

Emotion Regulation Difficulties Mediate Associations Between Betrayal Trauma and Symptoms of Posttraumatic Stress, Depression, and Anxiety

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Emotion regulation difficulties following trauma exposure have received increasing attention among researchers and clinicians. Previous work highlights the role of emotion regulation difficulties in multiple forms of psychological distress and identifies emotion regulation capacities as especially compromised among survivors of *betrayal trauma*: physical, sexual, or emotional maltreatment perpetrated by someone to whom the victim is close, such as a parent or partner. It is unknown, however, whether links between emotion regulation difficulties and psychological symptoms differ following exposure to betrayal trauma as compared with other trauma types. In the present study, 593 male and female university undergraduates completed the Difficulties with Emotion Regulation Scale (Gratz & Roemer, 2004), the Brief Betrayal Trauma Scale (Goldberg & Freyd, 2006), the Impact of Event Scale (Horowitz, Wilner, & Alvarez, 1979), and the Trauma Symptom Checklist (Elliott & Briere, 1992). A path analytic model demonstrated that betrayal trauma indirectly impacted symptoms of intrusion ($\beta = .11$), avoidance ($\beta = .13$), depression ($\beta = .17$), and anxiety ($\beta = .14$) via emotion regulation difficulties, an effect consistent with mediation. Emotion regulation difficulties did not mediate the relationship between other trauma exposure and psychological symptoms. Results may inform treatment-matching efforts, and suggest that emotion regulation difficulties may constitute a key therapeutic target following betrayal trauma.

Exposure to trauma is strongly associated with psychological difficulties such as anxiety, depression, and posttraumatic stress (Coker et al., 2002; MacMillan et al., 2001). The type of trauma to which an individual is exposed influences mental health outcomes. Interpersonal violence, such as rape or other physical assault, is more strongly linked with posttraumatic stress than are other types of traumas such as accidents (Copeland, Keeler, Angold, & Costello, 2007; Green et al., 2000). In addition, the relationship between the victim and the perpetrator matters. *Betrayal trauma*, or trauma perpetrated by someone to whom the victim was close (Freyd, 1996), is more strongly related to anxiety, depression, and posttraumatic stress than is trauma perpetrated by someone to whom the victim was not close (Atlas

& Ingram, 1998; Freyd, Klest, & Allard, 2005; Leahy, Pretty, & Tenenbaum, 2004; Lucenko, Gold, & Cott, 2000). The extent to which trauma involves betrayal also predicts victims' posttraumatic appraisals (e.g., reported perceptions of betrayal, self-blame, and shame), which in turn predict dissociation, depression, and posttraumatic stress beyond cumulative trauma exposure (Martin, Cromer, DePrince, & Freyd, 2010, 2013).

The finding that psychological outcomes vary as a function of the victim–perpetrator relationship may reflect several emotional processes and contextual features related to betrayal. Betrayal trauma may involve victimization arising from the very system (e.g., family, school, military) on which victims would otherwise rely for support. In some cases of betrayal trauma, individuals are hurt by people on whom they depend for caregiving and survival, which may result in cognitive and emotional internalizing patterns that then contribute to anxiety, depression, and symptoms of posttraumatic stress disorder (PTSD; Briere, 1992; Sachs-Ericsson, Verona, Joiner, & Preacher, 2006). Victims may also be told to suppress sadness or anger, or that mistreatment is deserved (Draucker, 1999), communications that may come from perpetrators, families, or broader social systems, and that may influence emotional processing and responses. For instance, family contexts may implicitly or

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explicitly limit emotional expression, impart that children are unable to correctly assess their own emotions, and disparage or punish children for expressing sorrow or anger (e.g., Linehan, 1993). Similarly, aspects of military contexts—including power structures, an emphasis on unit cohesion, and victim blame—may exacerbate emotional difficulties among survivors of military sexual trauma (Allard, Nunnink, Gregory, Klest, & Platt, 2011). Trauma survivors may also separate themselves from their feelings or internalize mistreatment to cope with betrayal and invalidating environments (Briere, 1992; Freyd, 1996; Linehan, 1993), coping styles that may lead to emotion regulation difficulties.

