



Overwhelmed by Emotion: Pathways from Revictimization to Mothers' Negative Emotional Responsivity

CHRISTINA GAMACHE MARTIN*,[†] HYOUN K. KIM^{‡,§} JENNIFER J. FREYD*

Maternal history of childhood abuse has consistently been linked to increased risk for poor emotional adjustment and parenting as an adult. The aim of this study was to examine a model that may explain the link between maternal history of childhood abuse and mothers' tendencies to respond negatively to their adolescent children's negative emotions. A community sample of 66 mothers with adolescent children participated. Path analysis supported associations between mothers with a history of high betrayal trauma revictimization (i.e., trauma perpetrated by someone close to the mother during childhood and again as a young adult) and increased difficulty regulating their emotions. In turn, mothers who struggled to regulate their own emotions were also more likely to respond negatively to their adolescent's negative emotions. Findings highlight effects of childhood trauma may be particularly problematic for mothers who are revictimized as young adults. These results provide the foundation for future research evaluating clinical interventions targeted at increasing maternal emotion regulation skills.

Keywords: Maternal trauma; Emotional responsivity; Emotion dysregulation; Betrayal trauma; Revictimization

Fam Proc 57:947-959, 2018

Maternal history of childhood abuse has consistently been linked to increased risk for poor parenting as an adult. Mothers with a child abuse history report lower levels of parenting confidence, more parent-related stress, less emotional control during parentchild interactions, decreased responsivity and empathy, and an increased propensity toward punitive and authoritarian parenting styles and discipline practices (Banyard, 1997; Bert, Guner, & Lanzi, 2009; Cole, Woolger, Power, & Smith, 1992; Schuetze & Das Eiden, 2005). Many studies have examined the effects of maternal history of child abuse on subsequent parenting stress and practices. However, most of these studies have treated maternal history of childhood abuse singularly without considering within-group differences, such as relationship to the perpetrator, and have neglected to assess how

^{*}Department of Psychology, University of Oregon, Eugene, OR,.

[†]National Crime Victims Research and Treatment Center, Medical University of South Carolina, Charleston, SC.

[‡]Oregon Social Learning Center, Eugene, OR.

[§]Department of Child and Family Studies, Yonsei University, Seoul, Korea.

Correspondence concerning this article should be addressed to Christina Gamache Martin, University of Oregon, 1227 University of Oregon, Eugene, OR 97403. E-mail: gamachem@uoregon.edu.

This research was supported by the UO Public Impact Fellowship, awarded to the 1st author from the University of Oregon. The authors thank the families who participated in the study.

subsequent exposure to trauma as a young adult (i.e., revictimization) might relate to poor parenting. Moreover, relatively little research has focused on how mothers with an abuse history tend to respond to their children during emotionally charged situations, although such maternal responsivity is a primary component of sensitive and responsive parenting (Dix, 1991; Gondoli & Silverberg, 1997). At the same time, extant parenting interventions tend to be less effective for parents struggling with psychological distress and poor emotion regulation (Maliken & Katz, 2013; McMahon, Wells, & Kotler, 2006), suggesting that maternal emotion regulation in general and mothers' negative emotional responsivity to their children's emotions may be fruitful targets within parenting interventions. Yet, little is known about which mothers with histories of childhood abuse are most at risk for increased negative emotional responsivity. The aim of this study was to examine maternal risk for negative emotional responsivity by considering mothers' relationships to their child abuse perpetrators, subsequent exposure to trauma as a young adult, and maternal emotion regulation.

There are multiple factors that may make it more challenging for mothers to recover from childhood abuse and cause them to become more easily distressed when interacting with their children. One factor is the relational context in which the abuse occurred. According to betrayal trauma theory (Freyd, 1996; Freyd, DePrince, & Gleaves, 2007), traumas considered to be higher in betrayal are associated with greater difficulty with emotion regulation and greater psychological distress compared to traumas considered to be lower in betraval (Edwards, Freyd, Dube, Anda, & Felitti, 2012; Ehring & Quack, 2010; Goldsmith, Chesney, Heath, & Barlow, 2013; Green et al., 2010). Traumas higher in betrayal are interpersonal traumas perpetrated by someone the victim trusted and perceived as close to them, such as a caregiver, whereas traumas lower in betrayal tend to be noninterpersonal traumas or interpersonal traumas perpetrated by strangers or individuals in which trust or reliance on the perpetrator for physical or emotional needs is absent (Freyd, 1996; Freyd et al., 2007). An additional factor that likely impedes women on their road to recovery is continued exposure to interpersonal violence and abuse as an adult (Jaffee et al., 2013), also known as revictimization. Adult revictimization is associated with greater risk for psychological distress, as well as parenting problems as an adult (Banyard, Williams, & Siegel, 2003; Gobin & Freyd, 2009; Simmel, Postmus, & Lee, 2016; Ullman, 2016). Exposure to child maltreatment significantly increases the chances of being revictimized as an adult (Ullman, 2016; Werner et al., 2016), and exposure to high, rather than low betrayal trauma in childhood is linked to increased odds of experiencing additional high betrayal traumas in adulthood (Gobin & Freyd, 2009). Further, in comparison with other patterns of revictimization, high betrayal trauma revictimization (i.e., exposure to high betrayal trauma during childhood and as a young adult) is associated with poorer mental health outcomes including trauma-related symptoms such as depression, anxiety, and dissociation (Gobin & Freyd, 2009).

