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Psychological Abuse and Posttraumatic Stress Disorder in Battered Women: Examining the Roles of Shame and Guilt

Amy E. Street
VA Boston Healthcare System and
Boston University School of Medicine
Ileana Arias
University of Georgia

Psychological abuse among battered women has been relatively understudied. However, battered women's reports in the existing qualitative and quantitative research suggest that the effects of psychological abuse can be even more damaging than the effects of physical abuse. The current study attempted to clarify the relationship between psychological abuse and posttraumatic stress disorder (PTSD) within a sample of battered women by statistically controlling for the effects of physical abuse. This study also explored the affective experiences of shame and guilt as important variables in the development of PTSD in battered women. This investigation replicated previous work suggesting that battered women are very much at risk for a diagnosis of PTSD and suggests that clinicians and researchers may need to focus on psychological abuse as a predictor of PTSD symptomatology. The current findings encourage attention to shame reactions in battered women and suggest new directions in the study of PTSD for other traumatized populations.

Physical abuse of women in dating and marital relationships has received a great deal of clinical and research attention in recent years. There is a consensus in the professional community that physical abuse of women by their male partners is a significant problem. In addition, studies of the psychological effects of domestic violence on women have found wideranging negative consequences, including depression (Campbell, 1989), anxiety (Russell, Lipov, Phillips, & White, 1989), social withdrawal (Star, Clark, Goetz, & O'Malia, 1979), and suicide attempts (Gelles & Harrop, 1989). Unfortunately, a woman rarely experiences physical abuse from a romantic partner without also experiencing significant psychological abuse (Marshall, 1996). However, the phenomenon of psychological abuse of women by their romantic partners has only recently begun to receive systematic attention.

There are two broadly defined motivations for the study of psychological abuse in intimate relationships (Murphy & Cascardi, 1993). First, psychological abuse may be problematic because it worsens the impact of physical abuse. Second, psychological abuse is of

concern because it may be related to negative outcomes independently of physical abuse. Psychological abuse impacts women's general functioning (Tolman & Bhosley, 1991), self-esteem (Aguilar & Nightingale, 1994), and physical health (Marshall, 1996), as well as depression and problem drinking (Arias, Street, & Brody, 1996). Early qualitative research (Walker, 1979) with self-identified battered women suggested that many of the women perceived the psychological abuse that they had experienced to be more harmful than the physical abuse. Similar results have been reported in more recent quantitative research. Seventy-two percent of one sample of physically abused women reported that the psychological abuse that they had experienced had a more severe impact on them than the physical abuse that they had experienced (Follingstad, Rutledge, Berg, Hause, & Polek, 1990). Interestingly, the women who reported psychological abuse to be more damaging did not differ from the rest of the sample in degree of severity of physical abuse or frequency of physically abusive incidents. In a similar vein, Sackett and Saunders (1999) reported that, among battered women who were seeking services, psychological abuse was a much stronger predictor of the women's fear than was physical abuse. This finding is particularly salient because fear during a traumatic event has been identified as a strong predictor of the development of PTSD (Briere, 1997), a frequent consequence of battering (cf. Arias & Pape, 1999).

Psychological abuse is a heterogeneous construct that includes a number of different abusive partner behaviors. In developing a measure of psychological maltreatment of women, Tolman (1989) drew upon existing research on the assessment of psychological abuse, as well as qualitative research and clinical observations. Exploratory factor analysis of scale items suggested the existence of two factors. The first factor, domination/isolation, included items related to rigid observance of traditional sex roles, demands for subservience, and isolation from resources. The second factor, emotional/verbal abuse, included withholding emotional resources, verbal attacks, and behavior that degrades women. Although there has been some suggestion that these different types of psychological abuse may be differentially related to women's emotional well-being (Katz & Arias, 1999), different forms of abuse have been examined in only a few studies and no clear conclusions can be drawn. Follingstad and colleauges (1990) found that ridicule, a form of emotional/verbal abuse, was identified by battered women as being the most detrimental for their emotional well-being. Katz and Arias (1999) examined the differential impact of emotional/verbal and domination/isolation forms of abuse on depressive symptomatology among nonbattered women over time. Although both forms of abuse were significantly related to depression, the effect of emotional/verbal abuse on depressive symptoms emerged most strongly in the cross-sectional analyses while the effect of domination/isolation abuse on depressive symptoms increased in magnitude over time and emerged as significant only in longitudinal analyses.

