

Betray My Trust, Shame on Me: Shame, Dissociation, Fear, and Betrayal Trauma

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Recent research suggests that betrayal is a fundamental dimension of trauma that may be a major factor contributing to posttraumatic distress (Freyd & Birrell, 2013). In the current study using a college student sample of female trauma survivors, ($N = 124$; 79% Caucasian; mean age = 20.40, $SD = 3.60$), we examined the contribution of high- and low-betrayal trauma history to shame, dissociation, and fear responses to threat. We hypothesized that (a) overall, shame and dissociation would be higher following interpersonal compared with noninterpersonal threat; (b) high- but not low-betrayal trauma history would predict increased shame and dissociation following interpersonal threat; and (c) low- but not high-betrayal trauma history would predict increased fear following noninterpersonal threat. Hypothesis 1 was not supported. There was no difference in overall shame and dissociation following interpersonal compared with noninterpersonal threat. Hypotheses 2 and 3 were supported. History of high- but not low-betrayal trauma predicted increases in shame ($R^2 = .14$) and dissociation ($R^2 = .23$) following interpersonal threat, whereas history of low- but not high-betrayal trauma predicted increases in fear ($R^2 = .07$) following noninterpersonal threat. These results contribute to growing evidence that perpetrator closeness matters when considering posttraumatic responses. Shame and dissociation warrant more clinical attention as possible barriers to effective exposure therapy among betrayal trauma survivors.

Keywords: betrayal trauma, shame, dissociation, fear, interpersonal trauma

Although researchers have tended to focus on perceived life threat as the driving force in posttraumatic distress, increasing evidence suggests that betrayal plays an important and unique role in trauma symptom profiles. For example, betrayal trauma research (Freyd, 1994, 1996) supports the theory that dissociation is more likely to occur among survivors of abuse perpetrated by someone trusted, close, or depended upon (high-betrayal traumas) and less likely among survivors of abuse perpetrated by a stranger or noninterpersonal events like major accidents and natural disasters (low-betrayal traumas; Freyd, Klest, & Allard, 2005; Goldsmith, Freyd, & DePrince, 2012; Hulette et al., 2008). Recent work suggests that betrayal and perceived life threat differentially predict posttraumatic stress disorder (PTSD) symptom clusters, with betrayal relating to avoidance and numbing, and perceived life threat relating to reexperiencing and hyperarousal (Kelley, Weathers, Mason, & Pruneau, 2012). Additionally, the mechanisms

linking high- versus low-betrayal experience to psychological symptoms may differ. Emotion regulation difficulties have been found to mediate the association between high-betrayal traumas and symptoms including depression, anxiety, avoidance, and intrusion, whereas no such mediating effect was found between low-betrayal traumas and psychological symptoms (Goldsmith, Chesney, Heath, & Barlow, 2013).

As the current study examines the link between dissociation and betrayal trauma, it is important to first define what is meant by dissociation. There is some disagreement regarding the definition of dissociation (DePrince & Freyd, 2007). Nijenhuis, Van der Hart, and Steele (2010) limit their definition to what they and others (e.g., Ross, 2009) refer to as structural dissociation of the personality. Structural dissociation is thought to be common in survivors of interpersonal trauma and to involve a split between an apparently normal part that is responsible for day-to-day functioning, and an emotional part that experiences the emotional memory of the traumatic experience(s). Given the use of a nonclinical sample in the current study, we took a more inclusive approach to our definition of dissociation, which includes derealization, depersonalization, and identity confusion (Krüger & Mace, 2002). We did not include nonpathological experiences that are sometimes identified as dissociative because of a lack of empirical evidence that they are associated with pathological dissociation (e.g., hypnotic suggestibility; van IJzendoorn & Schuengel, 1996). We focus primarily on the negative, rather than the positive, symptoms of dissociation (e.g., traumatic intrusions). This is in line with the literature on the dissociative subtype of PTSD, which indicates that a subgroup of people with PTSD experience persistent overmodulation of emotion (Lanius, Brand, Vermetten, Frewen, & Spiegel, 2012).

This article was published Online First January 19, 2015.

