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Exploring Negative Emotion in Women Experiencing Intimate Partner Violence: Shame, Guilt, and PTSD

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This study explored the association of shame and guilt with PTSD among women who had experienced intimate partner violence (IPV). Sixty-three women were assessed by a research clinic serving the mental health needs of women IPV survivors. Results indicated that shame, guilt-related distress, and guilt-related cognitions showed significant associations with PTSD but global guilt did not. When shame and guilt were examined in the context of specific forms of psychological abuse, moderation analyses indicated that high levels of both emotional/verbal abuse and dominance/isolation interacted with high levels of shame in their association with PTSD. Neither guilt-related distress nor guilt-related cognitions were moderated by specific forms of psychological abuse in their association with PTSD. These data support the conceptualization of shame, guilt distress, and guilt cognitions as relevant features of PTSD. Results are discussed in light of proposed changes to diagnostic criteria for PTSD.

Keywords: PTSD; shame; guilt; diagnosis; intimate partner violence

SINCE its introduction into the psychiatric classification system in 1980, posttraumatic stress disorder (PTSD) has been conceptualized primarily as a fear-based disorder (e.g., Foa & Kozak, 1986; Horowitz, 1976; Keane, Zimering, & Caddell, 1985). This conceptualization has facilitated the development and evaluation of treatments that are oriented at fear extinction. Without diminishing the importance of fear and anxiety in understanding PTSD, numerous authors have recognized the role of other forms of negative emotion in PTSD, particularly shame, guilt, anger, and sadness (e.g., Brewin, Andrews, & Rose, 2000; Lee, Scragg, & Turner, 2001; Pitman et al., 1990). These emotional states may shape how PTSD symptoms are presented, the extent to which an individual responds to exposure-based treatments, and whether remaining treatment needs exist following exposure.

Recently, the American Psychiatric Association (APA) has examined the diagnostic criteria for PTSD, with an eye towards updating the criteria based on advances in the literature (APA, 2010). Included within the provisional criteria is a new symptom, specifically "pervasive negative emotional states—for example: fear, horror, anger, guilt, or

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shame" (APA, 2010). In particular, inclusion of a broader range of negative emotional states recognizes the complexity of many traumatic events, particularly noncombat interpersonal traumas such as childhood abuse and domestic violence (e.g., Charuvastra & Cloitre, 2008; Keane, Marshall, & Taft, 2006). The current report seeks to examine two of these negative emotional states, specifically shame and guilt, in association with PTSD in a sample of women seeking mental health services for emotional difficulties stemming from intimate partner violence.

Shame and guilt have been recognized for many years as important emotional states in individuals who have experienced trauma. Although definitions of these constructs abound, the writings of Lewis (1971) have guided most of the recent work in this domain (Tangney, 1996). Lewis notes that in shame, one evaluates one's self negatively. As an example, individuals who feel shame might describe themselves as "unworthy" or "a bad person." Guilt, in contrast, involves negative evaluation of an action (either taken or not taken). As an example, individuals who feel guilt might state that they "should have known better" than to make a specific decision. Because guilt involves specific behavior, it is postulated to exert a lesser psychological toll relative to shame, where the person evaluates their entire self as negative. Wilson, Droždek, and Turkovic (2006) provide an interesting comparison of posttraumatic shame and posttraumatic guilt, noting that these two emotion-based constructs differ with respect to self-attribution processes, self-appraisals, psychopathology (particularly PTSD), personal identity, and suicidality. Echoing Lewis's conceptualization of these two constructs, Wilson and colleagues (2006) noted that shame appears to have a broader psychological impact, relative to guilt.

To date, guilt has received more attention in the trauma literature, relative to shame. One of the earliest investigations was conducted by Kubany and colleagues (1995) and involved two separate trauma samples, Vietnam-era combat veterans and women who had experienced intimate partner violence (IPV). Using cutoff scores on self-report PTSD measures, a probable diagnosis of PTSD was stated for 78% to 79% of the veteran sample and 54% of the IPV sample. This report focused on the association between guilt and PTSD, with delineation of specific aspects of guilt, including global event-related guilt (a composite of the negative emotional and cognitive elements of guilt), guilt-related distress, and guilt-related cognitions. Included in this latter construct are perceptions of wrongdoing and responsibility for causing the trauma, beliefs that there was a lack of justification for actions taken, and hindsight bias (Kubany, 1994). Higher levels of PTSD were associated with higher levels of global guilt, more guilt-related distress, and higher levels of guilt-related cognitions. Other authors also have noted a significant positive association between guilt and PTSD symptom severity in combat veterans who were diagnosed as PTSD+ (Henning & Frueh, 1997), men who were convicted of causing someone's death through reckless driving (45% PTSD+ using a self-report measure, Lowinger & Solomon, 2004), and women who had experienced IPV (59% reporting high levels of PTSD symptoms on a self-report measure; Bean & Möller, 2002). These reports, taken as a whole, suggest that guilt may be an important concomitant to PTSD in a variety of trauma samples.

