8-1-2018

Caregiver Behaviors Associated With Emotion Regulation in High-Risk Preschoolers

Christina Caiozzo
Marquette University

Kristen Yule
Marquette University

John H. Grych
Marquette University, john.grych@marquette.edu

Accepted version. *Journal of Family Psychology*, Vol. 32, No. 5 (2018): 565-574. DOI.

Journal of Family Psychology, Vol. 32, No. 5 (2018): 565-574. DOI.

Caregiver Behaviors Associated With Emotion Regulation in High-Risk Preschoolers

Christina N. Caiozzo
Department of Psychology, Marquette University;
Kristen Yule
Department of Psychology, Marquette University
John Grych
Department of Psychology, Marquette University

Abstract

Children who witness violence are at risk for developing a range of developmental problems, including deficits in understanding and regulating. The ability to adaptively manage emotions is associated with children's mental health and their social and academic competence; however, little is known about how parents of at-risk youth can foster the healthy development of emotion regulation. The current study aimed to identify specific parenting practices associated with adaptive emotion regulation in at-risk preschoolers. Multimethod, multi-informant data were collected from 124 caregiver-child dyads from Head Start programs. Results indicated that interparental aggression was negatively associated with caregivers' and children's emotion regulation, but there were specific caregiver behaviors that moderated the association between interparental aggression and children's emotion regulation. Specifically, care- givers' sensitivity to children's emotions during play, listening effectively to children's expression of sadness, and their own capacity for emotion regulation buffered the association between exposure to interparental aggression and children's emotion regulation.

These findings provide practical insight into how parents can promote resilience in children exposed to violence by fostering healthy emotional regulation.

Keywords: emotion regulation, resilience, violence, emotion socialization, preschool

Children who grow up with violence in their homes are at risk for a range of adverse developmental consequences that include psychopathology, peer rejection, and academic difficulties (for a review see Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003). Despite this increased risk, some children exposed to violence exhibit healthy and adaptive functioning (Haskett, Nears, Sabourin Ward, & McPherson, 2006). Understanding the factors that promote resilience in this population has important implications for prevention and intervention; however, most research on family violence has taken a deficit approach that offers little guidance for how parents can foster healthy development in their children. One potentially important mechanism is emotion regulation, which refers to the way that emotions are monitored, expressed, and modified in an effort to achieve a desired goal (Thompson, 1994). Adaptive emotion regulation is central to social and emotional adjustment (e.g., Denham et al., 2003) but can be undermined by exposure to violence (Katz, Hessler, & Annest, 2007). Caregivers play an important role in children's emotional development and consequently may be able to protect children from the negative effects of violence by promoting adaptive emotion regulation. The current study investigated this possibility using a multimethod, multi-informant design that examined whether specific caregiver behaviors are related to emotion regulation in a high-risk sample of preschool-aged children.

Emotion Regulation and Socialization

Starting in infancy, emotions are coregulated between children and their caregivers until children develop the capacity to regulate their emotions independently (Kopp, 1989). During preschool, children continue to rely on caregiver guidance to regulate emotions but are increasingly able to incorporate what they have learned into ongoing self-regulatory efforts (Carlson, 2005). Preschoolers' growing ability to manage their emotional reactions is associated with healthy adaptation in multiple domains, including better social skills and peer relationships (e.g., Denham et al., 2003), academic success (e.g., Graziano, Reavis, Keane, & Calkins, 2007), and lower levels of adjustment problems (e.g., Hill, Degnan, Calkins, & Keane, 2006).

Recognizing the centrality of caregivers for children's emotional development (Kopp, 1989), models of emotion socialization have been formulated to describe specific ways that parents influence children's developing regulatory capacities. Two of the more prominent models, the tripartite model (Morris, Silk, Steinberg, Myers, & Robinson, 2007) and the framework of Eisenberg, Cumberland, and Spinrad (1998), propose that how caregivers react to their children's emotions, including how they discuss emotional experiences and how they manage their own emotions, plays a critical role in children's emotional development.

Caregiver Reactions to Emotions

When children express their emotions, caregivers can react in a way that acknowledges and supports their feelings or they can act to minimize or dismiss the child's emotional experience. Listening to, labeling, and validating children's feelings fosters the development of emotional awareness, acceptance, and understanding (Dunn, Bretherton, & Munn, 1987), which in turn are important for effectively regulating emotions. For example, maternal validation has been shown to mediate the relationship between maltreatment status and children's adaptive emotion regulation (Shipman et al., 2007). The construct *emotion coaching* refers to caregiver awareness and willingness to talk about emotions and regulation (Gottman, Katz, & Hooven, 1997). Emotion coaching has been linked to better emotional understanding and self-regulation in preschool-aged children (Brophy-Herb, Stansbury, Bocknek, & Horodynski, 2012) and has been found to moderate the association between exposure to domestic violence and internalizing and externalizing symptoms (Katz & Windecker-

Nelson, 2006). *Emotional availability* (EA) is a related construct that reflects caregivers' attunement to, openness to, and acceptance of their children's feelings and needs (Biringen, Derscheid, Vliegen, Closson, & Easterbrooks, 2014). It emphasizes caregivers' sensitivity to their children and has been shown to relate to adaptive coping (Denham, 1993) and compliance (Lehman, Steier, Guidash, & Wanna, 2002) in toddlers.

Caregiver Emotion Regulation

The tripartite model of emotion socialization proposes that children also learn how to regulate emotions by observing how their parents express and regulate emotions (Bridges, Denham, & Ganiban, 2004; Morris, Criss, Silk, & Houltberg, 2017). Modeling offers one mechanism through which caregivers' ability to manage their own emotions influences their children's emotional development, but caregivers' own regulatory capacity also supports their ability to attend to and support their children's emotions; however, empirical demonstration of this connection has been limited (Bariola, Gullone, & Hughes, 2011). Recently, maternal emotion dysregulation was negatively associated with teacher reports of children's emotion regulation (Rogers, Halberstadt, Castro, MacCormack, & Garrett-Peters, 2016) and positively associated with children's displays of sadness and difficulty in problem solving during a task designed to elicit anger (Binion & Zalewski, 2017).

Intimate Partner Violence Exposure and Emotion Regulation in Childhood

Interactions between caregivers can have a powerful impact on children, and for approximately 30% of families with children, these interactions include violence (McDonald, Jouriles, Ramisetty-Mikler, Caetano, & Green, 2006). Conflict and aggression between caregivers can affect children in two ways. First, witnessing interparental discord is upsetting to children and can overwhelm their capacity to regulate their emotions. Children exposed to intimate partner violence can exhibit heightened emotional distress and reactivity, as well as behavioral dysregulation (Koss et al., 2011). For example, children's witnessing intimate partner violence is associated with difficulty regulating unpleasant emotions, difficulty soothing themselves, and the need for more external support for emotion regulation (Katz et al., 2007). Further, emotion regulation was found to be a prospective mediator of the relationship between intimate partner violence exposure at age 5 and children's negative peer group interactions, internalizing problems, and externalizing problems at age 11 (Katz et al., 2007).