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This work was supported in part by the David Caul Graduate Research Grant from the International Society for the Study of Dissociation. This work is based on a doctoral dissertation by Melissa G. Platt. We acknowledge helpful input from Sara Hodges, Gordon Hall, Debra Merskin, Sanjay Srivastava, Karyn Lewis, and members of the Dynamics Lab, and the time and effort of research assistants and study participants.

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Although dissociative alterations in consciousness have been associated with both high-betrayal (Freyd et al., 2005) and low-betrayal (Noyes & Kletti, 1977) trauma, evidence suggests that dissociation may have a uniquely adaptive function in the case of high-betrayal trauma. Betrayal trauma theory suggests that traumatizing events may involve fear, betrayal, or both, and that fear and its action tendency to flee should be more adaptive in response to low-betrayal trauma, whereas dissociation should be more adaptive in response to high-betrayal trauma. Dissociation may facilitate high-betrayal trauma survival by allowing the victim to detach from awareness of abuse, thereby protecting a relationship with a depended-upon perpetrator (Freyd, 1996). In the case of low-betrayal trauma, dissociation is typically not necessary for survival. When the perpetrator is a stranger, it is most effective for the victim to recognize the harm in order to fight or run in the moment and avoid that person in the future. When the trauma is noninterpersonal in nature, it is most effective for the victim to recognize the danger and flee the situation. In both instances of low-betrayal trauma, there is no depended-upon relationship to protect. Empirical support indicates that dissociation may indeed facilitate the ability to disconnect from trauma-relevant stimuli among high-betrayal trauma survivors (Becker-Blease, Freyd, & Pears, 2004; DePrince & Freyd, 2001).

We propose that, like dissociation, feelings of shame may be more strongly related to high-betrayal, compared with low-betrayal, trauma. Research suggests feelings of shame are higher in survivors of interpersonal compared with noninterpersonal trauma (Amstadter & Vernon, 2008). However, to our knowledge, no research to date has specifically examined feelings of shame in response to high-betrayal trauma versus low-betrayal trauma experiences. Literature on the integrated specificity model of emotion (Dickerson, Gruenewald, & Kemeny, 2004; Weiner, 1992) proposes that different types of threats are accompanied by integrated biological, emotional, and behavioral response patterns adaptive for surviving a given threat type. Dickerson and colleagues (2004) apply the integrated specificity model to social evaluative types of threat in their social self-preservation theory of shame. The authors provide evidence that following social evaluative threat, shame co-occurs with a submissive display, release of proinflammatory cytokines and cortisol, and withdrawal or disengagement. The work of Keltner, Young, and Buswell (1997), which demonstrates the ability of the postural shame display to appease others, supports social self-preservation theory.

According to social self-preservation theory, the coordinated shame response is thought to interrupt a perceived transgression from a social norm or standard and to prepare for the possibility of being attacked. Kemeny, Gruenewald, and Dickerson (2004) argue that shame should be most likely to occur and play a "quite urgent" survival function for individuals with low status facing a social threat. The authors propose that it is adaptive for the low-status individual to withdraw and appease in order to avoid an uncontrollable threat to her social standing. Although social self-preservation theory recognizes that social groups are necessary for survival, it does not explicitly discuss the role of level of trust or dependency in eliciting shame in the low-status individual. We propose that survivors of trauma perpetrated by someone close will be more prone to shame because such close relationships play a more urgent survival function compared to relationships with someone not close. The current study focuses on the emotional

element of the shame response with the understanding that the emotional experience is part of a larger coordinated biological, behavioral, and emotional response system.

The primary aim of the current study was to assess the association between betrayal trauma and shame, fear, and dissociation responses to perceived threat. This aim was achieved by (a) investigating the overall tendency to become more dissociative, ashamed, or fearful following exposure to a perceived threat that is interpersonal versus noninterpersonal in nature; and (b) assessing the contribution of high-betrayal and low-betrayal trauma history to shame, fear, and/or dissociation responses to perceived interpersonal and noninterpersonal threat. In the current study, we differentiate between the word *trauma* and the word *threat*. When referring to trauma, we mean a particular type of threat that involves major physical, sexual, or emotional harm or violation. We use the term threat more broadly to encompass traumatic experiences as well as more minor experiences that may elicit strong emotions, such as viewing the images in the current study.