Abuse and Posttraumatic Stress Disorder

Numerous studies have examined the presence and severity of PTSD in battered women, with prevalence rates reported in the literature ranging from 33% (Astin, Lawrence, & Foy, 1993) to 84% (Kemp, Rawlings, & Green, 1991). Variation in reported prevalence rates appears to differ as a function of differences across studies in the method of diagnostic assessment, the population sampled, and the length of time since the traumatic event (i.e., the violent episodes). Although the relationship between psychological abuse and PTSD has not received extensive empirical attention, some authors have hypothesized that psychological abuse may play an important role in the development of PTSD (Vitanza, Vogel, & Marshall, 1995). Like physical abuse, psychological abuse occurs repeatedly, over an extended period of time, and is perpetrated by an intimate other. In cases of severe psychological abuse, threats of injury and death are common (Okun, 1986).

Because psychological abuse and physical abuse frequently co-occur, it is of primary importance to control for the effects of physical abuse when examining the effects of psychological abuse on PTSD symptomatology. Two studies reported in the literature (Kemp, Green, Hovanitz, & Rawlings, 1995; Vitanza et al. 1995) attempted to examine the relationship between psychological abuse and PTSD symptomatology by methodologically controlling for the effects of physical abuse. Both studies compared a group of women who had been victims of psychological abuse, but no physical abuse, with a group of women who had been victims of both psychological and physical abuse. Both Kemp and associates (1995) and Vitanza and colleauges (1995) found high levels of PTSD symptomatology among women who experienced only psychological abuse, but women who had experienced both psychological and physical abuse reported significantly greater levels of PTSD symptomatology. These studies highlight many of the difficulties in controlling for the effects of physical abuse methodologically. It is almost impossible to find a sample of women who report physical abuse but no psychological abuse. Thus it is not clear whether higher rates of PTSD among psychologically and physically abused women are a function of the additive effects of two forms of abuse or a function of a greater negative impact of physical abuse.

These inherent methodological problems create difficulties in obtaining mutually exclusive comparison groups to examine the relative and specific effects of psychological and physical abuse. Therefore, when studying the relationship between psychological abuse and PTSD, it may be preferable to isolate the confounding effects of physical abuse statistically. Two studies to date have attempted to do this. Kahn, Welch, and Zilmer (1993) administered the MMPI-2 to residents of a battered women's shelter. Not surprisingly, 68% of participants scored within clinical ranges on the PS and PK supplementary scales (PTSD scales). When both physical and psychological abuse were included as predictors in the regression equation, only psychological abuse emerged as a unique predictor of the average clinical *T*-score. Unfortunately, the authors do not report significant predictors of the PTSD scales alone. Expanding this line of research, Arias and Pape (1999) surveyed women currently residing in battered women's shelters for the presence of PTSD symptomatology. In this sample, psychological abuse was a significant predictor of PTSD symptomatology while physical abuse was not. Even after controlling for the effects of physical abuse, psychological abuse continued to account for significant variance in PTSD symptomatology.

Shame and Guilt

The psychological mechanisms responsible for the link between traumatic experiences and PTSD are not fully understood. However, the majority of theories emphasize the role of the victim's affective and/or cognitive reactions to the traumatic event (Foa & Riggs, 1993; Janoff-Bulman, 1992; Keane, Zimering, & Caddell, 1985). Increasingly, researchers are realizing that trauma survivors' explanations for their role in the trauma contribute to the development and persistence of PTSD symptoms (Dutton, Burghardt, Perrin, Chrestman, & Halle, 1994; Kubany et al., 1996). For example, feelings of guilt related to the traumatic event are so prevalent that the DSM-IV (APA, 1994) lists guilt as an associated feature of PTSD. More specifically, Kubany and associates (1995) investigated reports of guilt within a sample of battered women and found that for these women trauma-related guilt was positively correlated with PTSD symptomatology.