Shame has received considerable discussion within the trauma literature but less empirical attention. Wong and Cook (1992) examined scores on a standardized shame measure in three groups of combat veterans: (a) a group with diagnosed PTSD, (b) a group with diagnosed depressive disorders, and (c) a group with diagnosed substance abuse. The PTSD and depression groups scored significantly higher on shame, relative to the substance abuse group, although no differences were noted between the former groups. The authors note that shame appears important in understanding posttrauma responses.

To date, two reports have compared the association of shame and guilt to PTSD symptoms within trauma-exposed samples. First, Leskela, Dieperink, and Thuras (2002) examined how shame and guilt related to PTSD in a sample of older male veterans who had been held as prisoners of war; 28% of this sample was identified as PTSD+ using a self-report measure. Shame correlated significantly with PTSD severity ($r = 0.48$), while guilt did not show an association ($r = 0.06$). A regression analysis suggested that both shame and guilt significantly contributed to the prediction of PTSD severity, with shame showing a significant positive association and guilt showing a significant negative association. Although this finding appears unusual, it is a common result when shame and guilt are entered within the same model and represents a suppression effect, as discussed by Paulhus, Robins, Trzesniewski, and Tracy (2004). Second, Street and Arias (2001) examined shame and guilt in women who had experienced IPV; 65% were identified as probable PTSD+ based on a self-report measure. In this study, shame significantly correlated with PTSD symptom severity ($r = 0.47$) while guilt was not significantly correlated with PTSD ($r = 0.21$).

Mediational analysis indicated that shame fully accounted for the association between emotional abuse and PTSD, highlighting the relevance of shame within this trauma population. Importantly, these authors compared physical abuse and psychological abuse in their examination of shame, guilt, and PTSD in this sample, with results strongly supporting the important role of psychological abuse in contributing to negative outcomes in this population.

Several issues surface in considering these studies. Many studies have relied on the Test of Self-Conscious Affect (TOSCA; Tangney, Wagner, & Gramzow, 1989), which consists of 15 scenarios depicting common events. Participants provide ratings of their likely emotional, cognitive, and behavioral reactions to each event; the scale is scored to reflect shame, guilt, and other dimensions of negative emotion. The TOSCA may not be the best measure to assess shame and guilt within trauma samples, as it was developed with college samples and community volunteers (e.g., Tagney, Wagner, Fletcher, & Gramzow, 1992) and its scenarios reflect everyday situations. It is possible that assessment of guilt and shame in trauma survivors may be improved through use of different measures of these constructs. In particular, measures that map more directly onto theoretical conceptualizations of shame and guilt could help to clarify how these negative emotions are associated with PTSD. From a conceptual approach, a shame measure should capture the global negative assessment of one's self and a guilt measure should reflect negative evaluations of one's choices and actions (Lewis, 1971). The use of measures that map onto these theoretical constructs can enhance our understanding of negative emotions following trauma.

Additionally, various authors have postulated that different types of trauma can produce different psychological sequelae. Terr (1991) for example has speculated that traumas which are repetitive and involve interpersonal relationships (termed "Type II" traumas) carry a higher risk not only for PTSD but also for compromised psychological development, relative to single incident, "Type I" traumas. Likewise, Ford (2005) and van der Kolk, Roth, Percovitz, Sunday, and Spinazzola (2005) have discussed potential differences in psychological symptomatology following protracted interpersonal trauma. In considering available research on shame and guilt in trauma survivors, it is notable that most studies have employed samples that have experienced protracted "complex" trauma, such as women who have experienced IPV and male combat veterans. Importantly, proposed changes to the *DSM* criteria for PTSD are designed to better capture the psychological processes reported by individuals who have experienced these types of traumatic events. Against this backdrop, it is salient to consider the role of specific features of trauma exposure, as these may impact shame and guilt in association with PTSD. Street and Arias (2001) noted the importance of psychological abuse in this association. Thus, this would appear to be an apt starting point in considering specific aspects of trauma exposure. In particular, specific aspects of psychological abuse, such as name calling or domination, could be more likely to evoke feelings of shame or guilt in IPV survivors, given the personal focus of this maltreatment. Exploring whether these negative emotions are associated with PTSD in the context of psychological abuse can expand our understanding of the emotional aftereffects of interpersonal trauma.

