Emotion

Maternal Emotion Coaching Styles in the Context of Maternal Depressive Symptoms: Associations With Preschoolers' Emotion Regulation

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This study examined the interplay between maternal depressive symptoms and emotion coaching in predicting preschoolers' emotion regulation skills. Participants included 126 preschoolers and their mothers, assessed at two time points, when children were 3 (T1) and 4 (T2). Mothers' coaching of sadness and anger was observationally assessed in a laboratory task at T1 under two categories, high and low elaborative styles of emotion coaching. Mothers also reported their depressive symptoms at T1. Children's emotion regulation was observed in laboratory tasks eliciting sadness and anger at T1 and T2. Path analyses revealed three-way interactions among maternal depressive symptoms, low elaborative emotion coaching, and high elaborative emotion coaching in predicting preschoolers' emotion regulation in both sadness- and anger-eliciting tasks 1 year later. Maternal low elaborative emotion coaching of sadness reduced children's focus on distress in the sadness-eliciting task only when mothers showed high depressive symptoms and used little high elaborative emotion coaching. In contrast, maternal low elaborative emotion coaching of sadness and anger predicted maladaptive child emotion regulation in both sadness- and anger-eliciting tasks, respectively, when mothers were depressed or used greater high elaborative emotion coaching. Findings highlight the importance of considering different types of maternal emotion coaching language styles in the context of maternal depression and have implications for intervention efforts.

Keywords: maternal depressive symptoms, maternal emotion coaching, child emotion regulation, child emotional development

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Emotion regulation (ER) refers to an individual's external and internal processes responsible for monitoring, evaluating, and modifying emotional reactions to accomplish one's goals (Cole, Martin, & Dennis, 2004; Thompson, 1994). Children's early ER skills are key to their emotional competence and are associated with better cognitive and social functioning and a lower risk for future psychopathology (Finlon et al., 2015; Morris, Criss, Silk, & Houltberg, 2017). One important protective factor promoting preschoolers' ER skills is maternal emotion coaching (Gottman, Katz, & Hooven, 1996; Katz, Maliken, & Stettler, 2012). Maternal emotion coaching behaviors include being responsive, supportive, empathetic, and validating toward children's emotional experiences, labeling children's emotions, and suggesting ways to problem solve emotional difficulties to help children regulate emotions adaptively (Dunsmore, Booker, & Ollendick, 2013; Gottman et al., 1996; Havighurst et al., 2013; Wu, Feng, Hooper, et al., 2019). The current study extended previous studies by not only focusing on the quantity of emotion coaching but also considering different

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emotion coaching styles, which are differentially influential in the emotion socialization process (Laible, Panfile Murphy, & Augustine, 2013; Thompson, 2002). Additionally, according to a risk-protective interaction framework in child development (Sroufe & Rutter, 1984), one significant risk factor affecting child ER is maternal depressive symptoms, of which the negative effect usually varies in different contexts (e.g., Feng et al., 2008; Kujawa et al., 2014; Silk, Shaw, Forbes, Lane, & Kovacs, 2006). To enhance our understanding of how ER is socialized during early childhood, the current study sought to examine the interaction between risk (i.e., maternal depressive symptoms) and protective (i.e., maternal emotion coaching) factors in shaping preschoolers' ER.

Preschoolers' Emotion Regulation

During the preschool age period, children gradually learn to regulate their emotions on their own, reducing their dependence on caregivers (Calkins & Hill, 2007; Wu, Feng, Hooper, & Ku, 2017). Two integral components of ER are emotion expression and regulatory behaviors (Cole et al., 2004). As preschoolers age, they become increasingly capable of managing their negative emotions. They also engage in several behaviors that may effectively or ineffectively regulate their emotions, such as active distraction and focusing on the distressing stimuli (Silk, Shaw, Skuban, et al., 2006; Stansbury & Sigman, 2000; Wu et al., 2017). In general, focusing on distress increases anger and frustration, whereas active distraction reduces sadness and anger (Dennis & Kelemen, 2009; Feng et al., 2008; Morris et al., 2011; Silk, Shaw, Skuban, et al., 2006; Wu et al., 2017).

During early childhood, children's ER skills develop primarily within the context of their families, where mothers tend to play a central role in socializing children to express and regulate their emotions appropriately (Eisenberg, Cumberland, & Spinrad, 1998; Morris et al., 2017). In this context, emotion socialization refers to maternal practices that model and teach children about the experience, expression, and regulation of emotions and related behaviors (Morris et al., 2017). Emotion socialization promotes adaptive social-emotional development among young children (Calkins & Hill, 2007; Morris et al., 2017). Successful emotion socialization usually depends on a host of factors, including mothers explicitly or implicitly teaching children about emotion knowledge, maternal mental health, and the general emotional atmosphere in the family (Morris et al., 2017; Wu et al., 2017). These factors usually work together to provide a specific and unique emotion socialization experience in the family. The current study emphasizes the interplay of a risk factor, maternal depressive symptoms, and a protective factor, maternal emotion coaching, in shaping preschoolers' ER as these two factors have been consistently related to children's emotional competence in early childhood (e.g., Dunsmore et al., 2013; Wu, Feng, Gerhardt, & Wang, 2019; Wu, Feng, Hooper, et al., 2019).

Maternal Emotion Coaching

Maternal emotion coaching was originally proposed along with the theory of the parental metaemotion philosophy, which posits that parents have an organized set of beliefs about their own and their children's emotions (Gottman et al., 1996; Katz et al., 2012). Two types of parental metaemotion philosophies have been identified. Whereas parents holding an emotion dismissing metaemotion philosophy tend to deny or ignore their children's negative emotion, parents holding an emotion coaching metaemotion philosophy are more likely to recognize and accept their children's negative emotional experiences, as well as to teach their children to understand, express, and regulate their emotions (Gottman et al., 1996; Katz et al., 2012). Emotion coaching has been further studied in parent–child conversations about past emotional events as children can acquire emotion knowledge through discussions of emotional events when children are emotionally engaged but not highly aroused. Through these discussions, children learn to understand their own emotional experiences and process information that assists in managing emotion experiences. As such, mother–child discussion of past emotional events provides a rich context to investigate maternal emotion coaching behaviors (Dunsmore et al., 2013; Havighurst et al., 2013; Wu, Feng, Hooper, et al., 2019).

Maternal emotion coaching shows consistent associations with an increased ability to regulate emotions (especially sadness) as well as fewer behavioral problems in preschool-aged children (e.g., Hernandez, Smith, Day, Neal, & Dunsmore, 2018; Wu, Feng, Hooper, et al., 2019). Intervention programs enhancing parental emotion coaching decreased preschoolers' behavioral problems and increased their social competence (Havighurst et al., 2013). Specific emotion coaching behaviors also increase young children's emotional competence. For example, mothers labeling emotions promoted children's emotion understanding (Aznar & Tenenbaum, 2013). Maternal elaboration of past negative events and discussion of causes of emotions increased preschoolers' emotion knowledge (Laible et al., 2013; Salmon et al., 2013). Maternal awareness and coaching of preschoolers' negative emotions were associated with fewer internalizing behaviors, especially for children with mothers having mental health concerns (Cohodes, Chen, & Lieberman, 2017).