Research has also suggested that intimate partner violence may impair caregivers' ability to socialize children's emotions in an adaptive way (Fosco & Grych, 2013). Parents who experience intimate partner violence may suffer physical and psychological consequences, including emotion dysregulation (Carpenter & Stacks, 2009), depression, and posttraumatic stress disorder (Basile, Arias, Desai, & Thompson, 2004). As a result, compared to parents in nonviolent homes, parents who experience intimate partner violence can demonstrate lower levels of emotional availability for their children (Kitzmann, 2000) and less warmth toward their children (McDonald, Jouriles, Rosenfield, & Leahy, 2012), engage in less emotion coaching (Katz & Windecker-Nelson, 2006), and have more difficulty bonding with their children (Levendosky, Lannert, & Yalch, 2012).

However, although several studies have indicated that intimate partner violence appears to lead to deficits in parenting, other research has indicated that this relationship is less straightforward. For instance, Sullivan, Juras, Bybee, Nguyen, and Allen (2000) found that parental emotional availability and child adjustment remained high over time despite exposure to intimate partner violence, and Levendosky, Huth-Bocks, Shapiro, and Semel (2003) reported that intimate partner violence was actually positively related to mother–child attachment and parenting effectiveness. Levendosky and colleagues suggested that some parents may recognize the potential harmful effects of violence on their children and increase their responsiveness to their children in an effort to offset these effects. Other research has suggested that supportive caregiving moderates the association between interparental aggression and child adjustment. Skopp, McDonald, Jouriles, and Rosenfield

(2007) showed that parental warmth displayed a buffering effect on externalizing behaviors for children exposed to violence between caregivers, and Katz and Gottman (1997) found that maternal and paternal scaffolding and praise weakened the relationship between marital conflict and children's behavior problems.

Taken together, these studies suggest that parenting can be but is not always adversely affected by interparental aggression and that supportive caregivers can help to promote resilience in children living in violent families. The current study investigated how emotion socialization behaviors relate to emotion regulation for young children in the context of interparental aggression.

Current Study

This study aimed to bridge the research on parenting in the context of violence and work on emotion socialization in normative samples to shed light on specific ways that caregivers may foster the development of emotion regulation in children exposed to intimate partner violence. Emotion regulation has been consistently identified as an important mechanism underlying adaptive social, emotional, and academic development, and conflict and aggression in the family may undermine this critical developmental process. We focused on the preschool years because they represent an important transitional period during which children become increasingly able to manage their emotions and present children with new academic and social demands that require regulatory skills for optimal success. However, little is known about how caregiver behaviors are associated with emotion regulation in high-risk preschoolers.

The current study used caregiver and teacher reports to assess emotion regulation in a sample of children from Head Start schools who were at an increased risk for exposure to acute and chronic stressors, including violence, due to socioeconomic disadvantage (McLoyd, 1998). Multiple methods and multiple raters were used to reduce the potential impact of common method variance on the results (Morris, Robinson, & Eisenberg, 2006). Caregiver emotion socialization behavior was assessed with caregiver reports of their emotion regulation and two observational tasks—a conversation between caregivers and their child about the child's mad and sad emotions and a play interaction—and caregivers' reactions to their children were coded (e.g., Eisenberg et al., 1998). Caregivers also reported on children's exposure to interparental aggression and their children's emotion regulation, and teachers provided an additional report of children's expression and management of their emotions at school.

The following research questions were tested: (1) Does interparental aggression have direct associations with caregivers' emotion socialization behaviors and children's emotion regulation? It was hypothesized that interparental aggression would be negatively associated with caregivers' emotion socialization behaviors (emotion-focused listening, support validation, emotion coaching, sensitivity, and emotion regulation) and with children's emotion regulation. (2) Do emotion socialization behaviors (a) have direct associations with children's emotion regulation and/or (b) moderate the relationship between exposure to interparental aggression and emotion regulation for children? We tested whether these behaviors were associated with children's emotion regulation for all the children in the sample regardless of their exposure to interparental aggression (i.e., a direct effect) or whether emotion socialization had a buffering effect that reduced the association between interparental aggression and emotion regulation (i.e., a moderating effect). We hypothesized that, based on prior research (Katz & Windecker-Nelson, 2006; Shipman et al., 2007), caregiver behaviors would be positively related to children's emotion regulation and would reduce the negative impact of interparental aggression on emotion regulation for children.

Method

Participants

A total of 124 children in Grades K3−K5 and their caregivers were recruited from four Head Start programs in a midwestern city. Children from families with low income according to the poverty guidelines published by the federal government U.S. Department of Health and Human Services (2018) are eligible for Head Start services. For example, for a household size of five, family income cannot exceed $28,440 to qualify for enrollment. Children were between 3 and 6 years of age (*M* = 3.96, *SD* = .86) and were predominantly African American (93%). The majority of caregivers were African American (91%), mothers (77%), and an average of 32 years of age (*M* = 31.71, *SD* = 9.24). Other participating caregivers included fathers (13%) extended family (e.g., grandparent; 10%), and one foster parent. Most caregivers had raised the participating child since birth (83%). Caregiver education ranged from less than high school (6%) to a master's degree (5%); most caregivers had either a high school diploma, general equivalency diploma, or associate's degree (83%).

Procedure

This study was approved by the university's Institutional Review Board. Data were collected at the schools in a private area during the school day. After informed consent was obtained, caregivers and children engaged in the parent−child emotion interaction task (PCEIT; Shipman & Zeman, 1999), which involved the dyad discussing children's experiences of feeling sad and mad. Next, caregivers and children engaged in an unstructured play period. These interactions were video-recorded and coded to assess caregivers' sensitivity to children's emotions using the Emotional Availability Scales (Biringen, 2008). Finally, caregivers completed questionnaires regarding the self, child, and home environment, and teachers completed a report of the child's emotion regulation. A total of 86 teachers participated; no teachers provided assessments of more than two children.

Measures

Caregiver reactions to emotions

The parent−child emotion interaction task (PCEIT; Shipman & Zeman, 1999) assesses how caregivers communicate with their children about emotions, which is important for building children's emotion regulation skills (Brophy-Herb et al., 2012). Children were asked to "talk about a time that you felt [mad or sad]." Caregivers were able to provide suggestions if necessary. Anger and sadness were presented in random order. The PCEIT was video-recorded and coded for caregivers' responses to children using the Parent−Child Validation/Invalidation Behavior Coding Scales (Shipman, Fitzgerald, & Torres, 2015). Nonverbal behaviors were coded on a 3-point Likert scale ranging from 1 (*minimally*) to 3 (*highly supportive*), and verbal behaviors were tallied. Nonverbal and verbal scores were then combined to create the total for each scale. Scales included emotion-focused listening (i.e., attention and interest), emotion support validation (i.e., acceptance and understanding), and emotion coaching (i.e., effort to increase understanding and management of feelings; see the online supplemental materials for more information on the scales). Data were obtained from 121 participants; the second author coded 100% of the data, and a trained research assistant double-coded 20% of the caregiver−child conversations. Single intraclass correlation (ICC) scores for caregiver response behaviors to both mad and sad feelings ranged from .94 to 1.00 across codes and indicated strong interrater reliability (see Table 1).