Thus, the current study was designed to expand our understanding of shame and guilt, as these constructs relate to PTSD. It relied on a sample of 63 women who sought assistance from a psychological clinic following exposure to IPV and included women with PTSD, as well as women with other psychological concerns who did not have diagnosable PTSD. In this report, independent measures of shame and guilt were used, specifically the Internalized Shame Scale (ISS; Cook, 1987) and the Trauma-Related Guilt Inventory (TRGI; Kubany et al., 1996). Both of these measures have been used with trauma-exposed samples (e.g., Kubany et al.; Wong & Cook, 1992) and have shown positive associations with PTSD. In this report, several questions were examined. First, what is the association of shame and guilt to PTSD? This question was examined with PTSD conceptualized as a continuous variable (Ruscio, Ruscio, & Keane, 2002). We hypothesized that PTSD would show significant positive correlations with both shame and guilt, based on theoretical writings (Lewis, 1971). Previous studies are interesting in this regard. When examined singularly, shame and guilt have both shown significant associations with self-reported PTSD. When examined together in the same study, shame has been significantly associated with PTSD but not guilt (Leskela et al., 2002; Street & Arias, 2001). In an effort to pursue possible reasons for these discrepant findings, three dimensions of guilt will be examined in the current study: (a) global feelings of guilt, (b) guilt-related distress, and (c) guilt-related cognitions. This approach could help to provide a more detailed picture of the role of guilt in PTSD.

Second, we were interested in examining whether shame and guilt's association with PTSD would be

qualified by exposure to specific forms of psychological abuse following from Street and Arias (2001). Although Street and Arias examined shame as a mediator of the association between two forms of psychological abuse and PTSD, it appeared more appropriate to examine whether specific features of psychological trauma moderate the association between shame or guilt and PTSD, as most research in this arena has yet to focus on the specific processes that link trauma and PTSD. Instead, a more basic question is whether specific aspects of psychological abuse qualify the association of either shame or guilt and PTSD. Psychological abuse from a romantic partner subsumes two categories: (a) domination/isolation, reflecting well-documented dynamics within abusive romantic relationships wherein the perpetrator demands subservience and isolates his partner from social support resources, and (b) emotional/verbal abuse, wherein the perpetrator verbally degrades his partner (e.g., Arias & Pape, 1999; Follingstad, Rutledge, Berg, Hause, & Polek, 1990). We hypothesized that both emotional/verbal abuse and dominance/control would moderate the association between shame and PTSD, such that higher levels of abuse would interact significantly with higher levels of shame in association with higher levels of PTSD symptoms. Because Street and Arias did not examine the interactive effects of guilt and psychological abuse in association with PTSD, we considered these analyses exploratory.

Method

PARTICIPANTS

The sample included 63 women who sought assessment and possible treatment at a university-based research clinic for mental health problems following IPV. Announcements for the clinic were sent to churches, advocacy centers, and college campuses, as well as using public service announcements. Women qualified for assessment if their IPV included actual or threatened death or serious injury and their emotional response included intense fear, helplessness, horror, or the perception that they would die (Criterion A; APA, 2000). These features were evaluated using the IPV Interview (see below). The sample ranged in age from 18 to 64 (mean age = 36.75, $SD = 11.62$). Eight women (12.7%) were still romantically involved and residing with their abuser at the time of the assessment. Of the 53 women who were no longer romantically involved with their abuser, the approximate average interval between separation from the abusive partner and the assessment was 4.19 years ($SD = 6.9$). For 2 women in this sample, time since involvement with abuser could not be calculated due to vague reporting. Other sample characteristics including types of IPV experienced, race, educational background, and annual income, are shown in Table 1. This sample reported considerable exposure to stressful life events other than IPV (such as serious motor vehicle accidents and childhood abuse, assessed with the Life Events Checklist [see below]), with an average of 3.1 ($SD = 1.87$) additional events experienced.

In addition to the 63 participants included in this report, data from 9 additional participants presenting with low cognitive functioning suggestive of neurological impairment (assessed using the Montreal Cognitive Assessment [Nasreddine et al., 2005], $n = 5$), psychotic symptoms ($n = 3$), or unreliable responding ($n = 1$) were excluded. An additional 7 women who were involved in romantic relationships that did not satisfy Criterion A were assessed but not included in this sample.

MEASURES

IPV Measures

The IPV Interview was devised by the first author and administered by a trained interviewer. This interview includes questions about the nature of the

Table 1
Sample Description

	n	%
Type of intimate partner abuse experienced		
Emotional abuse	4	6.3
Sexual abuse	1	1.6
Emotional and physical abuse	23	36.5
Emotional and sexual abuse	4	6.3
Emotional, physical, and sexual abuse	31	49.2
Race		
Caucasian	38	60.3
African-American	17	27
Hispanic	2	3.2
Asian	3	4.8
Other or no answer	3	4.8
Educational background		
Elementary school	1	1.6
High school	4	6.3
Attended or completed college	44	69.9
Attended or completed graduate training	14	22.2
Reported annual household income		
Below $10,000	10	15.9
$10,000 to $20,000	10	15.9
$20,000 to $30,000	5	7.9
$30,000 to $50,000	16	25.4
Over $50,000	15	23.8
Declined to respond	7	11.1