Thus far, common approaches to assess emotion coaching include (a) the Parental Meta-Emotion Interview (Gottman et al., 1996), where mothers are assessed on the extent to which they use multiple emotion-related parenting behaviors indicating their awareness, acceptance, and coaching of their children's emotions (e.g., Cohodes et al., 2017); (b) global ratings of maternal emotion coaching behavior using a single score, with a low score indicating no coaching, a midlevel score meaning emotion labeling, and a high score indicating discussing causes of emotion (e.g., Dunsmore et al., 2013; Hernandez et al., 2018; Lunkenheimer, Shields, & Cortina, 2007); and (c) measuring the sheer quantity of maternal emotion coaching behaviors, such as labeling, discussing emotion-related behaviors, and discussing causes (e.g., Brophy-Herb et al., 2015; van der Pol et al., 2015; Wu, Feng, Hooper, et al., 2019). Although these studies have identified a host of maternal behaviors that are important to children's emotional development, very few of them have examined the *style* of mothers' language use in emotion coaching, which is also important in the emotion socialization process (Laible et al., 2013; Thompson, 2002). Consider two sentences that a mother may use when emotion coaching: "You felt happy at the birthday party" and "How did you feel at the birthday party?" In the latter sentence, the mother's open-ended question invites input from the child and subsequently provides an opportunity for the dyad to discuss the child's emotion; this style may better allow for the child to actively participate in the emotion socialization process.

Several recent studies have made attempts to address whether differing emotion coaching language styles influence children's emotion socialization differently, by combining research on emotion coaching and mother–child reminiscing, or conversations, about past events (e.g., Hernandez et al., 2018; Valentino, Comas, Nuttall, & Thomas, 2013). This line of research reveals that when a mother uses a more elaborative style in discussing past emotional events with her young child, the child displays better emotional knowledge compared to those whose mothers used less elaborative discussions (Hernandez et al., 2018; Valentino et al., 2015). However, these studies have treated emotion coaching and elaboration as separate processes. In them, the assessment of maternal elaboration was based on mothers' speech in the entire discussion, including the parts that were unrelated to emotion coaching. This makes it difficult to discern whether it is mothers' elaborative style in emotion coaching specifically or their general elaborative style in talking with their children that leads to children's better emotion knowledge. In the current study, in contrast, we contend that maternal elaboration needs to be studied *during* maternal emotion coaching as maternal use of an elaborative, inquisitive, and eliciting style of questions on emotion can significantly contribute to the quality of the coaching. Prior evidence also suggests that mothers using a more generally elaborative language style do not always exhibit more emotion coaching specifically, and it is important to identify specific parenting processes that promote children's emotional development (Hernandez et al., 2018). Thus, we propose that it is important to combine the literature on elaboration and emotion coaching by studying maternal elaborative utterances when discussing names, causes, experiences, and regulation of emotion.

The literature on maternal reminiscing (regardless of whether it is an emotional event) reveals two language styles: high elaboration and low elaboration, which may both be used by the same mothers at different points during the same conversation (Fivush, Haden, & Reese, 2006). Consistent with the literature on reminiscing, we define a *high elaborative emotion coaching* (HEEC) style as mothers discussing emotional events in rich detail while asking open-ended questions that invite their children to participate in the conversation. For example, mothers may ask their children to provide input about emotion labels, emotional experiences, causes of emotion, or problem-solving strategies. In general, mothers' elaboration on past events with their children has been consistently associated with children's better ER and fewer emotional and behavioral problems (Fivush, Marin, McWilliams, & Bohanek, 2009). Further, intervention studies have shown that when their parents were trained to provide both general and emotion coaching elaboration (such as labeling and explaining emotions) when reminiscing about emotion-laden events, preschoolers referred to their own emotional states more frequently and showed better emotional knowledge than their peers whose parents were not trained (Van Bergen, Salmon, Dadds, & Allen, 2009; Valentino et al., 2013).

Mothers may also engage in *low elaborative emotion coaching* (LEEC), which is defined as mothers using few questions to probe children for answers. Instead of asking open-ended questions, these mothers may provide their children with emotion labels, feelings, causes, and solutions for an emotion-eliciting event without asking for input from their children. Whereas both of these styles represent active maternal emotion coaching, LEEC is a qualitatively different approach from HEEC in emotion socialization. No known study has distinguished between the two different coaching styles to test their potentially differential effects on children's emotional well-being. In general, maternal emotion coaching behaviors, which may include a combination of both HEEC and LEEC, seem to benefit preschoolers' ER (Havighurst et al., 2013; Hernandez et al., 2018; Wu, Feng, Hooper, et al., 2019). However, the literature on maternal reminiscing suggests that maternal low elaboration predicts lower child emotional competence when compared to those using less low elaboration (Valentino et al., 2013). To clarify the role of LEEC in children's emotional development, we propose that the effect of LEEC may be dependent on other factors, including whether or not mothers use it in combination with HEEC. It is likely that when mothers use little HEEC, LEEC can still benefit preschoolers' development of ER as the combined emotion coaching behaviors positively contribute to children's emotion development (Havighurst et al., 2013; Wu, Feng, Hooper, et al., 2019). Conversely, when mothers utilize higher HEEC strategies, the effect of LEEC on children's adaptive ER may be minimal or even negative as more effective parenting behaviors tend to override the influence of less effective parenting behaviors (Lunkenheimer et al., 2007). Thus, we expected an interaction of LEEC and HEEC in predicting children's ER.

Maternal Depressive Symptoms as a Context

When studying the influence of parenting on children's emotional development, one important contextual factor to consider is maternal depressive symptoms. Maternal depressive symptoms are an established risk factor toward preschoolers' ER (Feng et al., 2008; Goodman et al., 2011; Silk, Shaw, Skuban, et al., 2006; Wu, Feng, Gerhardt, & Wang, 2019). More importantly, developmental theories suggest that risk and protective factors can interplay to shape child development (Sroufe & Rutter, 1984). From this perspective, maternal depressive symptoms likely hinder children's adaptive emotional development by modifying the effects of other factors, such as parenting, on children (Kujawa et al., 2014; Maughan, Cicchetti, Toth, & Rogosch, 2007). Emerging research suggests that depressed mothers are not a homogeneous group, and some depressed mothers may still engage in supportive socialization behaviors that can theoretically reduce the risk of emotional dysregulation among their offspring (Hooper, Feng, Christian, & Slesnick, 2015; Wu, Hooper, Feng, Gerhardt, & Ku, 2019). As such, a possible interaction effect between maternal depressive symptoms and maternal parenting behaviors on children's emotional development should be considered.

Empirical evidence suggests that typically, a combination of maternal mental health concerns and difficulty in parenting is associated with the most severe adverse child outcomes (Kujawa et al., 2014). Specifically, preschoolers with mothers having a history of depression or elevated depressive symptoms and also utilizing maladaptive parenting behaviors showed the worst outcomes in emotion recognition skills (Kujawa et al., 2014), social competence (Maughan et al., 2007), and emotion expression and problem behaviors (Hooper et al., 2015). However, preschoolers of mothers with childhood-onset depression showed better active regulation of sadness when the mothers showed high positivity, suggesting that positive parenting is more beneficial to adaptive child emotional development when maternal depression is high, compared to when

maternal depression is low (Feng et al., 2008). As such, the effect of maternal parenting on child outcomes may be more salient in the presence of high maternal depression.

