy, hypothyroidism, hypoglycemia)?

YES___ NO___

Specify (type, date of onset/remission):

7a. For this current period of time, when did the depression and the symptoms accompanying the depression become a problem in that they occurred persistently (i.e., occurred nearly every day), you were bothered by these symptoms, or they interfered with your life in some way? (Note: If patient is vague in date of onset, attempt to ascertain more specific information, e.g., by linking onset to objective life events.)

Date of Onset: _____ Month _____ Year

b. Can you recall anything that might have led to this problem?

c. Were you under any type of stress at this time?

YES____ NO____

What was happening in your life at the time?

Were you experiencing any difficulties or changes in:

1) Family/relationships?

2) Work/school?

3) Finances?

4) Legal matters?

5) Health (self/others)?

7. Besides this current period of time, have there been other, separate periods when you have felt down or depressed more days than not for a period of two years or more?

YES____ NO____

If NO, skip to **MANIA/CYCLOTHYMIA**. (pg. 37)

Appendix E

Life Events Checklist (LEC)

Listed below are a series of **traumatic life events** that may have happened to you. Please read each one carefully and mark only those that describe a *significant event* that happened in your life. Please mark an **X** in the appropriate column to show that the event either happened directly to you, you saw the event happen, you learned about the event from someone else, or you saw the event on TV. If you have not experienced this event, please mark the last column.

	I experienced this event:				<u>I DID NOT</u> experience this event
	Directly (This event happened directly to you)	By watching it happen to someone else (You were present at the event, but it did not happen directly to you)	By learning about it from someone else (Someone told you about this)	By watching it on TV	
1. Natural Disaster (e.g., flood, hurricane, earthquake)					
2. Car accident					
3. Plane crash					
4. Drowning or near drowning					
5. Machinery accident					
6. Explosion					
7. Home fire					
8. Chemical Leak or exposure to radiation					
9. Warfare or combat					

10. Sudden AND unexpected death of someone close to you					
11. Life threatening illness					
12. Threatened with a weapon					
13. Physical attack (kicked, punched, beaten up) when you were <i>under age 18</i>					
14. Physical attack (kicked, punched, beaten up) when you were <i>over age 18</i>					
15. Seeing someone killed					
16. Someone threatening to seriously harm or kill you					
17. Sexual abuse, sexual assault, or rape when you were <i>under age 18</i>					
18. Sexual abuse, sexual assault, or rape when you were <i>over age 18</i>					
19. Other traumatic event not yet mentioned (Please describe)					

Appendix F

Trauma-Related Guilt Inventory (TRGI)

Individuals who have experienced traumatic events- such as physical or sexual abuse, military combat, sudden loss of a loved one, serious accidents or disasters, etc.- vary considerably in their response to these events. Some people do not have any misgivings about what they did during these events, whereas other people do. They may have misgivings about something they did (or did not do), about beliefs or thoughts they had, or for having had certain feelings (or lack of feelings). The purpose of this questionnaire is to evaluate your response to a traumatic experience.

Briefly describe what happened:

Please take a few moments to think about the abuse. All the items below refer to events related to this experience. Circle the answer that best describes how you feel about each statement.