The current study focuses on women, for the sake of clarity, given the gendered nature of betrayal trauma (DePrince & Freyd, 2002). High-betrayal trauma has been strongly associated with female gender and low-betrayal trauma has been strongly associated with male gender (Goldberg & Freyd, 2006). Gender differences have likewise been found in psychological outcome of exposure to betrayal trauma (Tang & Freyd, 2012). In addition, women have been proposed to be more shame-prone compared with men because of their relatively lower status (Lewis, 1987).

Method

Participants

Data collection was conducted using an undergraduate sample at a large public northwestern university. Recruitment via SONA Systems, a human subjects pool management software system for online participant recruitment and data management, resulted in the inclusion of 124 participants who selected the study based on their schedule availability. In order to reduce self-selection bias and improve generalizability of data (Freyd, 2012), participants were not aware of the focus of the study prior to participation and were therefore unable to self-select based on study content. We prescreened participants for at least one traumatic experience and for female gender. Traumatic experiences were defined using the Brief Betrayal Trauma Survey (Goldberg & Freyd, 2006), and included physical, sexual, and emotional abuse perpetrated by someone close or someone not close to the victim, noninterpersonal events such as major car accidents and natural disasters, and an "other seriously traumatic event" category. Ninety-eight (79.0%) identified as White/Caucasian, nine (7.3%) identified as Hispanic, two (1.6%) identified as African American/Black, 20 (16.1%) identified as Asian or Asian American, and five (4.0%) identified as "other." The average age was 20.40 years ($SD = 3.60$). Given the relatively large proportion of Asian/Asian Americans compared with all other groups, except White/Caucasian, mean differences were assessed for Asian/Asian Americans compared with all other groups. Baseline shame was significantly higher for Asians/Asian Americans ($M = 3.45$, $SD = 3.64$) compared with all other participants ($M = 1.24$, $SD = 1.89$), $t(122) = 2.64$, $p = .015$. No additional mean differences were revealed.

Measures

Demographics. Participants' ethnicity, age, country of birth, number of siblings, religion, and sexual orientation were assessed in a brief demographics questionnaire.

State Shame and Guilt Scale (SSGS; Marschall, Sanftner, & Tangney, 1994). The SSGS is a 15-item self-rating scale of current feelings of shame, guilt, and pride. The five Shame subscale items were included in the current study. The questionnaire informs participants, "The following are some statements which may or may not describe how you are feeling *right now*," and then instructs participants to rate the following on a 1-to-5 Likert scale: *I want to sink into the floor and disappear; I feel small; I feel like a bad person; I feel humiliated, disgraced; and I feel worthless, powerless.* The SSGS Shame subscale was chosen for the current study as our measure of state shame because of its brevity, because it is one of few existing State Shame scales, and because prior research has demonstrated evidence of predictive and convergent validity (Marschall et al., 1994; Platt & Freyd, 2012). In the current study, the SSGS subscale proved to be a reliable measure of shame ($\alpha = .77$).

Brief Betrayal Trauma Survey (BBTS; Goldberg & Freyd, 2006). The BBTS is a 14-item self-report measure. Items distinguish between noninterpersonal events and interpersonal events perpetrated by someone close or not close. Each item is assessed before age 12, at ages 12 to 17, and age 18 or older. Prior research has demonstrated evidence of construct validity based on agreement between traumatic events endorsed on the BBTS and an existing trauma inventory (DePrince, 2001). Previous work has employed the BBTS in investigating issues such as trauma disclosure (Foyne, Freyd, & DePrince, 2009), revictimization (Gobin & Freyd, 2009), and borderline personality disorder (Kaehler & Freyd, 2009). The BBTS was chosen as the betrayal trauma measure in the current study because it is brief and well-validated (DePrince, 2001; Goldberg & Freyd, 2006). In the current study, high-betrayal trauma included physical, sexual, and emotional abuse by someone close. Low-betrayal trauma included physical and sexual abuse by someone not close, and major car accidents. Physical- and sexual-abuse items were included in both the high-betrayal and low-betrayal variables in order to match the types of trauma experienced as closely as possible between the two. As there is no "emotional abuse by someone not close" item, major car accidents were included as the third low-betrayal item. In the current study, the BBTS was a reliable measure of total trauma ($\alpha = .92$). Although high- and low-betrayal-trauma subscales consisted of only three items each, reliability was adequate for high-betrayal ($\alpha = .85$) and low-betrayal ($\alpha = .61$) trauma.