Similarly, research on emotion coaching suggests that the benefits of it on children's emotional development can vary depending on other factors, with a stronger protective effect found when the environmental risk is high (Dunsmore et al., 2013; Wu, Feng, Hooper, et al., 2019). These risk factors include parental emotion dismissing behaviors (Lunkenheimer et al., 2007), domestic violence (Cohodes et al., 2017), parenting stress (Wu, Feng, Hooper, et al., 2019), familial economic risk (Brophy-Herb et al., 2015), and children's negative emotionality (Brophy-Herb et al., 2015; Dunsmore et al., 2013; Dunsmore, Booker, Ollendick, & Greene, 2016). It seems that emotion coaching may provide preschoolers with useful tools for emotion self-regulation when their mothers are less available to aid in the regulatory process (Wu, Feng, Hooper, et al., 2019), and this may be applied to situations where mothers are depressed.

Together, these aforementioned studies suggest an interplay between emotion coaching and maternal depressive symptoms in predicting children's ER skills. Further, as the link between maternal parenting and child outcomes tends to be stronger when combined with higher maternal depressive symptoms (Feng et al., 2008; Kujawa et al., 2014), it is likely that the interaction effect of HEEC and LEEC becomes more salient in predicting child ER when mothers show higher depressive symptoms. Thus, a three-way interaction among HEEC, LEEC, and maternal depressive symptoms can be expected. As the role of LEEC in child emotional development remains understudied and controversial, in the current study, we were particularly interested in testing how maternal LEEC was associated with child ER capacities under different levels of risk (e.g., maternal depressive symptoms) and protective (e.g., maternal HEEC) factors within a three-way interaction among these maternal variables. Possibly, both the positive effect of maternal LEEC on child ER when maternal HEEC is absent and the negative effect of maternal LEEC on child ER when maternal HEEC is high can become more pronounced given higher maternal depressive symptoms. Finally, as literature on emotion coaching has mostly focused on emotion knowledge or general emotion competence, of which ER is a core component, in this study, we examined specific affective and behavioral indicators of child ER, which allows us to assess children's regulatory abilities more objectively. In all, this study contributes to our growing understanding of nuanced processes of maternal emotion socialization in an at-risk context.

The Current Study

The current study extends the work of previous studies to investigate the interplay between maternal emotion coaching and depressive symptoms in predicting children's future ER skills. In this study, we proposed novel concepts of HEEC versus LEEC as they may be differentially related to preschoolers' emotional skills. We tested a three-way interaction among LEEC, HEEC, and maternal depressive symptoms to understand the role of LEEC under different levels of risk (maternal depressive symptoms) and protective (maternal HEEC) factors in the socialization of ER.

In this study, we focused on 3-to-4-year-olds as evidence on emotion coaching focusing on younger preschoolers remains in-

sufficient (Wu, Feng, Hooper, Gerhardt, et al., 2019). The younger preschool age is a critical time for children's development as it is when children master a host of emotional vocabulary that can help with processing emotion-related information (van der Pol et al., 2015). Children also develop autobiographical memory at this age, making recalling past events and creating meaning from them possible (Fivush et al., 2006). Finally, children at this age gradually acquire critical cognitive skills that support the emergence of emotion self-regulation (Calkins & Hill, 2007; Silk, Shaw, Skuban, et al., 2006; Wu et al., 2017). This study also contributes to the current literature by examining the relations between maternal emotion coaching and specific gains in children's abilities to apply ER skills, rather than just their general emotion knowledge. Therefore, we assessed children's ER observationally when they were alone. It is generally considered that the adaptiveness of children's ER should be considered in contexts of their elicited emotions (Cole et al., 2004; Silk, Shaw, Skuban, et al., 2006; Wu et al., 2017). As such, we observed maternal emotion coaching in two emotional contexts, discussing children's sadness and anger, respectively. We further assessed children's ER skills in two contexts where children were likely to experience sadness and anger, respectively. Participants for this study were drawn from a study that oversampled mothers with elevated depressive symptoms, which helps to understand the robust relations between maternal depressive symptoms and child ER.

We hypothesized that a three-way interaction among maternal LEEC, HEEC, and depressive symptoms would be found in predicting children's ER. In particular, the effect of maternal LEEC on child adaptive ER (i.e., low negative emotion, low focus on distress, and high active distraction) would vary depending on different levels of both maternal HEEC and depressive symptoms. We expected that (a) maternal LEEC would be a protective factor for child adaptive ER when more effective socialization was not available (i.e., when maternal HEEC was low) and the environmental risk (i.e., the level of maternal depressive symptoms) was high. In contrast, (b) maternal LEEC might hinder the development of adaptive ER when mothers used more effective socialization practices (i.e., HEEC) and also when mothers were depressed as depression tends to intensify the link between less adaptive parenting and adverse child outcomes (Kujawa et al., 2014).

Method

Participants

A total of 126 mother–child dyads (65 girls) were recruited from a central U.S. city for a longitudinal study examining the effect of maternal depressive symptoms and children's emotional development when children were 3 years old (T1; $M = 3.23$, $SD = 0.19$), between the years of 2011 and 2014. To be eligible for the study, mothers needed to be at least 21 years old and have no history of a psychiatric disorder other than depression (with or without comorbid anxiety). Children needed to be between the ages of 3 and 3.5 at enrollment and free of developmental delay/disorder. At T1, using the Center for Epidemiological Studies Depression Scale (Radloff, 1977) as a screening tool, 43.7% of the mothers had depressive symptoms above the clinical cutoff (with a score of 16 or above). Mothers and children (109 pairs, 86.5%)

were assessed again a year later (T2; child age $M = 4.21$, $SD = 0.15$).

The mean age of the mothers was 31.09 ($SD = 5.44$) at T1. A majority of the mothers (65.4%) self-identified as White, 30.7% as African American, 4.7% as Native American or Alaskan, and 0.8% as Asian. About a half (51.2%) of the mothers had a college degree, 22.8% had a graduate or professional degree, 35.4% had some college education or an associate degree, and 13.4% had a high school education or less. A majority (71.7%) of the mothers were married or living with a partner. Family annual household incomes ranged from less than $10,000 to more than $150,000; 45.7% of the mothers reported an annual household income at or above $50,000, comparable to the local median household income ($48,246) for the year of data collection (U.S. Department of Commerce, 2012).

Procedure

Mothers and their children were screened for study eligibility when the children were age 3. Eligible mothers consented and gave permission for their children to participate in the study. Mothers filled out a set of questionnaires reporting their depressive symptoms. Mothers and children also attended a laboratory visit where their interactions were videotaped at both T1 and T2. At T1, mothers and their children engaged in an emotion discussion task (Wang, 2004). In this task, mothers and their children were asked to discuss four recent events when the children felt happy, sad, angry, and scared, respectively, just as how they would discuss them at home. Their conversation was video recorded and then transcribed and coded for maternal emotion coaching behaviors. The discussions during which mothers and children talked about sad and angry events were used in the current study.

Additionally, children participated in two sets of emotion-eliciting tasks at each time point, with one eliciting anger and the other eliciting sadness. Similar sadness- and anger-eliciting tasks were administered across T1 and T2, with minor modifications made to the tasks to maintain consistency in the measures over time while adding some novelty. The anger-eliciting task at T1 was the attractive toy in a transparent box task (Laboratory Temperament Assessment Battery; Goldsmith, Reilly, Lemery, Longley, & Prescott, 1999). A trained research assistant provided the child with a locked transparent box containing an attractive toy and asked the child to open it using a set of incorrect keys while alone in the room for 3.5 min. The experimenter came back when the timer ran out to give the child the right key to open the box and an opportunity to play with the toy. At T2, the task was adapted with slight variations such that the child needed to open two locks with two sets of keys. The first set of keys matched the outside lock, but the second set of keys did not match the inner lock. The child stayed alone in the room for 4.5 min.

