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ARTICLE

Betrayal trauma and child symptoms: The role of emotion

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ABSTRACT

Both mothers' and children's exposures to interpersonal violence-including betrayal traumas-are linked with heightened risk for children developing internalizing and externalizing symptoms. Despite this association, little research has examined additional factors that may explain this risk, such as emotion skills. The current study examined the relationship between mother-child emotion understanding abilities and use of emotion language on a behavioral facial affect perception task and betrayal trauma exposure in relation to child internalizing/externalizing symptoms. The sample included 47 ethnically diverse female guardians (ages 25-51 years old; M age = 37.7) and their children (ages 7–11 years old; Mage = 9.1). Results indicated that maternal provision of a spontaneous, unprompted reason for emotions during the facial affect perception task was significantly associated with lower child internalizing/externalizing symptoms when both mothers' and children's betrayal trauma histories were controlled. The results suggest that emotion skills (in particular, the way mothers talk about emotions) warrant greater attention in research on the development of child internalizing/ externalizing problems.

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Betrayal trauma, which includes interpersonal violence that occurs in the context of a close victim-perpetrator relationship (Freyd, 1996, 2008), is linked to a host of disparate psychological outcomes across the lifespan. For example, children exposed to betrayal trauma are at a heightened risk for developing internalizing and externalizing symptoms (D'Andrea, Ford, Stolbach, Spinazzola, & Van der Kolk, 2012; Ford, 2002; Ford, Gagnon, Connor, & Pearson, 2011; Moylan et al., 2010). In addition, mothers exposed to betrayal trauma in their own childhoods are at a heightened risk for developing symptoms of posttraumatic stress disorder (PTSD), dissociation, and depression in adulthood (Banyard, Williams, & Siegel, 2001; Freyd, 1996; Horwitz, Widom, McLaughlin, & White, 2001). In turn, maternal trauma-

CONTACT Kerry L. Gagnon Kerry.Gagnon@du.edu Department of Psychology, University of Denver, 2155 South Race Street, Denver, CO 80208. © 2016 Taylor & Francis related distress is linked with adverse outcomes among children (Bosquet Enlow et al., 2011; Chu & DePrince, 2006; Goodman et al., 2011; Hulette, Kaehler, & Freyd, 2011; Marysko et al., 2010).

Previous studies have demonstrated that mothers' and/or children's exposure to betrayal trauma puts children at risk for poor psychological outcomes; however, researchers have yet to simultaneously test other factors that may contribute to the transmission of symptom severity between mothers and children, such as emotion understanding. Addressing this gap in the literature, the current study considers emotion skills within the relationship between mothers' and children's betrayal trauma exposure and children's internalizing and externalizing symptoms. In particular, this study focuses on two components of emotion skills: emotion understanding and emotion language. Emotion understanding is the ability to identify emotional expressions and the situations that elicit them (Denham et al., 2003). Emotion language encompasses the use of discrete emotion words (e.g., *happy, sad*) and behavioral expressions of emotions (e.g., smiling, crying; Denham, Cook, & Zoller, 1992). Furthermore, the current study examines emotion understanding and emotion language in both children and parents.

Researchers examining the association between trauma and psychological well-being in children have pointed to the importance of considering emotion skills along with trauma exposure (Van der Kolk, 2005), as emotion skills are central to children's psychological development (Cartledge, 2010; Denham, McKinley, Couchoud, & Holt, 1990; Eisenberg et al., 2001a). In particular, the ability to identify, describe, and understand emotions in one's self and others, as well as the ability to regulate one's emotions, appears central to children's overall psychological development and well-being (Cartledge, 2010; Denham et al., 1990). The importance of emotion skills to children's psychological outcomes is also highlighted by the fact that many treatment programs for internalizing and externalizing symptoms specifically target the development of emotion skills.

Conversations between parents and their children about emotions are crucial for children's acquisition of emotion language and emotion understanding (Denham & Auerbach, 1995). Through conversations, parents teach their children about the kinds of emotions they may feel and how to manage these emotions (Goldfinch, 2009). In addition, parent-child discussions of emotions teach children how to identify and understand emotions in others (Eisenberg et al., 2001b). In essence, parents function as direct teachers and external regulators of their children's emotions. Furthermore, the degree to which parents engage in emotion conversation with their children directly relates to their children's ability to engage in discourse about emotions (Denham, Mitchell-Copeland, Strandberg, Auerbach, & Blair, 1997; Garner, Jones, Gaddy, & Rennie, 1997). The dynamic of emotion communication between parents and their children, therefore, may contribute to poor emotional development and communication as well as future symptomatology (Linehan, 1993). Given the importance of both parents and children in the development of emotion language and understanding in children, the current study takes into account mothers' as well as children's emotion understanding and emotion language.