Contextual aspects of trauma exposure may also explain why traumas that are not perpetrated by someone to whom the victim is close involve fewer psychological symptoms and emotion regulation difficulties. These traumas may be easier for survivors to compartmentalize as separate from daily life, whereas traumas perpetrated by someone close may involve continued contact or other environmental constants that trigger trauma-related symptoms and associated emotion regulation difficulties (Bownes, O’Gorman, & Sayers, 1991). Furthermore, victims of noninterpersonal trauma or trauma perpetrated by someone not close may be more likely to have and use support systems that mitigate negative emotional effects (e.g., Declercq & Palmans, 2006). In addition, perpetrators to whom victims are not close may exert minimal emotional influence. These perpetrators’ attempts to convey that victimization is deserved or to control victims’ emotional expression may occur less often, be less salient, and elicit fewer psychological symptoms than attempts by perpetrators to whom victims are close, and therefore result in fewer emotion regulation difficulties.

Emotion regulation describes individuals’ awareness, understanding, and acceptance of their emotions, as well as their capacities to control impulsive behaviors and to modulate affective responses to meet individual goals or situational circumstances (Gratz & Roemer, 2004). Emotion regulation difficulties are related to multiple psychological problems, including anxiety, depression, and PTSD (Campbell-Sills & Barlow, 2007; Eftekhari, Zoellner, & Vigil, 2009; McLaughlin, Hatzenbuehler, Mennin, & Nolen-Hoeksma, 2011; Price, Monson, Callahan, & Rodriguez, 2006), and predict severity of psychological difficulties even after controlling for negative affect (Tull, Barrett, McMillan, & Roemer, 2007). Survivors of betrayal trauma demonstrate generalized emotion regulation difficulties in addition to symptoms of specific psychological disorders (Kim & Cicchetti, 2010; Lansford et al., 2002). Emotion regulation difficulties are emphasized in conceptualizations related to chronic trauma such as complex PTSD (Herman, 1992), the diagnostic consideration of disorders of extreme stress not otherwise specified (DESNOS), and borderline personality disorder (Linehan, 1993).

It is unclear whether emotion regulation difficulties reflect general posttraumatic responses, or if they are more strongly related to trauma perpetrated by someone to whom the victim is close (i.e., high betrayal [HB] trauma). Few studies have inves-

tigated whether associations between emotion regulation difficulties and psychological symptoms vary according to trauma type. Studies note links between emotion regulation difficulties and trauma that involve relatively low levels of betrayal, such as accidents, natural disasters, or assault perpetrated by a stranger (i.e., low betrayal [LB] trauma; Boden, Bonn-Miller, Kashdan, Alvarez, & Gross, 2012; Klemanski, Mennin, Borelli, Morrissey, & Aikins, 2012). Available research, however, suggests that emotion regulation difficulties are especially pronounced following exposure to HB trauma as compared to LB trauma exposure (Ehring & Quack, 2010). Furthermore, emotion regulation difficulties mediate the relationship between HB trauma exposure and psychological symptoms (e.g., Cloitre, Stovall-McClough, Miranda, & Chemtob, 2004; Kim & Cicchetti, 2010; Sachs-Ericsson et al., 2006). It is yet unknown whether emotion regulation difficulties mediate associations between LB trauma exposure and psychological symptoms.

The current study used a path analytic modeling approach to examine relations among HB trauma, LB trauma, emotion regulation difficulties, and psychological symptoms in a general university sample. We proposed a preliminary model (Figure 1) in which HB and LB trauma each indirectly predicted a latent variable of psychological distress (comprised of intrusion, avoidance, depression, and anxiety) through the mediating variable of emotion regulation difficulties.