The sadness-eliciting task at T1 was adapted from the disappointment task (Cole, Zahn-Waxler, & Smith, 1994). First, a research assistant asked the child to rank toys based on how much they liked them and then promised the child their first choice as a prize for completing a long vocabulary test. However, the experimenter gave the child their least favorite toy, stayed with the child silently for 1 min, and then left the child alone in the room for another minute. The experimenter then came back to give the child their preferred prize. At T2, the task was modified such that the

child received two toys. After the first half of the vocabulary task, the child received their second favorite toy and then received the least favorite toy at the end. Child negative emotion and emotion regulation were coded from these tasks. The Ohio State University's institutional review board approved all study procedures (Approval 2010B0437, project "Development of Attentional Control and Emotion Regulation in Preschoolers").

Measures

Maternal depressive symptoms were assessed by the Beck Depression Inventory-II (Beck, Steer, & Brown, 1996) at T1. This 21-question, self-report questionnaire measures depressive symptoms in the past 2 weeks. Example items include feelings of "sadness" and "loss of interest." A sum score of all items was used, with higher scores indicating more severe depressive symptoms. This scale showed good reliability ($\alpha = .95$).

Maternal emotion coaching behaviors were coded from the emotion discussion task (Wang, 2004) at T1, with the anger- and sadness-eliciting events coded separately. A sentence-by-sentence coding system adapted from previous studies (Gottman et al., 1996; Lunkenheimer et al., 2007; Magai, 1996) was used to code maternal emotion coaching. Two types of emotion coaching behaviors were coded. Low elaborative emotion coaching was coded when mothers described or explained to their children their emotional experiences, including labeling children's emotion expression or emotional experience (e.g., "You were happy that evening," "You felt sad and wanted a hug"); acknowledgment, acceptance, or validation of children's emotional experiences (e.g., "It is okay to get sad sometimes"); explaining causes (e.g., "You felt angry because your brother took your toy") and consequences of emotion (e.g., "Mom feels sad when you are sad"); providing coping strategies (e.g., "Next time when you are sad, you can think of something fun"); and teaching emotion-related knowledge (e.g., "We all have different emotions and different ways to feel but they don't last long").

On the other hand, high elaborative emotion coaching was coded when mothers used open-ended questions to prompt children for input and included asking for emotion labels (e.g., "How did you feel?"), asking about experiences of emotions (e.g., "What is it like to feel sad?"), probing causes of emotions (e.g., "Why did you feel angry"), asking about consequences of the emotion (e.g., "How does mommy feel when you get sad/angry?"), and probing for problem-solving (e.g., "Can you think of anything that would have made it easier? What could you do next time you are sad?"). Maternal emotion coaching behaviors were count variables based on the total number of codes for sadness and anger, separately. Intercoder reliability was assessed with 25% of the transcripts double coded, and the intraclass correlation coefficient ranged from .98 to 1.00 for anger and from .94 to .98 for sadness.

Child negative emotion was coded from the two emotion-eliciting tasks at T1 and T2, using a coding system adapted from Shaw et al. (2006; Wu et al., 2017). We coded facial expressions (e.g., drawn eyebrows, crying), vocal cues (e.g., whining, yelling), statements (e.g., "I hate this"), and gestures (e.g., slumped shoulders) for the duration of expression, with the final scores of negative emotion expressed during each task indicating the percentage of time out of the total codable length of the task. For the disappointment task, the final score was the sum of the

experimenter-present and alone situations. Approximately 25% of the observations were double coded, with reliability (kappa) ranging between .65 and .87 for the disappointment task and between .72 and .84 for the transparent box task.

Child emotion regulation behavior was observationally assessed using the two emotion-eliciting tasks at T1 and T2. A coding system adapted from previous studies (Stansbury & Sigman, 2000; Wu et al., 2017) was used, focusing on children's behaviors, vocal cues, statements, and facial expressions. Focus on distress was coded when the child focused their attention on the negative aspect of the task/stimuli, such as complaining about the task, staring at the box/toy with an upset face, and hitting or throwing the toys. Active distraction was coded when the child attempted to redirect attention away to other nondistressing stimuli, such as making faces at the one-way mirror and singing. These regulation strategies were coded for the duration of time spent engaging in each behavior, and the final scores of each strategy for each task were calculated to represent the percentage of time that each strategy was used, divided by the total codable duration of the task when child behaviors were visible. For the disappointment situations, we summed each strategy use between the experimenter-present and alone situations. Approximately 25% of the videos were double coded. Reliability of coding (kappa) was .76 to 1.00 for focus on distress and .81 to .90 for active distraction for T1 and T2, respectively.

Child sex was reported by the mothers at T1 and used as a covariate as it is commonly associated with both maternal socialization of emotion and children's ER (van der Pol et al., 2015). Mothers also reported their income levels, but this variable was removed from analysis due to nonsignificant associations with the study variables.

Data Analysis

We used path models to analyze the data. Two models were estimated for maternal coaching of sadness at T1 predicting child ER in the disappointment task at T2 and maternal coaching of anger at T1 predicting child ER in the transparent box task at T2, respectively. Predictors of child ER at T2 included (a) maternal depressive symptoms, HEEC, and LEEC; (b) significant two-way and three-way interaction terms among the three variables; and (c) covariates, including child sex as well as the corresponding child ER variable at T1. In the final path model, variables involved in calculating the interactions were mean centered (maternal depressive symptoms and two types of maternal coaching). In calculating the interaction relations, low, medium, and high levels of the moderating variables were centered at one standard deviation below the mean, at the mean, and at one standard deviation above the mean, respectively. To detect a medium effect size with power of .80, alpha of .05, and up to nine predictors in regression-type models, power analyses suggested a minimum of 112 participants. Thus, a sample of 126 is adequately powered for our most complex model.

Analyses were conducted using the lavaan package (Rosseel, 2012) in R (R Core Team, 2014). The model fit was evaluated using root mean squared error of approximation (RMSEA), comparative fit index (CFI) and standardized root mean squared residual (SRMR), with an RMSEA/SRMR of .05 and below and a CFI of .95 and above indicating good fit and an RMSEA/SRMR of .05−.08 and a CFI of .90−.95 indicating acceptable fit (Hu & Bentler, 1995). Percentages

of missing data ranged from 3.2% to 36.5% on the independent variables (T1) and was 14.3% on the dependent variables at T2 (see Table 1). Little's MCAR test revealed that data were not missing completely at random, $\chi^2(113) = 140.45$, $p = .04$. Missingness on maternal coaching variables at T1 was associated with lower maternal depressive symptoms, $t(121) = 4.9$, $p < .001$. Thus, the missing pattern is likely missing at random, and missing data were handled using full information maximum likelihood estimation, as recommended (Enders & Bandalos, 2001). As variables involving children's ER were skewed, maximum likelihood estimation with robust (Huber-White) standard errors was used, as recommended for nonnormal distributions, especially in smaller samples (Chou, Bentler, & Satorra, 1991; Li, 2016).

Results

The means, standard deviations, ranges, and bivariate correlations among all study variables are shown in Table 1. In both sadness- and anger-eliciting tasks, HEEC and LEEC styles were positively correlated with each other. LEEC of anger at T1 was prospectively associated with greater levels of negative emotion, higher levels of focus on distress, and lower active distraction in the anger-eliciting task at T2. Mothers displayed more HEEC of sadness and anger toward boys. Boys displayed more negative emotion in sadness-eliciting tasks at T2 only.