Tangney, Wagner, and Gramzow (1992) suggested that much of the work on guilt and its correlates may actually reflect the effects of a combination of guilt and shame. Tangney (1996) reviewed the conceptual distinctions between guilt and shame and suggested that both emotions involve negative affect but the focus of the negative feelings differ: in shame, the entire self is negatively evaluated while in guilt, the focus of attention is a specific behavior. Guilt is

characterized by feelings of tension, remorse, and regret over bad things that were done, but does not include the global negative evaluation of the self that is found with shame (Niedenthal, Tangney, & Gavanski, 1994). Shame is widely considered to be the more incapacitating, a more pathological emotion (Andrews, 1995). Tangney, and colleagues (1992) found that guilt was moderately related to several indicators of psychopathology but these relationships resulted entirely from the shared variance between shame and guilt. Guilt-proneness, independent of shame, was unrelated to measures of psychological maladjustment. In contrast, shame-proneness, independent of guilt, was strongly and positively related to several indices of psychopathology, including depression, anxiety, and somatization. Accordingly, the association between pathological guilt and PTSD may be the result of the co-occurrence of shame and guilt. There is some empirical evidence linking shame to PTSD. Wong and Cook (1992) examined the presence of shame in Vietnam veterans who had been diagnosed with PTSD, depression or substance abuse. Veterans in the PTSD group reported significantly higher levels of shame than those in the substance abuse group and higher levels of shame than veterans in the depressed group, although this difference did not reach statistical significance.

Shame is likely to impact PTSD symptomatology through both its cognitive and affective components. Shame cognitions include a belief in a negative global evaluation of the self, or a challenge to the belief in the self as decent, good, and competent. Shame-affective reactions involve negative evaluations of the self with a corresponding sense of being "small," worthless, and powerless (Tangney et al., 1992). Doubts about one's own worth and competency may challenge previously held belief systems and create feelings of anxiety about one's ability to cope effectively and safely with future life challenges. These types of cognitions have been implicated by shattered assumption theorists (Janoff-Bulman, 1992) in the development of PTSD.

Anecdotal evidence (Barnett & LaViolette, 1993) and empirical work suggest that victims of relationship violence evidence high levels of guilt. For example, Kubany and colleauges (1996) found that battered women reported high levels of guilt specifically related to their battering experiences. Kubany defines guilt as "an unpleasant feeling accompanied by a belief (or beliefs) that one should have thought, felt, or acted differently" (p. 355; Kubany et al., 1995). Examination of this definition, as well as the items used to measure the construct, suggests that trauma-related guilt includes components of both guilt-proneness and shame-proneness. That is, the construct does include guilt feelings about acts of commission or omission, but also includes shame-based negative evaluations of the entire self. This is corroborated by evidence that Kubany's trauma-related guilt construct is highly correlated with measures of both guilt and shame (Kubany et al., 1995). Andrews and Brewin (1990) have commented on the similarities between the emotional experience of shame and an attributional style known as characterological self-blame, which focuses on internal, global and stable attributions. Empirical evidence indicates that shame-proneness is strongly correlated with characterological self-blame (Tangney et al., 1992). The attributional style of characterological self-blame has often been found to characterize battered women (Andrews & Brewin, 1990), suggesting that battered women may also report high levels of shame.

Based on existing theoretical and empirical work, we framed and tested the following hypotheses:

1. PTSD symptomatology is positively correlated with severity of psychological abuse, even after controlling for the effects of physical abuse;
2. measures of shame and guilt are significantly related to psychological abuse;
3. both shame and guilt are significantly related with PTSD symptomatology but only shame remains a significant independent predictor of PTSD symptomatology; and
4. shame mediates the relationship between psychological abuse and PTSD symptomatology.

In order to examine the differential impact of different forms of abuse, all hypotheses were tested using total psychological abuse, domination/isolation, and emotional/verbal abuse scores separately.

METHOD

Participants

Participants were 63 heterosexual women seeking services from 23 battered womens shelters in the southeastern United States, all of whom reported experiencing both physical and psychological abuse from their romantic partners within the past year. Participants ranged in age from 19 to 64 years, with a mean of 32 years. The majority of participants (63%) reported their race as White/Caucasian; 29% of participants reported their race as African American, 5% reported their race as Latina and 3% of participants self-identified as "other." Participants' annual income ranged from $0 to $35,000, with a mean of $7,277. In terms of participants' level of education, 32% reported some high school education, 31% reported completing high school, 23% reported some college education, 6% reported completing college and 8% reported obtaining a technical or vocational degree. Eighty-four percent of the participants reported having children. Number of children ranged from 1 to 8 with a mean of 2.44.

