Emotion Regulation Among Preschoolers on a Continuum of Risk: The Role of Maternal Emotion Coaching

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Abstract

Parental emotion coaching involves acknowledging and validating children's feelings, as well as guiding them on how to manage intense or negative feelings. Although parental emotion coaching has been identified as a potentially important factor for children's emotional development, research into this topic is scant. The present study examined whether maternal emotion coaching can play a mediational role between family risk (i.e. economic disadvantage, family stress, and maltreatment) and emotion regulation in preschoolers. Seventy-four preschoolers, aged 46–58 months, and their maternal caregivers participated in an observational laboratory study, including a narrative task in which mothers and children reminisced about a mildly upsetting event. We coded these conversations for maternal emotion coaching behaviors with the *Family Emotional Communication Scoring System*. A family risk score was obtained via the *Family Events Checklist* and demographic data. We measured children's emotion regulation with the *Emotion Regulation Checklist*. Increased family risk was associated with both reduced child emotion regulation and reduced maternal emotion coaching. Maternal emotion coaching partially mediated the relation between family risk and child emotion regulation, in particular child emotional lability. The findings support further research into the possibilities of training mothers in high risk families in emotion coaching skills in order to foster their children's emotional development.

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Introduction

Emotion regulation skills are essential for children's psychological and social well-being (Shipman et al. 2003). Children with these skills are able to monitor, evaluate and modify emotional reactions (Thompson 1994), or in other words, to manage the ebb and flow of negative emotions (Kopp 1989). The ability to regulate emotions effectively is crucial to successful development (Morris et al. 2007) and is associated with social competence while difficulties with emotion regulation are linked to both internalizing and externalizing disorders (Stansbury and Zimmermann 1999; Zeman et al. 2006).

Two aspects of emotion regulatory processes are often distinguished: emotional lability and adaptive regulation (e.g., Dunsmore et al. 2012). Emotional lability refers to children's sensitivity to emotion-inducing events (Pietromonaco and Barrett 2009). Children with high lability quickly respond to emotion-eliciting situations and have difficulty recovering from their emotional response. Adaptive regulation refers to children's ability to manage the elicited emotions within their current context. There is a strong negative relation between the two aspects but they are not simply opposites (Dunsmore et al. 2012). In this paper, we use the term emotion regulation as the construct overarching both emotional lability and adaptive regulation.

Although many factors, such as child temperament, neurophysiology, and cognitive development affect the development of emotion regulation in children (Eisenberg and Morris 2002), most psychologists agree that the family context plays a major role (Morris et al. 2007). In particular, living in a high-risk family (with low economic status, high family stress, or maltreatment) is found to be related to maladaptive development in children (e.g., Ackerman et al. 1999, 2004; Bradley and Corwyn 2002; Cicchetti and Aber 1998). Exposure to the atypical socialization experiences which are prevalent in high-risk families may push children to develop unique strategies for regulating emotion in order to fit in with the current social environment. This may hinder children's subsequent adaptation outside this context and poses a risk for long-term adjustment; it may teach children to manage emotionally arousing situations in atypical, and less successful, ways (Barrett and Campos 1987; Cummings and Davies 1996; Shipman et al. 2003).

The increased chance of atypical emotional development has been reported for several forms of family risk and their accumulation in particular has been related to worse child outcomes (see e.g., Appleyard et al. 2005; Evans 2003). For example, there are many indications that children's regulatory skills are associated with family poverty (Bolger et al. 1995; Cicchetti and Aber 1998; Raver 2004). Family stress in the form of interparental conflict has repeatedly been reported to be negatively related to youngsters' emotion regulation (Davies et al. 2009; Fosco and Grych 2013). With regard to maltreatment, research has shown that affected children are more likely to try to suppress emotional displays and to express emotions in an inappropriate (e.g., aggressive) manner than non-maltreated children

(Maughan and Cicchetti 2002; Shields and Cicchetti 1998). Also young neglected children have been found to show reduced understanding of negative emotions and fewer adaptive emotion regulation skills compared to non-neglected peers (Shipman et al. 2005).