IPV and the individual's emotional response to the interpersonal violence (feelings of fear, helplessness, danger, and perceptions that they might die) to determine whether the IPV qualified as a Criterion A traumatic event (APA, 2000). Each of these responses to the abuse was rated on a 0–100 Likert scale, where 0 = *not at all* and 100 = *extreme*, with a score of 50 or higher on ratings of fear, helplessness, or horror indicating that the IPV was experienced as traumatic. Cut points of 50 on these scales have been used successfully in related work (e.g., Beck et al., 2004) to determine if the target event satisfied Criterion A2 and appear to capture heightened feelings of fear, helplessness, and horror. Information about the presence or absence of physical, sexual, and emotional abuse also was obtained using the IPV Interview. The IPV Interview was constructed to provide an omnibus assessment of the types of traumatic abuse that a woman experienced during IPV, using questions modeled from a similar trauma interview designed to provide descriptive information about the target trauma (Blanchard & Hickling, 2004). For this report, the IPV interview was used to determine whether the IPV qualified as a Criterion A trauma. The short form of Psychological Maltreatment of Women Inventory (PMWI; Tolman, 1999) was used to assess psychological abuse. The PMWI was originally developed to assess women's experience of psychological abuse from a male romantic partner and contains two empirically supported subscales (Tolman, 1989). The Domination/Isolation subscale contains 7 items, such as "My partner interfered in my relationships with other family members." The Emotional/Verbal Abuse subscale contains 7 items, such as "My partner swore at me." All items are rated on a 5-point scale, with anchors ranging from *never* to *very frequently*; higher scores reflect greater abuse. In the current study, women were asked to rate PMWI items as occurred during the most abusive romantic relationship in those instances where multiple abusive relationships had occurred. The original PMWI has good internal consistency (Cronbach's alpha = .95 [domination/isolation], .93 [emotional/verbal]) and support for its construct validity (Tolman, 1989, 1999). The short form has similar psychometric features as the original scale. In the current sample, alpha coefficients are .90 (domination/isolation subscale) and .95 (emotional/verbal subscale).

Stressful Life Events Measure

In order to quantify exposure to stressful events other than IPV, the Life Events Checklist (LEC; Blake et al., 1990) was administered. This self-report measure includes 18 stressful life events and asks the individual to indicate if she directly experienced, observed, or learned about the occurrence of any of these events. In order to ensure that only non-IPV events were recorded on this measure, the interviewer queried those events which could overlap (e.g., threatened with a weapon, physical attack) and removed all IPV-related events from this count. Only those non-IPV events that were directly experienced were counted.

PTSD Measure

PTSD symptomatology stemming from IPV was assessed with the Clinician-Administered PTSD Scale (CAPS; Blake et al., 1990), a structured interview that assesses PTSD symptoms identified in the current *DSM-IV* (APA, 2000). The CAPS includes 17 standardized questions to determine frequency and intensity of each symptom; symptoms were anchored to the woman's IPV experience via temporal occurrence and specific features (e.g., the scent of the abuser's aftershave cuing distress). If a participant had endorsed other extreme life events on the LEC, the interviewer used the CAPS to probe symptoms pertaining to these other traumas and removed these symptoms from the IPV symptomatology score. Symptoms were assessed in the preceding month, using a 5-point Likert scale (0 indicates "*the symptom does not occur or does not cause distress*" and 4 indicates "*the symptom occurs nearly every day or causes extreme distress and discomfort*"). The total IPV severity score for the CAPS (CAPS-Tot) was computed by summing the frequency and intensity ratings for each symptom (range 0–136, higher scores indicate more symptomatology).

The CAPS was administered by advanced psychology doctoral students. All interviews were videotaped and 26.9% ($n = 17$) were randomly selected and reviewed by an independent clinician to establish diagnostic reliability. Interrater agreement in CAPS-Tot scores, reflected by a Pearson correlation, was good for PTSD ($r = 0.86$). As reviewed by Weathers, Keane, and Davidson (2001), the CAPS has excellent support for its reliability, with alpha coefficients generally ranging from .64 to .88. In the current sample, coefficient alpha was .88. Two- to 3-day test-retest reliability was found to range from .78 to .87 (Weathers et al., 2001).

Shame Measure

The Internalized Shame Scale (ISS; Cook, 1987, 1996) was administered to assess shame. This 30-item scale contains items that were developed based on phenomenological descriptions of the shame experience and include statements such as "I think that people look down on me." In keeping with

theoretical conceptions of shame, the ISS was not anchored to any specific experience but rather simply describes various negative self-evaluations. Response anchors range from *never* to *almost always*, reflecting the frequency of experiencing each feeling state. The ISS contains a Shame subscale, containing 24 negatively worded items, and a Self-Esteem subscale, which was not included in the current report. Higher scores reflect more shame. The Shame subscale has been shown through factor analysis to be unidimensional, have high internal consistency ($\alpha = 0.95$), and show good test-retest reliability ($r = 0.84$; Cook, 1996). The ISS has good support for its validity (see Cook, 1996). In the current sample, the alpha coefficient of the shame subscale equaled .96.