A little more than half of the participants (53%) identified the current status of their romantic relationship as married, but separated; 32% identified their relationship status as living together, but separated. Length of separation ranged from 3 days to 2 years with a mean of 69 days. Five percent of participants reported themselves to be either married or living together while 10% of the participants reported themselves to be dating seriously, but not living together. At the time of data collection, 89% of participants were shelter residents while the remaining 11% of participants were receiving other shelter services (e.g., legal advocacy, social work services).

Materials

The Conflict Tactics Scale (CTS; Straus, 1979). The CTS is an 18-item self-report measure that assesses tactics employed by intimate partners during conflicts and yields indices of reasoning, verbal aggression, and physical violence. Only the physical violence subscale was used in the current investigation. This subscale consists of nine items, ranging from "threw something at you" to "used a knife or fired a gun." Participants indicated how many times, if any, they had experienced any of these violent acts from their romantic partners during the past year. Response options included "never," "once," "twice," "3-5 times," "6-10 times," "11-20 times," or "more than 20 times." Physical violence scores were created by summing the product of the frequency of the violent act and the severity, or injury-producing potential, of the violent act (as described in Straus, 1990). By including frequency and severity information, this scoring method provides the most sensitive measure of the victims' experiences. Higher scores are indicative of more severe and/or frequent physical violence. The alpha coefficient of reliability for the violence subscale in the current sample was .87.

The Psychological Maltreatment of Women Inventory (PMWI; Tolman, 1989). The PMWI contains 58 items that are designed to assess a woman's experiences of psychologically abusive behavior from her male partner. All items are rated on a 5-point response scale with anchors ranging from "never" to "very frequently." Factor analysis of the PMWI items supports the existence of two factors: domination/isolation and emotional/verbal abuse. In the current sample, alpha coefficients of internal consistency were .93, .93, and .87 for the total scale score, the domination/isolation subscale, and the emotional/verbal subscale, respectively.

The Civilian Mississippi Scale for PTSD (CMS; Vreven, Gudanowski, King, & King, 1995). The CMS is a widely used, 35-item, self-report instrument of PTSD symptomatology originally developed for veteran populations but modified for use in civilian populations. The CMS samples a range of PTSD symptoms including reexperiencing, situational avoidance, numbing, and hyperarousal. All items are rated on 5-point scales with anchors ranging from "never true" or "never" to "always true" or "very frequently," with higher scores indicative of greater levels of symptomatology. The CMS has been shown to be significantly related to the Lifetime Traumatic Stressor Index and significantly, but less strongly related, to the Diagnostic Interview Schedule for PTSD (Vreven et al., 1995). The CMS has been previously used as a measure of PTSD in samples of battered women (Kemp et al., 1995). In the current sample, the internal consistency coefficient for the CMS was .83.

The Test of Self-Conscious Affect (TOSCA; Tangney, Wagner, & Gramzow, 1989). The TOSCA was designed to provide information about a person's disposition to respond with shame, guilt, externalization, detachment/unconcern, and pride across a number of situations. Only the shame and guilt indices were used in the current investigation. The TOSCA consists of a series of brief, day-to-day scenarios (e.g., "You make a big mistake on an important project at work. People were depending on you and your boss criticizes you.") Each scenario is followed by a brief phenomenological description of shame (e.g., "You would feel like you wanted to hide") and of guilt (e.g., "You would think 'I should have recognized the problem and done a better job.'"). Respondents rate their likelihood of responding in each manner indicated using a 5-point scale ranging from "not at all likely to react that way" to "very likely to react that way." The scenarios were drawn from written accounts of personal shame and guilt experiences provided by a sample of college students, and adults not in college, while the descriptions of shame and guilt reactions were drawn from a larger pool of affective, cognitive and behavioral responses provided by a separate sample of adults not in college. Within this sample of battered women, internal consistency estimates were .80 and .65 for the shame and guilt subscales, respectively. Among college student samples, Tangney and associates (1989) reported internal consistency estimates of .76 for the shame subscale and .66 for the guilt subscale. These estimates suggest reasonably high internal consistency because alpha coefficients tend to underestimate reliability in scenario-based measures due to the situational variance introduced by the scenario approach (Tangney, 1996). Tangney, Wagner, Fletcher and Gramzo (1992) reported test-retest estimates of reliability over a 3-week period, arguably a more appropriate measure of reliability for a scenario-based measure, of .85 and .74 for the shame and guilt subscales, respectively.