Although living in a high-risk family is known to be associated with poor emotion regulation, less is known about the social mechanisms by which family risk influences emotion regulatory processes (Morris et al. 2011). Morris et al. (2007) developed a tripartite model of family influence on children's emotion regulation. The first pathway involves children's observational learning via modeling and social referencing. A second pathway refers to the emotional climate of the family, such as parenting style and the attachment relationship. Thirdly, parenting practices specifically related to emotion management and emotion coaching are thought to affect children's emotion regulation. Within this model of family influence, the extent to which parents engage in emotion coaching is a potentially important factor (Morris et al. 2011).

The general importance of parent–child emotion conversations has been suggested by a large body of literature (see e.g., Fivush 2007; Saarni 1999). Children learn to organize, interpret, and evaluate their experiences, and to develop their sense of self via parent–child conversations (Fivush et al. 2003; Reese et al. 2007; Wareham and Salmon 2006). In particular, reminiscing about past negative events has been identified as a rich learning opportunity for children, where they can reflect on earlier feelings in a calm situation and parents can choose which aspects of events to bring up (Fivush et al. 2003). Previous work has found links between decreased family discourse about negative emotion and poor development of emotion understanding (Dunn and Brown 1994) while more maternal elaboration during reminiscing of a past event has been associated positively with children's emotion understanding (Laible 2004).

In this paper, we focus on the role of one specific type of parental 'emotion talk' as identified in Morris et al's model: emotion coaching. Parents who provide emotion coaching typically respond to a child's emotions by acknowledging and validating their child's feelings, and by offering guidance on how to manage intense or negative feelings. Parents who are high on emotion coaching skills are aware of their child's emotions, talk about them in a differentiated way, accept them, and assist their children in experiencing and regulating them (Gottman et al. 1997; Lunkenheimer et al. 2007; Ramsden and Hubbard 2002). Parental emotion coaching has been associated with 'a host of child outcomes', including less behavior problems, stronger academic achievement, and better relationships with peers (Katz et al. 2012).

Shipman et al. (2007) hypothesized that this parental coaching behavior would mediate the relation between maltreatment status and children's emotion regulation skills. In a sample of 80 physically maltreating and non-maltreating mother–child dyads, with children ranging from 6 to 12 years old, the authors found that maltreating mothers engaged in less emotion coaching than non-maltreating mothers and that these socialization behaviors mediated the relation between maltreatment status and children's adaptive emotion regulation skills. Shipman et al. concluded that improving parents' emotion-focused communication skills

will be central in fostering children's socioemotional and psychological adjustment and in improving parent–child relationships (p. 282).

Until now, only a few other studies have investigated the way in which emotion coaching could mediate the role of family risk with regard to children's functioning, and in particular children's emotion regulation. For example, Katz and Gottman (1997) studied mechanisms that may protect children in circumstances of marital conflict and dissolution. They reported that parents' emotion coaching beliefs buffered preschool children from the negative effects of their parents' marital distress on behavior problems, peer problems and school achievement. With children living in violent neighborhoods, Cunningham et al. (2009) found that maternal emotion coaching philosophy predicted boys' change in grades, internalizing and externalizing behaviors, and social skills through emotion regulation.

The purpose of the present study was to replicate the finding that maternal emotion coaching mediates the relation between family risk and emotion regulation and to extend the current knowledge in two ways. First, we examined mothers' actual emotion coaching *behavior* instead of *asking them about* their emotion coaching beliefs and intentions. Second, we included not one specific group of children at risk but incorporated several aspects of risk (i.e. economic disadvantage, family stress, and maltreatment) in a composite score (cf. Rutter 1983) to acknowledge the continuum of risk that represent children's circumstances.