State Scale of Dissociation (SSD; Krüger & Mace, 2002). The SSD is a 56-item measure comprised of items rated on a 1-to-5 Likert scale. The measure was factor analyzed by the authors to include Identity Confusion, Conversion, Amnesia, Identity Alteration, and Hyperamnesia subscales. The authors of the scale provided evidence of good discriminant and convergent validities, as well as good content and predictive validities. They also found good internal consistency and split-half reliability. Prior to inclusion in the proposed study, we pilot tested the SSD using a dissociation induction (Zoellner, Sacks, & Foa, 2007), and in order to reduce participant burden, only retained subscales with the highest variability. The Derealization, Depersonalization, and

Identity Confusion subscales were retained (Items 1 to 24). Sample items include "Right now things seem unreal or dreamlike" (Derealization), "At this moment my body feels vague, indefinite, strange" (Depersonalization), and "Right now I do not know who I really am" (Identity Confusion). The SSD was chosen for the current study because our pilot testing revealed evidence of predictive validity, in that SSD scores increased in response to the dissociation induction. In the current study, the included SSD subscales reliably measured derealization ($\alpha = .88$), depersonalization ($\alpha = .91$), identity confusion ($\alpha = .94$), and overall dissociation ($\alpha = .94$).

Positive and Negative Affect Schedule-Expanded Form, Fear subscale (PANAS-X; Watson & Clark, 1994). The Fear subscale of the PANAS-X consists of six mood states, which participants are asked to endorse on a 5-point Likert scale. Mood states assessed include *afraid, scared, frightened, nervous, jittery, and shaky.* Construct validity of the PANAS-X Fear subscale has been demonstrated, in that fear items loaded onto a single factor in a principal factor analysis and no items from other scales loaded onto the Fear factor (Watson & Clark, 1994). The PANAS was chosen as our fear measure because it is a well-established scale and is brief and easy to comprehend. In the current study, the PANAS proved to reliably measure fear ($\alpha = .91$).

Procedure

The university institutional review board approved the study prior to data collection. Following the prescreening for female gender and for lifetime exposure to at least one traumatic event, participants who met inclusion criteria were given the opportunity to participate in the study. During the informed consent procedure, the research assistant explained that participation was voluntary and that the participant could choose to leave at any time. Participants who completed the study received partial fulfillment of a research requirement for psychology and linguistics courses.

Participants completed study questionnaires on a lab computer via Qualtrics software, which was also used to randomly assign participants, without replacement, to an interpersonal-threat condition, noninterpersonal-threat condition, or negative-feedback condition (not a focus of the current article). Research assistants were unaware of the study condition to which each participant was assigned. We used the following inductions:

1. Interpersonal-threat condition. The following words appeared on the screen for participants in the interpersonal-threat condition: "A series of images will now appear on the screen. The images will advance automatically." For the interpersonal-threat condition, participants viewed 10 images from the International Affective Picture System (IAPS; Lang, Bradley, & Cuthbert, 1997). Participants viewed each image for 6 s with a 2-s pause between images. We matched the images with images in the noninterpersonal-threat condition based on arousal and valence norms (Lang et al., 1997) and threat ratings (Mogg, Bradley, Miles, & Dixon, 2004). Images included the following: 2245.51 (boy with black eye), 2276 (girl crying), 2703 (children crying and begging), 3191 (bruised nude woman lying on a bed), 4621 (sexual harassment), 6315 (man grabbing woman's neck), 6360

(man punching woman), 6530 (man hitting woman), 6561 (woman recoiling as man tries to kiss her), and 6838 (little girl screaming as police arrest caregivers).

2. Noninterpersonal-threat condition. The noninterpersonal-threat condition was identical to the interpersonal-threat condition, with the exception of the specific images viewed by participants. In the noninterpersonal-threat condition, we included IAPS (Lang et al., 1997) images without an interpersonal component. Images included the following: 5971 (tornado), 9470 (exploded building), 9471 (exploded building), 9610 (plane crash), 9611 (plane crash), 9900 (auto accident), 9911 (auto accident), 9920 (auto accident), 9922 (fire), and 9930 (boat capsizing).