Table 1
Interparental Aggression, Emotion Regulation, and Caregiver Behaviors: Correlations and Descriptive Statistics

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Child emotion regulation (parent report)[a]	—										
2. Child emotion regulation (teacher report)	.13	—									
3. Interparental aggression	−.20*	.08	—								
4. Sensitivity	.02	−.03	−.09	—							
5. Listening for sad	.04	.09	−.02	.29**	—						
6. Emotion support validation for sad	−.00	.03	−.04	.07	.14	—					
7. Emotion coaching for sad	−.01	.11	−.08	.30**	.03	.41**	—				
8. Listening for mad	−.05	.04	.03	.24**	.59**	.11	.15	—			
9. Emotion support validation for mad	−.06	−.01	−.06	.10	−.11	.05	−.03	.16	—		
10. Emotion coaching for mad	.06	.06	−.03	.12	.07	.09	.26**	.25**	.04	—	
11. Caregiver emotion regulation	.41**	−.06	−.26**	.08	.07	.03	.09	−.16	−.13	.09	—
M	.00	24.92	8.12	21.07	9.60	.07	.15	9.84	.07	.24	152.72
SD	1.74	7.57	13.44	4.78	4.49	.28	.42	5.35	.26	.66	19.62
Range	−5–4	0–39	0−72	12−29	1−25	0−2	0−2	1−32	0−1	0−5	86−179
Reliability											
α	.90	.94	.88								.93
r				.86	.99	.94	1.00	.99	.90	1.00	

[a] Sum of standardized caregivers' reports of their child's emotion regulation.
* $p < .05$. ** $p < .01$.

Table 1 *Interparental Aggression, Emotion Regulation, and Caregiver Behaviors: Correlations and Descriptive Statistics*

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Child emotion regulation (parent report)[a]	—										
2. Child emotion regulation (teacher report)	.13	—									
3. Interparental aggression	−.20*	.08	—								
4. Sensitivity	.02	−.03	−.09	—							
5. Listening for sad	.04	.09	−.02	.29**	—						
6. Emotion support validation for sad	−.00	.03	−.04	.07	.14	—					
7. Emotion coaching for sad	−.01	.11	−.08	.30**	.03	.41**	—				
8. Listening for mad	−.05	.04	.03	.24**	.59**	.11	.15	—			
9. Emotion support validation for mad	−.06	−.01	−.06	.10	−.11	.05	−.03	.16	—		
10. Emotion coaching for mad	.06	.06	−.03	.12	.07	.09	.26**	.25**	.04	—	
11. Caregiver emotion regulation	.41**	−.06	−.26**	.08	.07	.03	.09	−.16	−.13	.09	—
M .	00	24.92	8.12	21.07	9.60	.07	.15	9.84	.07	.24	152.72
SD	1.74	7.57	13.44	4.78	4.49	.28	.42	5.35	.26	.66	19.62
Range	−5–4	0–39	0−72	12−29	1−25	0−2	0−2	1−32	0−1	0−5	86−179
Reliability											
α	.90	.94	.88								.93
r				.86	.99	.94	1.00	.99	.90	1.00	

a Sum of standardized caregivers' reports of their child's emotion regulation.

** p < .05. ** p < .01.*

Caregiver sensitivity

Sensitivity was assessed using a video recording of a 7-min free-play interaction between the caregiver and child. Sensitivity is a central component of the construct emotional availability (EA; Biringen et al., 2014) and refers to caregivers' ability to "read" and respond to their children (a full description appears in the online supplemental materials). Caregivers' sensitivity to their children's emotions helps children build templates about how to manage emotions (for a review see Calkins & Hill, 2007). Sensitivity was assessed using the fourth edition of the Infancy to Early Childhood version of the Emotional Availability Scales (Biringen, 2008), which has been validated in a number of contexts (Biringen et al., 2014). Scores were derived by summing the subscale scores, which resulted in a range from 0 to 29. The first author coded 122 viable interactions, 20% of which were double-coded by a research assistant. Both coders were approved as reliable by Biringen after an extensive training period. The ICC demonstrated good internal consistency (.86).

Caregiver emotion regulation

The caregivers' ability to regulate their own emotions was measured with the Difficulties With Emotion Regulation Scale (DERS; Gratz & Roemer, 2004). The DERS is a 36-item measure assessing characteristic patterns of emotion regulation and includes items such as "I experience my emotions as overwhelming and out of control" and "When I'm upset, I acknowledge my emotions." Responses ranged from 1 (*almost never*) to 5 (*almost always*) and were summed to create a total score; higher scores indicated more adaptive emotion regulation. In the current sample, this measure demonstrated strong internal reliability with an alpha of .93.

Child emotion regulation

Caregivers completed the Emotion Regulation Checklist (Shields & Cicchetti, 1997). This is a 24-item measure assessing children's capacity for emotion self-regulation; all items were scored and summed, with higher scores indicating more adaptive emotion regulation. Items included "is prone to angry outbursts/tantrums easily" and "is easily frustrated." Responses ranged from 1 (*rarely/never*) to 4 (*almost always*). In this sample, this measure demonstrated good internal consistency with an alpha of .85. Child emotion regulation was also assessed by caregiver and teacher report on the emotion regulation subscale of the Preschool Behavioral and Emotional Rating Scale (PreBERS; Epstein & Synhorst, 2008). This subscale includes 13 items, such as "accepts responsibility for own behavior" and "reacts to disappointments calmly." Each item was rated on a 4-point scale ranging from 0 (*not at all like this child*) to 3 (*very much like the child*), with higher scores indicating more adaptive emotion regulation. In the current sample, this measure demonstrated good internal consistency when completed by caregivers (α = .89), and by teachers (α = .94).

Interparental aggression

Interparental aggression was measured using the Revised Conflict Tactic Scale Short Form (Straus & Douglas, 2004), which is a 20-item scale that assesses perpetration and victimization of partner aggression within the past year. We included both perpetration and victimization scales to capture the total amount of intimate partner aggression that children were exposed to. This measure captures aggression the caregiver was involved in over the past year; although the measure does not require that aggression occur with the child's biological parent, the current study refers to this construct as "interparental aggression." Example items include "insulted or swore at each other" and "threw or smashed or hit or kicked something." Responses ranged from 0 (*Never*) to 7 (*more than 20 times*), with higher scores indicating more aggression. In the current sample, internal consistency was good, with an alpha of .88.