In addition to high betrayal traumas being linked to specific mental health symptom profiles such as depression, dissociation, and posttraumatic distress (Edwards et al., 2012; Green et al., 2010; Martin, Cromer, DePrince, & Freyd, 2013; Tang & Freyd, 2012), high betrayal traumas have also been linked to poor emotion regulation (Coates & Messman-Moore, 2014; Goldsmith et al., 2013; O'Mahen, Karl, Moberly, & Fedock, 2015), and emotion regulation has, in turn, been implicated as fundamental to effective parenting (Crandall, Deater-Deckard, & Riley, 2015; Rutherford, Wallace, Laurent, & Mayes, 2015). Emotion regulation within the context of parenting is thought to be more complex than emotion regulate emotion, while simultaneously managing their own emotional distress (Rutherford et al., 2015). For mothers who believe that negative emotions are bad or uncontrollable or lack the emotion regulation skills to manage their own negative emotions, their children's negative emotions are thought to be experienced as more overwhelming, and managing one's own emotions under these circumstances may be even more challenging (Dix, 1991). This line of thinking fits within the broader literature on personal distress, where high levels of personal distress are associated with more maladaptive, self-focused responses to others' expressions of negative emotion (Batson, O' Fultz, Vanderplas, & Isen, 1983; Tone & Tully, 2014; Wood, Saltzberg, & Goldsamt, 1990). These self-focused reactions are thought to result from a motivation to escape or diminish the experience of intense negative affect (Batson et al., 1983), where other, more adaptive emotion regulation skills are lacking. These results correspond to qualitative work examining mothering as a trauma survivor where mothers less far along in their recovery were less attuned to differentiating between their own emotions and those of their children and tended to become more distressed in response to their own and their children's strong emotions (Wright, Fopma-Loy, & Oberle, 2012). Thus, it may be that mothers with a trauma history, and particularly those with high betrayal trauma revictimization, tend to respond more negatively to their children's negative emotions due to poor emotion regulation.

The aim of this study was to examine a model of risk for maternal negative emotional responsivity to adolescent children's negative affect. Although pathways between childhood abuse and revictimization as an adult, emotion dysregulation, and emotional control during parent-child interactions have been individually tested and supported (e.g., Banyard et al., 2003; Lilly, London, & Bridgett, 2014; O'Mahen et al., 2015; Ullman, 2016), they have not been tested in a model simultaneously. The hypothesized model was based on the idea that, compared to mothers who experienced traumas that were not high in betrayal or who experienced high betrayal trauma either in childhood or as an early adult, mothers with a history of high betrayal trauma in childhood who were revictimization) would have more negative emotional responsivity to adolescent negative emotion. We further hypothesized that maternal high betrayal trauma revictimization would be associated with negative maternal emotional responsivity indirectly through maternal emotion regulation difficulties.

METHOD

Participants

Participants were 66 adolescent-mother dyads, recruited to participate in a larger study aimed at learning more about how teens talk to their moms about distressing experiences. Participants were recruited using two strategies in an attempt to maximize the socioeconomic diversity and experiences of the sample. Almost a third of the dyads (n = 19) were recruited through a database maintained by the University of Oregon, where the families tend to be classified as middle and upper middle class households. The remaining two-thirds of the dyads were recruited through community outreach efforts (n = 46). The community recruitment materials were specifically aimed at mothers and adolescents who have a hard time talking to one another and were posted in lower income areas of the community, as well as through electronic advertisements and advertisements in the local newspaper. Due to incomplete records, we are unsure of how one dyad was recruited.

Given the study's focus on maternal childhood trauma and revictimization in adulthood, four mothers who had not endorsed any history of trauma were excluded from the study, leaving an analytic sample of 62 mothers. The mothers were on average approximately 43 years old (SD = 8.09) and had adolescents between the ages of 12 and 18 (M = 14.33, SD = 1.63; 56% female). Most mothers (81%, n = 50) identified as Caucasian,

10% (n = 6) identified as multiracial or other, 8% (n = 5) as Latina or of Hispanic descent, and 1% (n = 1) as African American or Black. Just over half of the mothers were married (53%), and a large majority of them were biological mothers (97%). One mother identified as a stepmother and another as an adoptive mother. The mothers had an average of 2.60 children (SD = 1.35), ranging from one to eight children. The level of mothers' education varied; 2% (n = 1) had not graduated from high school, 19% (n = 12) had a high school diploma, 15% (n = 9) had some college or training at a vocational school, 24% (n = 15) had an associate's degree, 23% (n = 14) had a bachelor's degree, and 18% (n = 11) had a graduate degree. Sixty-three percent (n = 39) of the mothers were currently employed, and the median annual family income was approximately \$35,000 (M = \$53,210, SD = \$49,231, range = \$0–250,000).

Procedure

The University's Institutional Review Board approved the study procedures. All procedures were completed in the laboratory. Adolescent and mother dyads independently completed a series of self-report measures, all of which were completed using Qualtrics (Provo, UT), a web-based survey software. First, mothers and adolescents completed questionnaires to assess demographics. Next, mothers completed the Coping with Children's Negative Emotions Scale-Adolescent Perception Version (CCNES-AP) and adolescents completed the CCNES-Adolescent Version (CCNES-A). Then, the adolescent-mother dyads completed three disclosure tasks, where the adolescents disclosed to their mothers, for the first time, a time when they felt socially excluded, an emotionally distressing experience, and an experience that evoked happiness or pride. Following the adolescents' disclosures, mothers completed the Positive and Negative Affect Schedule (PANAS), the Dysregulated Emotion Regulation Scale (DERS), and Brief Betrayal Trauma Survey (BBTS). Aside from reporting on maternal affect (with the PANAS) following these disclosure tasks, the disclosure tasks are not relevant to this study and will not be discussed further. At the end of the assessment, adolescents and their mothers were debriefed and were provided with community counseling referrals. Mothers were compensated with \$25, and adolescents were compensated with a \$10 gift card.