Emotion Coaching of Sadness

The model estimating maternal emotion coaching of sadness and child ER in sadness-eliciting tasks yielded an acceptable fit, $\chi^2(10) = 18.54$, $p = .05$, RMSEA = .072, 90% CI [.000, .122], CFI = .917, SRMR = .035. The proportion of variance explained (R^2 value) was .26 for child focus on distress, .26 for child negative emotion, and .06 for active distraction, all at T2.

Focus on distress. As shown in Table 2, a significant three-way interaction was found among maternal depressive symptoms and the two different styles of emotion coaching in predicting child focus on distress a year later. Consistent with our first hypothesis, when maternal depressive symptoms were at medium ($B = -7.69$, $SE = 1.93$, $t = -3.98$, $p < .001$) and high levels ($B = -12.57$, $SE = 3.10$, $t = -4.06$, $p < .001$), LEEC at T1 was associated with children's low level of focus on distress at T2 only for children whose mothers showed low levels of HEEC. On the contrary and consistent with our second hypothesis, at medium ($B = 5.50$, $SE = 1.68$, $t = 3.27$, $p = .001$) and high ($B = 10.28$, $SE = 2.83$, $t = 3.63$, $p < .001$) levels of maternal depressive symptoms, LEEC was associated with children's greater level of focus on distress at T2 only for children whose mothers showed high levels of HEEC (see Figure 1).

Negative emotion. A similar three-way interaction was found for child negative emotion in the disappointment task, but the slopes of maternal LEEC were not significantly different from zero at all levels of the two moderators (see Figure 2). In this interaction, maternal LEEC was associated with lower child negative emotion at a trend level ($B = -3.46$, $SE = 2.08$, $t = -1.66$, $p < .10$) given high maternal depressive symptoms and low maternal HEEC.

Additionally, boys displayed more negative emotion and focus on distress in this task. Child focus on distress at T1 was signifi-

Table 1

Descriptive Statistics and Zero-Order Correlations Among Study Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Child sex																		
2. T1 maternal depression	−.05																	
						Sadness-eliciting tasks												
3. T1 LEEC	.08	−.14																
4. T1 HEEC	.23*	−.18	.50***															
5. T1 negative emotion	.08	.06	−.02	.01														
6. T1 focus on distress	−.01	−.13	.00	.03	−.01													
7. T1 active distraction	−.01	.14	−.13	.00	−.06	−.33***												
8. T2 negative emotion	.31***	−.03	.09	.22	.09	−.02	.08											
9. T2 focus on distress	.17	−.03	.02	.11	.14	.18	−.05	.39***										
10. T2 active distraction	.08	.04	−.02	−.12	−.13	.00	.14	−.11	−.19									
						Anger-eliciting tasks												
11. T1 LEEC	.19	−.12	.16	.28*	−.10	−.09	.00	.06	.09	−.11								
12. T1 HEEC	.31**	.00	.06	.33**	.00	−.24*	.09	.11	.11	−.13	.45***							
13. T1 negative emotion	.10	.03	.04	.15	.53***	−.04	−.10	.18	.21*	−.05	−.01	.03						
14. T1 focus on distress	.03	−.08	−.03	−.04	.38***	−.02	−.16	.12	.22*	−.13	.01	−.12	.43***					
15. T1 active distraction	−.18	.04	.02	.03	−.15	−.29**	.19*	−.06	−.25*	.14	−.15	.11	−.12	−.13				
16. T2 negative emotion	.12	−.09	.07	.38***	.21*	−.04	.00	.21*	.14	.06	.34**	.11	.10	.11	−.05			
17. T2 focus on distress	.06	−.14	.12	.23	.24*	−.17	.03	.10	.08	−.07	.29*	.09	.01	.22*	−.01	.67***		
18. T2 active distraction	−.01	.10	−.12	−.05	.22*	−.16	.05	.11	−.08	−.01	−.27*	.00	.26**	−.03	.15	.02	.10	
N	126	126	108	81	122	122	122	108	108	108	80	80	119	119	119	108	108	108
Minimum	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum	1.00	54.00	31.00	14.00	100.66	183.07	148.01	126.99	195.02	140.96	20.00	9.00	99.99	82.19	77.98	71.91	54.05	68.35
M	—	15.56	6.78	2.35	11.04	71.11	32.40	11.62	62.51	23.63	6.78	2.61	5.51	8.01	9.19	7.81	7.70	7.03
SD	—	12.87	4.59	2.46	22.80	46.42	37.06	26.16	47.93	32.95	3.92	2.16	13.80	14.17	15.37	12.63	11.37	12.74

Note. Child sex: 0 = female, 1 = male. T1 = age 3; T2 = age 4; HEEC = high elaborative emotion coaching; LEEC = low elaborative emotion coaching.
* $p < .05.$ ** $p < .01.$ *** $p < .001.$ (two-tailed).

Table 2

Coefficients in the Path Models

Outcomes (age 4)	Predictors (age 3)	Sadness-eliciting tasks				Anger-eliciting tasks			
		B	*SE*	*z*	95% CI	*B*	*SE*	*z*	95% CI
Negative emotion	Focus on distress	0.00	0.12	0.00	[−0.23, 0.23]	0.10	0.07	1.32	[−0.05, 0.24]
	HEEC	3.17	1.81	1.75	[−0.39, 6.72]	−0.41	0.58	−0.71	[−1.54, 0.72]
	LEEC	0.38	0.71	0.54	[−1.01, 1.77]	1.05	0.46	2.29*	[0.15, 1.95]
	Child sex	18.36	5.82	3.15**	[6.95, 29.77]	2.46	2.20	1.12	[−1.86, 6.78]
	BDI	−0.10	0.25	−0.38	[−0.59, 0.40]	−0.05	0.08	−0.55	[−0.20, 0.12]
	BDI × HEEC	0.31	0.17	1.88†	[−0.01, 0.64]	0.02	0.04	0.47	[−0.06, 0.09]
	BDI × LEEC	−0.11	0.09	−1.29	[−0.28, 0.06]	−0.01	0.02	−0.22	[−0.05, 0.04]
	HEEC × LEEC	0.25	0.41	0.61	[−0.55, 1.04]	0.51	0.22	2.29*	[0.07, 0.94]
	BDI × HEEC × LEEC	0.06	0.03	1.94*	[0.00, 0.12]	−0.02	0.01	−2.04*	[−0.03, −0.001]
Focus on distress	Negative emotion	0.24	0.09	2.73**	[0.07, 0.41]	0.12	0.09	1.40	[−0.05, 0.29]
	HEEC	−1.54	2.65	−0.58	[−6.74, 3.66]	−0.43	0.56	−0.77	[−1.54, 0.67]
	LEEC	−1.10	1.23	−0.89	[−3.51, 1.32]	0.64	0.42	1.53	[−0.18, 1.46]
	Child sex	27.27	9.59	2.85**	[8.48, 46.06]	0.86	2.00	0.43	[−3.06, 4.79]
	BDI	−0.08	0.40	−0.20	[−0.86, 0.70]	−0.12	0.07	−1.67†	[−0.26, 0.02]
	BDI × HEEC	0.26	0.17	1.50	[−0.08, 0.60]	—	—	—	—
	BDI × LEEC	0.00	0.11	−0.03	[−0.22, 0.22]	—	—	—	—
	HEEC × LEEC	2.68	0.54	4.97***	[1.62, 3.74]	0.61	0.19	3.20**	[0.24, 0.98]
	BDI × HEEC × LEEC	0.15	0.05	3.43**	[0.07, 0.24]	—	—	—	—
Active distraction	Active distraction	0.15	0.11	1.37	[−0.07, 0.37]	0.06	0.10	0.65	[−0.13, 0.25]
	HEEC	−2.84	1.87	−1.52	[−6.5, 0.82]	0.97	0.58	1.69†	[−0.16, 2.1]
	LEEC	0.80	1.23	0.65	[−1.61, 3.20]	−1.12	0.50	−2.22*	[−2.11, −0.13]
	Child sex	7.16	6.69	1.07	[−5.95, 20.28]	0.18	2.44	0.08	[−4.6, 4.96]
	BDI	0.01	0.25	0.02	[−0.49, 0.50]	0.10	0.12	0.80	[−0.14, 0.34]
	BDI × LEEC	—	—	—	—	−0.10	0.05	−2.28*	[−0.19, −0.02]