Results

Descriptive Data and Data Reduction

There was little missing data (<1%), and the data that were missing were determined to be missing at random; linear regression was used to impute missing values (Enders, 2013). Similar to rates of violence in other Head Start samples (e.g., Graham-Bermann & Seng, 2005), most caregivers (66%) reported that interparental aggression occurred in the past year (see Table 1 for descriptive statistics). Most interparental aggression reported was verbal (*M* = 4.20) or physical (*M* = 2.45), but sexual aggression was also reported (*M* = .53). Caregivers rated children somewhat higher in emotion regulation than teachers did on the PreBERS. The two caregiver measures of children's emotion regulation were highly correlated (*r* = .54, *p* = .001), and thus, scores were converted to *z* scores and combined for use in all subsequent analyses (α = .90). Caregiver and teacher reports of children's emotion regulation were not significantly correlated (*r* = .13, *p* = .17), as is common when assessing children's behavior, due to variations in structure, expectations, and perceptions (e.g., Hinshaw, Han, Erhardt, & Huber, 1992) and were therefore analyzed separately.

On the PCEIT, caregivers engaged in fairly high levels of emotion-focused listening when their children discussed sad and mad emotions, but other socialization strategies were observed infrequently for both emotions (*M*s = <1 for emotion coaching and support validation). During the free-play interaction, most caregivers scored in the midrange on the sensitivity scale. Scores in this range can reflect incongruence between channels of communication (e.g., saying positive things with a flat affect) and/or inconsistency in behavior (e.g., periods of engagement mixed with periods of disengagement—indicators of boredom; Biringen et al., 2014). Levels of these caregiver behaviors as well as self-reports of emotion regulation did not differ significantly across the type of caregiver (e.g., mothers, fathers, grandparents; all *p*s > .10).

Child age was positively correlated with caregiver reports of children's emotion regulation (*r* = .19, *p* = 04) but not with teacher reports. However, when age was examined categorically using a one-way between-subjects analysis of variance, teacher reports of children's emotion regulation differed significantly across age groups, $F(3, 118) = 3.11$, $p = .03$. Specifically, teachers rated 4- year-olds higher in regulation (*M* = 26.83) than 3-year-olds (*M* = 22.77). Teachers also viewed girls (*M* = 27.17) as showing better emotion regulation than boys (*M* = 22.67), $t(120) = -3.42$, $p = .001$, but caregivers did not. Consequently, child age was accounted for in all analyses, and child gender was accounted for in analyses predicting teacher reports of child emotion regulation.

Data Analytic Plan

Associations among study variables were first examined with correlational analyses. The question of whether specific caregiver emotion socialization behaviors had direct associations with children's emotion regulation or moderated the relationship between exposure to interparental aggression and child emotion regulation was tested with hierarchical regression analyses. Data were analyzed with all participants and then with only mothers and grandmothers who were primary caretakers to examine whether results differed when only longstanding maternal caregivers were included. Results did not differ; therefore, results in the next sections are presented with the complete data set.

To further explore direct and moderating associations, we conducted moderation analyses according to guidelines from Aiken and West (1991). To preserve power given the sample size, we conducted separate moderation analyses for each moderator, and each moderator was tested separately with the two reports of child emotion regulation (i.e., caregiver and teacher). To test each moderator in the prediction of caregiver-reported child emotion regulation, we performed a hierarchical regression analysis. In Step 1, child age was entered. In Step 2, interparental aggression was entered. In Step 3, the moderator was entered. Finally, in Step 4, the interaction term was entered (i.e., Moderator × Interparental Aggression). The same analyses were used to test each moderator in the prediction of teacher-reported child emotion regulation; however, in Step 1, child

gender was also entered. To probe significant interaction effects, we first estimated simple slopes using conventional guidelines (±1 *SD* from the mean), and we performed a linear regression analysis to compare main effects of the moderator 1 *SD* above and below the mean.

Correlations

Table 1 presents correlations among caregiver reports of past-year interparental aggression, observed caregiving behaviors, caregivers' emotion regulation, and caregiver and teacher reports of children's emotion regulation. The table shows that interparental aggression was negatively related to caregiver reports of children's emotion regulation ($r = -.20$, $p = .03$) and to caregiver emotion regulation ($r = -.26$, $p = .01$). Further, emotion regulation for caregivers and their children were positively related ($r = .41$, $p = .002$). Caregiver sensitivity was related to listening for sad ($r = .29$, $p = .001$) and mad ($r = .24$, $p = .01$) feelings and to emotion coaching for sad feelings ($r = .30$, $p = .001$). Listening for sad and mad feelings were highly correlated ($r = .59$, $p = .001$). Listening for sad and mad feelings were each correlated with emotion coaching for sad and mad feelings, respectively (sad $r = .41$, $p = .001$; mad $r = .25$, $p = .01$), and emotion coaching for sad and mad feelings were correlated ($r = .26$, $p = .004$). Finally, support validation of sad feelings was correlated with emotion coaching for sad feelings ($r = .41$, $p = .001$).

Direct and Moderating Effects

Emotion-focused listening

Hierarchical regression analyses indicated that child age and interparental aggression uniquely predicted caregiver reports of children's emotion regulation but that emotion-focused listening for sad or mad feelings did not. However, a significant interaction of emotion-focused listening for sadness and interparental aggression (β = .20, $p = .03$; see Table 2) was found in the prediction of children's emotion regulation as reported by caregivers. The interaction effect was not apparent at ±1 *SD* around the mean, and therefore, simple slopes were tested at ±.5 *SD* around the mean. As Figure 1 shows, at low levels of emotion-focused listening, interparental aggression was negatively associated with caregiver-reported child emotion regulation (β = −.40, $p = .01$), but at high levels of emotion focused listening, there was no association between interparental aggression and child emotion regulation (β = .10, $p = .54$). No direct or interaction effects were found for emotion-focused listening for mad feelings or for teacher-reported emotion regulation.

Table 2
Hierarchical Regression Analyses for Variables Associated With Child Emotion Regulation

	Caregiver-reported child emotion regulation: Emotion-focused listening (sad)				Teacher-reported child emotion regulation							
					Caregiver sensitivity				Caregiver emotion regulation			
Variable	M1	M2	M3	M4	M1	M2	M3	M4	M1	M2	M3	M4
Child age	.20*	.19*	.24*	.22*	.09	.09	.09	.10	.08	.09	.09	.12
Child gender[a]					.29**	.30**	.30**	.28**	.28**	.29**	.29**	.29**
Interparental aggression		−.19*	−.19*	−.33*		.10	.00	.20*		.10	.10	.24*
Caregiver behavior			.13	.11			.00	.05			−.00	.00
Interparental Aggression × Caregiver Behavior				.20*				.34**				.24*
R^2	.04	.08	.09	.17	.09	.10	.10	.20	.09	.09	.09	.13
F for ΔR^2	4.72*	4.66*	2.20*	2.81*	5.47**	4.07**	3.03**	5.52**	5.19**	3.87*	2.88*	3.27**

Note. $N = 119$. Data are standardized betas, and variables were centered at their means. M = model.
[a] Based on preliminary data analysis, child gender was accounted for only when predicting teacher reports of children's emotion regulation.
* $p < .05$. ** $p < .01$.