In sum, researchers have demonstrated a strong link between mothers' and children's emotion skills (e.g., naming and talking about emotions) and children's internalizing/externalizing symptom severity. Researchers have also shown that mothers' and children's histories of betrayal trauma exposure are predictive of children's internalizing/externalizing symptoms, yet limited research to date has examined other factors that may contribute to symptom development and severity in children. The current study advances understanding of these findings and examines whether the emotion understanding and emotion language of mothers and children contribute to internalizing/ externalizing symptoms in children above and beyond mothers' and children's betrayal trauma exposure.

The present study

The current study investigated the relation between mothers' and children's emotion understanding and emotion language with children's internalizing/externalizing symptoms in the context of mothers' and children's betrayal trauma histories. The current study adapted an existing task for use with mother-child dyads (Emde, Osofsky, & Butterfield, 1993) to create a behavioral task in which mothers had an opportunity to teach children about emotions. A coding system was then developed and implemented to code the emotion understanding and emotion language of mothers and children. Emotion understanding was measured by the ability to identify expressions of emotion and the situations that elicit them (Denham et al., 2003). Specifically, in the current study, we examined both the mother's and child's ability to name the emotion, use behavioral expressions (e.g., smiling, crying) to describe the emotion, and identify the context of the emotion. Emotion language was measured by the number of emotion words used, which included discrete emotions as well as behavioral expressions of emotion (Denham et al., 1992). Mothers' and children's emotion understanding and emotion language variables were reliably coded based on their performance on a behavioral facial affect perception task.

To test study hypotheses, we developed a coding system and applied it to transcripts of the dyadic task. Given the relatively small sample size (N = 47) and paucity of research using emotion understanding and language tasks with mother-child dyads, the development of our new coding system required exploratory analyses first. We developed and implemented a broad

coding system that assessed an array of emotion understanding and emotion language variables, then selected variables to be included in analyses based on the strength of bivariate correlations.

Hypotheses

The following hypotheses were tested. We predicted that mother and child emotion understanding and language abilities would account for unique variance in child internalizing/externalizing symptoms. In particular, we predicted that lower scores on the emotion understanding and emotion language variables would be associated with greater child internalizing/externalizing symptoms. We also predicted that mother and child betrayal trauma history variables would be associated with greater child internalizing/externalizing symptoms, as past research has documented, and that unique variance would still be explained by the specific emotion understanding and language variables when the betrayal trauma variables were entered into a hierarchical regression analysis on the second step. Finally, we planned to evaluate whether mother and child demographics (age, race/ethnicity, child gender) and verbal fluency would be significantly related to any of the predictor or outcome variables.

Method

Participants

Female guardians (N = 47, ages 25–51 years old) and their children (ages 7–11 years old) participated in a larger project on parenting and stress. The majority of the women were biological mothers to the child participants, though the sample also included adoptive mothers and one grandmother. (Female guardians are referred to as "mothers" for the rest of this article.) Child participants were predominantly female (66%). Reported ethnic back-grounds for the children were 44% White, 17% Black, 13% Hispanic/Latino, 4% American Indian/Alaska Native, and 22% other race or biracial/multiracial (the ethnic background of one child was not reported). Ethnic backgrounds of the mothers were 49% White, 15% Black, 15% Hispanic/Latino, 4% American Indian/Alaska Native, and 17% other race or biracial/multiracial. The mothers' reported education was 34% some high school or general equivalency diploma, 55% college (some or graduated), 11% postcollege education.