Note. Child sex: 0 = female, 1 = male. *SE* = standard error; CI = confidence interval; HEEC = high elaborative emotion coaching; LEEC = low elaborative emotion coaching; BDI = maternal depressive symptoms.
† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$. (two-tailed).

cantly associated with the same construct measured a year later. In sum, consistent with our first hypothesis, maternal LEEC was prospectively associated with lower child maladaptive ER (focus on distress and negative emotion) in the sadness-elicit context only when maternal depressive symptoms were high and maternal HEEC was low. Consistent with our second hypothesis, when both maternal HEEC and depressive symptoms were high, maternal LEEC predicted more future child focus on distress.

Emotion Coaching of Anger

The model estimating maternal emotion coaching of anger and child ER in anger-eliciting tasks yielded an acceptable fit, $\chi^2(12) = 29.48$, $p = .003$, RMSEA = .076, 90% CI [.000, .130], CFI = .920, SRMR = .041. The proportion of variance explained (R^2 value) was .55 for child focus on distress, .51 for child negative emotion, and .27 for active distraction, all at T2.

Negative emotion. For negative emotion at T2, we found a significant three-way interaction effect among maternal depressive symptoms, HEEC of anger, and LEEC of anger. Supporting our second hypothesis about the negative effect of LEEC on child ER when paired with high maternal HEEC, when mothers showed high levels of depressive symptoms and also utilized medium ($B = 0.98$, $SE = 0.46$, $t = 2.12$, $p = .03$) or high levels of HEEC ($B = 1.63$, $SE = 0.58$, $t = 2.80$, $p = .005$), LEEC predicted children's greater negative emotion at T2. This pattern was similar when maternal depressive symptoms were medium such that LEEC predicted more children's negative emotion at T2, when maternal HEEC of anger was medium ($B = 1.05$, $SE = 0.46$, $t = 2.29$, $p = $

.02) or high ($B = 2.15$, $SE = 0.70$, $t = 3.05$, $p = .002$). When maternal depressive symptoms were low, LEEC was associated with greater child negative emotion at T2 only when maternal HEEC of anger was high ($B = 2.66$, $SE = 0.96$, $t = 2.78$, $p = .006$; Figure 3).

Focus on distress. Additionally, a significant two-way interaction was found between HEEC and LEEC of anger in predicting child focus on distress a year later (Figure 4a). When maternal HEEC was high, LEEC was associated with children's greater focus on distress at T2 ($B = 1.95$, $SE = 0.54$, $t = 3.60$, $p < .001$), supporting our second hypothesis.

Active distraction. Finally, a significant two-way interaction was found between maternal depressive symptoms and LEEC of anger in predicting child active distraction at T2 (Figure 4b). LEEC of anger was associated with less active distraction when maternal depressive symptoms were at medium ($B = −1.12$, $SE = 0.50$, $t = −2.22$, $p = .03$) and high levels ($B = −2.45$, $SE = 0.92$, $t = −2.65$, $p = .008$). In sum, LEEC was prospectively associated with children's less adaptive ER (high negative emotion, focus on distress, and low active distraction) in an anger-eliciting context when mothers had higher depressive symptoms and/or also high HEEC, which is consistent with our second hypothesis. We included models containing all interaction terms (i.e., untrimmed models) in the online supplemental materials as reference.

Discussion

Preschool age is an important time when children are socialized to gain independence in ER. The current study investigated inter-
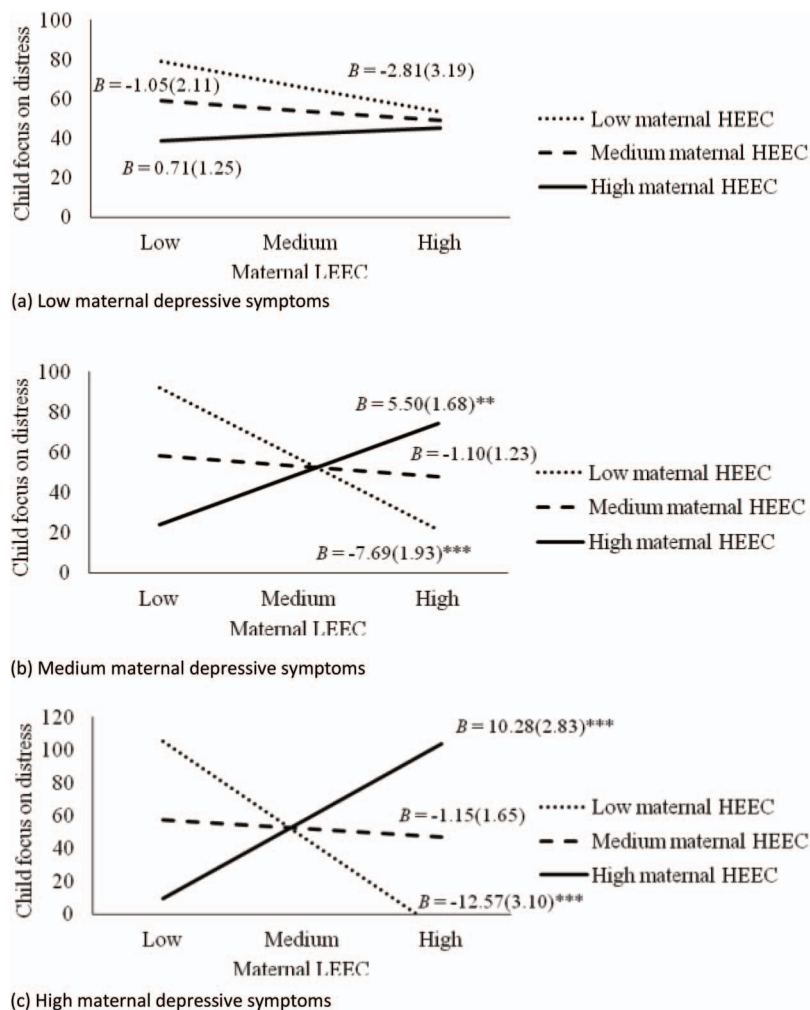
Figure 1. Interaction among maternal depressive symptoms and high and low elaborative emotion coaching of sadness in predicting child focus on distress in the disappointment task. HEEC = high elaborate emotion coaching; LEEC = low elaborate emotion coaching. [**] $p < .01$. [***] $p < .001$.

actions among maternal depressive symptoms, HEEC, and LEEC in predicting children's ER. This study adds to the current understanding of the effectiveness of different types of maternal emotion coaching behaviors, shedding light on improving psychoeducation and intervention efforts toward parents and their preschoolers at risk for emotion dysregulation.