Guilt Measure

Participants completed the Trauma-Related Guilt Inventory (TRGI, Kubany et al., 1996) to assess guilt. This 32-item measure contains three scales, specifically Global Guilt (4 items), Guilt-Related Distress (6 items), and Guilt Cognitions (22 items).[1] Sample items include, "I experience intense guilt that relates to what happened" (Global Guilt), "I experience severe emotional distress when I think about what happened" (Guilt-Related Distress), and "I blame myself for something I did, thought, or felt" (Guilt Cognitions). Items were anchored to the woman's IPV, in keeping with theoretical perspectives on guilt. Items are scored on a 5-point scale, with anchors ranging from *extremely or always true* to *not at all or never true*. Higher scores indicate greater guilt levels for each subscale. The TRGI has strong support for its factor structure and convergent validity. Internal consistency is strong for each scale (alphas ranging from .86 to .90) and test-retest reliability ranges from .73 to .86. In the current sample, the alpha coefficients were .96 (Global Guilt), .89 (Distress) and .85 (Cognitions).

PROCEDURE

Procedures were reviewed by the Institutional Review Board. Following provision of informed consent, each participant was interviewed individually, first with the IPV Interview, followed by the CAPS. She then completed the questionnaires. Following the assessment, the participant was given feedback concerning her evaluation, debriefed, and provided with community referrals for additional services where appropriate.

[1] Interested readers may contact the first author for data derived from the subscales of the TRGI-Guilt Cognition subscale.

DATA ANALYTIC APPROACH

Data were examined for completeness. All participants had CAPS data, although some were missing self-report data (ISS, $n = 1$; TRGI, $n = 2$; PMWI, $n = 6$). Data were examined initially with pair-wise deletion. To ensure that missing data did not influence the obtained results, imputation was conducted, using a mixture of mean substitution and regression imputation[2] (Switzer & Roth, 2002). Results using both nonimputed and imputed data were examined. To address the first research question concerning the association between shame, guilt, and PTSD, we computed correlations between the ISS-Shame, TRGI-Global Guilt, TRGI-Guilt-Related Distress, and TRGI Guilt Cognitions scales and the CAPS-Total score.

To examine the second question, whether shame and guilt's association with PTSD was qualified by exposure to specific forms of psychological abuse, a series of moderation analyses were conducted, following guidelines provided by Aiken and West (1991). The ISS-Shame subscale and the three subscales of the TRGI were used in these analyses. Effect sizes (squared semipartial correlations) were computed and interpreted using Kirk's (1996) metric wherein an effect of 0.01 is considered small, 0.06 is considered medium, and 0.14 is considered large.

Results

Zero-order correlations[3], means, and standard deviations of all variables are presented in Table 2.

WHAT IS THE ASSOCIATION OF SHAME AND GUILT TO PTSD?

As noted in Table 2, shame and guilt overall showed significant associations to PTSD. The ISS-Shame subscale was positively correlated with the CAPS-Total score, indicating that as self-reported shame increased, so did the severity of PTSD symptoms. The TRGI-Global Guilt subscale did not show a significant association with the CAPS-Tot, although both the Guilt-Related Distress and Guilt Cognitions subscales were positively associated with PTSD severity, indicating that increased levels of PTSD symptoms were associated with increased levels of guilt-related distress and cognitions. Using imputed data, the pattern of results was the same except for the correlation between the

[2] Regression imputation was used if a given case was missing only 1 variable ($n = 2$). Otherwise, mean imputation was used ($n = 6$).

[3] To determine the magnitude of these effects, the reader may square the reported correlation to obtain the percent of variance accounted for. These data are not included for clarity of presentation.

Table 2
Zero Order Correlations, Means, and Standard Deviations of All Variables

Variable		1.	2.	3.	4.	5.	6.	*M*	*SD*
1.	CAPS – Tot							34.38	23.91
2.	ISS-Shame	.25*						45.31	22.37
3.	TRGI-Global Guilt	.11	.52**					1.83	1.35
4.	TRGI-Distress	.33**	.57**	.56**				2.71	1.02
5.	TRGI-Guilt Cognitions	.25*	.55**	.62**	.39**			2.00	0.84
6.	PMWI-Emotional/verbal	.21	.37**	.21	.10	.40**		22.86	10.26
7.	PMWI – Domination/iso	.18	.24	.15	.09	.32*	.77**	18.42	10.22

Note. *N* ranges from 57 to 63. CAPS-Tot = Clinician Administered PTSD Scale – Total score; ISS = Internalized Shame Scale; TRGI = Trauma Related Guilt Inventory; PMWI = Psychological Maltreatment of Women Inventory; Domination/iso = Domination/isolation subscale.
* $p < .05$, ** $p < .01$.

CAPS-Tot and ISS-Shame subscale, which changed to $r = .24$, $p = .06$.