Four hypotheses were tested. First, increased family risk was expected to be associated with decreased emotion regulation in children. We also expected a relation between increased family risk and reduced maternal emotion coaching. Third, higher levels of maternal emotion coaching were expected to predict better child emotion regulation. Finally, greater use of emotion coaching in mothers was expected to partially mediate the association between risk and emotional (dys)regulation in children. In order to home in on the mediational relation, we controlled for child gender, age, and general family expressiveness (McCoy and Raver 2011). We expected to find these relations for both aspects of emotion regulation (i.e. emotional lability and adaptive regulation).

Method

Participants

Preschoolers and their parents were recruited through fliers distributed to parents of children in Head Start and a local social service agency, as well as telephone calls to parents identified through birth announcements as having children in the appropriate age-range. Ninety-one preschoolers and their primary female caregivers participated in the study. Children ranged in age from 46 to 58 months with a mean age of 51 months. Seventy-four out of the 91 mother–child dyads completed the measures that were included in the present study. There were no significant demographic differences between the completers and non-completers.

The sample consisted of 29 boys and 45 girls. Participants reflect the racial demographics of the small city in which recruitment took place. The sample was primarily Caucasian (89 %) with a minority of Hispanic (3.5 %) black (2.4 %), Asian (1 %) and other (3.5 %)

participants. The median annual income for families was $15,000–20,000, ranging from below $10,000 to above $70,000. Mother's education level ranged from some high school to graduate school with the majority having completed some college. About a third of the mothers (32 %) had been referred to one or both of two local service agencies for child maltreatment.

Procedure

Each mother–child dyad participated in a laboratory visit lasting approximately 2.5 h. The visit included self-report questionnaires, interviews and several laboratory tasks for the child and/or the mother. Mothers were paid $40 for their participation and each child received a small toy and some stickers. The study protocol was approved by the Institutional Review Board of The University of Oregon.

Measures

Family Events Checklist—The Family Events Checklist (FEC; Fisher et al. 1998) measures family stress through a 46-item questionnaire. Each item is answered on a 4-point scale. Sample items include "There was not enough money to buy something important needed for the family, such as food or clothing" and "There was a conflict or tension between you and any family member(s)". FEC's reliability and validity have been shown by Fisher et al. (1998): Cronbach's alpha was .78 and total scores differed significantly across four comparison samples that demonstrated various degrees of risk, with higher risk being associated with higher scores on all three subscales.

Negative Memory Narrative—The mother was asked to think of two or three instances in the last couple of days in which the child had become mildly upset (e.g. the child couldn't go somewhere he or she wanted to go, or a favorite toy broke). The mother was requested not to nominate events in which the child got into trouble in order to avoid the child feeling shamed or additionally punished. The experimenter then left the room and the child and caregiver were asked to discuss the memory freely. The task ended after the mother finished discussing the memory with the child, or after about 5 min. The coding of the narrative is described under data preparation and analysis.

The Emotion Regulation Checklist—Mothers completed the Emotion Regulation Checklist (ERC; Shields and Cicchetti 1997) for their children. The questionnaire contains 24 items on a 4-point Likert scale and includes questions regarding intensity, lability, flexibility, and appropriateness of the child's positive and negative emotions. The ERC has two subscales: Adaptive Regulation, composed if items assessing positive emotion regulation skills such as empathy and emotion understanding, and Lability, composed of items assessing emotional dysregulation such as emotional intensity and angry reactivity. An overall emotion regulation score is derived from reverse scoring negatively weighted items. The ERC shows good convergent validity with similar instruments as well as good reliability (Cronbach's alphas between .84 and .96 in various studies; Ramsden and Hubbard 2002; Shields and Cicchetti 1997).

Family Expressiveness Questionnaire—The Family Expressiveness Questionnaire (Halberstadt 1986) contains 40 items related to emotional expressiveness. It includes both nonverbal and verbal behavior within the family. The respondent is asked how often a situation occurs in the family, compared to other families by rating each item on a 9-point Likert scale. Sample items include "Exclaiming over a beautiful day" and "Crying after an unpleasant disagreement". The questionnaire has strong internal consistency (α ranged from .87 to .93 in several studies; Halberstadt et al. 1995) and convergent validity (Eisenberg et al. 1992).