Procedure

Participants were approached by shelter staff and invited to participate in a research study examining the ways in which women are affected by relationship conflict. Shelter residents were informed that their participation was completely voluntary, and assured that shelter services were in no way contingent on their participation. Women gave informed consent and completed the packet of self-report questionnaires. After completing the questionnaires, participants returned them to the investigator in prepaid-postage envelopes. The participants were fully debriefed using a written debriefing form, asked for their reactions to the questionnaires, and provided with information on how to contact the investigator with any questions or concerns about the study. Each participant was reimbursed with $10 for her participation.

RESULTS

As expected, the majority of the current sample reported experiencing high levels of physical abuse ($M = 201.38$, $Mdn = 150$, $SD = 199.2$, range 2–800), total psychological abuse scores ($M = 220.4$, $Mdn = 223.84$, $SD = 39.54$, range 106–290), emotional/verbal forms of psychological abuse ($M = 93.87$, $Mdn = 96$, $SD = 13.7$, range 44–115) and domination/isolation forms of psychological abuse ($M = 97.96$, $Mdn = 101$, $SD = 22.08$, range 44–130). PTSD symptomatology in the current sample was also high ($M = 112.49$, $Mdn = 112$, $SD = 21.62$, range 56–159). Using a cut-off of 107 on the Mississippi Scale as recommended for Vietnam veterans (Keane, Caddell, & Taylor, 1988) and as used previously in samples of battered women (Kemp et al., 1995), 65.1% of participants could be categorized as at high risk for a diagnosis of PTSD. Given the large range of scores on the CTS, the measure of physical abuse, data were examined for the presence of nonnormality and univariate outliers. Examination of descriptive statistics for the CTS revealed that skew = 1.53 and kurtosis = 1.78. While these scores reflect a slightly nonnormal distribution, they do not reflect problematic levels of nonnormality (Kline, 1998). To address the issue of potential outliers, CTS scores were transformed to a standardized z-score distribution. Tabachnick and Fidell (1989) have suggested that cases with standardized scores in excess of +/-3.00 are potential outliers. In the current distribution, no cases exceeded +/-3.00, indicating no outliers. Simple order correlations among all variables of interest are reported in Table 1.

Motherhood status, or participants' "yes" or "no" answer to the question, "Do you have any children?," was a significant statistical predictor of PTSD symptomatology, accounting for 8% of the variance, $\beta = -.28$, $F(1, 60) = 5.13$, $p < .05$, suggesting that, in general, women without children reported higher levels of PTSD symptomatology than did women with children. Accordingly, motherhood status was entered as a covariate in all analyses using PTSD symptomatology as an outcome variable. Specifically, this variable was entered as the first independent variable in all regression equations predicting PTSD symptoms. Motherhood status was not related to additional outcome variables, and no other demographic variable was a significant statistical predictor of any variable of interest.

Main Effects of Abuse on PTSD Symptomatology

In order to examine the relationship of psychological and physical abuse to PTSD symptomatology a series of multiple regression analyses was conducted. In the first analysis, psychological abuse only was entered as an independent variable, predicting PTSD symptomatology. In the second analysis, physical abuse only was entered as the independent variable. As hypothesized, both level of psychological abuse, R^2 (2, 59) = .21, $\beta = .37$, $t(59) = 3.19$, $p < .01$, and level of physical abuse, R^2 (2, 56) = .16, $\beta = .27$, $t(56) = 2.2$, $p < .05$, were positively related to severity of PTSD symptomatology. In order to determine if the effects of psychological abuse on PTSD remain significant even when statistically controlling for the effects of physical abuse, an additional multiple regression was conducted. In this analysis, physical and psychological abuse were entered simultaneously as independent variables. Results indicated that the overall regression equation was significant, accounting for 23% of the variance in PTSD symptomatology, $F(3, 55) = 5.41$, $p < .01$. Additionally, as predicted, psychological abuse was a significant independent predictor of PTSD symptomatology, $\beta = .30$, $t(55) = 2.26$, $p < .05$, while physical abuse was not, $t(55) = 1.10$, ns.

TABLE 1. Correlations Among Variables of Interest (n = 61)

	Psych Abuse	Em/Verb Subscale	Dom/Isol Subscale	Physical Abuse	PTSD	Shame	Guilt
Em/Verb Subscale	.87****						
Dom/Isol Subscale	.95****	.73****					
Physical Abuse	.43***	.29*	.48****				
PTSD	.38**	.41***	.34**	.31*			
Shame	.25	.28*	.25	.13	.47***		
Guilt	.28*	.31*	.26	.02	.21	.52****	
Depression	.41***	.41***	.40**	.29*	.67****	.35*	.17

Note. *p </ = .05. **p < .01. *** p </ = .001. ****p < .0001.