Table 2 *Hierarchical Regression Analyses for Variables Associated With Child Emotion Regulation*

	Caregiver-reported child emotion regulation: Emotion-focused listening (sad)				Teacher-reported child emotion regulation							
					Caregiver sensitivity				Caregiver emotion regulation			
Variable	M1	M2	M3	M4	M1	M2	M3	M4	M1	M2	M3	M4
Child age	.20*	.19*	.24*	.22*	.09	.09	.09	.10	.08	.09	.09	.12
Child gender[a]					.29**	.30**	.30**	.28**	.28** .	29**	.29**	.29**
Interparental aggression		.19	.19	.33		.10	.00	.20		.10	.10	.24
Caregiver behavior			.13	.11			.00	.05			-.00	.00
Interparental Aggression ×												
Caregiver Behavior				.20**				.34**				.24
R^2	.04	.08	.09	.17	.09	.10	.10	.20	.09	.09	.09	.13
F for $2R^2$	4.72*	4.66*	2.20*	2.81*	5.47**	4.07	** 3.03**	5.52**	5.19**	3.87*	2.88*	3.27**

Note. N = 119. Data are standardized betas, and variables were centered at their means. M = model.

a Based on preliminary data analysis, child gender was accounted for only when predicting teacher reports of children's emotion regulation.

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

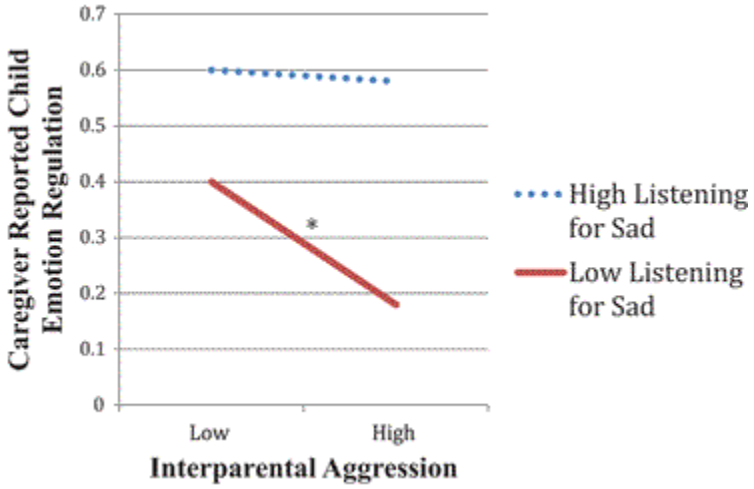

*Figure 1. Emotion-focused listening for sadness moderates the association between exposure to interparental aggression and teacher-reported child emotion regulation There was not a significant difference in teacher-reported child emotion regulation for high (M = 24.87) and low (M = 25.39) sensitivity groups, t(85) = −.77, ns. * β = −.40, p = .01.*

Emotion support validation and emotion coaching

No main or interaction effects of support validation or emotion coaching for mad or sad feelings were found beyond the age and gender effects described earlier.

Caregiver sensitivity

As shown in Table 2, a main effect of gender and a significant interaction of caregiver sensitivity and interparental aggression (β = .33, *p* = .001) in the prediction of teacher reports of children's emotion regulation were observed. As Figure 2A shows, tests of simple slopes indicated that at low levels of sensitivity, interparental aggression was not associated with child emotion regulation (β = −.31, *p* = .05); however, at high levels of sensitivity, interparental aggression was positively associated with child emotion regulation (β = .42, *p* = .001). No direct or interaction effects were found with caregiver-reported emotion regulation.

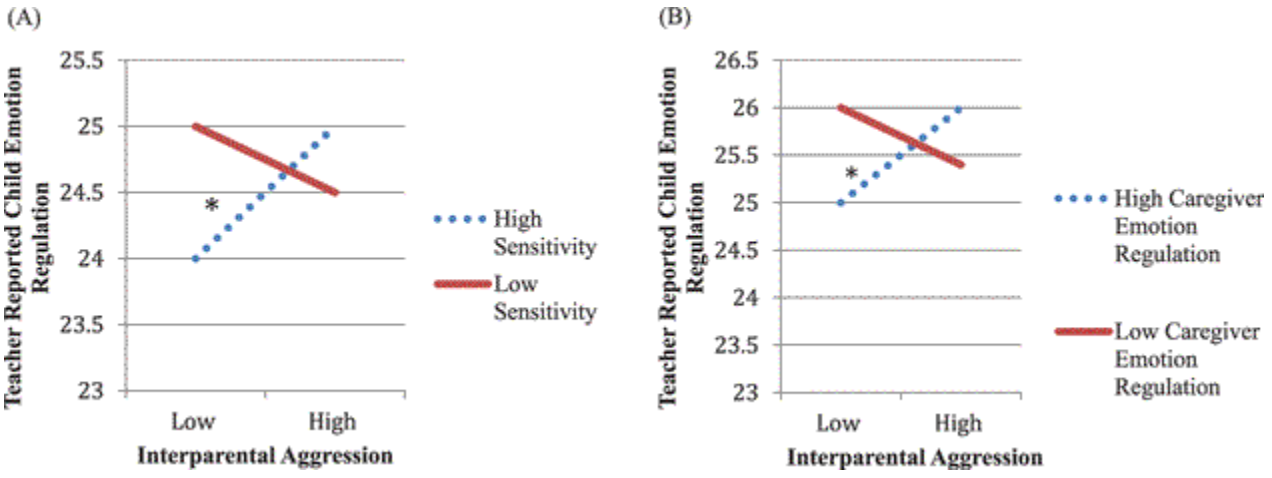

*Figure 2. Caregiver sensitivity and emotion regulation moderate the association between exposure to interparental aggression and teacher-reported child emotion regulation. Panel A: There was not a significant difference in teacher-reported child emotion regulation for high-sensitivity (M = 24.87) and low-sensitivity (M = 25.39) groups, t(94) = .32, ns. * β = .42, p = .001. Panel B: There was not a significant difference in teacher-*

*reported child emotion regulation for high (M = 24.32) and low (M = 26.08) caregiver emotion regulation groups, t(102) = 1.11, ns. * β = .25, p = .04.*

Caregiver emotion regulation

Along with age and interparental aggression, main effects of caregiver emotion regulation were found in the hierarchical regression analysis predicting children's emotion regulation as reported by their caregivers (β = .38, *p* = .001). Further, and as seen in Table 2, main effects of gender and a significant interaction of caregiver emotion regulation and exposure to interparental aggression (β = .24, *p* = .04) were observed in the prediction of children's emotion regulation as reported by teachers. A test of simple slopes revealed that at low levels of caregiver emotion regulation, interparental aggression was not associated with child emotion regulation (β = −.21, *p* = .23), but at high levels of caregiver emotion regulation, interparental aggression was positively associated with child emotion regulation (β = .25, *p* = .04). This interaction is depicted in Figure 2b.

Discussion

The primary goal of this study was to identify specific caregiver behaviors associated with emotion regulation in preschool children who are at higher risk for dysregulation and maladjustment. Much of the research on this topic has focused on either maladaptive outcomes associated with violence or emotion socialization in middle-class, Caucasian samples. The current results bridge these literatures and provide evidence that there are specific caregiver behaviors related to adaptive emotion regulation in at-risk preschoolers from predominantly African American families. Greater interparental aggression was associated with poorer emotion regulation in both caregivers and children, but caregivers who reported better emotion regulation also reported that their children exhibited more adaptive emotion regulation; further, three caregiver behaviors (emotion-focused listening, emotion regulation, and sensitivity) moderated the association between interparental aggression and emotion regulation for children. These findings have important implications for understanding resilience in young children.