Consistent with our hypothesis, we found a three-way interaction among maternal depressive symptoms, HEEC of sadness, and LEEC of sadness in predicting children's focus on distress in a sadness-eliciting situation 1 year later. When mothers showed medium and high levels of depressive symptoms and they used few HEEC behaviors, LEEC of sadness reduced children's maladaptive ER of focusing on the negative aspect of a disappointing toy. It is likely that in a high-risk environment (i.e., mothers with elevated depressive symptoms) and when there is a dearth of more effective emotion coaching, LEEC can function to reduce children's maladaptive ER as children can receive knowledge regarding how to express and regulate sadness adaptively from this type of coaching. This result was consistent with previous findings that

maternal coaching of sadness increases ability to regulate sad emotion (Wu, Feng, Hooper, et al., 2019) and that high parental coaching and low elaboration on negative events reduced child internalizing behaviors (Hernandez et al., 2018); it is also in line with other studies finding emotion coaching as more effective when environmental risk is high (e.g., Cohodes et al., 2017; Dunsmore et al., 2013; Lunkenheimer et al., 2007; Wu, Feng, Hooper, et al., 2019).

In contrast, when mothers used a lot of HEEC of sadness, LEEC was associated with more focus on distress, and this association was more prominent when mothers had medium and high levels of depressive symptoms. This finding indicates that when there are more effective coaching behaviors being used, LEEC can be an ineffective socialization strategy as this type of maternal input may not necessarily fit children's developmental needs in learning and absorbing adaptive ways to process emotional experiences. The link between LEEC and focus on distress was stronger when mothers showed higher levels of depressive symptoms, revealing the role of maternal depression as intensifying the association
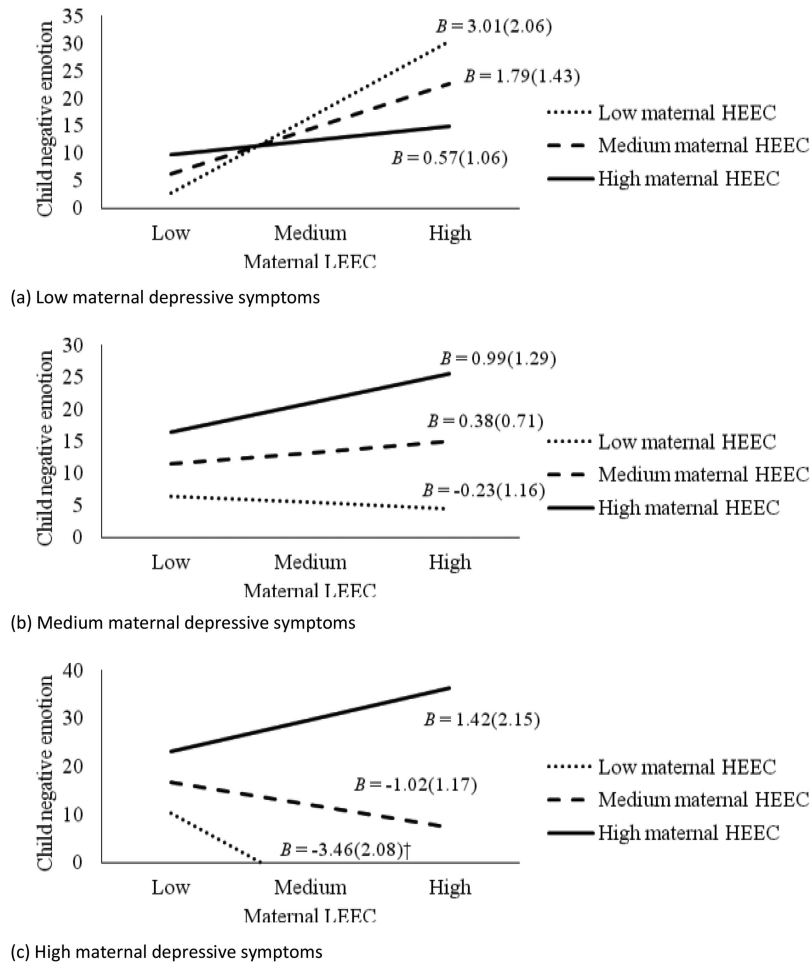
Figure 2. Interaction among maternal depressive symptoms and high and low elaborative emotion coaching of sadness in predicting child negative emotion in the disappointment task. HEEC = high elaborate emotion coaching; LEEC = low elaborate emotion coaching. [†] $p < .10$.

between parenting and child development (Kujawa et al., 2014). The same three-way interaction also predicted child negative emotion in a sadness-eliciting situation, and the trend of associations was the same as the focus-on-distress variable. We did not find significant effects on child active distraction in the sadness-eliciting situation, possibly because compared to anger, active distraction is not as effective in reducing sadness and so is not as likely to be included in parents' emotion coaching in this situation (Morris et al., 2011; Wu, Feng, Gerhardt, & Wang, 2019).

Similarly, we found a three-way interaction in predicting child negative emotion in the anger-eliciting situation. When mothers showed medium and high levels of depressive symptoms and used medium and high levels of HEEC of anger, LEEC of anger increased child negative emotion 1 year later. This finding reveals LEEC as an ineffective socialization practice in reducing children's experienced anger or frustration. As for ER strategies, LEEC of anger increased child focus on distress only when HEEC of anger was low. LEEC also decreased active distraction only when mothers showed medium and high levels of depressive symptoms. As both focus on distress and active distraction are

common strategies in regulating anger (Wu, Feng, Gerhardt, & Wang, 2019), these findings together indicate that when mothers are depressed or use effective coaching strategies (i.e., HEEC), less effective coaching (i.e., LEEC) is not helpful for children to develop skills to regulate anger. We did not find evidence that LEEC benefits child regulation in an anger-eliciting situation, possibly because compared to sadness, anger is more of a "hot" emotion that calls for stronger inhibition skills to handle (Snyder, Schrepferman, McEachern, & DeLeeuw, 2010), and the acquisition of skills to manage anger requires more of children's active participation in learning from conversations with mothers in rich detail.

During the early preschool ages, children actively grasp ER skills from maternal socialization. An HEEC style can engage preschoolers in actively participating in their own socialization process while providing essential input for mothers to assess key areas that need improvement (Fivush et al., 2006; Valentino et al., 2013). On the other hand, an LEEC method may render preschoolers as passive receivers of socialization, and children may have a harder time applying information achieved in this method when
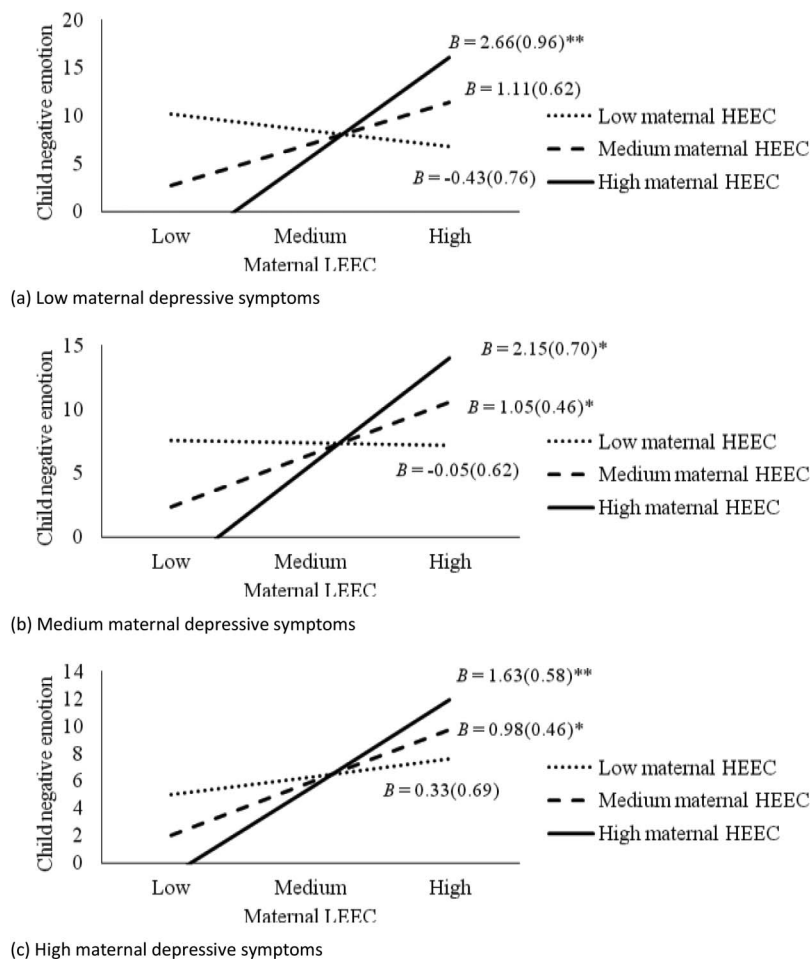
(a) Low maternal depressive symptoms