Prior to viewing the images, participants completed a brief demographics questionnaire. Prior to and immediately following viewing the images in each condition, participants completed the SSGS, SSD, and PANAS-X Fear subscale. Upon completion of all questionnaires and induction, a debriefing form appeared on the screen and a trained research assistant explained the debriefing to the participant aloud. Although no adverse events were reported during the study, participants were given a list of resources in case they felt distressed at any time after leaving.

Results

Descriptive Statistics and Correlations

There were no between-condition differences in baseline shame, fear, or dissociation, or demographic variables. We used natural log transformations on the high-betrayal trauma and low-betrayal trauma variables to resolve skew. Sixty-nine (55.6%) participants endorsed at least one lifetime high-betrayal trauma, and 59 (47.6%) endorsed at least one lifetime low-betrayal trauma. High-betrayal trauma consisted of physical, sexual, or emotional abuse by someone close and low-betrayal trauma consisted of physical and sexual abuse by someone not close or major automobile accidents. Table 1 presents the average number of high- and low-betrayal traumas experienced by age. Pearson's correlations demonstrated significant relationships between high-betrayal trauma and baseline shame, $r = .21$, $p = .027$, and baseline SSD dissociation, $r = .22$, $p = .017$, as well as low-betrayal trauma and baseline SSD dissociation, $r = .21$, $p = .023$. All remaining correlations between high-betrayal trauma or low-betrayal trauma with shame, dissociation, or fear were nonsignificant (see Table 2). Although several baseline variable pairs were correlated, collinear-

ity tolerance was adequate, ranging from .69 to .89. This indicates that there is enough distinct variance between variables for analyses to be meaningful.

Hypothesis Testing

We used PASW statistical software (SPSS Inc., 2009) for all analyses. First, shame, dissociation, and fear difference scores were compared between the interpersonal- and noninterpersonal-threat conditions using independent samples t tests. We expected that shame and dissociation change scores would be greater (increase more) for the interpersonal-threat condition, and that fear change scores would be greater (increase more) for the noninterpersonal-threat condition. Our predictions were not supported. We found no overall differences in shame, fear, or dissociation between the two conditions ($ps > .05$).

Next, in order to test the hypothesis that betrayal trauma history would predict shame and dissociation, but not fear, in response to interpersonal threat, we ran a series of regressions. For each regression, we entered high-betrayal trauma history in the first step and low-betrayal trauma history in the second step, in order to determine whether low-betrayal trauma would contribute to variance not accounted for by high-betrayal trauma. We repeated this three times with the dependent variable being (a) shame change scores, (b) dissociation change scores, and (c) fear change scores. We expected that high-betrayal trauma would significantly predict change in shame and dissociation, but not fear, and that low-betrayal trauma would not contribute significantly to variance in shame or dissociation change scores.

Results matched our predictions within the interpersonal-threat condition. In the regression predicting shame, high-betrayal trauma history accounted for 13.5% ($p < .001$) of the variance in shame change scores ($\beta = .40$, 95% CI [.49, 3.95]). Low-betrayal trauma did not significantly contribute to the model ($p = .298$). We repeated this regression, adding Asian or Asian American status as a covariate, given baseline differences in shame between Asian/Asian Americans and all other groups. Asian/Asian American ethnicity was not a significant predictor of shame change scores ($p = .167$), and high-betrayal trauma remained significant with the inclusion of this covariate. In the regression predicting dissociation, high-betrayal trauma accounted for 23.2% ($p = .003$) of the variance in dissociation change scores ($\beta = .52$, 95% CI [2.77, 12.38]). Low-betrayal trauma did not significantly contribute to the model ($p = .885$). In the regression predicting fear, neither high-betrayal trauma ($p = .387$), nor low-betrayal trauma ($p = .841$) was significant.