Measures

Emotion understanding and emotion language

Mother's and child's emotion understanding and emotion language were measured in a behavioral task using the IFEEL Pictures (IFP; Emde et al., 1993). The

Example transcript	Variable	Code
M: Aw, now that one looks like it's getting a shot. Most people turn red when they're in pain so, so that's probably, it's	Emotion/descriptor word selected	Pain
either a shot or, I would say a shot. I would say something	Accuracy of emotion/descriptor	(1)
that I don't think they'd be happy about.	word	Correct
	Use of facial/physical features	(1) Yes
	Providing a cause for the emotion	(1) Yes
I: So what is the baby expressing?	Providing a spontaneous (vs. prompted) reason for the emotion	(1) Yes
M: Pain, it looks like to me. That looks like pain, cause the eyebrow.	Quantity of discrete emotion/ descriptive words used	2
I: And then the numbers?		
M: Oh, uhh well I'm sure that would be 1 on top and a 9 on		
the bottom. He's got a		
very serious expression.		

 Table 1. Example of emotion language and emotion understanding coding.

Notes: M =mother; I =interviewer.

IFP is a behavioral facial affect perception task and consists of 30 colored photographs depicting head and shoulder views of ethnically diverse infants (ranging from 2½ months to 12 months of age) displaying expressions of emotions (Hildyard & Wolfe, 2007). The variety of coloring, shadowing, and clarity of the photographs is designed to model daily occurrences (Butterfield & Ridgeway, 1993). The photos represent a variety as well as a blend of emotions; multiple different emotions can be used to describe each photo. The photographs were normed based on judgments of women who either were mothers or had experience with children. The IFP was used in the current study to assess mothers' and children's verbal communication about emotion and various abilities of emotion understanding. Validity and long-term stability of the IFP has been established in a predominantly White sample of adult females (Appelbaum, Butterfield, & Culp, 1993).

The coding system was developed for the current study to measure the emotion understanding and emotion language of mothers and children during the IFP task (see Table 1 for an example of the coding). Four categories of emotion understanding were separately coded: (a) accuracy of the emotion word chosen for each picture determined by the IFEEL Reference Sample (coded as 1 = accurate emotion word [i.e., the emotion word chosen was in agreement with at least 20% of the IFEEL Reference Sample], 0 = inaccurate or no response), (b) use of physical or facial features to describe emotion (e.g., smiling, crying; 1 = yes, 0 = no), (c) providing a reason for the emotion (1 = yes, 0 = no), and (d) providing a spontaneous reason versus a reason that was prompted by the experimenter (1 = spontaneous, 0 = prompted).¹ To code emotion language, raters coded the emotion words (which included both specific emotion words as well as behavioral expressions of emotion) used by mother and child during the entire IFP task and then calculated the number of discrete emotion words (i.e.,

calculated each emotion word once) to capture the breadth of the mother's and child's emotion vocabulary. Emotion words were also coded based on dimension (positive, neutral, or negative).

Two coders coded the transcripts in random sequence separately. There was substantial agreement between raters: for the emotion understanding codes, $M \alpha = .84$; for the emotion language codes, M r = .89. There were no indications of significant systematic coder differences, coder fatigue, or decay in coders' reliability across time. Differences between coders were resolved in consensus coding for the analyses.

Mother betrayal trauma history

Mothers' trauma history was assessed by self-report using the Trauma History Questionnaire (Green, 1996). The Trauma History Questionnaire consists of 24 types of traumatic events, including items assessing for exposure to crimerelated events, general disaster and trauma, and unwanted physical and sexual experiences. Based on the relationship to the perpetrators (e.g., parents, partner), events that involved betrayal of an interpersonal relationship (e.g., unwanted physical or sexual experience) were separately tallied. Mothers' history of betrayal trauma was coded as no trauma, no betrayal trauma, and betrayal trauma. History of betrayal trauma was used as a predictor variable.

Child betrayal trauma history

Children's trauma history was assessed by maternal report using the University of California at Los Angeles Posttraumatic Stress Disorder Index for *DSM–IV* (UCLA PTSD Index; Pynoos, Rodriquez, Steinberg, Stuber, & Fredrick, 1998). The UCLA PTSD Index is a 48-item measure that assesses a child's exposure to 26 types of traumatic events and assesses *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*, PTSD diagnostic criteria. Events that involved betrayal of an interpersonal relationship were also separately tallied to compute the child's history of betrayal trauma. These events included 'your child being hit, punched, or kicked very hard at home'; 'seeing a family member being hit, punched, or kicked very hard at home'; and 'having an adult or someone much older touch your child's private sexual body parts when the child did not want them to'. Children's history of betrayal trauma. History of betrayal trauma was used as a predictor variable.