Method

Participants and Procedure

Participants were 653 undergraduate students from a large university in the northwestern United States. Sixty students did not complete the study (i.e., consented, but did not complete the measures) and were excluded from analyses, yielding a final sample of 593 participants (58.3% female; mean age = 21.9 years, $SD = 5.7$, range = 17–52). The ethnic distribution of the final sample was 84.2% Caucasian, 4.5% biracial/multiracial, 2.5% Asian, 1.7% Black/African American, 1.2% Native Hawaiian/Pacific Islander, and 6% other ethnicity or declined to respond. This ethnic makeup is representative of the state in which the data were collected.

This study was approved by the institutional review board of Boise State University. Participation was voluntary and all participants gave informed consent via an online form prior to completing questionnaires online. If participants did not check the “I agree” box on the consent form, the questionnaires were not loaded. Students were compensated for their time by receiving points toward course credit; however, participation in this study was not a course requirement.

Measures

Demographic forms were administered to participants to obtain demographic information regarding their age, gender, and racial/ethnic background.

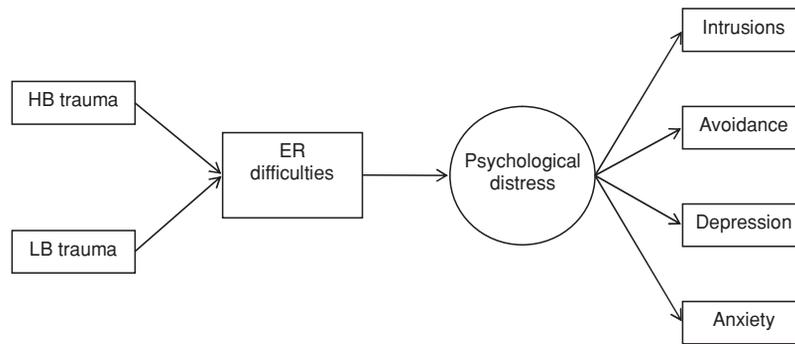


Figure 1. Original hypothesized path model: high betrayal and low betrayal trauma would indirectly impact psychological distress (as a latent variable) via emotion regulation difficulties. HB = high betrayal; LB = low betrayal; ER = emotion regulation.

The Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004) is a 36-item self-report measure with noted predictive and construct validity (Gratz & Roemer, 2004) that is used to assess the prevalence of emotion regulation difficulties. This measure was used to evaluate difficulties in areas such as awareness, understanding, and acceptance of emotions, as well as maintaining goal-directed behavior, inhibiting impulse behavior triggered by negative affect, and accessing perceived effective emotion regulation strategies. Respondents rated items on a 5-point scale (1 = *almost never/0–10% of the time* to 5 = *almost always/91–100% of the time*); items are then summed to obtain a total score. The Cronbach's α for this sample was .94.

The Brief Betrayal Trauma Survey (BBTS; Goldberg & Freyd, 2006) is a 14-item self-report measure of traumatic experiences with good construct and convergent validity (Martin et al., 2010, 2013). Items measure different categories of trauma exposure (i.e., accidents, natural disasters, or interpersonal violence). Participants reported on a 3-point scale whether each event occurred; 0 = *never*, 1 = *one or two times*, or 2 = *more than that*. BBTS items may be separated into two subscales (e.g., Freyd et al., 2005) that reflect separate questions assessing trauma exposure involving relatively high levels of betrayal (i.e., trauma perpetrated by a person with whom the respondent was very close) and those that assess trauma exposure involving relatively low levels of betrayal (i.e., trauma with no perpetrator or a perpetrator to whom the victim was not close). Two scores of trauma exposure were subsequently calculated for each participant: HB Trauma Exposure and LB Trauma Exposure. HB Trauma Exposure was calculated by summing the frequencies of relatively high betrayal traumas to which participants reported exposure (possible range = 0–20). LB Trauma Exposure was calculated by summing the frequencies of relatively low betrayal traumas to which participants reported exposure (possible range = 0–28). Cronbach's α for the two BBTS subscales were HB Trauma Exposure = .73 and LB-Trauma Exposure = .77.