In order to test the hypothesis that low-betrayal trauma history would predict fear, but not shame or dissociation, in response to noninterpersonal threat, we ran another series of three regressions with the same predictors and outcome variables as in the previous analyses. In this case, we expected that low-betrayal trauma, but not high-betrayal trauma, would contribute significantly to increase in fear following viewing of the noninterpersonal-threat images. Results matched our predictions. The regressions predicting shame and dissociation were both nonsignificant, and in the regression predicting fear, high-betrayal trauma was not significant ($ps > .05$). The addition of low-betrayal trauma significantly contributed to the model ($\beta = .44$, 95% CI [.14, 13.10]), and the

Table 1
Average Number of High- and Low-Betrayal Traumas Experienced by Age

Age	High-betrayal traumas <i>M</i> (<i>SD</i>)	Low-betrayal traumas <i>M</i> (<i>SD</i>)	Total traumas <i>M</i> (<i>SD</i>)
<12	1.08 (2.39)	.29 (.82)	1.35 (2.62)
12–17	1.89 (2.59)	.44 (.82)	2.38 (2.99)
18+	1.39 (2.26)	.41 (.78)	1.82 (2.68)
Total	4.19 (6.59)	1.12 (1.81)	5.35 (7.55)

Table 2
Means, Standard Deviations, and Correlations

Measure	HBT	LBT	Baseline Shame (SSGS)	Baseline Fear (PANAS-X)	Baseline Dissociation (SSD)	Mean	SD	Range
HBT	—					4.35	6.63	37.00
LBT	.39 ^{□□}	—				1.09	1.69	9.00
Baseline Shame (SSGS)	.21 [□]	.09	—			1.74	2.46	10.00
Baseline Fear (PANAS-X)	.05	.11	.53 ^{□□}	—		2.39	2.77	13.00
Baseline Dissociation (SSD)	.22 [□]	.21 [□]	.58 ^{□□}	.59 ^{□□}	—	10.35	12.40	57.00

Note. LBT = low-betrayal traumas; HBT = high-betrayal traumas; SSGS = State Shame and Guilt Scale; PANAS = Positive and Negative Affect Schedule; SSD = State Scale of Dissociation.

□ $p < .05$. □□ $p < .001$.

Step 2 model accounted for 7.0% of the variance in fear change scores ($p = .046$).

Discussion

This study demonstrated a link between high-betrayal trauma and both shame and dissociation, and between low-betrayal trauma and fear in female trauma survivors. Freyd's (1996) betrayal trauma theory and Dickerson and colleagues' (2004) integrated specificity model served as the basis for hypothesis development and testing. As we expected, participants endorsing more exposure to high-betrayal trauma were more prone to shame and dissociation, but not fear, in response to viewing images involving interpersonal threat. In addition, as we predicted, participants endorsing more exposure to low-betrayal trauma were more prone to fear, but not shame or dissociation, in response to viewing images involving noninterpersonal threat. Overall between-group differences in shame, fear, and dissociation were not significant, indicating that threat type only matters when individual history of high-betrayal trauma and low-betrayal trauma is taken into account.

Although this study focused on state variables as they related to particular threat types, results have potential implications related to trait shame and dissociation in high-betrayal trauma survivors. Significant correlations were revealed between high-betrayal trauma history and baseline state shame and dissociation. Study participants were not asked any questions about trauma history prior to responding to baseline questionnaires and therefore were not primed for an increase in these variables prior to viewing the images. Thus, baseline state measures of shame and dissociation (though possibly not fear) appear sensitive to trait-level experiences as well. Chronic, or trait-level, shame has been found to predict depression (Andrews, 1995), PTSD (Leskela, Dieperink, & Thuras, 2002), physical health problems, and earlier mortality (Dickerson, Gruenewald, & Kemeny, 2009). Chronic dissociation is related to psychosis (Moskowitz, 2011), PTSD (Najavits & Walsh, 2012), and physical health problems, (Haven & Pearlman, 2004). Thus, accurate measurement and understanding of how state shame and dissociation relate to trait shame and dissociation may aid in detection and amelioration of myriad health consequences. It is possible that state increases in these constructs as demonstrated in the current study may serve as markers for chronic shame, fear, and/or dissociation-prone styles.