Child internalizing/externalizing symptoms

Children's internalizing/externalizing symptoms were assessed by maternal report using the Child Behavior Checklist (Achenbach, 1991). The Child Behavior Checklist is a 113-item observer-report measure that assesses for children's behavioral and emotional problems. For each item, mothers indicated whether the item described their children (now or within the past 6 months) on a scale from 0 to 2 (0 = not true, 1 = somewhat or sometimes true, 2 = very or often true). An internalizing/externalizing symptoms (total) T score was calculated, with higher T scores indicating greater symptom severity. The internalizing/externalizing symptoms T score was used as an outcome variable. The Child Behavior Checklist has been demonstrated to have adequate test-retest reliability (Achenbach, 1991). For the current sample, Cronbach's alpha was .96.

Verbal fluency

Verbal fluency of mothers and children was measured using the Vocabulary subtests from the Wechsler Adult Intelligence Scale (Wechsler, 1997) and the Wechsler Intelligence Scale for Children (Wechsler, 2003), respectively. The Vocabulary subtests measure verbal knowledge and concept formation. Participants were presented with words (both visually and verbally) of increasing difficulty and were asked to define each word. For children younger than the age of 9 years, words were presented verbally only. Scores ranging from 0 to 2 were given for each word based on the accuracy of the definition. Higher scores indicate greater verbal intelligence. Mother and child vocabulary scores were used as a control variable. Both Vocabulary subtests exhibit adequate test–retest reliability (Wechsler, 1997, 2003).

Procedures

The study was approved by a university institutional review board. Motherchild dyads were recruited to participate in a larger project on parenting and stress through flyers posted at local community agencies (see Chu & DePrince, 2006). Mothers and their children were asked to come for an interview at a research office. Consent information was provided both verbally by a research assistant and in written form. Understanding of the consent information was assessed using a consent quiz with the mothers that assessed for key consent elements (e.g., confidentiality, voluntary nature of the research). In order to be considered able to consent to the study, mothers had to answer all consent questions correctly; they could make errors on the first administration of the questions, but after being provided with the correct information, they had to answer correctly on the second administration.

Following consent procedures, the mother-child dyad was asked to participate in a behavioral facial affect perception task (IFP). Mother and child were instructed to look at a total of 10 photos (five pictures each) from the IFP. The mother and the child were further instructed to take turns explaining the task to each other and describing the photos one by one, going in alternating order. The mother and child were given an instructional booklet

and were asked to describe the emotion of the infant using four probes that were created for the current study: (a) Tell what feeling the baby is expressing, (b) tell what kind of feelings the baby has, (c) tell how much the baby feels that, and (d) tell why the baby feels that. For the second and third items, the mother and the child were given a 9-point continuum scale to describe what kind of feelings the infant has (i.e., $1 = very \ bad \ feelings$, $9 = very \ good \ feelings$) and how much the infant feels that particular feeling (i.e., $1 = feels \ very \ little$, $9 = feels \ very \ much$). The interviewer was present during the task; however, after administering the first picture as an example, the interviewer provided minimal guidance to the mother–child dyad. The entire sequence was audiotaped and then transcribed for coding purposes. After the IFP, mother and child were separated and asked to complete written and verbally administered questionnaires.

Results

Data preparation

Prior to beginning analyses, we examined variables in the data set to ensure that they had acceptable levels of skew and kurtosis. Predictor variables included mother and child emotion language (number of discrete emotion words said during task), mother and child emotion understanding variables (accuracy of emotion word, use of facial/physical features, providing a reason, and providing a spontaneous reason), mother betrayal trauma history, and child betrayal trauma history. The outcome variable was child internalizing/externalizing symptoms. Control variables included mother and child demographic characteristics (e.g., age, race/ethnicity, child's gender) and mother and child verbal fluency scores. Table 2 presents additional descriptive statistics, including means and standard deviations for the variables in the analyses (refer to "Participants" for descriptive statistics on demographic information). Close to half of the mothers (47%) and children (40%) endorsed experiencing at least one type of betrayal trauma in their lifetime.