Emotion-Focused Listening

Active, emotion-focused listening was the most frequent form of emotion socialization observed during the emotion discussion. This may indicate that listening is a skill practiced in general conversation and therefore comes more naturally when talking about emotions, compared to emotion coaching and emotion support validation, which are less likely to be practiced outside of emotion talk. Indeed, emotion coaching and emotional support validation occurred infrequently and were not related to children's emotion regulation. Emotion-focused listening had a buffering effect on the association between interparental aggression and children's emotion regulation. When caregivers showed low levels of engaged, active listening to children's expression of sad feelings, interparental aggression was negatively related to a child's emotion management at home, but when caregivers demonstrated high levels of active listening to their children's expression of sadness, exposure to interparental aggression was not related to children's emotion regulation. This suggests that caregivers' listening supportively to their child's sad feelings is a protective factor for at-risk preschoolers and also suggests that emotion socialization strategies may relate to children's regulation differently depending on the context and on the emotion that children express. Children exposed to interparental aggression may experience high levels of sadness, and when caregivers encourage their expression of sadness by listening actively, which includes reflection and paraphrasing, they may become more adept at recognizing, labeling, and managing those feelings. Further, feeling heard by their caregivers can increase children's own acceptance of sadness and decrease emotional avoidance, as well as teach children to seek out supportive others when they feel down. Children are more likely to express sadness, compared to anger, when they want support (Zeman, & Shipman, 1996), and therefore receiving support in the context of sad, compared to mad, feelings may be particularly important for emotional growth and regulation. Reaching out to others to talk about sad feelings may be a skill

that children use more at home and would be perceived as more adaptive in the home setting, compared to the school setting.

Sensitivity

When caregivers were rated as highly sensitive to their children during the free-play interaction (i.e., positive, genuine, and accurate in reading emotional cues; Biringen et al., 2014), children's exposure to interparental aggression was positively related to teacher reports of the children's emotion regulation. This finding suggests that children who are at risk for disrupted emotional development can demonstrate normative regulatory abilities when their caregivers respond sensitively to their emotional needs. The results extend Alink, Cicchetti, Kim, and Rogosch's (2009) report that maltreated children who were securely attached had a lower risk for deficits in emotion regulation. This type of moderation is consistent with what Luthar, Cicchetti, and Becker (2000) termed a *protective-enhancing* effect: Children who have witnessed interparental aggression may have experienced and expressed more extreme emotions, providing more opportunities for caregiver intervention, and when a caregiver was sensitive to their distress, children were then able to develop a more flexible and adaptive style of emotion regulation (Cassidy, 1994). Children's ability to develop a flexible and varied set of emotion regulation skills may be more notable and appreciated in a school setting with many demands, compared to a home setting.

Caregiver Emotion Regulation

Consistent with previous research (e.g., Katz et al., 2007), interparental aggression was negatively associated with caregivers' reports of emotion regulation for both themselves and their children; however, interparental aggression was positively related to teacher reports of children's emotion regulation when caregivers' emotion regulation was high. This finding is similar to the interaction between caregiver sensitivity and children's emotion regulation and suggests that for children exposed to aggression, having a well-regulated caregiver acts as a protective enhancer for their emotional development. Prior research has indicated that some mothers exposed to intimate partner violence can maintain high levels of supportive parenting (e.g., Levendosky et al., 2003; Sullivan et al., 2000), and the present findings suggest that when caregivers are well regulated, they may be better able to focus on their children's emotional expressions and to help them learn to manage unpleasant emotions. Caregiver emotion regulation was the only socialization strategy that was associated with children's emotion regulation at home and at school, suggesting that socialization strategies may relate differently to different components of emotion regulation that are more or less adaptive in different settings, in the context of interparental aggression.

Clinical Implications

Despite inconsistencies in the literature regarding the relationship between intimate partner violence, parenting, and child functioning, the current results indicate that certain parenting behaviors previously established in the emotion socialization literature are positively related to emotion regulation for at-risk youth and may be important to include in prevention and intervention programs for young children exposed to interparental aggression. Given that the preschool period represents an important time for caregivers to act as socializing agents in their children's emotional development, the current findings suggest several positive ways that caregivers can promote healthy emotion regulation for their at-risk children. Specifically, when caregivers demonstrate active listening, which includes reflecting, paraphrasing, and asking open-ended questions during conversations about sadness, children demonstrate better regulatory abilities even when they have been exposed to high levels of interparental aggression. Second, caregivers who are able to appropriately manage their own emotions provide models of healthy emotion regulation and are better able to respond sensitively to their children's distress. Even if children observe conflict between parents, which can model emotional and behavioral dysregulation, parents can still promote healthy emotional development in their children by

demonstrating high levels of regulation in other contexts. Finally, caregivers' ability to be emotionally sensitive, which in this study was represented by positive and genuine affect, congruence between verbal and nonverbal communication, and the ability to "read" and respond to child cues, also may support children's emotion regulation, particularly when they are exposed to interparental aggression. Encouraging and teaching caregivers how to be sensitive and responsive to their child's emotional needs may increase the effectiveness of parenting interventions, especially for families marked by higher levels of partner aggression.

Research Implications

The results suggest several important implications for future research. First, the findings underscore the potential for parenting behaviors to foster healthy emotional development for at-risk children, rather than to simply reduce problem behaviors, and support the value of further investigating other parenting behaviors that could promote resilience. It would also be beneficial to explore whether the associations between interparental aggression and parenting depend on the frequency and severity of the aggression experienced. Second, observational assessments and multiple informants helped reduce the limitations inherent in having a single informant report on all variables and supports the utility of using a multimodal, multi-informant design to study the role caregivers play in the development of young children's emotion regulation. Caregiver and teacher discrepancies and similarities in reports of children's emotion regulation also have implications for future research; teachers often report different behavioral observations than do parents, such as higher inattentive symptoms compared to hyperactive–impulsive symptoms of attention-deficit/hyperactivity disorder (Wolraich et al., 2014). Given the different demands across environments, utilizing observational assessments of children's regulation in both the home and school setting would help further determine how their regulation might differ across contexts. Third, although the PCEIT has been used largely with children in middle childhood, the current study demonstrated that this measure can be used reliably with a preschool-age sample. Fourth, this study's focus on a minority sample expands on knowledge of emotion socialization, which has been primarily based on Caucasian samples; however, to fully understand the role culture plays in the development of emotion regulation, further research is needed with diverse samples. Finally, finding significant results with caregivers' responses to sad but not mad emotions, despite the high correlation between the two behaviors (r = .59), indicates that further exploration is needed to better understand socialization of distinct emotions.