In order to determine if different forms of psychological abuse were differentially related to PTSD symptomatology, a similar series of multiple regression analyses was conducted using the domination/isolation and emotional/verbal subscales of the PMWI. In the first analysis, the domination/isolation subscale was a significant correlate of PTSD symptomatology, R^2 (2, 59) = .18, β = .32, t (59) = 2.74, p < .01. To determine if these effects remained significant after controlling for the effects of physical abuse, physical abuse was entered as the first independent variable and the domination/isolation subscale was entered as the second independent variable in the regression equation. Results of this analysis indicated that, after controlling for the effects of physical abuse, the domination/isolation subscale of the PMWI was no longer a significant correlate of PTSD symptomatology, R^2 (3, 55) = .20, β = .25, t (55) = 1.80, ns. Similar regression analyses were conducted using the emotional/verbal subscale of the PMWI as an independent variable. Results revealed that the emotional/verbal subscale was a significant correlate of PTSD symptomatology, R^2 (2, 59) = .22, β = .38, t (59) = 3.29, p < .01, and this relationship remained significant even after controlling for the effects of physical abuse, R^2 (3, 55) = .24, β = .31, t (55) = 2.49, p < .05.

Main Effects of Abuse on Shame and Guilt

In order to examine the relationship of total psychological abuse scores and physical abuse scores to reported levels of shame, multiple regression analyses were employed. First, total psychological abuse was entered as the independent variable and shame was entered as the dependent variable and, contrary to predictions, did not emerge as a significant correlate, R^2 (1, 48) = .06, β = .25, t (48) = 1.79, ns.[1] Next, physical abuse was entered as the independent variable of shame and likewise was nonsignificant, R^2 (1, 45) = .02, β = .13, t (45) = .88, ns. Multiple regression analyses conducted to examine the differential associations with type of psychological abuse indicated that the domination/isolation subscale of the PMWI was not related to shame, R^2 (1, 48) = .06, β = .25, t (48) = 1.81, ns, but the emotional/verbal subscale of the PMWI was, R^2 (1, 48) = .08, β = .28, t (48) = 2.02, p < .05.

Two additional multiple regression analyses were conducted to examine the relationship of total psychological abuse scores and physical abuse scores (the independent variables) to reported levels of guilt (the dependent variable). Results indicated that neither psychological abuse, R^2 (1, 47) = .08, β = .28, t (47) = 2.01, ns, nor physical abuse, R^2 (1, 44) = .00, β = .02, t (44) = .14, ns, were significantly related to guilt. In order to examine the independent effects of the two types of psychological abuse on guilt, the domination/isolation subscale was entered as the independent variable in one regression and the emotional/verbal subscale in the second regression. Results indicated that the effects of the domination/isolation subscale on guilt were nonsignificant, R^2 (1, 47) = .07, β = .26, t (47) = 1.88, ns, but those of the emotional/verbal subscale were significant, R^2 (1, 47) = .09, β = .31, t (47) = 2.23, p < .05.

Main Effects of Shame and Guilt on PTSD Symptomatology

To test the hypothesis that the emotional reactions of shame and guilt would be significantly related to PTSD symptomatology, shame was entered as the independent variable in one regression and guilt was entered as the independent variable in a second regression. Shame emerged as a significant correlate of PTSD symptomatology, R^2 (2, 46) = .20, β = .44, t (46) = 3.34, p < .01, but guilt did not, R^2 (2, 45) = .10, β = .18, t (45) = 1.30, ns.