Measures

Maternal high betrayal trauma and revictimization

The BBTS (Goldberg & Freyd, 2006) is a 14-item self-report inventory used to assess the experience of trauma. For each item, mothers were asked whether they experienced the event prior to age 12, between the ages of 12 and 17, and between the ages of 18 and 29. Five items assess for high betrayal traumas, or interpersonal traumas perpetrated by someone "very close" (i.e., physical, sexual, and emotional abuse, and witnessed violence). Example high betrayal trauma items include the following: "Witnessed someone with whom you were very close (such as a parent, brother or sister, caretaker, or intimate partner) committing suicide, being killed, or being injured by another person so severely as to result in marks, bruises, burns, blood, or broken bones" and "You were made to have some form of sexual contact, such as touching or penetration, by someone with whom you were very close (such as a parent or lover)." Five items assess for low betrayal traumas, or noninterpersonal traumas (e.g., natural disasters and accidents) and interpersonal traumas perpetrated by someone "not very close" (e.g., physical and sexual abuse). Example low betrayal trauma items include the following: "Been in a major earthquake, fire, flood, hurricane, or tornado that resulted in significant loss of personal property, serious injury to yourself or a significant other, the death of significant other, or the fear of your own death" and "You were made to have such sexual contact by someone with whom you were not close." Using a *yes/no* format, mothers indicated whether or not they had experienced the event during each period of development and categorical variables were constructed (Gobin & Freyd, 2009): child high betrayal trauma (where a "1" represented mothers who endorsed high betrayal trauma prior to age 18 and a "0" represented mothers who did not), young adult high betrayal trauma (where a "1" represented mothers who endorsed high betrayal trauma between the ages of 18 and 29 and a "0" represented mothers who did not), and a high betrayal trauma revictimization variable, an interaction variable (where a "1" represented mothers who endorsed high betrayal trauma both as a child and as a young adult and a "0" represented mothers who did not). The BBTS has good construct and convergent validity (DePrince & Freyd, 2001; Martin et al., 2013). The test-retest reliability of the BBTS is 83% for experiences that occurred during childhood and 75% for events that occurred in adulthood (Goldberg & Freyd, 2006).

Maternal emotion regulation difficulties

The DERS (Gratz & Roemer, 2004) is a 36-item, self-report measure that assesses difficulties in emotion regulation. The DERS assesses six dimensions of emotion dysregulation: nonacceptance of emotional responses, difficulties engaging in goal-directed behaviors when distressed, difficulties controlling impulsive behaviors when distressed, lack of emotional awareness, lack of emotional clarity, and limited access to emotion regulation strategies. Responses are made on a 5-point Likert-type scale ranging from 1 (*almost never*, 0-10%) to 5 (*almost always*, 91-100%). A total score was calculated by summing all items. Scores could range between 36 and 180 (M = 74.32, SD = 23.29). Higher scores are indicative of greater difficulty in regulating emotions. The DERS has good internal consistency and test-retest reliability and adequate construct and predictive validity (Gratz & Roemer, 2004). Cronbach's alpha was .96.

Mothers' negative emotional responsivity

To assess mothers' level of negative emotional responsivity towards adolescent negative emotion, we created a composite construct. First, mothers and adolescents reported on how mothers typically respond to their adolescents' emotional distress using maternal self-report on the CCNES-A (Fabes & Eisenberg, 1998) and adolescent report of their mothers on the CCNES-AP (Fabes & Eisenberg, 1998). The CCNES-A and the CCNES-AP are identical in content and structure, except that the CCNES-A asks mothers how they typically respond to their adolescent's emotional distress (e.g., "When my teenager gets down because he/she has had a bad day, I usually..."), while the CCNES-AP asks adolescents how their mothers typically respond to the adolescent's emotional distress (e.g., "When I get down because I've had a bad day, my mother usually..."). The CCNES consists of nine hypothetical scenarios in which an adolescent expresses negative emotion, and mothers and adolescents rated the likelihood that the mothers would respond to the adolescents in each scenario using six different response types. The distress response type was used to assess maternal negative emotional responsivity, in accordance with theory (Fabes, Poulin, Eisenberg, & Madden-Derdich, 2002) and empirical findings (Jones, Brett, Ehrlich, Lejuez, & Cassidy, 2014). Responses are made on a 7-point Likert-type scale ranging from 1 (very unlikely) to 7 (very likely), and mean scores were calculated for the distress response type (e.g., "becomes obviously uncomfortable when she sees I'm feeling down") across the nine vignettes for mothers and adolescents. Cronbach's alpha was .90 and .83 for mothers and adolescents, respectively.

The third component of the composite score was maternal self-report on the PANAS (Watson, Clark, & Tellegen, 1988). The mothers completed the 20-item self-report PANAS immediately following the adolescent disclosure task to assess momentary state affect.

Both positive and negative affect were assessed, but only negative affect scores were utilized given their consistent association with distress tolerance (Kiselica, Rojas, Bornovalova, & Dube, 2015). The mothers rated their current feelings for various forms of negative affect (e.g., "guilty," "ashamed," and "irritable") on a Likert-type scale from 1 (*very slightly or not at all*) to 5 (*extremely*). Scores were summed so that higher scores are indicative of greater negative affect. Scores could range from 10 to 50. The PANAS demonstrates adequate reliability and convergent and divergent validity (Watson et al., 1988). Cronbach's alpha was .90.

To create a more reliable measure of maternal negative emotional responsivity and to reduce the number of comparisons with individual indicators, a composite index was created using maternal and adolescent report of maternal distress in response to adolescent negative emotion, as well as maternal report of negative affect following adolescent's disclosure of a distressing experience. The scales of the CCNES have been successfully combined in similar ways with the negative affect scale of the PANAS in prior research (i.e., Jones, Eisenberg, Fabes, & MacKinnon, 2002). Cronbach's alpha for our composite variable (.86) is comparable to that found by Jones et al. (.92). Moreover, each of the three indicators we used was significantly correlated, r = .35-.47, $p \leq .007$. The composite was computed by first calculating a *z*-score for each indicator to standardize the values across measures and then by calculating a mean score across the three variables. Higher scores are indicative of greater maternal distress (M = 0.00, SD = 0.77).