Limitations

Although results of the current study contribute to the understanding of the development of emotion regulation in young children exposed to interparental aggression, several limitations should be noted. First, the cross-sectional design does not provide information about the causal direction of the associations among interparental aggression, parenting, and child emotion regulation. This study was also limited by an overrepresentation of mothers in the sample. Further, associations between caregiver reports of both their own and their child's functioning may be limited by method variance; however, this concern was mitigated to a degree by finding moderation effects with observed and self-report data and with caregiver- and teacher-reported emotion regulation. Finally, participants in this study were all economically disadvantaged (i.e., based on their participation in Head Start), and were predominantly African American. Investigation of how emotion regulation is socialized for this minority group is an important contribution to a body of literature that has sought to understand emotion regulation from largely middle-class, Caucasian samples; however, the study's results may not extend to other racial, ethnic, or socioeconomic groups.

Conclusion

The current results enhance the field's understanding of the development of emotion regulation for at-risk preschool-age children and have notable research and clinical implications. Although much of the research on parenting in the context of violence has indicated that intimate partner violence undermines parenting (Fosco &

Grych, 2013), the present results are consistent with those of several studies showing it does not inevitably do so (Levendosky et al., 2003; Sullivan et al., 2000). The findings suggest that caregivers have valuable skills at their disposal to help their at-risk children learn how to manage emotions. Specifically, they indicate that children exposed to interparental aggression can develop healthy skills in emotion regulation when their caregivers model high levels of regulation, listen inquisitively to their sad feelings, and are sensitive to their emotional needs. The data thus contribute to research emphasizing the importance of studying resilience in children and families exposed to violence.

References

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.

Alink, L. R., Cicchetti, D., Kim, J., & Rogosch, F. A. (2009). Mediating and moderating processes in the relation between maltreatment and psychopathology: Mother-child relationship quality and emotion regulation. *Journal of Abnormal Child Psychology*, *37*, 831–843. 10.1007/s10802-009-9314-4

Bariola, E., Gullone, E., & Hughes, E. K. (2011). Child and adolescent emotion regulation: The role of parental emotion regulation and expression. *Clinical Child and Family Psychology Review*, *14*, 198–212. 10.1007/s10567-011-0092-5

Basile, K. C., Arias, I., Desai, S., & Thompson, M. P. (2004). The differential association of intimate partner physical, sexual, psychological, and stalking violence and posttraumatic stress symptoms in a nationally representative sample of women. *Journal of Traumatic Stress*, *17*, 413–421. 10.1023/B:JOTS.0000048954.50232.d8

Binion, G., & Zalewski, M. (2017). Maternal emotion dysregulation and the functional organization of preschoolers' emotional expressions and regulatory behaviors. *Emotion*. Advance online publication. 10.1037/emo0000319

Biringen, Z. (2008). *The Emotional Availability (EA) scales* (4th ed.). Retrieved from www.emotionalavailability.com

Biringen, Z., Derscheid, D., Vliegen, N., Closson, L., & Easterbrooks, M. A. (2014). Emotional availability (EA): Theoretical background, empirical research using the EA Scales, and clinical applications. *Developmental Review*, *34*, 114–167. 10.1016/j.dr.2014.01.002

Bridges, L. J., Denham, S. A., & Ganiban, J. M. (2004). Definitional issues in emotion regulation research. *Child Development*, *75*, 340–345. 10.1111/j.1467-8624.2004.00675.x

Brophy-Herb, H. E., Stansbury, K., Bocknek, E., & Horodynski, M. A. (2012). Modeling maternal emotion-related socialization behaviors in a low-income sample: Relations with toddlers' self-regulation. *Early Childhood Research Quarterly*, *27*, 352–364. 10.1016/j.ecresq.2011.11.005

Calkins, S., & Hill, A. (2007). Caregiver influences on emerging emotion regulation. In J. J.Gross (Ed.), *Handbook of emotion regulation* (pp. 229–248). New York, NY: Guilford Press.

Carlson, S. M. (2005). Developmentally sensitive measures of executive function in preschool children. *Developmental Neuropsychology*, *28*, 595–616. 10.1207/s15326942dn2802_3

Carpenter, G. L., & Stacks, A. M. (2009). Developmental effects of exposure to intimate partner violence in early childhood: A review of the literature. *Children and Youth Services Review*, *31*, 831–839. 10.1016/j.childyouth.2009.03.005

Cassidy, J. (1994). Emotion regulation: Influences of attachment relationships. *Monographs of the Society for Research in Child Development*, *59*, 228–249. 10.2307/1166148

Denham, S. A. (1993). Maternal emotional responsiveness and toddlers' social-emotional competence. *Journal of Child Psychology and Psychiatry*, *34*, 715–728. 10.1111/j.1469-7610.1993.tb01066.x

Denham, S. A., Blair, K. A., DeMulder, E., Levitas, J., Sawyer, K., Auerbach-Major, S., & Queenan, P. (2003). Preschool emotional competence: Pathway to social competence?*Child Development*, *74*, 238–256. 10.1111/1467-8624.00533

Dunn, J., Bretherton, I., & Munn, P. (1987). Conversations about feeling states between mothers and their young children. *Developmental Psychology*, *23*, 132–139. 10.1037/0012-1649.23.1.132

Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental socialization of emotion. *Psychological Inquiry*, *9*, 241–273. 10.1207/s15327965pli0904_1

Enders, C. K. (2013). Dealing with missing data in developmental research. *Child Development Perspectives*, *7*, 27–31. 10.1111/cdep.12008

Epstein, M. H., & Synhorst, L. (2008). Preschool Behavioral and Emotional Rating Scale (PreBERS): Test-retest reliability and inter-rater reliability. *Journal of Child and Family Studies*, *17*, 853–862. 10.1007/s10826-008-9194-1

Fosco, G. M., & Grych, J. H. (2013). Capturing the family context of emotion regulation: A family systems model comparison approach. *Journal of Family Issues*, *34*, 557–578. 10.1177/0192513X12445889

Gottman, J. M., Katz, L. F., & Hooven, C. (1997). *Meta-emotion: How families communicate emotionally*. Mahwah, NJ: Erlbaum.