The Trauma Symptom Checklist-40 (TSC-40; Elliott & Briere, 1992), a measure with established reliability and validity, was used to evaluate a range of traumatic stress symptoms

by asking respondents to report how often they have experienced each of 40 symptoms in the previous 2 months. Subscales from this measure assess symptoms related to depression, anxiety, sleep disturbance, dissociation, and sexual problems. The present study implemented the Depression and Anxiety subscales of the TSC-40. Items were rated on a 4-point scale ranging from 0 = *never* to 3 = *often* and subscale scores were obtained for each participant by summing subscale item scores (possible range = 0–27 for both subscales). Cronbach's α for the Depression and Anxiety subscales in this sample were .71 and .74, respectively.

The Impact of Event Scale (IES; Horowitz et al., 1979) is a 15-item measure with substantial construct, content, convergent, and clinical validity (Sundin & Horowitz, 2002) that was administered to assess symptoms of intrusion and avoidance related to stressful life events. Items are rated on a 0, 1, 3, 5 scale where 0 = *not at all* and 5 = *often* based on the respondent's frequency of experiencing the given symptom within the previous week. An Intrusion score and an Avoidance score were calculated for each participant by summing the item scores for each symptom subscale (possible range = 0–35 for intrusion and 0–40 for avoidance). Cronbach's α for the Intrusion and Avoidance subscales in this sample were .89 and .85, respectively.

Data Analysis

All variables were tested for departures from normality and were found to be normally distributed. Missing data at the item level were minimal in this study (i.e., less than 1% missing on each individual measure) and were estimated via estimation-maximization (EM) methods. Bivariate relationships were assessed by calculating zero-order correlations among the demographic and primary study variables. From these correlations, we determined that gender and age were significantly related to key study variables, and therefore we included gender and age in the proposed model as covariates.

The proposed model was tested by using HB trauma exposure and LB trauma exposure to predict emotion regulation difficulties, which in turn was used to predict four outcome

Table 1
Means, Standard Deviations, and Correlations of Key Variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. HB Trauma	2.72	3.07						
2. LB Trauma	2.73	3.27	.56***					
3. ER Difficulties	78.57	21.43	.29***	.15***				
4. Intrusion	8.24	5.58	.26***	.13**	.36***			
5. Avoidance	8.90	5.58	.23***	.08	.44***	.73***		
6. Anxiety	6.13	4.32	.41***	.29***	.48***	.34***	.33***	
7. Depression	7.66	4.60	.39***	.18***	.57***	.43***	.42***	.69***

Note. *N* = 593. HB = high betrayal; LB = low betrayal; ER = emotion regulation.

p* < .01. *p* < .001.

variables: intrusion, avoidance, anxiety, and depression. Using the AMOS 18 program (Arbuckle, 2009), goodness of fit for this model was assessed using the χ^2 fit statistic, the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the residual mean squared error of approximation (RMSEA). Nonsignificant χ^2 values are indicative of good fit, whereas CFI and TLI values between .90 and .95 were considered to indicate good model fit (Hu & Bentler, 1999; Vandenberg & Lance, 2000). RMSEA values below .08, with the lower bound of a 90% confidence interval (CI) < .05, were considered to indicate adequate fit (Browne & Cudeck, 1993). Direct and indirect effects of HB trauma and LB trauma on psychological symptoms were also tested. Bootstrapping procedures resampled the data 2,000 times to calculate indirect effects.

When poor model fit was encountered, we used modification indices to empirically and theoretically respecify the model by sequentially freeing constraints on the model (Kline, 2011). To avoid developing a sample-specific model, however, we randomly divided the full sample in half and fit the model to the first half (*n* = 296) and validated the final, well-fitting model to the second half of the sample (*n* = 297). These two groups did not significantly differ on any demographic variables, nor did they differ on any study variables.