Bivariate correlation analysis

Bivariate correlations between the predictor and outcome variables guided decisions about predictors included in the regression model (see Table 3). Mothers' and children's demographic characteristics (e.g., age, race/ethnicity, child's gender) as well as their verbal fluency scores were not significantly correlated with the outcome variable. Correlations between the predictor and outcome variables revealed that child providing a reason for the emotion and mother providing a spontaneous reason for the emotion were significantly correlated with child internalizing/externalizing symptoms (p < .05). The

Variable	M (SD)	Range
Symptom scores (T score)		
Child internalizing/externalizing symptoms	52.37 (11.48)	29–74
Verbal fluency scores (scaled score)		
Mother verbal fluency score	10.30 (2.88)	5–14
Child verbal fluency score	10.30 (2.80)	5–18
Emotion language scores		
Mother discrete emotion words	11.64 (3.70)	4–21
Child discrete emotion words	8.49 (2.73)	3–14
Emotion understanding scores		
Mother emotion accuracy	3.04 (1.02)	1–5
Child emotion accuracy	2.40 (0.80)	1–4
Mother physical features	1.40 (1.38)	0–5
Child physical features	0.77 (0.89)	0–3
Mother provide reason	3.55 (1.46)	1–5
Child provide reason	3.83 (1.51)	0–5
Mother spontaneous reason	0.49 (0.78)	0–3
Child spontaneous reason	0.79 (0.98)	0–4

Table 2. Psychometric properties for variables (N = 47).

Notes: Child internalizing/externalizing symptoms = Child Behavior Checklist; Mother verbal fluency = Wechsler Adult Intelligence Scale Vocabulary subtest; Child verbal fluency = Wechsler Intelligence Scale for Children Vocabulary subtest.

correlation between mother providing a reason and child internalizing/externalizing symptoms trended toward significance (p = .09). Mother's and child's betrayal trauma history were also significantly correlated with child internalizing/externalizing symptoms (p < .05). The other mother and child emotion understanding and emotion language variables were not significantly correlated with child internalizing/externalizing symptoms.

Multiple regression analysis

Given the bivariate correlations, hierarchical multiple regression analysis tested the relationship between child providing a reason, mother providing a reason, mother providing a spontaneous reason, child betrayal trauma history, mother betrayal trauma history, and child internalizing/externalizing symptoms. More specifically, we tested whether child providing a reason, mother providing a reason, and/or mother providing a spontaneous reason predicted child internalizing/externalizing symptoms, even after we accounted for mother's and child's betrayal trauma history. For the regression analysis, we used contrast coding for child and mother betrayal trauma history: -1 = no trauma, 0 = non-betrayal trauma, 1 = betrayal trauma.

Table 4 presents the results of the hierarchical regression analysis, including coefficients and estimated R^2 for the model. Child providing a reason and mother providing a spontaneous reason accounted for unique variance. Specifically, child providing a reason and mother providing a spontaneous reason were associated with lower internalizing/externalizing symptoms. When mothers' and children's histories of betrayal trauma were added to

Table 3. Bivariate correlations b	oetweer	n predi	ictor ar	nd outc	ome v	ariables														
Measure	-	2	m	4	5	9	7	∞	6	10	1	12	13	14	15	16	17	18	19 2	0
1. Child age	I																			
2. Child gender	03																			
3. Child race/ethnicity	.33*	.04																		
4. Mother age	07	02	10																	
5. Mother race/ethnicity	.33	E.	.92**	09																
6. Child betrayal trauma history	.21	02	.12	28	.05															
7. Mother betrayal trauma history	.10	90.	02	19	-00	.47**														
8. Mother verbal fluency	.12	.05	07	.08	04	.22	.06													
9. Child verbal fluency	03	.05	41**	.22	37*	32*	23	.03												
10. Mother emotion accuracy	.12	.08	05	.26	04	.34*	.04	.08	.20											
11. Child emotion accuracy	.49**	.03	15	12	15	.10	.14	.18	.04	.17										
12. Mother physical feature	.08	.02	.31*	10	.38**	.24	.08	07	14	07	03									
13. Child physical feature	31*	.22	.08	00:	.18	.12	06	.19	18	06	17	.42**								
14. Mother provide reason	07	07	17	.26	22	20	26	09	T	.10	16	34*	27	Ι						
15. Child provide reason	24	6.	17	.38**	20	49**	31*	09	.26	02	07	19	23	.62**	Ι					
16. Mother spontaneous reason	03	07	.17	 11	.07	90.	.01	 11	42**	30*	05	.14	.17	22	07	Ι				
17. Child spontaneous reason	04	.17	04	10	.05	.01	03	.14	20	06	.22	.1	.24	07	20	.08				
18. Mother emotion language	07	 11	25	.01	19	.05	03	.27	.01	24	24	.20	.10	24	22	.19	- 00	I		
19. Child emotion language	.07	.20	01	00.	.18	20	23	.05	.26	08	14. 14	.30*	.33*	4	21	.06	.16	33* -	I	
20. Child symptoms	.16	08	19	10	10	.39**	.48**	60.	00	.10	60.	.01	17	25	37*	34*	- 08	03	- 14 -	
<i>Notes</i> : Mother betrayal trauma histo fluency = Wechsler Adult Intellige	ory = Tra ence Sca	uma Hi le Voca	istory Qu abulary	uestionr subtest;	aire; Ch Child v	iild betra rerbal flu	iyal trau Jency =	ma his [.] Wechs	tory = U iler Intel	CLA PTS ligence	D Inde Scale f	x; Child or Chile	sympto Iren Voo	oms = C cabular	hild Be / subte	havior (st.	Checklis	t; Moth	ier verl	bal