Data Preparation and Analysis

The Negative Memory Narratives were coded for maternal emotion coaching. The narratives were transcribed verbatim and divided into utterances. Each maternal utterance (defined as a mother's comment bounded by the child's comments) referring to an emotion was coded for its emotion theme or word (e.g. sadness, happiness) and emotion context (e.g., emotion coaching question, elaboration statement) based on the Family Emotion Communication Scoring System developed by Shields et al. (2002). When several emotion themes or emotion contexts were present in a single utterance, these were recorded as separate 'events'. To determine interrater reliability, ten narratives were scored by two coders, yielding a Cohen's Kappa of .86 for emotion themes and .84 for type of utterances. The remaining narratives were scored by a single coder, consulting the other coder when in doubt. Coders were blind to information on risk and emotion regulation. Because dismissive behaviors, dismissive statements, and references to lab emotions were virtually not present (1 % of the utterances) we did not include them in the analyses. In line with prior research (Denham et al. 1997; Lunkenheimer et al. 2007), we computed a total emotion coaching score by summing maternal emotion coaching questions, emotion coaching statements, elaboration questions, elaboration statements, and confirmations (all referring to a child's emotions). This number was then divided by the number of maternal utterances of each narrative to account for the amount of mothers' speech in the narratives.

A composite family risk score (cf. Appleyard et al. 2005; Rutter 1983) was computed by combining annual income, family stress (as measured by the FEC) and parental report of having been referred for child maltreatment services. The three variables were transformed to standardized Z-scores (with annual income reflected) and averaged to form a composite score.

We used descriptive statistics for the narratives and questionnaire scores and computed Pearson correlations for the relations between child demographics (age, gender), family expressiveness, child emotion regulation, and maternal emotion coaching scores. Two univariate outliers were identified and dropped from further analyses. There were no multivariate outliers. Hierarchical linear regression analyses were conducted to test the mediational model, in line with recommendations by Baron and Kenny (1986) often applied in emotion regulation studies (e.g., Davis et al. 2010). All analyses were carried out with SPSS 18.0 software.

Results

The descriptive statistics for the narratives and the questionnaires are shown in Table 1. The narratives took 3.6 min on average, in which mothers showed about six emotion coaching behaviors (ranging from 0 to 18 per narrative and from 0 to .63 per utterance). Mothers showed more negative than positive emotion coaching (paired samples t test, t(73) = 9.26, p < .01). An example of negative emotion coaching was in the narrative of the mother who talked with her child about his lost bear: M: "You were really sad though weren't you?" Later on, in the same narrative the parent talked about how the bear was found: C: "You found it" M: "And then how did you feel?" C: "Happy", an example of positive emotion coaching.

Correlations between the main variables are shown in Table 2. The correlations between family risk, maternal emotion coaching, and child emotion regulation were significant and in the expected directions, with the exception of the association between emotion coaching and child adaptive regulation, which was non-significant. The strongest associations (apart from those between the emotion regulation subscales) existed between family risk and child emotion regulation, between family risk and child adaptive regulation, and between maternal emotion coaching and child emotional lability (all rs .30). With regard to the control variables (child age, gender, and family expressiveness), only family expressiveness related significantly to the other variables and was subsequently included in the hierarchical regression analyses.

The regression analyses showed that (a) child emotion regulation was significantly and negatively related to family risk, (b) maternal emotion coaching was significantly and negatively related to family risk, (c) child emotion regulation was significantly and positively related to maternal emotion coaching, and (d) that the relationship between risk and emotion regulation was attenuated in the presence of this variable in the equation (see Table 3). The reduction was considerable but not resulting in non-significance of family risk. This implies partial, but not full, mediation. The final model explained 19 % of the variance in the children's emotion regulation.

Additional regression analyses were conducted separately for the two aspects of child emotion regulation, adaptive regulation (Table 4) and emotional lability (Table 5). The findings for the subscale of emotional lability were similar to the overall findings. However, for the subscale of adaptive regulation, like in the exploratory correlations, there was no significant relation with maternal emotion coaching.