WHAT IS THE ASSOCIATION OF SHAME AND GUILT TO PSYCHOLOGICAL ABUSE?

As noted in Table 2, the ISS-Shame score was significantly positively correlated with scores on the Emotional/Verbal Abuse subscale of the PMWI, indicating that higher levels of shame were associated with greater levels of emotional/verbal abuse. The correlation between the ISS-Shame score and the Domination/Isolation subscale of the PMWI approached significance ($p = .07$). The TRGI-Guilt Cognitions scale was significantly positively associated with both the Emotional/Verbal Abuse subscale and the Domination/Isolation subscale of the PMWI, although neither the Global Guilt nor the Guilt-Related Distress scales showed significant associations with either subscale of the PMWI. The pattern of results was unchanged using imputed data.

Shame

To examine shame, separate regression analyses using the ISS-Shame subscale, each subscale of the PMWI (emotional/verbal abuse and domination/isolation), and the multiplicative interaction term of shame and the specific PMWI subscale as predictors were conducted (see Table 3). Beginning with the analyses involving the CAPS, the ISS-Shame scale, the Emotional Abuse subscale of the PMWI and the interaction of these two variables were examined as predictors of the CAPS-Tot ($R^2 = .213$, $F_{3, 53} = 4.77$, $p = .005$). A significant effect was observed for the interaction of emotional/verbal abuse and shame ($B = .033$, $\beta = .287$, $p = .03$). As noted in the top panel of Fig. 1, simple slopes analysis indicated that among women reporting high levels of emotional/verbal abuse, high levels of shame were significantly more likely to be associated with elevated levels of PTSD, relative to low levels of shame ($p = .001$). For women reporting low levels of emotional/verbal abuse, a significant relationship was not noted between shame and PTSD ($p > .05$). Examination of similar analyses involving the domination/isolation subscale of the PMWI revealed a significant model ($R^2 = .232$, $F_{3, 52} = 5.23$, $p = .003$). A significant effect was observed for the interaction of domination/isolation and shame ($B = .038$, $\beta = .338$, $p = .01$). Follow-up of this interaction using simple slopes indicated that among women who reported high levels of dominance/isolation in their abusive relationship, high levels of shame were significantly more likely to be associated with PTSD on the CAPS-Tot, relative to low levels of shame ($p = .001$, see bottom panel of Fig. 1). For women reporting low levels of dominance/isolation, a significant relationship was not noted between shame and PTSD ($p > .05$). The pattern of result was unchanged using imputed data.

Guilt

Similar analyses were conducted with each of the three guilt subscales (see Table 3). Examination of models in which Global guilt, each subscale of the PMWI, and the interaction of these variables served as predictors of the CAPS-Tot score indicated that both of these models were not significant (Emotional/Verbal Abuse analysis: $R^2 = .08$, $F_{3, 53} = 1.53$, $p = .218$; Domination/Isolation analysis: $R^2 = .064$, $F_{3, 52} = 1.19$, $p = .321$). Examination of a model in which Guilt-Related Distress, the Emotional/Verbal Abuse subscale of the PMWI, and the interaction of these variables were used to predict CAPS-Tot score indicated a significant model ($R^2 = .201$, $F_{3, 53} = 4.45$, $p = .007$). As noted in Table 3, the only significant term in this model was Guilt-Related Distress ($p = .004$). Likewise, consideration of a model in which Guilt-Related Distress, the Domination/Isolation subscale of the PMWI, and the interaction of these variables were used to predict CAPS-Tot score indicated a

Table 3
Standardized Regression Coefficients and Squared Semipartial Correlations (Effect Size) for Regression Analyses Predicting PTSD Using Shame, Guilt, and Specific Types of Psychological Abuse

	β	sr^2
Shame		
ISS-Shame	.32*	.087
Emotional/verbal abuse	.20	.032
ISS-Shame x Emotional/verbal abuse	.29*	.080
ISS-Shame	.36**	.118
Domination/isolation	.13	.016
ISS-Shame x Domination/isolation	.32*	.100
Global Guilt		
TRGI-Global Guilt	.12	.013
Emotional/verbal abuse	.24	.048
Guilt x Emotional/verbal abuse	.15	.020
TRGI-Global Guilt	.14	.020
Domination/isolation	.17	.027
Guilt x Domination/isolation	.11	.011
Guilt-related distress		
TRGI-Guilt-related distress	.37**	.137
Emotional/verbal abuse	.16	.025
Distress x Emotional/verbal abuse	.13	.016
TRGI-Guilt-related distress	.41**	.163
Domination/isolation	.13	.016
Distress x Domination/isolation	.15	.021
Guilt-related cognitions		
TRGI-Guilt-related cognitions	.24	.049
Emotional/verbal abuse	.18	.024
Cognitions x Emotional/verbal abuse	.18	.029
TRGI-Guilt-related cognitions	.28*	.069
Domination/isolation	.10	.009
Cognitions x Domination/isolation	.20	.041

Note. ISS = Internalized Shame Scale; TRGI = Trauma Related Guilt Inventory.
*$p < .05$, **$p < .01$, ***$p < .001$.