Graham-Bermann, S. A., & Seng, J. (2005). Violence exposure and traumatic stress symptoms as additional predictors of health problems in high-risk children. *Journal of Pediatrics*, *146*, 349–354. 10.1016/j.jpeds.2004.10.065

Gratz, K. L., & 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. 10.1023/B:JOBA.0000007455.08539.94

Graziano, P. A., Reavis, R. D., Keane, S. P., & Calkins, S. D. (2007). The role of emotion regulation in children's early academic success. *Journal of School Psychology*, *45*, 3–19. 10.1016/j.jsp.2006.09.002

Haskett, M. E., Nears, K., Sabourin Ward, C., & McPherson, A. V. (2006). Diversity in adjustment of maltreated children: Factors associated with resilient functioning. *Clinical Psychology Review*, *26*, 796–812. 10.1016/j.cpr.2006.03.005

Hill, A. L., Degnan, K. A., Calkins, S. D., & Keane, S. P. (2006). Profiles of externalizing behavior problems for boys and girls across preschool: The roles of emotion regulation and inattention. *Developmental Psychology*, *42*, 913–928. 10.1037/0012-1649.42.5.913

Hinshaw, S. P., Han, S. S., Erhardt, D., & Huber, A. (1992). Internalizing and externalizing behavior problems in preschool children: Correspondence among parent and teacher ratings and behavior observations. *Journal of Clinical Child Psychology*, *21*, 143–150. 10.1207/s15374424jccp2102_6

Katz, L. F., & Gottman, J. M. (1997). Buffering children from marital conflict and dissolution. *Journal of Clinical Child Psychology*, *26*, 157–171. 10.1207/s15374424jccp2602_4

Katz, L. F., Hessler, D. M., & Annest, A. (2007). Domestic violence, emotional competence, and child adjustment. *Social Development*, *16*, 513–538. 10.1111/j.1467-9507.2007.00401.x

Katz, L. F., & Windecker-Nelson, B. (2006). Domestic violence, emotion coaching, and child adjustment. ***Journal of Family Psychology***, *20*, 56–67. 10.1037/0893-3200.20.1.56

Kitzmann, K. M. (2000). Effects of marital conflict on subsequent triadic family interactions and parenting. *Developmental Psychology*, *36*, 3–13. 10.1037/0012-1649.36.1.3

Kopp, C. B. (1989). Regulation of distress and negative emotions: A developmental view. *Developmental Psychology*, *25*, 343–354. 10.1037/0012-1649.25.3.343

Koss, K. J., George, M. R., Bergman, K. N., Cummings, E. M., Davies, P. T., & Cicchetti, D. (2011). Understanding children's emotional processes and behavioral strategies in the context of marital conflict. *Journal of Experimental Child Psychology*, *109*, 336–352. 10.1016/j.jecp.2011.02.007

Lehman, E. B., Steier, A. J., Guidash, K. M., & Wanna, S. Y. (2002). Predictors of compliance in toddlers: Child temperament, maternal personality, and emotional availability. *Early Child Development and Care*, *172*, 301–310. 10.1080/03004430212124

Levendosky, A. A., Huth-Bocks, A. C., Shapiro, D. L., & Semel, M. A. (2003). The impact of domestic violence on the maternal-child relationship and preschool-age children's functioning. ***Journal of Family Psychology***, *17*, 275–287. 10.1037/0893-3200.17.3.275

Levendosky, A. A., Lannert, B., & Yalch, M. (2012). The effects of intimate partner violence on women and child survivors: An attachment perspective. *Psychodynamic Psychiatry*, *40*, 397–433. 10.1521/pdps.2012.40.3.397

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, *71*, 543–562. 10.1111/1467-8624.00164

McDonald, R., Jouriles, E. N., Ramisetty-Mikler, S., Caetano, R., & Green, C. E. (2006). Estimating the number of American children living in partner-violent families. ***Journal of Family Psychology***, *20*, 137–142. 10.1037/0893-3200.20.1.137

McDonald, R., Jouriles, E. N., Rosenfield, D., & Leahy, M. M. (2012). Children's questions about interparent conflict and violence: What's a mother to say?***Journal of Family Psychology***, *26*, 95–104. 10.1037/a0026122

McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, *53*, 185–204. 10.1037/0003-066X.53.2.185

Morris, A. S., Criss, M. M., Silk, J. S., & Houltberg, B. J. (2017). The impact of parenting on emotion regulation during childhood and adolescence. *Child Development Perspectives*, *11*, 233–238. 10.1111/cdep.12238

Morris, A. S., Robinson, L. R., & Eisenberg, N. (2006). Applying a multimethod perspective to the study of developmental psychology. In M.Eid & E.Diener (Eds.), *Handbook of multimethod measurement in psychology* (pp. 371–384). 10.1037/11383-025

Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social Development*, *16*, 361–388. 10.1111/j.1467-9507.2007.00389.x

Rogers, M. L., Halberstadt, A. G., Castro, V. L., MacCormack, J. K., & Garrett-Peters, P. (2016). Maternal emotion socialization differentially predicts third-grade children's emotion regulation and lability. *Emotion*, *16*, 280–291. 10.1037/emo0000142

Shields, A., & Cicchetti, D. (1997). Emotion regulation among school-age children: The development and validation of a new criterion Q-sort scale. *Developmental Psychology*, *33*, 906–916. 10.1037/0012-1649.33.6.906

Shipman, K., Fitzgerald, M. M., & Torres, M. M. (2015). *The Parent-Child Validation/Invalidation Coding Scales* [Code book]. Unpublished instrument, Institute of Behavioral Science, University of Colorado, Boulder, Colorado.

Shipman, K. L., Schneider, R., Fitzgerald, M. M., Sims, C., Swisher, L., & Edwards, A. (2007). Maternal emotion socialization in maltreating and non-maltreating families: Implications for children's emotion regulation. *Social Development*, *16*, 268–285. 10.1111/j.1467-9507.2007.00384.x

Shipman, K. L., & Zeman, J. (1999). Emotional understanding: A comparison of physically maltreating and nonmaltreating mother-child dyads. *Journal of Clinical Child Psychology*, *28*, 407–417. 10.1207/S15374424jccp280313

Skopp, N. A., McDonald, R., Jouriles, E. N., & Rosenfield, D. (2007). Partner aggression and children's externalizing problems: Maternal and partner warmth as protective factors. ***Journal of Family Psychology***, *21*, 459–467. 10.1037/0893-3200.21.3.459

Straus, M. A., & Douglas, E. M. (2004). A short form of the Revised Conflict Tactics Scales, and typologies for severity and mutuality. *Violence and Victims*, *19*, 507–520. 10.1891/vivi.19.5.507.63686

Sullivan, C. M., Juras, J., Bybee, D., Nguyen, H., & Allen, N. (2000). How children's adjustment is affected by their relationships to their mothers' abusers. *Journal of Interpersonal Violence*, *15*, 587–602. 10.1177/088626000015006003

Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. *Monographs of the Society for Research in Child Development*, *59*, 25–52. 10.2307/1166137

U.S. Department of Health and Human Services. (2018). *The poverty guidelines updated periodically in the Federal Register under the authority of 42 U.S.C. 9902(2)*. Washington, DC: U.S. Government Printing Office.

Wolfe, D. A., Crooks, C. V., Lee, V., McIntyre-Smith, A., & Jaffe, P. G. (2003). The effects of children's exposure to domestic violence: A meta-analysis and critique. *Clinical Child and Family Psychology Review*, *6*, 171–187. 10.1023/A:1024910416164

Wolraich, M. L., McKeown, R. E., Visser, S. N., Bard, D., Cuffe, S., Neas, B., . . .Beck, L. (2014). The prevalence of ADHD: Its diagnosis and treatment in four school districts across two states. *Journal of Attention Disorders*, *18*, 563–575. 10.1177/1087054712453169

Zeman, J., & Shipman, K. (1996). Children's expression of negative affect: Reasons and methods. *Developmental Psychology*, *32*, 842–849. 10.1037/0012-1649.32.5.842