(b) Medium maternal depressive symptoms

(c) High maternal depressive symptoms

Figure 3. Interaction among maternal depressive symptoms and high and low elaborative emotion coaching of anger in predicting child negative emotion in the transparent box task. HEEC = high elaborate emotion coaching; LEEC = low elaborate emotion coaching. $^* p < .05.$ $^{**} p < .01.$

they are alone and distressed (Fivush et al., 2009). This may be especially true when mothers are depressed as depressed mothers may be less sensitive to children's emotional cues and may feed their children information that may not necessarily be adaptive to children's developmental needs (Wu, Hooper, et al., 2019). As children of depressed mothers tend to be more passive in regulating their emotions (Feng et al., 2008), it is likely that LEEC creates more challenges in grasping ER skills for them, failing to providing an active learning environment, compared to children whose mothers are not depressed. As a result, these children are likely to have a difficult time applying the acquired emotional knowledge through LEEC into practice.

Taken together, findings from both the sadness- and anger-eliciting tasks unanimously support the hypotheses of three-way interactions among maternal depressive symptoms, HEEC, and LEEC, promoting our understanding of different socialization pathways of both sadness and anger. In particular, LEEC shows limited effects in promoting preschoolers' adaptive ER in a sad situation only when mothers are depressed and HEEC is not available. When mothers use HEEC frequently, LEEC does not benefit children's ER. Thus, this study suggests that HEEC may

benefit preschoolers' emotional development, especially in families where mothers have a mental health concern (e.g., depression). In contrast, when maternal depression is low, LEEC can be effective and may be used to instruct children for better ER.

This study adds to our understanding that at a remarkably young age, researchers should consider the importance of a child's active participation in their socialization. It is likely that our finding may only apply to this specific age group (i.e., younger preschoolers) as children at this age develop rapidly in their language skills, memory abilities, and regulatory capacities in processing emotion-related information (Laible et al., 2013; van der Pol et al., 2015). Meanwhile, mothers may use increasingly complex language to socialize their children in this age group compared to younger age groups (Hernandez, Carmichael, Kiliç, & Dunsmore, 2019). As such, future studies should investigate the associations between maternal HEEC/LEEC and children's ER in a broader age span.

Several limitations should be considered when interpreting findings of the current study. First, due to the available data, we did not include measures of children's emotion understanding, which may affect maternal emotion coaching and children's regulation of emotion (Laible et al., 2013), and this should be addressed by
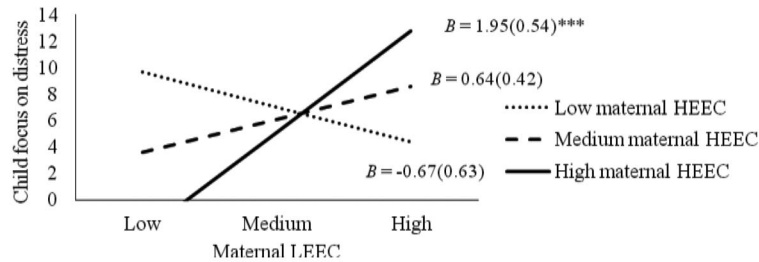
(a) Interaction between maternal high and low elaborative emotion coaching of *anger* in predicting child *focus on distress* in the transparent box task
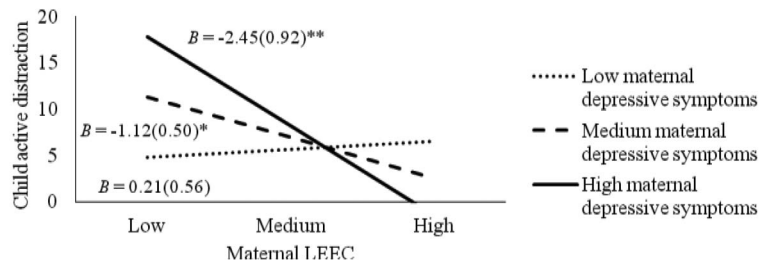
(b) Interaction between maternal depressive symptoms and low elaborative emotion coaching of *anger* in predicting child *active distraction* in the transparent box task

Figure 4.   Two-way interactions concerning maternal low elaborative emotion coaching in predicting child emotion regulation. HEEC = high elaborate emotion coaching; LEEC = low elaborate emotion coaching. * $p <$ .05. ** $p <$ .01. *** $p <$ .001.

future studies. Second, we did not include how children's input may affect maternal coaching styles, which can be a direction of future investigations. Third, as the emotion discussion task was added to the study protocol after the study had begun, we had a relatively high rate of missingness (36.5%) on maternal emotion coaching variables. Most mothers missing maternal emotion coaching variables had relatively low depressive symptoms, which may have biased our understanding of the relations among maternal depressive symptoms, emotion coaching, and child ER. We also had relatively low coding reliability on one negative emotion code, anger, because it was displayed in short bursts (sometimes shorter than 1 s), so it was difficult to achieve high coding reliability. Finally, emotion socialization in the family requires an understanding of multiple socialization agents such as fathers and siblings and multiple parenting practices such as familial emotional expressiveness and reciprocity, which tend to work together to form effective socialization (van der Pol et al., 2015). Thus, future studies should include other family socialization processes and understand how these processes work together and how child factors contribute to these socialization practices.

Despite these limitations, the current study has several significant strengths, including a longitudinal design and observational assessments of maternal coaching and child ER. This study was among the first to distinguish low versus high elaborative styles of emotion coaching and provided nuanced evidence concerning how different styles of maternal emotion coaching are related to preschoolers' ER. This study highlights the importance of promoting children's agency in ER development. This study also adds to our growing understanding of familial emotion socialization processes,

especially in different emotional contexts. A better understanding of these interactions allows for developing targeted intervention programs for parents and their young children. In particular, this study suggests that training depressed mothers to use more HEEC with their young children, instead of LEEC, could be ultimately beneficial in reducing negative expression and gaining emotional competence. More broadly, a more complete comprehension of socialization factors contributing to differences in child regulatory capacity will allow for a better understanding of how to support adaptive parenting and children's emotional development in the context of maternal depression.

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