A great deal of attention has been paid to fear and anxiety in the posttrauma response, with relatively less attention to other emotions such as shame. Prolonged exposure, a widely implemented

trauma-focused treatment, has been informed by emotional processing theory (Foa & Kozak, 1986), which posits that fear structures are central to the development of posttraumatic distress. Cahill and Foa (2007) recognize a potential limitation of emotional processing theory, in that it does not account for the fact that "other emotions [than fear] may be associated with PTSD-like symptoms" (p. 66). Both shame and dissociation warrant more clinical attention as possible barriers to effective exposure therapy among betrayal trauma survivors.

This study has several limitations. The use of an undergraduate student sample (albeit a sample of trauma survivors) limits the variability of the data in terms of number of traumatic events and severity of symptoms (Scott, 2007), and may also limit variability in proneness to increases in shame, fear, and dissociation. Scores on study variables were likely lower than they would be in a clinical population. Data were variable enough for interesting and significant patterns to emerge, but findings would likely be more robust with the use of a clinical sample and with larger sample size. Another limitation pertains to the interpersonal-threat condition. We used IAPS images in both conditions in order to match arousal, threat, and valence ratings between the two conditions. Within these parameters, we chose the most relevant IAPS images available for each of the two conditions. Although all images in the interpersonal-threat condition portray human suffering with an implied interpersonal element, four of the images (boy with a black eye, girl crying, children crying and begging, and bruised nude woman lying on a bed) do not directly depict one human harming another human. Thus, it is possible that high-betrayal trauma survivors may have experienced these images as interpersonally threatening, whereas low-betrayal trauma survivors may not have experienced those particular images as interpersonally threatening. Unfortunately, our data does not allow us to directly answer questions about participant appraisal of the images. Finally, there were significant correlations between baseline shame, dissociation, and fear that we are unfortunately not able to thoroughly examine for discriminant validity, given that we only included one state measure of each construct. However, some evidence of discriminant validity comes from the three measures being differentially predicted across the two study conditions according to betrayal trauma history. Tolerance statistics were adequate for the regression analyses in the current study, indicating that the results of the analyses can be meaningfully interpreted.

Asians and Asian Americans made up 16% of the sample for the current study. Generalization of results should be made with cau-

tion, given the difference in baseline shame between Asian/Asian Americans and all other groups. Given the different function of shame in Asian cultures compared with Western culture (Mesquita & Karasawa, 2004), and in individualist versus collectivist cultures (Bagozzi, Verbeke, & Belschak, 2009), these groups may be of particular interest in future studies focusing on shame.

Conclusion

This study contributes to the evidence suggesting that betrayal plays a unique role in posttraumatic distress. The findings that shame and dissociation-proneness are increased for high-betrayal trauma survivors in response to interpersonal threat, and fear-proneness is increased for low-betrayal trauma survivors in response to noninterpersonal threat has implications for future research and clinical practice. A large body of evidence suggests that exposure-based treatments may be effective (Foa, Keane, Friedman, & Cohen, 2008). However, research also indicates that exposure therapy is less effective for survivors of childhood trauma (Hembree, Street, Riggs, & Foa, 2004), people with emotion regulation difficulties (Feeny, Zoellner, & Foa, 2002), and people with high-trauma-related shame (Ironson, Freund, Strauss, & Williams, 2002). In addition, published reports of treatment efficacy typically compare a treatment of interest to a control group or another active treatment condition, but often do not take into account factors contributing to treatment dropout rates and symptom exacerbation (Schottenbauer, Glass, Arnkoff, Tendrick, & Gray, 2008). Dropout rates for trauma-focused therapy are universally high (Hembree et al., 2003), though rates vary widely across studies (Imel, Laska, Jakupcak, & Simpson, 2013). It is important to determine whether shame and dissociation may lead to even higher dropout rates and/or symptom exacerbation in trauma-focused therapy, especially among survivors of extensive high-betrayal trauma. It is also important to determine whether the mental health system is reliably capturing trauma responses involving shame and/or dissociation, especially if people exhibiting these problems do not meet full criteria for PTSD or any other diagnosis. Continued attention to betrayal in the clinical science and treatment of trauma will enhance care for a broad range of survivors.

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Received August 14, 2014

Revision received October 5, 2014

Accepted October 29, 2014 □