Results

In regards to trauma exposure, most participants (*n* = 406, 68.5%) reported at least one experience of HB trauma, and the majority also reported exposure to at least one LB trauma (*n* = 425, 71.7%). The most common HB trauma in the sample was being emotionally or psychologically mistreated over a significant period by someone close (*n* = 285, 48.1%), followed by witnessing physical violence among individuals to whom the participant was close (*n* = 166, 28.0%), witnessing family physical violence (*n* = 146, 24.6%), and being made to have some form of sexual contact by someone to whom the participant was close (*n* = 145, 24.4%). The most common LB traumas reported were witnessing injury to someone with whom the participant was not close (*n* = 244, 41.1%), being in a major

accident (*n* = 167, 28.2%), being emotionally or psychologically mistreated over a significant period by someone with whom the participant was not close (*n* = 139, 23.4%), and being made to have sexual contact by someone to whom the participant was not close (*n* = 131, 22.1%).

Table 1 provides means, standard deviations, and bivariate correlations among study variables. Significant correlations emerged between demographic variables and key psychological measures. Older age was associated with fewer emotion regulation difficulties and fewer avoidance symptoms, but was related to higher levels of HB trauma exposure, and LB trauma exposure. Women reported significantly more HB trauma and less LB trauma than did men, and also scored significantly higher than men on all symptom outcome measures as well as difficulties with emotion regulation (see Table 2).

The statistical tests for this study were conducted using path analyses. Using half the sample, we first modeled intrusion, avoidance, anxiety, and depression as manifest indicators of a latent variable (see Figure 1) and tested this measurement model (Anderson & Gerbing, 1988). However, this model demonstrated poor fit to the data, $\chi^2(2, N = 296) = 128.04, p < .001, CFI = .75, TLI = .26, RMSEA = .46, 90\% CI = [0.40, 0.53]$, which suggested that these outcome variables did not adequately reflect an underlying latent construct. As such, we treated intrusion, avoidance, anxiety, and depression as separate manifest outcome variables. We next evaluated this model with the addition of age and gender as covariates based on the univariate tests. This model demonstrated better, but still inadequate model fit, $\chi^2(15, N = 296) = 67.70, p < .001, CFI = .94, TLI = .86, RMSEA = .11, 90\% CI = [0.08, 0.14]$. However, modification indices suggested that freeing several constraints among variables and correlating outcome variable error terms would significantly improve model fit.

After inspection of several model iterations that were both empirically and theoretically driven (see Table 3), the final model demonstrated excellent fit, $\chi^2(12, N = 296) = 16.81, p = .16, CFI = .99, TLI = .98, RMSEA = .04, 90\% CI = [0.00, 0.08]$. Further, nonsignificant pathways were trimmed from the initial model so as to impose constraints on the overall model,

Table 2
Gender Differences for Study Variables

Variable	Women (n = 346)		Men (n = 246)		d
	M	SD	M	SD	
HB Trauma	3.12	3.27	2.13	2.65	.33***
LB Trauma	2.48	2.86	3.07	3.74	-.18*
ER Difficulties	80.13	22.23	76.20	19.96	.19*
Intrusions	8.79	5.58	7.46	5.51	.24**
Avoidance	9.69	5.96	7.75	5.80	.33***
Anxiety	7.00	4.50	4.91	3.77	.50***
Depression	8.48	4.67	6.48	4.21	.45***

Note. N = 593. One participant declined to identify their gender. Independent samples *t* tests, with Cohen's *d* as a measure of effect size, were used to compute group differences on study variables. HB = high betrayal; LB = low betrayal; ER = emotion regulation.