Mediating Effects of Shame

It was hypothesized that participants' reported level of shame would mediate the relationship between psychological abuse scores and PTSD symptomatology. However, neither total psychological abuse scores nor domination/isolation subscale scores were found to be significantly associated with shame. Accordingly, shame could not be tested as a mediator of the relationships between total or domination/isolation psychological abuse scores and PTSD symptomatology. In order to determine if shame was a mediator of the relationship between emotional/verbal forms of psychological abuse and PTSD symptomatology, three requirements needed to be satisfied (Baron & Kenny, 1988). As reported earlier, the first two requirements, that significant relationships exist between emotional/verbal abuse and shame and emotional/verbal abuse and PTSD symptomatology, were met. In order to determine if the final condition necessary for mediation was met, emotional/verbal abuse and shame were entered simultaneously to predict PTSD symptomatology. In this equation, only shame emerged as a significant correlate of PTSD symptomatology, R^2 (3, 45) = .25, β = .40, t (45) = 2.93, p < .01, suggesting that the relationship between the emotional/verbal subscale of the PMWI and PTSD symptomatology can be fully accounted for by the effects of shame. Results of this regression equation are reported in Figure 1.[2]

DISCUSSION

The current study attempted to replicate and extend the current research on the relationships between psychological abuse victimization and PTSD among battered women. We replicated results of previous investigations by documenting that PTSD symptomatology was related to both psychological and physical abuse, but that only psychological abuse was a unique, significant statistical predictor of PTSD symptomatology. These results should not be interpreted to mean that physical abuse is unimportant in the development of PTSD in battered women. However, previous research may have overestimated the influence of physical abuse relative to psychological abuse by failing to control for the concurrent effects of psychological abuse.

Unlike previous research on the relationship between psychological abuse and PTSD symptomatology, we examined two types of psychological abuse: emotional/verbal victimization and domination/isolation victimization. The results indicated that while both forms of psychological abuse were related to PTSD symptomatology, only the emotional/verbal form of abuse remained a significant independent explanatory variable after controlling for physical abuse. Emotional/verbal forms of abuse, as defined by the PMWI, include such behaviors as withholding emotional resources, verbal attacks, and behavior that degrades women. Domination/isolation forms of abuse include behaviors related to rigid observance of traditional sex roles, demands for subservience, and isolation from resources. Emotional/verbal forms of psychological abuse may be a more direct form of psychological assault, thereby having the potential for a greater impact on cognitions and affect than domination/isolation forms of abuse. While the two subscales included in this investigation are highly correlated,

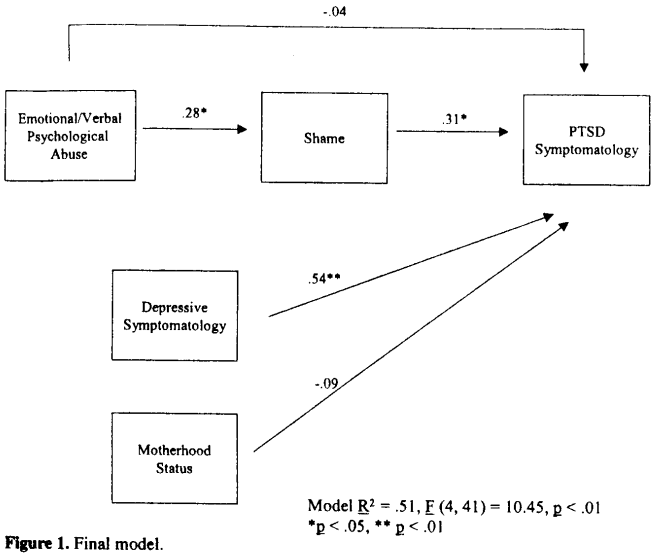

Figure 1. Final model.

our findings may be relevant for a more fine-tuned conceptualization and classification of psychological abuse. The two subscales may assess two associated but different forms of nonphysical coercion, each having distinct antecedents and consequences.

We further extended the research on psychological abuse and PTSD by testing shame- and guilt-proneness as mediators. Consistent with the pattern of results predicting PTSD, physical abuse scores, total psychological abuse scores, and domination/isolation scores were not significant correlates of shame or guilt but the emotional/verbal form of psychological abuse was. Guilt and shame are both emotional reactions involving negative self-evaluations; guilt involves negative evaluations of one's own behavior while shame involves negative evaluations of one's entire self. Again, perhaps emotional/verbal forms of psychological abuse are unique predictors of these emotional reactions because of the types of behavior that constitute emotional/verbal abuse. These emotionally and verbally abusive behaviors more directly attack victims' self-concepts, theoretically causing victims to experience higher levels of guilt and shame.