Analytic Strategy

Preliminary analyses were conducted to examine patterns of normality and missing data; no data were missing. Bivariate Pearson correlations were performed to examine the relationships between the study variables. Maternal age, adolescent age and gender, maternal education, and gross annual family income were examined as potential covariates. Path analysis using Mplus (Version 7; Muthén & Muthén, 1998–2015), with full information maximum likelihood default, was conducted to evaluate the hypothesized model. As a means to assess the strength of our results, standardized estimates were reported as an indicator of the effect size. Bootstrapping was used to generate bias-corrected confidence intervals (CIs) to examine the significance of the direct and indirect effects (MacKinnon, Lockwood, & Williams, 2004), as well as to provide more robust estimates. CIs that exclude 0 indicate significance of the estimate. Bootstrap CIs were based on 1,000 samples. The models were run with all the mothers (n = 62) and with only the biological mothers (n = 60). No differences were found so results from the model with 62 mothers are reported.

RESULTS

Preliminary Analyses

All variables were examined for significant deviations from normality and outliers. The composite variable for maternal negative emotional responsivity was positively skewed. One outlier was found for adolescent perception of maternal distress on the CCNES-AP and another for maternal report of negative affect on the PANAS. Preliminary analysis indicated that the results did not differ depending on whether the outliers were included or excluded, so they were included. The bivariate correlations among the potential covariates and the dependent variables are presented in Table 1. The potential covariates—adolescent age, adolescent gender, maternal age, maternal education, and family income—were not associated with the study variables of interest, and thus, were not included in the main analyses. The descriptive statistics for the dependent variables based on high

Correlations Between Study Variables												
Variable	1	2	3	4	5	6	7					
1. Mother age (years)	_											
2. Adolescent age (years)	0.33*	_										
3. Adolescent gender	-0.07	-0.18										
4. Education	0.16	0.06	0.11									
5. Family income	0.15	-0.04	-0.05	0.38**								
6. Emotion regulation difficulties	-0.21	-0.18	0.04	-0.21	-0.19	_						
7. Negative emotional responsivity	0.07	0.11	-0.12	-0.06	-0.04	0.50***	_					

TABLE 1 Correlations Between Study Variables

Note. All variables are for mothers except where otherwise noted.

p < .05, p < .01, p < .01, p < .001.

betrayal trauma exposure and the period of exposure (i.e., child or young adult) are presented in Table 2.

Maternal Childhood and Young Adult Trauma Exposure

A majority of the mothers reported a history of childhood trauma (79%); 58% reported at least one low betrayal trauma and 60% reported at least one high betrayal trauma. Similarly, a majority of the mothers reported a history of trauma as a young adult (80%); 55% reported at least one low betrayal trauma and another 55% reported at least one high betrayal trauma. Table 2 illustrates when and how many mothers experienced high betrayal traumas. Sixty percent of the mothers (n = 37) reported trauma in childhood and as a young adult. Of the mothers who experienced trauma as a child and as a young adult, 65% (n = 24) endorsed high betrayal trauma revictimization.

Path Model

The first path model tested the hypothesis that maternal high betrayal revictimization will be related to more negative emotional responsivity to adolescent negative emotion than the simple additive effects of experiencing child or adult high betrayal trauma independently. Neither maternal high betrayal trauma as a child (b = -0.39, SE = 0.22,

	No high betrayal trauma			High betrayal trauma			
	M SD Ran		Range	М	SD	Range	
Childhood							
N	25			37			
Emo Reg difficulties	68.24	16.98	42-103	78.43	26.15	43-141	
Neg Emo responsivity	-0.08	0.67	-0.76 to 1.55	0.05	0.84	-0.86 to 2.77	
Young adult							
Ν	28			34			
Emo Reg difficulties	62.75	12.35	46-98	83.85	25.89	42 - 141	
Neg Emo responsivity	-0.17	0.63	-0.86 to 1.55	0.14	0.86	-0.76 to 2.77	
Revictimization							
N	38			24			
Emo Reg difficulties	65.92	15.42	42-103	87.63	27.47	43-141	
Neg Emo responsivity	-0.18	0.62	-0.86 to 1.55	0.29	0.91	-0.72 to 2.77	

TABLE 2 Descriptive Statistics by Level of Betrayal Trauma and Period of Trauma Exposure

Note. Emo is emotion; Reg is regulation; Neg is negative.

954 /

 $\beta = -0.25, 95\%$ CI [-0.88, 0.02]), nor as a young adult ($b = -0.22, SE = 0.27, \beta = -0.14, 95\%$ CI [-0.79, 0.27]) was significantly associated with mothers' negative responsivity. In contrast, mothers who experienced high betrayal trauma revictimization responded more negatively to their adolescent's expressions of negative affect ($b = 0.88, SE = 0.35, \beta = 0.56, 95\%$ CI [0.22, 1.56]). To avoid misinterpreting the main effects given the significant interaction effect, two post hoc analyses were conducted to compare mothers who experienced child or young adult high betrayal trauma with mothers who did not experience any high betrayal trauma at the corresponding time period. The nonsignificant main effects were confirmed with independent sample t tests, where there was no significant difference in mothers' negative responsivity between mothers with or without a history of high betrayal trauma as a child t(60) = -0.65, p = .52. Likewise, there was no significant difference in mothers' negative responsivity between mothers with or without a history of high betrayal trauma as a young adult t(60) = -1.61, p = 11.