* $p < .05$. ** $p < .01$. *** $p < .001$.

resulting in a more theoretically sound and parsimonious model (Kline, 2011). We then applied this final model to the second half of the sample and found that this model also fit, $\chi^2(12, N = 297) = 34.65, p < .001, CFI = .98, TLI = .93, RMSEA = .08, 90\% CI = [0.05, 0.11]$. Thus, we used this model to inspect path coefficients in the full sample (see Figure 2). We identified several significant covariate paths. Younger age predicted more emotion regulation difficulties ($\beta = -.19, p < .001$). Female gender predicted greater symptoms of intrusion ($\beta = -.09, p = .02$), avoidance ($\beta = -.12, p = .001$), anxiety ($\beta = -.22, p < .001$), and depression ($\beta = -.15, p < .001$). Although correlated with emotion regulation difficulties at the bivariate level, gender did not predict emotion regulation difficulties in the path model.

HB trauma significantly predicted emotion regulation difficulties ($\beta = .31, p < .001$), which in turn predicted intrusions ($\beta = .35, p < .001$), avoidance ($\beta = .43, p < .001$), anxiety ($\beta = .44, p < .001$), and depression ($\beta = .54, p < .001$). HB trauma also directly predicted depression ($\beta = .13, p < .001$)

symptoms. LB trauma was only directly related to anxiety ($\beta = .17, p < .001$). Although LB trauma was related to emotion regulation difficulties at the bivariate level, when estimating all paths simultaneously, this association became nonsignificant.

Significant indirect effects were also noted for the effects of HB trauma on intrusions ($\beta = .11, p < .001$), avoidance ($\beta = .13, p < .001$), anxiety ($\beta = .14, p < .001$), and depression ($\beta = .17, p < .001$). These results are consistent with emotion regulation difficulties serving as a significant mediator between HB trauma and these four measures of psychological distress. Emotion regulation difficulties did not mediate the relationship between LB trauma and the four psychological outcome variables. However, due to the cross-sectional nature of our dataset, true mediation could not be established because of a lack of temporal ordering (Kraemer, Kiernan, Essex, & Kupfer, 2008). To best remedy this, we fit a competing model in which our proposed mediator (emotion regulation difficulties) and our four outcome variables were reversed. This alternative model did not fit the data well, $\chi^2(9, N = 593) = 114.62, p < .001$,

Table 3
Iterations of Model Respecification to Improve Model Fit and Determine Final Model

Model	Constraint type	Respecifications	MI	EPC
1. Baseline		N/A	-	-
2.	Released	Intrusions ↔ Depression	16.26	.14
	Released	LB Trauma → Anxiety	12.64	.21
	Imposed	Age → Avoidance	-	-
	Imposed	Gender → ER Difficulties	-	-
	Imposed	LB Trauma → ER Difficulties	-	-
3.	Released	Depression ↔ Avoidance	7.34	.08
4.	Released	HB Trauma → Depression	5.55	.15
	Released	Anxiety ↔ Intrusions	6.25	.08
5. Final	Released	Anxiety ↔ Avoidance	5.82	.17

Note. Model respecification was conducted on the first half of the total sample. HB = high betrayal; LB = low betrayal; ER = emotion regulation; MI = modification index; EPC = expected parameter change; ↔ = covariance path, → = directional path.