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۲ ر fluency = p < .05** p < .01

Step	Adjusted R ²	В	SE	β	t
Step 1					
Mother provide reason	.18*	0.43	1.38	0.05	0.31
Child provide reason		-2.86	1.30	-0.38	-2.21*
Mother spontaneous reason		-4.65	2.05	-0.32	-2.27*
Step 2	.33*				
Mother provide reason		0.56	1.28	0.07	0.44
Child provide reason		-1.56	1.32	-0.21	-1.18
Mother spontaneous reason		-5.03	1.86	-0.34	-2.71*
Child betrayal trauma history		1.95	2.00	0.15	0.97
Mother betrayal trauma history		7.14	2.76	0.36	2.58*

 Table 4. Regression analysis predicting emotion understanding variables and child symptoms.

Notes: Mother betrayal trauma history = Trauma History Questionnaire; Child betrayal trauma history = UCLA PTSD Index; Child symptoms = Child Behavior Checklist.

* *p* < .05

the model, mothers providing a spontaneous reason continued to significantly predict children's internalizing/externalizing symptoms. Mothers' betrayal trauma history was also significantly associated with higher internalizing/externalizing symptoms in children.

Discussion

The current study examined the relationship between mothers' and children's emotion understanding and emotion language and children's internalizing/externalizing symptoms when taking into account mothers' and children's betrayal trauma histories within a diverse sample of mothers and their children. Previous research has demonstrated that mothers' and children's exposure to betrayal trauma puts children at risk for poor psychological outcomes. The current study contributes to the previous literature by examining emotional factors that may also contribute to children's internalizing/externalizing symptoms above and beyond betrayal trauma exposure. Specifically, the current study found that scores for mothers spontaneously providing a reason for an emotion in a behavioral facial affect perception task were negatively related to children's internalizing/externalizing symptoms when controlling for both mothers' and children's betrayal trauma histories.

Emotion understanding variables

Existing research suggests that children's ability to understand emotions in themselves and others is crucial to their psychological development and social functioning (Cartledge, 2010; Denham et al., 1990). Research also emphasizes the importance of parents' discussion of emotion for children's acquisition of emotion language and understanding (Denham & Auerbach, 1995). The results of the current study extend this existing research by finding that children providing a reason and mothers providing a spontaneous reason for emotions in a behavioral facial affect perception task are significantly linked with lower internalizing/externalizing symptoms. More striking is that the relationship between mothers providing a spontaneous reason and lower internalizing/externalizing symptoms remained significant when we took into account mothers' and children's betrayal trauma histories. In sum, mothers who provided a reason for the emotion that they chose for the infant displayed in the picture prior to the prompt asking for a reason had children with lower internalizing/externalizing symptoms overall (please see Table 1 for an example of a spontaneous reason).