The second path model tested the hypothesis that maternal high betrayal trauma revictimization would be associated with negative maternal emotional responsivity indirectly through maternal emotion regulation difficulties. This path model was also fully saturated. In comparison with mothers who did not experience high betrayal trauma revictimization, mothers who experienced high betrayal trauma revictimization had greater difficulty regulating their emotions (b = 21.70, SE = 5.89, $\beta = 0.46$, 95% CI [10.14, 33.89]), which was, in turn, associated with mothers responding more negatively to their adolescent's negative affect (b = 0.015, SE = 0.004, $\beta = 0.46$, 95% CI [0.007, 0.023]). While the direct path from maternal high betrayal trauma revictimization to maternal negative emotional responsivity became nonsignificant in this model (b = 0.14, SE = 0.23, $\beta = 0.09$, 95% CI [-0.25, 0.61]), the indirect path through maternal emotion regulation difficulties was significant (b = 0.33, SE = 0.13, $\beta = 0.21$, 95% CI [0.14, 0.65]). The final model accounted for a significant amount of the variance in maternal emotion regulation difficulties, $R^2 = .21$, p = .02 and in maternal negative emotional responsivity, $R^2 = .26$, p = .007.

DISCUSSION

The purpose of the present study was to examine a model of risk for maternal negative emotional responsivity to adolescent negative emotion. The findings suggest that exposure to trauma, and particularly a pattern of high betrayal trauma revictimization where mothers experience interpersonal trauma perpetrated by someone close to them as children and as young adults, is associated with mothers being emotionally distressed in response to their adolescents' negative emotions. Maternal childhood high betrayal trauma revictimization was associated with mothers' increased difficulty regulating their emotions, and greater maternal emotion dysregulation was associated with higher levels of maternal negative emotional responsivity to adolescent expression of negative emotion. These findings are consistent with prior studies examining each of the pathways independently, demonstrating links between childhood and adult trauma in general (e.g., Lilly et al., 2014), high betrayal trauma revictimization for individuals who experienced high betrayal trauma during childhood (e.g., Gobin & Freyd, 2009), and trauma and emotion dysregulation (e.g., Goldsmith et al., 2013). Similar to findings that the effects of child abuse may be more problematic following subsequent trauma during other developmental periods (Dubowitz et al., 2001), our findings also suggest that rather than child or young adult high betrayal trauma being associated with mothers' negative responsivity, it was mothers who had experienced high betrayal trauma as children and young adults who were more likely to respond negatively to their adolescent's negative emotions.

Maternal childhood high betrayal trauma revictimization was indirectly associated with maternal negative emotional responsivity through poor emotion regulation. Lieberman

(2004) has found that when children are traumatized, their parents are often traumatized as well. The results of the current study likewise suggest that when adolescents are distressed, mothers with high betrayal trauma histories are also more easily distressed. These findings help add context to related findings linking maternal history of abuse with more insensitive parenting and less emotional control during parent-child interactions (Bert et al., 2009; Cole et al., 1992; Schuetze & Das Eiden, 2005). Mothers who experienced high betrayal traumas as children and as young adults struggled in regulating their emotions, and it may be that their trauma histories impaired their development of emotion regulation. Abusive and emotionally invalidating environments during childhood may limit the opportunity for children to seek emotional support from their parents or the ability to identify and regulate negative emotions. Although adaptive in an abusive environment, emotion regulation strategies that rely on avoidance and suppression may endure as primary methods to manage emotion outside of abusive environments and become problematic (Krause, Mendelson, & Lynch, 2003). As mothers, the women in the current study with high betrayal trauma revictimization struggled to manage their emotions, including those that arose during their interactions with their children. Of note, the direct association between maternal high betrayal trauma revictimization and maternal negative emotional responsivity became nonsignificant when maternal emotion dysregulation was included in the model. These results add to the existing literature highlighting decreased rates of maternal sensitivity and responsiveness for mothers with abuse histories and further suggest that maternal emotion dysregulation may play a role in this process. The mothers in the current study appeared to become distressed and overwhelmed by their children's intense emotions without having developed the skills needed to regulate their own emotions in an effective way, highlighting the importance of intervention.

Clinical Implications

The findings from this study suggest that mothers with a history of high betrayal trauma revictimization may find it particularly challenging to help their adolescents manage negative emotions and distressing experiences. Findings from another study using this sample of adolescent-mother dyads found that adolescents whose mothers tended to become more distressed in response to their adolescents' negative affect were also more likely to perceive their mothers as less supportive, and when sharing distressing experiences with their mothers, these adolescents made less substantive disclosures (Martin, Kim, & Freyd, 2017). Clinical interventions that incorporate emotion regulation skill development for mothers show promise for helping mothers to better manage their emotions, improve their parenting behaviors, and reduce some negative psychological outcomes for youth (Havighurst, Kehoe, & Harley, 2015; Martin, Roos, Zalewski, & Cummins, 2017; Shortt, Eddy, Sheeber, & Davis, 2014). Future research should specifically assess whether improvements in maternal emotion regulation lead to better emotional responsivity in response to their children's emotions and whether this also leads to better adjustment in their children. At the same time, mothers who continue to be abused and invalidated within their close relationships may not be in a safe enough position to integrate emotion regulation and validation skills into their lives. Thus, mental health providers working with children and families should assess for history of current maternal trauma, as well as maternal emotion regulation, to better understand mothers' ability to cope with and help their adolescents manage negative emotions.