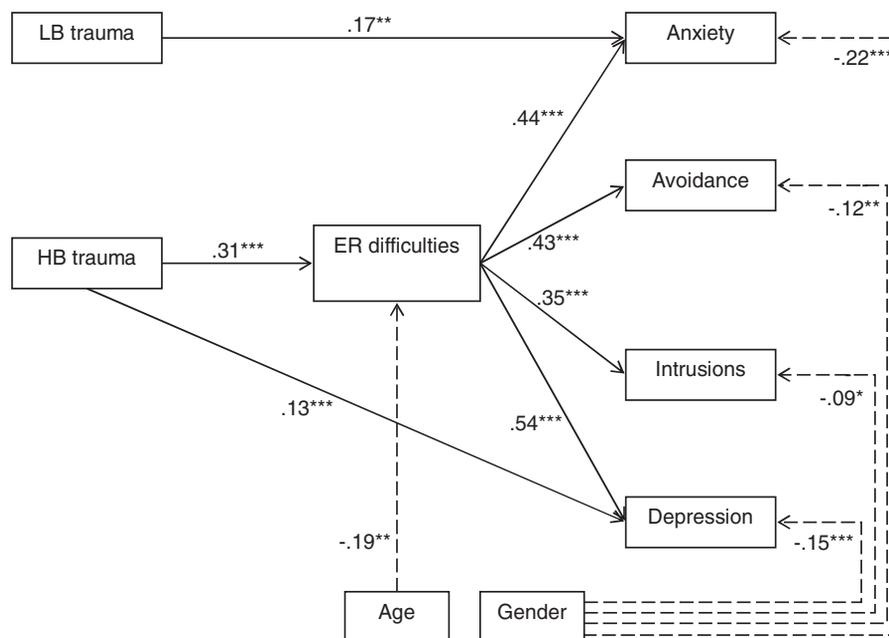


Figure 2. Final path model using the second half of the sample. Dashed lines denote covariates. All coefficients in this model are standardized. HB trauma = high betrayal, LB trauma = low betrayal, ER = emotion regulation. * $p < .05$. ** $p < .01$. *** $p < .001$.

CFI = .94, TLI = .76, RMSEA = .14, 90% CI = [0.12, 0.16], suggesting that our model, with emotion regulation difficulties serving as mediator, better represents the existing data structure.

Discussion

Results indicated that exposure to HB trauma and LB trauma differed in their associations with emotion regulation difficulties and psychological symptoms. HB trauma indirectly predicted symptoms of posttraumatic stress, depression, and anxiety via emotion regulation difficulties (an effect consistent with mediation). However, emotion regulation difficulties did not mediate the relationship between LB trauma exposure and psychological symptoms. These data are consistent with other studies that indicate distinct psychological responses following HB trauma as compared with LB trauma (Atlas & Ingram, 1998; Leahy et al., 2004; Lucenko et al., 2000). However, the present study is the first to indicate, within the same nonclinical sample, that HB trauma exposure indirectly impacts symptoms of posttraumatic stress, depression, and anxiety via emotion regulation difficulties, an effect consistent with mediation. Such indirect pathways were not found originating from LB trauma exposure.

The results underscore recommendations that first-line interventions be matched to specific symptom presentations such as emotion regulation difficulties (Cloitre, Koenen, Cohen, & Han, 2002). The data also reflect treatment research demonstrating that targeting emotion regulation combined with exposure therapy is more effective than exposure and supportive therapy for abuse survivors (Cloitre et al., 2010). Several group therapies that emphasize improving emotion regulation

skills have demonstrated overall effectiveness and reductions in PTSD symptoms, and include skills training in affect and interpersonal regulation/prolonged exposure (Cloitre et al., 2002), trauma-adaptive-recovery group education and therapy (Ford & Russo, 2006), and dialectical behavior therapy (Linehan, 1993; Steil, Dyer, Priebe, Kleindienst, & Bohus, 2011). Recommendations for individual psychotherapy following HB trauma also focus on improving emotion regulation skills (Leahy, Tirsch, & Napolitano, 2011). In addition to therapeutic approaches that explicitly address emotion regulation skills, established therapies for PTSD such as prolonged exposure (PE; Foa, Hembree, & Rothbaum, 2007) may achieve symptom reduction through improving emotion regulation skills. For example, PE promotes abilities related to tolerating distress, managing emotions, and increasing emotional self-efficacy. Therapeutic interventions may work by teaching new ways to handle distress—in part by replacing emotion regulation strategies such as avoidance, suppression, and self-blame, with more adaptive strategies such as reappraisal, problem solving, and acceptance. Whereas avoidance and suppression may maintain psychological symptoms, strategies such as reappraisal and acceptance are associated with fewer psychological difficulties (Aldao, Nolen-Hoeksema, & Schweizer, 2010; Tull, Gratz, Salters, & Roemer, 2004). Shifting emotion regulation patterns may also facilitate cognitive and emotional processing of trauma experiences (e.g., Paivio & Laurent, 2001).