Discussion

Despite a robust body of research describing the central role of parenting in children's social and emotional development, studies examining specific parenting practices associated with successful emotion regulation are scant, particularly among preschoolers and early school age children (Morris et al. 2007, 2011). The present study examined the relations between family risk (i.e. economic disadvantage, family stress, and maltreatment), maternal emotion coaching, and emotion regulation in preschoolers. Increased family risk was associated with

both reduced child emotion regulation and reduced maternal emotion coaching. As expected, maternal emotion coaching partially mediated the relation between family risk and child emotion regulation. However, when looking at the two elements of child emotion regulation —emotional lability and adaptive regulation—separately, maternal emotion coaching was only associated with a reduction in child emotional lability, not with increased adaptive regulation.

The study's strengths include its observational design, the specific attention for the under researched topic of emotion coaching, the testing of a theoretically informed model, a high interrater reliability regarding the maternal emotion coaching scores, and the focus on a continuum of family risk. However, our study's limitations must also be kept in mind. Even though measurement of maternal emotion coaching in a laboratory setting gives important insights in how emotion socialization takes place in the home and is stronger than questionnaire data, it has to be considered a proxy of real-life interactions instead of a complete reflection. Secondly, we based our estimates of maternal emotion coaching on a conversation about a mildly upsetting event. Although mothers' emotion coaching philosophy and therefore their behavior may be rather stable, prior research has shown that parent–child conversations about past events differ from those on ongoing emotions and may serve different purposes (Fivush 1993 in Fivush et al. 2003; Reese et al. 2007). It is possible that emotion coaching does have different outcomes for children depending on the timing, intensity and context of the conversation: our approach should be replicated with conversations on various types of ongoing and past emotions. Thirdly, we choose to combine indications of poverty, family stress and child maltreatment to capture family risk. While our sample size did not allow for a fine-grained analysis, future studies with larger numbers of participants may be able to examine both the role of the composite risk factor and the specific contributions of its elements. Finally, because of the cross-sectional nature of this study, no conclusions can be drawn about the causal effects of maternal emotion coaching on the development of child emotion regulation.

Our findings confirm that the negative relation between risk and affect regulation in children not only applies to children in specifically defined adverse circumstances such as maltreatment (e.g., Shields and Cicchetti 1998; Shipman et al. 2007) but also holds when considering family risk as a composite factor, including economic disadvantage, violence and distress in the family. The moderate effect size of the association between family risk and children's emotion regulation is in line with the view that many children are resilient and do well despite adverse circumstances (McCoy and Raver 2011). On the other hand, a moderate effect size also suggests that screening for cumulative family risk can help us target interventions to groups of children more vulnerable to emotion dysregulation than others (cf. Katz et al. 2012).

The core questions of our study involved the association between maternal emotion coaching and child emotion regulation on the one hand and the mediational role of maternal emotion regulation between adverse family conditions and children's emotion regulation on the other. If found related, immediate interventions to improve maternal emotion coaching would provide an opportunity to improve children's functioning where interventions to enhance children's circumstances (i.e. lower family risk) may well be a long-term endeavor. Our

study indeed showed the existence of the relation between maternal emotion coaching and child emotion regulation—in line with prior research on parent–child reminiscing (e.g., Laible 2004)—as well as the partial mediation. These findings will need to be further confirmed by prospective studies but initial support for the idea that maternal emotion coaching can be improved by training has already be established. Recently, a parenting skills training has been trialed in Australia. The Tuning in to Kids (TIK) parenting program teaches parents emotion socialization practices and has been found to strengthen parents' emotion coaching and decrease child behavior problems (Havighurst et al. 2010).

With regard to the specific characteristics of maternal emotion coaching behaviors, our results differ from those obtained by Lunkenheimer et al. (2007) in a sample of 8–11 year olds. Because the amount of dismissive behavior was too small in our study to be included, we only analyzed the *presence* of emotion coaching behaviors and found a favorable effect. However, Lunkenheimer et al. had observed that the *absence* of dismissive behavior was the driving force, with a buffering effect of emotion coaching if both happened to take place in a family. We may have come across a developmental difference, where for younger children benefit more from the presence of coaching and older children more from the absence of dismissing. It is also possible that our samples differed in other, unknown aspects. In further, larger, studies we will need to identify the elements of emotion coaching that drive the positive effects.