Limitations

We are aware of a number of limitations of the current study. First, the data are crosssectional, and thus, causal inferences cannot be confirmed. Although an attempt was made to examine the appropriate temporal sequence of factors by utilizing data specific to three different developmental periods in the mothers' lives, the data were nonetheless collected at the same time point. Moreover, modeling of indirect effects with cross-sectional data often results in biased estimates when compared to models using longitudinal data (Maxwell & Cole, 2007). Thus, longitudinal research is needed to replicate this model. Future longitudinal research should also incorporate additional variables that may account for the relationship between maternal trauma and negative emotional responsivity such as current stressors, including parenting stress, and lack of social support. Second, the demographic composition of the study was limited in that it did not include mother-father or father-adolescent dyads, despite fathers being involved in the emotion socialization process for their children. Because mothers and fathers may respond in unique ways to their children's emotions, including distressing emotions (Klimes-Dougan et al., 2007), it is also important to gain a better understanding of the factors that may increase fathers' distress and negative reactivity when interacting with their children. Further, by not including fathers or other co-parents in the study, we were unable to control for their influence on maternal emotional responsivity. Third, despite our attempts to maximize the socioeconomic diversity of the sample, a majority of the mothers had postsecondary education and were employed, and just over a third reported annual gross incomes at \$50,000 or higher. Future research should expand this research to mothers with greater socioeconomic disadvantage. Finally, the sample size was modest and power was limited, which might have resulted in type II errors of nonsignificance. In an effort to mitigate the limitations of our sample size and to provide more robust estimates, we reported confidence intervals from the bias-corrected bootstrapping method. Future replication studies should incorporate larger samples to confirm these results.

A few caveats should also be considered. The classification of traumas as being high or not in betrayal is relatively subjective, and some misclassifications may have occurred as a result. For example, some mothers may have experienced abuse perpetrated by a caregiver, such as a stepfather, that would typically be considered a high betrayal trauma but may not have endorsed the experience as a high betrayal trauma because they did not feel "close" to the perpetrator. Likewise, high betrayal traumas solely comprise interpersonal traumas, whereas those not high in betrayal include both interpersonal and noninterpersonal traumas. Future research would benefit from examining whether the relationship to the perpetrator is driving these results or whether similar results would be found when comparing interpersonal to noninterpersonal traumas. Moreover, the most common type of recall bias of childhood trauma is underreporting (Fergusson, Horwood, & Woodward, 2000; Lalande & Bonanno, 2011) and our results may be influenced by such recall bias. Because the mothers self-reported on their trauma histories after the disclosure task, it is possible that distress during the disclosure task may have influenced their ability to accurately recall past traumatic experiences. However, Lalande and Bonanno (2011) found that higher distress at the time of recall tended to reduce the underreporting of life events, suggesting that mothers who felt distressed may have been more accurate reporters.

CONCLUSION

When examining risk factors for maternal personal distress in response to adolescent negative emotion, mothers with histories of high betrayal trauma revictimization were found to be more likely to struggle in regulating their emotions and to become emotionally distressed in response to their adolescents' negative emotions. These findings highlight the often long-lasting effects of childhood trauma, especially when perpetrated by someone close to the child and when revictimization is present as an adult. High betrayal trauma revictimization appeared to have disrupted the mothers' abilities to regulate their emotions and respond sensitively to their children's negative emotions. These findings also provide the foundation for future research evaluating clinical interventions targeted at increasing maternal emotion regulation skills. Promoting safe and stable relationships for mothers and better maternal emotion regulation, especially for mothers with childhood histories of trauma, may serve to enhance mother–adolescent relationships and mothers' abilities to best support their children.