The results from the current study demonstrate that within a controlled lab task, the particular ways in which mothers talked about emotions were predictive of lower internalizing/externalizing symptoms in their children. Within the constraints of the behavioral facial affect perception task of the current study, these mothers were discussing emotions in a different way relative to the other mothers in the sample that seemed to be beneficial to their children's symptomatology. Research has shown that parents' discussions of emotions teach their children about how to identify and understand emotions in others (Eisenberg et al., 2001b). The findings from the current study extend the existing literature, suggesting that the ways in which mothers talk about emotions to their children may act as a protective factor to children's internalizing/ externalizing symptoms, even when the betraval trauma exposure of both mothers and children is taken into account. Specifically, parents automatically providing context for emotions (e.g., why the emotion is occurring) when identifying an emotion seems to be beneficial to children's psychological outcomes. Future research is needed to fully understand the influence of how mothers talk to their children about emotions.

Limitations

Several limitations of the current study should also be noted. The current study had a small sample size (N = 47), which resulted in limited power to detect effects and affected the type of analyses that could be conducted. For example, future studies should test whether mothers providing a (spontaneous) reason for emotions mediates the relationship between mothers' and children's betrayal trauma histories and children's internalizing/externalizing symptoms.

Though the sample was diverse, the sample size and use of convenience sampling limit generalizability. The sample in the current study was not a clinical sample of mothers or children, which may raise questions about the validity of the findings with a treatment-seeking population. It will be important for future studies to replicate the current study findings with a treatmentseeking population of mothers and children. Furthermore, the reference sample used for the IFP was a predominantly White (94%), middle-class sample of

adult mothers and caretakers, which may have influenced the emotion understanding and emotion language coding for the younger and ethnically and racially diverse women and their children. In the current study, certain components of emotion understanding and emotion language were not of significance. In particular, the accuracy of the emotion identified was not significantly related to children's internalizing/externalizing symptoms, which is surprising as it was predicted that a greater ability to detect emotions accurately by mother and child would be associated with lower internalizing/externalizing symptoms. This lack of significance may be attributed in part to the limitations of the IFP norms. For example, the IFP norms do not take into account developmental differences in identifying emotional expressions. Children overall are less accurate at identifying emotional expressions compared to adults; children's ability to detect and identify basic emotions increases with age, usually with basic emotions such as happiness, sadness, and anger first and then fear, surprise, and disgust later on in development (Widen & Russell, 2003). Children in the current sample (ages 7-11) therefore may not have been as accurate in identifying emotions overall, notwithstanding internalizing/externalizing symptom severity. Future studies with a more diverse population of adults and children are needed, first, to test the generalizability of the IFP and, second, to test the associations performed in the current study.

The coding system measuring mothers' and children's emotion understanding abilities and emotion language was developed specifically for the current study and was theoretically driven. The coding system demonstrated adequate interrater reliability; however, future studies will need to further examine the validity of the coding system, in conjunction with the IFP, in measuring variables of emotion understanding and emotion language across different populations. The promising findings in the current study warrant further testing of this coding system and hypotheses specific to emotion understanding and language factors in the transmission of child internalizing/externalizing symptoms.

Strengths and future directions

Despite the noted limitations, the current study points to the importance of future studies focused on the links between betrayal trauma history (maternal and child), child symptoms, and the ways in which parents talk about emotions to their children. This is the first published study (of which we are aware) to consider emotion learning in the context of betrayal trauma and child symptoms, and findings from the mother–child task point to the importance of considering dyadic emotion processes in the development of child symptoms. These findings echo empirical results in the larger trauma research literature that focus on different constructs (e.g., alexithymia), methods (e.g., self-report), and samples (e.g., adults). For example, a robust

literature points to alexithymia as a common posttrauma outcome (Paivio & McCulloch, 2004), particularly following betrayal trauma (Goldsmith, Freyd, & DePrince, 2012).

The current findings, considered in tandem with literature on trauma and alexithymia, highlight the need for future research focused on the contribution of emotion processes (including awareness, understanding, and communication of emotions) to children's psychological symptoms in the context of mother and child betrayal trauma exposure. The current data suggest that the ways in which caregivers talk about emotions with children may play an important role in the development and/or maintenance of child symptoms. Furthermore, the findings reinforce intervention approaches that target children's emotion understanding and learning while accentuating the potential role of engaging caregivers in interventions. In particular, the results raise the possibility that working with parents to build skills specific to talking to and teaching their children 's internalizing/externalizing symptoms.

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Note

1. During the task, mothers and children were prompted to provide a reason for the emotion they chose, and the spontaneous versus prompted variable captured those who automatically provided a reason/described the context of the emotion before being prompted. See "Procedures" for more details about the provided prompts.

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