When considering the two separate elements of the outcome, children's emotion regulation, our study showed surprising results. Although family risk was related to both emotional lability and adaptive regulation, maternal emotion coaching was associated with children's emotional lability only, not with their adaptive regulation. These findings contrast with those of Shipman et al. (2007) who found that maternal emotion socialization mediated the association between maltreatment status and adaptive emotion regulation (but not lability) among children aged six to twelve. The different result could be an indicator that maternal emotion coaching functions uniquely at progressive developmental stages. In the preschool years mothers may be more focused on helping children manage intense feelings and inappropriate outbursts, rather than building skills to appropriately express and understand emotions. However, this would diverge from the earlier findings that mothers' style during parent–child conversations (e.g., amount of elaboration) is stable over time (Fivush 2007). It is also possible that adaptive regulation develops later, and as such the effect of maternal emotion coaching on adaptive regulation will not become evident until those skills generally come on line (Dunsmore et al. 2012).

The role of parental emotion coaching deserves more attention in research and, subsequently, clinical practice. In particular, observational research could shed further light on which particular emotion coaching behaviors in what contexts foster children's well-being (cf. Lagattuta and Wellman 2002). Recent years have brought innovative methods for naturalistic observations, for example with small recording devices that sample interactions during the day (Mehl et al. 2012). Also, observational methods would allow us to examine the importance of emotion coaching relative to other parental behavior such as modeling and general parenting style (cf. the tripartite model by Morris et al. 2007). Longitudinal studies examining emotion coaching and regulation across the span of childhood will be important

to further elucidating the way in which specific aspects of parental emotion coaching may affect specific aspects of emotion regulation during different developmental periods. Finally, we refer to *parental* emotion coaching here while our study focused on *maternal* behaviors. Future research will need to involve fathers as well: there is growing evidence that fathers contribute in unique ways to children's emotional development (Katz et al. 2012) and may differ from mothers in their approach to emotion coaching. In order to further develop recommendations and interventions for parents, it will be necessary to have this more in-depth understanding of parental emotion coaching.

Acknowledgments

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Table 1

Descriptive statistics of narratives and questionnaires (N=74)

	Mean	SD	Range
Narratives			
Length of narratives (seconds)	216.0	84.00	59–614
Number of maternal utterances	27.2	10.99	7–65
Emotion coaching utterances	5.9	4.05	0–18
Related to positive themes	1.0	1.61	0–8
Related to negative themes	4.9	3.58	0–18
Questionnaires[a]			
Family stress (FEC)	1.5	.32	1.0–2.3
Child emotion regulation (ERC)[b]	3.2	.33	2.3–3.9
Child adaptive regulation	3.1	.45	2.1–4.0
Child emotional lability	1.6	.35	1.0–2.6
Family expressiveness (FEQ)	5.9	.76	3.3–7.7

[a] Means per item. Questionnaires had 4-point Likert scales (1–4), except family expressiveness (1–9)

[b] For the child emotion regulation total score, the emotional lability subscore was reversed

Table 2

Correlations between main study variables (*N*=74)

	1	2	3	4	5	6	7
1. Family risk							
2. Maternal emotion coaching	−.27*						
3. Child emotion regulation (total)	−.30**	.26*					
4. Child adaptive regulation (sub)	−.30**	.13	.84**				
5. Child emotional lability (sub)	.23*	−.30**	−.88**	−.51**			
6. Family expressiveness	−.02	.24*	−.25*	−.14	.26*		
7. Child age	.10	.06	.11	.22	−.06	−.17	
8. Child gender[a]	.14	.04	−.06	−.02	.07	.02	.08

*
p .05

**
p .01

[a]Point bi-serial correlation (0 = girl, 1 = boy)