REFERENCES

- Banyard, V. L. (1997). The impact of childhood sexual abuse and family functioning on four dimensions of women's later parenting. *Child Abuse & Neglect*, 21, 1095–1107. https://doi.org/10.1016/S0145-2134(97) 00068-9
- Banyard, V. L., Williams, L. M., & Siegel, J. A. (2003). The impact of complex trauma and depression on parenting: An exploration of mediating risk and protective factors. *Child Maltreatment*, 8, 334–349. https://doi.org/ 10.1177/1077559503257106
- Batson, C. D., O'Quin, K., Fultz, J., Vanderplas, M., & Isen, A. M. (1983). Influence of self-reported distress and empathy on egoistic versus altruistic motivation to help. *Journal of Personality and Social Psychology*, 45, 706–718. https://doi.org/10.1037/0022-3514.45.3.706
- Bert, S. C., Guner, B. M., Lanzi, R. G., & Centers for the Prevention of Child Neglect (2009). The influence of maternal history of abuse on parenting knowledge and behavior. *Family Relations*, 58(2), 176–187. https://doi.org/10.1111/j.1741-3729.2008.00545.x
- Coates, A. A., & Messman-Moore, T. L. (2014). A structural model of mechanisms predicting depressive symptoms in women following childhood psychological maltreatment. *Child Abuse & Neglect*, 38, 103–113. https://doi. org/10.1016/j.chiabu.2013.10.005
- Cole, P. M., Woolger, C., Power, T. G., & Smith, K. D. (1992). Parenting difficulties among adult survivors of father-daughter incest. *Child Abuse & Neglect*, 16, 239–249. https://doi.org/10.1016/0145-2134(92)90031-L
- Crandall, A., Deater-Deckard, K., & Riley, A. W. (2015). Maternal emotion and cognitive control capacities and parenting: A conceptual framework. *Developmental Review*, 36, 105–126. https://doi.org/10.1016/j.dr.2015.01. 004
- DePrince, A. P., & Freyd, J. J. (2001). Memory and dissociative tendencies: The roles of attentional context and word meaning in a directed forgetting task. *Journal of Trauma & Dissociation*, 2, 67–82. https://doi.org/10. 1300/J229v02n02_06
- Dix, T. (1991). The affective organization of parenting: Adaptive and maladaptive processes. Psychological Bulletin, 110(1), 3–25. https://doi.org/10.1037/0033-2909.110.1.3
- Dubowitz, H., Black, M. M., Kerr, M. A., Hussey, J. M., Morrel, T. M., Everson, M. D. et al. (2001). Type and timing of mothers' victimization: Effects on mothers and children. *Pediatrics*, 107, 728–735. https://doi.org/10. 1542/peds.107.4.728
- Edwards, V. J., Freyd, J. J., Dube, S. R., Anda, R. F., & Felitti, V. J. (2012). Health outcomes by closeness of sexual abuse perpetrator: A test of Betrayal Trauma Theory. *Journal of Aggression, Maltreatment, & Trauma*, 21, 133–148. https://doi.org/10.1080/10926771.2012.648100
- Ehring, T., & Quack, D. (2010). Emotion regulation difficulties in trauma survivors: The role of trauma type and PTSD symptom severity. *Behavior Therapy*, 41, 587–598. https://doi.org/10.1016/j.beth.2010.04.004
- Fabes, R. A., & Eisenberg, N. (1998). The coping with children's negative emotions scale Adolescent perception version: Procedures and scoring. Available from authors. Tempe, AZ: Arizona State University.
- Fabes, R. A., Poulin, R. E., Eisenberg, N., & Madden-Derdich, D. A. (2002). The Coping with Children's Negative Emotions Scale (CCNES): Psychometric properties and relations with children's emotional competence. *Marriage & Family Review*, 34, 285–310. https://doi.org/10.1300/J002v34n03_05
- Fergusson, D. M., Horwood, L. J., & Woodward, L. J. (2000). The stability of child abuse reports: A longitudinal study of the reporting behaviour of young adults. *Psychological Medicine*, 30, 529–544. https://doi.org/10.1017/ S0033291799002111
- Freyd, J. J. (1996). Betrayal trauma: The logic of forgetting childhood abuse. Cambridge, MA: Harvard University Press.
- Freyd, J. J., DePrince, A. P., & Gleaves, D. (2007). The state of betrayal trauma theory: Reply to McNally (2007) —Conceptual issues and future directions. *Memory*, 15, 295–311. https://doi.org/10.1080/09658210701256514
- Gobin, R. L., & Freyd, J. J. (2009). Betrayal and revictimization: Preliminary findings. Psychological Trauma: Theory, Research, Practice, and Policy, 1, 242–257. https://doi.org/10.1037/a0017469
- Goldberg, L. R., & Freyd, J. J. (2006). Self-reports of potentially traumatic experiences in an adult community sample: Gender differences and test-retest stabilities of the items in a Brief Betrayal-Trauma Survey. Journal of Trauma & Dissociation, 7(3), 39–63. https://doi.org/10.1300/J229v07n03_04

958 /

- Goldsmith, R. E., Chesney, S. A., Heath, N. M., & Barlow, M. R. (2013). Emotion regulation difficulties mediate associations between betrayal trauma and symptoms of posttraumatic stress, depression, and anxiety. *Journal of Traumatic Stress*, 26, 376–384. https://doi.org/10.1002/jts.21819
- Gondoli, D. M., & Silverberg, S. B. (1997). Maternal emotional distress and diminished responsiveness: The mediating role of parenting efficacy and parental perspective taking. *Developmental Psychology*, 33, 861–868. https://doi.org/10.1037/0012-1649.33.5.861
- Gratz, K., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. Journal of Psychopathology and Behavioral Assessment, 26, 41–54. https://doi.org/10.1023/B:JOBA.0000007455.08539.94
- Green, J. G., McLaughlin, K. A., Berglund, P. A., Gruber, M. J., Sampson, N. A., Zaslavsky, A. M. et al. (2010). Childhood adversities and adult psychiatric disorders in the National Comorbidity Survey Replication I: Associations with first onset of DSM–IV disorders. Archives of General Psychiatry, 67, 113–123. https://doi.org/10. 1001/archgenpsychiatry.2009.186
- Havighurst, S. S., Kehoe, C. E., & Harley, A. E. (2015). Tuning in to teens: Improving parental responses to anger and reducing youth externalizing behavior problems. *Journal of Adolescence*, 42, 148–158. https://doi.org/10. 1016/j.adolescence.2015.04.005
- Jaffee, S. R., Bowes, L., Ouellet-Morin, I., Fisher, H. L., Moffitt, T. E., Merrick, M. T. et al. (2013). Safe, stable, nurturing relationships break the intergenerational cycle of abuse: A prospective nationally representative cohort of children in the United Kingdom. *Journal of Adolescent Health*, 53, S4–S10. https://doi.org/10.1016/ j.jadohealth.2013.04.007
- Jones, J. D., Brett, B. E., Ehrlich, K. B., Lejuez, C. W., & Cassidy, J. (2014). Maternal attachment style and responses to adolescents' negative emotions: The mediating role of maternal emotion regulation. *Parenting, Science and Practice*, 14, 235–257. https://doi.org/10.1080/15295192.2014.972760
- Jones, S., Eisenberg, N., Fabes, R. A., & MacKinnon, D. P. (2002). Parents' reactions to elementary school children's negative emotions: Relations to social and emotional functioning at school. *Merrill-Palmer Quarterly*, 48(2), 133–159. https://doi.org/10.1353/mpq.2002.0007
- Kiselica, A. M., Rojas, E., Bornovalova, M. A., & Dube, C. (2015). The nomological network of self-reported distress tolerance. Assessment, 22(6), 715–729. https://doi.org/10.1177/1073191114559407
- Klimes-Dougan, B., Brand, A. E., Zahn-Waxler, C., Usher, B., Hastings, P. D., Kendziora, K. et al. (2007). Parental emotion socialization in adolescence: Differences in sex, age, and problem status. *Social Development*, 16 (2), 326–342. https://doi.org/10.1111/j.1467-9507.2007.00387.x
- Krause, E. D., Mendelson, T., & Lynch, T. R. (2003). Childhood emotional invalidation and adult psychological distress: The mediating role of emotional inhibition. *Child Abuse & Neglect*, 27, 199–213. https://doi.org/10. 1016/S0145-2134(02)00536-7
- Lalande, K. M., & Bonanno, G. A. (2011). Retrospective memory bias for the frequency of potentially traumatic events: A prospective study. *Psychological Trauma: Theory, Research, Practice, and Policy*, 3, 165–170. https://doi.org/10.1037/a0020847
- Lieberman, A. F. (2004). Traumatic stress and quality of attachment: Reality and internalization in disorders of infant mental health. *Infant Mental Health Journal*, *4*, 336–351. https://doi.org/10.1002/(ISSN)1097-0355
- Lilly, M. M., London, M. J., & Bridgett, D. J. (2014). Using SEM to examine emotion regulation and revictimization in predicting PTSD symptoms among childhood abuse survivors. *Psychological Trauma: Theory, Research, Practice, and Policy, 6*(6), 644–651. https://doi.org/10.1037/a0036460
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39, 99–128. https://doi.org/10. 1207/s15327906mbr3901_4
- Maliken, A. C., & Katz, L. F. (2013). Exploring the impact of parental psychopathology and emotion regulation on evidence-based parenting interventions: A transdiagnostic approach to improving treatment effectiveness. *Clinical Child and Family Psychology Review*, 16, 173–186. https://doi.org/10.1007/s10567-013-0132-4
- Martin, C. G., Cromer, L. D., DePrince, A. P., & Freyd, J. J. (2013). The role of cumulative trauma, betrayal, and appraisals in understanding trauma symptomatology. *Psychological Trauma: Theory, Research, Practice, and Policy*, 5(2), 110–118. https://doi.org/10.1037/a0025686
- Martin, C. G., Kim, H. K., & Freyd, J. J. (2017). In the spirit of full disclosure: Maternal distress, emotion validation, and adolescent disclosure of distressing experiences. *Emotion*. Advance online publication. doi: 10.1037/ emo0000363.
- Martin, C. G., Roos, L. E., Zalewski, M., & Cummins, N. (2017). A dialectical behavior therapy skills group case study on mothers with severe emotion dysregulation. *Cognitive and Behavioral Practice*, 24, 405–415. https://doi.org/10.1016/j.cbpra.2016.08.002
- Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. Psychological Methods, 12, 23–44. https://doi.org/10.1037/1082-989X.12.1.23
- McMahon, R. J., Wells, K. C., & Kotler, J. S. (2006). Conduct problems. In E. J. Mash & R. A. Barkley (Eds.), *Treatment of childhood disorders* (3rd ed., pp. 137–268). New York: Guildford Press.