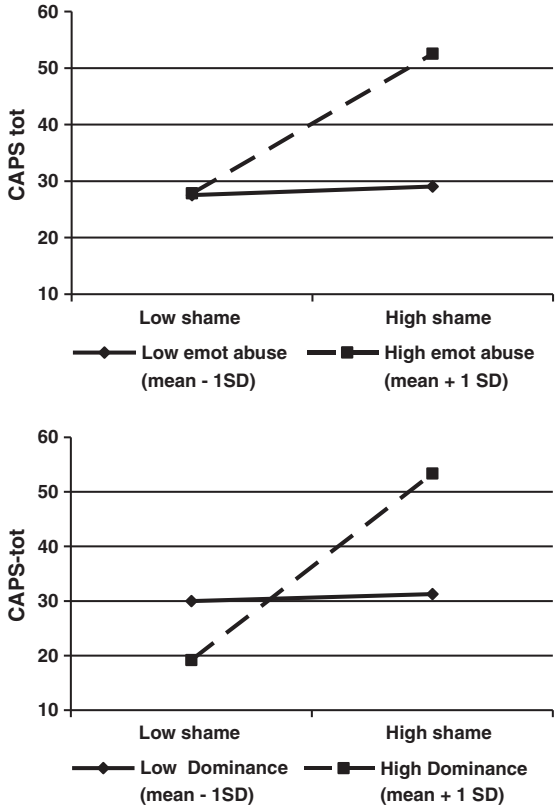

FIGURE 1 The interaction of ISS-Shame with Emotional/verbal abuse (top panel) and Dominance/isolation (bottom panel) subscales of the Psychological Maltreatment of Women Inventory on CAPS-tot scores.

significant model ($R^2 = .198$, $F_{3, 52} = 4.28$, $p = .009$). Again, the only significant term in this model was Guilt-Related Distress ($p = .002$). Examination of a model involving Guilt-Related Cognitions, the Emotional/Verbal Abuse subscale of the PMWI, and the interaction of these variables to predict CAPS-Tot indicated a nonsignificant model ($R^2 = .126$, $F_{3, 53} = 2.54$, $p = .066$). Lastly, consideration of a model in which Guilt-Related Cognitions, the Domination/Isolation subscale of the PMWI, and the interaction of these variables were used to predict CAPS-Tot indicated a significant model ($R^2 = .138$, $F_{3, 52} = 2.77$, $p = .05$). As noted in Table 3, the only significant term in this model was Guilt-Related Cognitions ($p = .047$). Thus, moderation was not noted in analyses involving each of the three guilt subscales.[4] Using imputed data, all moderation analyses produced the same pattern of results, with the exception of the model involving Guilt-Related Cognitions, the Domination/Isolation subscale of the PMWI, and the interaction of these variables, in which the Guilt-Related Cognitions term became a trend ($p = .09$).

Discussion

This study explored the association of shame and guilt with PTSD among women who had experienced IPV. PTSD showed significant correlations

[4] Each of these moderation analyses was repeated, controlling for exposure to stressful life events other than IPV, at the suggestion of a reviewer. The results were identical to those which did not control for additional stressful life experiences, with the exception of the model involving Guilt-Related Cognitions, the Dominance/Isolation subscale of the PMWI, and their interaction, which was nonsignificant ($R^2 = .145$, $F_{4, 55} = 2.16$, $p = .087$). These secondary analyses suggest that participants' non-IPV stressful life events are not a likely alternative explanation for these finding.

with shame, guilt-related distress, and guilt-related cognitions, although not with global guilt. Among the significant associations, the effect sizes were small and accounted for 6% (shame, guilt cognitions) to 10% (guilt-related distress) of the variance. A series of moderation analyses examined whether exposure to specific forms of psychological abuse, specifically emotional/verbal abuse and domination/isolation, qualified associations between shame, guilt, and PTSD. Results indicated that high levels of both emotional/verbal abuse and dominance/isolation interacted with high levels of shame in their association with PTSD. Examination of effect size indicators in these analyses suggests that these effects are medium in magnitude (Kirk, 1996). None of the moderator analyses involving the three guilt subscales revealed significant interaction effects. Thus, the experience of shame is likely to interact with significant forms of psychological abuse in association with PTSD. In contrast, associations of guilt cognitions and guilt-related distress to PTSD were not moderated by psychological abuse. These data support conceptualization of shame and guilt as relevant features of PTSD, supporting this provisional change to the *DSM* criteria for PTSD. As well, these data illustrate that exposure to specific forms of trauma may interact with shame, but not with guilt.