Table 3

Hierarchical linear regression analyses with child emotion regulation as outcome

	B	SE	p	β	F value	p	R²	R²
(A) *Regression of maternal emotion coaching on family risk*								
Step 1								
Constant	−.04	.131	.74		4.45	.04	.06	
Family expressiveness	<.01	.001	.04	.24				
Step 2								
Constant	−.04	.126	.76		5.33	.01	.13[a]	.07
Family expressiveness	<.01	.001	.04	.24				
Family risk	−.06	.025	.02	−.27				
(B) *Regression of child emotion regulation on family risk*								
Step 1								
Constant	3.88	.292	<.01		4.92	.03	.06	
Family expressiveness	−.003	.001	.03	−.25				
Step 2								
Constant	3.89	.279	<.01		6.60	<.01	.16[b]	.09
Family expressiveness	−.003	.001	.02	−.26				
Family risk	−.15	.055	.01	−.31				
(C) *Regression of child emotion regulation on risk and maternal emotion coaching*								
Step 1								
Constant	3.88	.292	<.01		4.92	.03	.06	
Family expressiveness	−.003	.001	.03	−.25				
Step 2								
Constant	3.92	.270	<.01		6.62	<.01	.22[c]	.16
Family expressiveness	−.003	.001	<.01	−.32				
Family risk	−.12	.055	.04	−.23				
Maternal emotion coaching	.61	.253	.02	.27				

[a] Adjusted R^2 for (A) in step 2 = .11

[b] Adjusted R^2 for (B) in step 2 = .13

[c]Adjusted R^2 for (C) in step 2 = .19

Table 4

Hierarchical linear regression analyses for child adaptive regulation (subscale)

	B	SE	*p*	β	F value	*p*	R²	R²
(A) Regression of maternal emotion coaching on family risk: see Table 3								
(B) Regression of child adaptive regulation on family risk								
Step 1								
Constant	3.62	.411	<.01		1.40	.24	.02	
Family expressiveness	−.002	.002	.24	−.14				
Step 2								
Constant	3.63	.395	<.01		4.33	.02	.11[a]	.09
Family expressiveness	−.002	.002	.21	−.14				
Family risk	−.21	.078	.01	−.30				
(C) Regression of child adaptive regulation on family risk and maternal emotion coaching								
Step 1								
Constant	3.62	.411	<.01		1.40	.24	.02	
Family expressiveness	−.002	.002	.24	−.14				
Step 2								
Constant	3.64	.396	<.01		3.07	.03	.12[b]	.10
Family expressiveness	−.002	.002	.16	−.17				
Family risk	−.19	.081	.02	−.27				
Maternal emotion coaching	.29	.372	.44	.09				

[a] Adjusted R² for (B) in step 2 = .08

[b] Adjusted R² for (C) in step 2 = .08

Table 5

Hierarchical linear regression analyses for child emotional lability (subscale)

	B	SE	p	β	F value	p	R²	R²	R²
(A) Regression of maternal emotion coaching on family risk: see Table 3									
(B) Regression of child emotional lability on family risk									
Step 1									
Constant	.87	.312	<.01		5.05	.03	.07		
Family expressiveness	<.01	.001	.03	.26					
Step 2									
Constant	.87	.305	<.01		4.87	.01	.12[a]	.06	
Family expressiveness	<.01	.001	.02	.26					
Family risk	.13	.06	.04	.24					
(C) Regression of child emotional lability on family risk and maternal emotion coaching									
Step 1									
Constant	.87	.312	<.01		5.05	.03	.07		
Family expressiveness	<.01	.001	.03	.26					
Step 2									
Constant	.83	.289	<.01		6.68	<.01	.22[b]	.16	
Family expressiveness	<.01	.001	<.01	.34					
Family risk	.08	.059	.2	.14					
Maternal emotion coaching	−.82	.27	<.01	−.34					

[a] Adjusted R² for (B) in step 2 = .10

[b] Adjusted R² for (C) in step 2 = .19