- O'Mahen, H. A., Karl, A., Moberly, N., & Fedock, G. (2015). The association between childhood maltreatment and emotion regulation: Two different mechanisms contributing to depression. *Journal of Affective Disorders*, 174, 287–295. https://doi.org/10.1016/j.jad.2014.11.028
- Rutherford, H. J. V., Wallace, N. S., Laurent, H. K., & Mayes, L. C. (2015). Emotion regulation in parenthood. Developmental Review, 36, 1–14. https://doi.org/10.1016/j.dr.2014.12.008
- Schuetze, P., & Das Eiden, R. (2005). The relationship between sexual abuse during childhood and parenting outcomes: Modeling direct and indirect pathways. *Child Abuse & Neglect*, 29, 645–659. https://doi.org/10.1016/j.c hiabu.2004.11.004
- Shortt, J. W., Eddy, J. M., Sheeber, L., & Davis, B. (2014). Project home: A pilot evaluation of an emotion-focused intervention for mothers reuniting with children after prison. *Psychological Services*, 11(1), 1–9. https://doi. org/10.1037/a0034323
- Simmel, C., Postmus, J. L., & Lee, I. (2016). Revictimized adult women: Perceptions of mental health functioning and associated services. *Journal of Family Violence*, 31, 679–688. https://doi.org/10.1007/s10896-015-9796-5
- Tang, S. S., & Freyd, J. J. (2012). Betrayal trauma and gender differences in posttraumatic stress. Psychological Trauma: Theory, Research, Practice, and Policy, 4, 469–478. https://doi.org/10.1037/a0025765
- Tone, E. B., & Tully, E. C. (2014). Empathy as a "risky strength": A multilevel examination of empathy and risk for internalizing disorders. *Development & Psychopathology*, 26, 1547–1565. https://doi.org/10.1017/ S0954579414001199
- Ullman, S. E. (2016). Sexual revictimization, PTSD, and problem drinking in sexual assault survivors. Addictive Behaviors, 53, 7–10. https://doi.org/10.1016/j.addbeh.2015.09.010
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS Scales. Journal of Personality and Social Psychology, 54, 1063–1070. https://doi.org/ 10.1037/0022-3514.54.6.1063
- Werner, K. B., McCutcheon, V. V., Challa, M., Agrawal, A., Lynskey, M. T., Conroy, E. et al. (2016). The association between childhood maltreatment, psychopathology, and adult sexual victimization in men and women: Results from three independent samples. *Psychological Medicine*, 46, 563–573. https://doi.org/10.1017/ S0033291715002056
- Wood, J. V., Saltzberg, J. A., & Goldsamt, L. A. (1990). Does affect induce self-focused attention? Journal of Personality and Social Psychology, 58, 899–908. https://doi.org/10.1037/0022-3514.58.5.899
- Wright, M. O., Fopma-Loy, J., & Oberle, K. (2012). In their own words: The experience of mothering as a survivor of childhood sexual abuse. *Development and Psychopathology*, 24, 537–552. https://doi.org/10.1017/ S0954579412000144