Although guilt was not a significant correlate of PTSD, shame emerged as an important predictor. This finding replicates previous work suggesting that shame is a more pathological emotion than guilt (Tangney, 1996). We hypothesized that shame would mediate, or fully account for, the relationship between psychological abuse and PTSD symptomatology. While total psychological abuse scores and domination/isolation abuse scores were not related to shame, this hypothesis was supported for the emotional/verbal abuse subscale, indicating that the impact of emotional/verbal forms of psychological abuse on PTSD symptomatology was fully explained by the effects of shame. DSM-IV diagnostic criteria

for PTSD focus on the victims' affective reactions of fear, helplessness, or horror (APA, 1994). However, findings from the current investigation suggest that other strong emotional reactions, such as shame, also may be important. It may be that shame is an important variable in the development of PTSD for a number of different traumatic experiences, or its importance may be limited to experiences of emotional/verbal forms of psychological abuse by battered women. Additional research is needed to clarify this question.

The findings reviewed above have several important implications for clinicians working in the field of family violence. Primarily, these results suggest that professionals may need to pay increased attention to psychological abuse, a form of abuse that has been historically understudied. Treatment programs for both perpetrators and victims of domestic violence can be improved by including prevention efforts aimed specifically at psychological abuse. In addition, the efficacy of existing treatment programs for victims of domestic violence can be improved by specifically addressing the effects of psychological abuse. Therapies can be developed which directly challenge victims' guilt- and shame-based cognitions and affect. Additionally, clinicians should be aware that victims of severe psychological abuse, particularly those who also experience physical abuse, may be at high risk for the development of PTSD. Treatment of PTSD in battered women can be aimed at modifying victims' feelings and beliefs about their role in the psychological abuse and their consequent negative global self-evaluations.

The results of the current study should be interpreted with caution. Despite using statistical procedures to isolate the relative effects of psychological abuse and physical abuse, the majority of women in this sample have experienced significant levels of both psychological and physical abuse. Interestingly, in contrast to many researcher's stereotypes, not all of these women were severely physically battered. Regardless, these results should not be uniformly applied to a population of women who are only psychologically abused. Future investigations should examine the impact of psychological abuse on women who are not also physically abused. In addition, given that the current sample of battered women is drawn from battered women shelters, it can be hypothesized that they are experiencing a number of additional life stressors such as relocation and limited social support. The current study does not isolate the influence of these variables that may increase reports of PTSD symptomatology. Additional research is needed to determine if the current findings will generalize to a sample of nonshelter battered women or battered women who have not left their abusive partners.

Important questions regarding the relationship between psychological abuse and psychopathology still remain. For example, is psychological abuse a unique predictor of other forms of psychopathology, such as depression, anxiety and substance abuse? Many other variables need to be included in future investigations to further our understanding of the relationship between psychological abuse and PTSD symptomatology. Additional cognitive (e.g., attributions of responsibility), affective (e.g., helplessness) and situational variables (e.g., previous victimization history) may interact with shame, influencing the development of PTSD in battered women. The results of this investigation, along with additional research in this area, can be used to help clinicians and researchers more fully understand the development of PTSD in battered women in hopes of helping them to overcome their traumatic experiences.

NOTES

[1]Given the large number of subjects lost in analyses involving the TOSCA, group comparisons were conducted to ensure that participants with lost data on this measure did not differ from participants without lost data on this measure. One-way analyses of variance

revealed no group differences for physical abuse, $F(1, 58) = .08$, ns, total psychological abuse, $F(1, 61) = .62$, ns, domination/isolation psychological abuse, $F(1, 61) = .33$, ns, or emotional/verbal psychological abuse, $F(1, 61) = .13$, ns. Additionally, one-way analyses of variance revealed no significant differences between the two groups on either education level, $F(1, 60) = 2.0$, ns, or income, $F(1, 42) = 1.17$, ns.

[2]Within the current sample, participants' reports of PTSD symptomatology, emotional/verbal abuse, and shame were significantly related to depressive symptomatology as reported in Table 1. In order to ensure that depression was not a confound influencing the relationship of emotional/verbal forms of psychological abuse and shame to PTSD symptomatology, the depression subscale of the Symptom Checklist 90 (Derogatis, 1983) was entered as a statistical control in the full model that tested the mediation hypothesis. In this analysis, the results of the mediational model were unchanged, indicating that the relationship of emotional/verbal forms of abuse and reactions of shame to PTSD symptomatology are not attributable to the confounding effects of a third variable, depression.

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Offprints. Requests for offprints should be directed to Dr. Amy Street, Women's Health Sciences Division (116B-3), National Center for PTSD, Boston VA Medical Center, 150 South Huntington Ave., Boston, MA 02130.