These data build upon previous studies of guilt and shame as emotional aftereffects of trauma. Leskela and colleagues (2002) and Street and Arias (2001) both reported that shame showed consistent associations with PTSD but guilt did not. In the current report, the use of an alternate guilt measure permitted delineation of specific components of this negative emotion. With this measure, global guilt failed to show an association with PTSD but other facets of guilt (guilt-related distress and guilt cognitions) were associated with PTSD. As well, a different measure of shame was incorporated into the current report, relative to some previous studies. In considering the measures used in the current study, the shame measure was not linked to specific trauma experiences while the guilt measure was. This methodological choice is consistent with current theories about guilt and shame. With these methodological improvements, a more nuanced picture of shame and guilt's association with PTSD emerges. In particular, specific aspects of guilt show significant associations with PTSD that are similar or slightly larger in effect size, relative to the association between shame and PTSD. Yet, global guilt did not show an association. It is possible that theoretical notions about shame and guilt (Lewis, 1971; Wilson et al., 2006) could be modified to reflect specific facets of guilt, particularly guilt-related cognitions. As well, the proposed DSM-5 changes may need to reflect this more nuanced approach to guilt. It is possible that the association of guilt-related distress to PTSD could simply reflect the higher level of general distress that characterizes trauma survivors and individuals with PTSD in particular (e.g., Marshall, Schell, & Miles, 2010). Continued development of our conceptions of guilt could be fruitful in this regard.

It remains to be seen whether the nature of these associations differs depending on specific features of the trauma sample under investigation. One could envision, for example, that guilt could show a more pronounced effect in the aftermath of a trauma where the individual's actions contributed to the event (e.g., Lowinger & Solomon, 2004). It is possible that continued exploration of negative emotions in trauma could benefit from greater inclusion of perceptions of responsibility, as well as specific features of the target trauma. Moreover, it would seem important to examine shame and guilt among survivors of "Type I" traumas that are noninterpersonal in nature (e.g., natural disasters, road traffic accidents). Although it is likely that neither shame nor guilt is unique to traumas that involve interpersonal relationships, it is important to map these negative emotional states across different types of trauma survivors to enhance our understanding of the emotional aftereffects of trauma.

The findings of the current report have clear implications for treatment of women with PTSD in the aftermath of IPV. Numerous authors have written about the relevance of shame and guilt in the treatment of this disorder, with clear discussion of how shame and guilt can disrupt the therapeutic effects of exposure-based treatment (e.g., Pitman et al., 1991; Resick & Schnicke, 1992). To date, only one report has examined this issue empirically. Nishith, Nixon, and Resick (2005) examined the role of trauma-related guilt on the effectiveness of cognitive processing therapy (CPT) and prolonged exposure (PE) in the treatment of PTSD among female rape victims. Although the authors note that CPT is superior at reducing certain guilt cognitions relative to PE, no notable effect of pretreatment guilt was found with respect to the effectiveness of either CPT or PE. Given its clinical importance, this issue deserves greater research attention. As well, it is important to examine if high levels of shame impact the therapeutic effects of psychosocial treatments for PTSD, given that this issue has not been examined empirically. Additionally, results from the current study suggest that inclusion of interventions designed to address excessive shame could be a useful component within treatment

protocols for women suffering from PTSD following high levels of emotional abuse and domination/control from intimate partners. To date, guilt and shame have been emphasized in tandem within this treatment literature (e.g., Kubany & Ralston, 2006), with no specific focus on shame alone. It might be useful to consider development of shame-focused interventions, particularly for this treatment population.

Like most empirical reports, the current study has its limitations. To begin, the sample is relatively small in size, which limits the generalizability of the findings. Second, the sample was entirely comprised of women. In considering this methodological choice, although both men and women can experience IPV, much of the available literature has placed emphasis on women's adaptation, given their higher likelihood of injury during IPV. However, it is possible that guilt and shame play different psychological roles in males and females who have experienced IPV, an issue that can be explored in future studies. Third, continued work in this area could benefit from incorporation of a psychometrically sound index of IPV, such as the Conflict Tactics Scale (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). This improvement could facilitate empirical exploration of linkages between exposure to specific features of IPV and symptomatology and allow quantification of overall abuse severity.

In sum, the current report contributes to our understanding of shame and guilt as these emotions relate to PTSD in women who have experienced IPV. Shame, guilt-related distress, and guilt-related cognitions showed significant associations with PTSD. Shame was moderated by specific forms of psychological abuse in its association with PTSD, while guilt was not. Other authors have noted that guilt, although commonly mentioned in the PTSD literature, may be more closely identified with depression (e.g., Bennice, Grubaugh, & Resick, 2001; Nishith et al., 2005). Clearly, we have considerably more to learn concerning negative emotions and PTSD. Results point to several areas that deserve greater examination, specifically examination of the interaction between specific types of traumas and negative emotions in PTSD and consideration of how best to conceptualize shame and guilt within the proposed diagnosis for PTSD. This is an area that potentially could prove fruitful in expanding our understanding of nonfear forms of negative emotion following the experience of an extreme event.

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