The current study involved several limitations, including a culturally homogenous sample and a cross-sectional design. The use of self-report measures depends upon individuals' self-awareness of their emotion regulation tendencies and symptoms, capacities that may be impaired in distressed

individuals struggling to understand and manage their feelings. Participants' DERS scores were consistent with reports of other general undergraduate samples (e.g., Gratz & Roemer, 2004); however, they are likely lower than those of clinical or exclusively traumatized samples. We note that respondents may have varied in their interpretations of BBTS questions about trauma perpetrated by "someone very close (such as a parent or lover)," and that different interpretations of "very close" (e.g., friends, military or work supervisors, etc.) may have influenced responses. However, participants' subjective appraisals and interpretations regarding whether the perpetrator was close or not may drive emotional responses (see Resick & Schnicke, 1992), a consideration that supports the format of the BBTS questions for assessing this contextual facet of trauma exposure. It is important to note that HB and LB trauma may differ in terms of frequency, severity, and age of exposure, and these differences may in turn impact associations between the traumatic experience and emotion regulation difficulties. In addition, although items on the BBTS involve Criterion A events with the addition of emotional victimization, the study did not assess exposure to Criterion A stressors specifically. Information on posttraumatic stress was limited by the IES, which does not provide information on numbing and hyperarousal, or allow for PTSD diagnosis. Future research may build upon these results by incorporating clinical samples, methods other than self-report, more detailed accounts of traumatic experiences and symptoms, and longitudinal methodologies. In addition, the current study did not investigate the age at which traumas occurred, an element of trauma exposure related to emotion regulation difficulties (e.g., Walsh, DiLillo, & Scalora, 2011). Finally, it is important to consider that variables that were not measured or included in the current model—such as additional aspects of trauma exposure, other trauma appraisals such as shame or self-blame, or subsequent social support—could have influenced the results.

Future studies can augment the current study by investigating the range of behaviors that are related to both emotion regulation difficulties and trauma exposure, including self-harm, alcohol or other drug abuse, nicotine use, eating disorders, and perpetration of intimate partner violence (Berking et al., 2011; Blalock et al., 2011; Felitti et al., 1998; Grayson & Nolen-Hoeksema, 2005; Kendall-Tackett, 2002; Muehlenkamp, Kerr, Bradley, & Adams Larsen, 2010; Stuart et al., 2006; Taylor et al., 2008; van der Kolk & Fisler, 1994). Because research identifies betrayal as an important facet of traumas that include disasters (Markstrom & Charley, 2003) and military trauma (Allard et al., 2011; Cohn, Dyson, & Wessely, 2008), studies of trauma survivors' perceptions of betrayals in diverse contexts could provide further illumination. Additional areas for exploration include analyses of specific emotion regulation difficulties and capacities, as well as their associations with trauma exposure and psychological symptoms. The current study demonstrated gender differences in trauma exposure and outcome measures that are consistent with other reports (Ehring & Quack, 2010; Goldberg & Freyd, 2006; Moser,

Hajcak, Simons, & Foa, 2007), and merit additional exploration (see Nolen-Hoeksema, 2012). Because HB and LB trauma exposure were related, studies that examine the connections between these forms of trauma—such as impact of overall violence in one's community—may yield further insights.

The present study highlights the role of emotion regulation difficulties as an important aspect of posttraumatic emotional experiences. The results accentuate the need for researchers and clinicians to consider the type of trauma exposure individuals have endured when addressing psychological symptoms and interventions. These data suggest that emotion regulation difficulties may comprise a key target of psychological interventions for individuals exposed to HB trauma. It is encouraging that intervention reports show that individuals can improve emotion regulation capacities and associated psychological functioning (Cloitre et al., 2002; Ford & Russo, 2006; Izard et al., 2008). Research and clinical endeavors can benefit from continued exploration of emotion regulation and its relation to trauma exposure, psychological symptoms, and associated outcomes.

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