1. I could have prevented what happened.

Extremely true Very true Somewhat true Slightly true Not at all true

2. I am still distressed about what happened.

Extremely true Very true Somewhat true Slightly true Not at all true

3. I had some feelings that I should not have had.

Extremely true Very true Somewhat true Slightly true Not at all true

4. What I did was completely justified.

Extremely true Very true Somewhat true Slightly true Not at all true

5. I was responsible for causing what happened.

Extremely true Very true Somewhat true Slightly true Not at all true

6. What happened causes me emotional pain.

Always true Frequently true Sometimes true Rarely true Never true

7. I did something that went against my values.

Extremely true Very true Somewhat true Slightly true Not at all true

8. What I did made sense.

Extremely true Very true Somewhat true Slightly true Not at all true

9. I knew better than to do what I did.

Extremely true Very true Somewhat true Slightly true Not at all true

10. I feel sorrow or grief about the outcome.

Always true Frequently true Sometimes true Rarely true Never true

11. What I did was inconsistent with my beliefs.

Extremely true Very true Somewhat true Slightly true Not at all true

12. If I knew today-only what I knew when the event(s) occurred-I would do exactly the same thing.

Extremely true Very true Somewhat true Slightly true Not at all true

13. I experience intense guilt that relates to what happened.

Always true Frequently true Sometimes true Rarely true Never true

14. I should have known better.

Extremely true Very true Somewhat true Slightly true Not at all true

15. I experience severe emotional distress when I think about what happened.

Always true Frequently true Sometimes true Rarely true Never true

16. I had some thoughts or beliefs that I should not have had.

Extremely true Very true Somewhat true Slightly true Not at all true

17. I had good reasons for doing what I did.

Extremely true Very true Somewhat true Slightly true Not at all true

18. Indicate how frequently you experience guilt that relates to what happened.

Never Seldom Occasionally Often Always

19. I blame myself for what happened.

Extremely true Very true Somewhat true Slightly true Not at all true

20. What happened causes a lot of pain and suffering.

Extremely true Very true Somewhat true Slightly true Not at all true

21. I should have had certain feelings that I did not have.

Extremely true Very true Somewhat true Slightly true Not at all true

22. Indicate the intensity or severity of guilt that you typically experience about the event(s).

None Slight Moderate Considerable Extreme

23. I blame myself for something I did, thought, or felt.

Extremely true Very true Somewhat true Slightly true Not at all true

24. When I am reminded of the event(s), I have strong physical reactions such as sweating, tense muscles, dry mouth, etc.

Slightly true Not at all true Always true Frequently true Sometimes true

25. Overall, how guilty do you feel about the event(s)?

Not guilty at all Slightly guilty Moderately guilty Very guilty Extremely guilty

26. I hold myself responsible for what happened.

Extremely true Very true Somewhat true Slightly true Not at all true

27. What I did was not justified in any way.

Extremely true Very true Somewhat true Slightly true Not at all true

28. I violated personal standards of right and wrong.

Extremely true Very true Somewhat true Slightly true Not at all true

29. I did something that I should not have done.

Extremely true Very true Somewhat true Slightly true Not at all true

30. I should have done something that I did not do.

Extremely true Very true Somewhat true Slightly true Not at all true

31. What I did was unforgivable.

Extremely true Very true Somewhat true Slightly true Not at all true

32. I didn't do anything wrong.

Extremely true Very true Somewhat true Slightly true Not at all true

Appendix G

Internalized Shame Scale (ISS)

Read each statement carefully and enter the number to the left of the time that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement. Use the scale below.

0	1	2	3	4
NEVER	SELDOM	SOMETIMES	OFTEN	ALMOST ALWAYS

1. ___ I feel like I am never quite good enough.
2. ___ I feel somehow left out.
3. ___ I think that people look down on me.
4. ___ All in all, I am inclined to feel that I am a success.
5. ___ I scold myself and put myself down.
6. ___ I feel insecure about other's opinions of me.
7. ___ Compared to other people, I feel like I somehow never measure up.
8. ___ I feel myself as being very small and insignificant.
9. ___ I feel I have much to be proud of.
10. ___ I feel intensely inadequate and full of self-doubt.
11. ___ I feel as if I am somehow defective as a person, like there is something basically wrong with me.
12. ___ When I compare myself to others, I am just not as important.
13. ___ I have an overpowering fear that my faults will be revealed in front of others.
14. ___ I feel I have a number of good qualities.
15. ___ I see myself striving for perfection only to continually fall short.
16. ___ I think others are able to see my defects.
17. ___ I could beat myself over the head with a club when I make a mistake.
18. ___ On the whole, I am satisfied with myself.
19. ___ I would like to shrink away when I make a mistake.
20. ___ I replay painful events over and over in my mind until I am overwhelmed.

0	1	2	3	4
NEVER	SELDOM	SOMETIMES	OFTEN	ALMOST ALWAYS

21. ___ I feel I am a person of worth at least on an equal plane with others.
22. ___ At times I feel like I will break into a thousand pieces.
23. ___ I feel as if I have lost control over my body functions and feelings.
24. ___ Sometimes I feel no bigger than a pea.
25. ___ At times I feel so exposed that I wish the earth would open up and swallow me.
26. ___ I have this painful gap within me that I have not been able to fill.
27. ___ I feel empty and unfulfilled.
28. ___ I take a positive attitude towards myself.
29. ___ My loneliness is more like emptiness.
30. ___ I feel like there is something missing.

Appendix H

Multidimensional Scale of Perceived Social Support (MSPSS)

Multidimensional Scale of Social Support (MSPSS)

We are interested in how you feel about the following statements. Please read each statement carefully and indicate at left the number that best describes how you feel about the statement. There are no right or wrong answers to these statements.

1 = Very strongly disagree

2 = Strongly disagree

3 = Mildly disagree

4 = Neutral

5 = Mildly agree

6 = Strongly agree

7 = Very strongly agree

- _____ 1. There is a special person who is around when I am in need.
- _____ 2. There is a special person with whom I can share joys and sorrows.
- _____ 3. My family really tries to help me.
- _____ 4. I get the emotional help and support I need from my family.
- _____ 5. I have a special person who is a real source of comfort to me.
- _____ 6. My friends really try to help me.
- _____ 7. I can count on my friends when things go wrong.
- _____ 8. I can talk about my problems with my family.
- _____ 9. I have friends with whom I can share my joys and sorrows.
- _____ 10. There is a special person in my life who cares about my feelings.
- _____ 11. My family is willing to help me make decisions.
- _____ 12. I can talk about my problems with my friends.