

Maternal responses to negative emotions and child externalizing behavior: Different relations for 5-, 6-, and 7-year-olds

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Funding information

Jerry M. Lewis, M.D. Mental Health Research Foundation

Abstract

Emotional and behavioral maturity expectations increase as children transition to primary school; thus, maternal responses that support and encourage children's expression of negative emotion may not benefit school-age children as much as preschoolers. The current study explored a change in the utility of these maternal responses among 187 families (62 5-year-olds, 75 6-year-olds, and 50 7-year-olds). Mothers reported on their responses to children's negative emotions and children's externalizing and internalizing behaviors at two time points over 1 year. Multiple group analysis within cross-lagged path models revealed a positive association between non-supportive maternal responses and later child externalizing behaviors among 5-year-olds. However, non-supportive responses were related to decreases in externalizing behaviors among the 7-year-olds. Discrepant findings between the 5- and 7-year-olds may represent a developmental shift in the function of mothers' emotion socialization practices.

KEYWORDS

behavior problems, emotion, middle childhood, mother-child relations, socialization

1 | INTRODUCTION

Parental responses to children's anger, sadness, and fear are powerful methods of emotion socialization that convey to children whether their negative emotional displays are appropriate. Sanctions that restrict emotional expression teach children to hide their negative emotions and are thought to result in feelings of anxiety and dysregulated emotional arousal in subsequent emotionally evocative situations (Buck, 1984; Eisenberg, Fabes, & Murphy, 1996). Parental responses that discourage children's displays of distress through punishment or minimizing the emotional experience have been considered unsupportive and have been associated with more social problems and aggression in children (Eisenberg, Fabes, Carlo, & Karbon, 1992; Eisenberg et al., 1999). Alternatively, parents may provide supportive responses to children during times of distress that convey acceptance of children's emotions and provide assistance in

coping with the emotion and managing the problem at hand. These supportive parental responses have been associated with better emotion regulation in children and less anger in social situations (Eisenberg & Fabes, 1994; Gottman, Katz, & Hooven, 1997). The absence of unsupportive responses to children's negative emotions does not require the presence of supportive responses; thus, these have been considered separate dimensions with past research showing moderate negative associations (e.g., Spinrad et al., 2007) to no significant relation between the responses (e.g., McElwain, Halberstadt, & Volling, 2007).

Emotion socialization research has predominantly focused on preschool-age children, a developmental period characterized by emerging emotional competence. Children of this age are learning how to understand their own emotions, regulate negative feelings, and appropriately express themselves (Saarni, 1999). These tasks are challenging for young children and there are large individual differences in these emergent skills; thus, children rely heavily on caregivers to navigate their emotional worlds (Eisenberg, Cumberland, & Spinrad, 1998). When parents coach children through negative emotional experiences, they facilitate the development of adaptive coping skills that children rely upon in various social arenas. For instance, helping a child better understand the causes underlying her angry feelings and assisting her in resolving the problem causing those emotions may provide skills she can use the next time she feels angry when playing with a peer, thus decreasing her arousal and likelihood of resorting to aggression.

1.1 | Developmental changes

As children age, emotional competence improves and their reliance on parents to understand emotional situations declines (Saarni, 1999). According to Parent Development Theory, parents respond to their children's individual developmental advancements by altering perceptions of their parenting role and their parenting behaviors accordingly (Mowder, 2005). Parents' cognitions concerning the timing of competencies within children's social-emotional development create maturity expectations that affect parents' behavior and specific caregiving practices (Goodnow & Collins, 1990; Mansbach & Greenbaum, 1999; Sigel, McGillicuddy-DeLisi, & Goodnow, 1992). Parents' meta-emotion philosophy has been shown to change from ages 5 to 9 with decreases in their acceptance of children's negative emotions (Stettler & Katz, 2014). In the context of emotion socialization, parents may hold beliefs about the age at which their child should be able to manage distress independently, causing them to react in a less sensitive manner if the child continues to express negative emotions and has trouble regulating herself after this age. For example, Eisenberg et al. (1999) found that mothers appeared to shift expectations for their children's ability to regulate emotions at the start of elementary school, suggesting this may be a time when parents' maturity demands for children tend to increase.

In accordance with these ideas, emerging evidence suggests that parents' emotion socialization practices operate differently among children in middle childhood compared to preschoolers. One study found that mothers' emotion-focused responses (i.e., comforting), which are typically considered supportive practices among preschoolers, were not helpful among highly emotionally reactive 6- to 10-year-old children (Jones, Eisenberg, Fabes, & MacKinnon, 2002). The authors suggest that this seemingly supportive practice may prevent reactive children from learning to reduce arousal independently, a skill that is particularly critical for children of this age and with this temperamental characteristic. Other research has shown that parents of 8- to 11-year-olds who hold certain beliefs regarding parental guidance of children's emotional development—that it is the parent's job to teach the child about emotions and that children are not capable of this on their own—tend to have children with poorer emotion recognition skills (Castro, Halberstadt, Lozada, & Craig, 2015; Dunsmore, Her, Halberstadt, & Perez-Rivera, 2009). Whether these guidance-heavy beliefs inhibit school-age children's social-emotional development or represent a reaction to individual differences in children's independent skills remains an open question for longitudinal investigations.

Inconsistencies in the utility of supportive parental responses to children's emotions among preschool and middle childhood samples point to changes in parenting practices over time. However, developmental literature lacks empirical investigations comparing associations of emotion socialization practices with later child outcomes in various age groups from preschool to middle childhood. The current study addresses this gap by exploring differences in associations between mothers' responses to children's negative emotions and child externalizing and internalizing behavior 1 year later among 5-year-olds, 6-year-olds, and 7-year-olds.

1.2 | Child behavior problems

One important dimension of effective parenting is the expectation that children will perform to their potential (Baumrind, 1971). The start of elementary school comes with new behavioral expectations, including the ability to manage frustration and disappointment independently. Failure to manage distress, control behavior, and follow directions has serious implications for school-age children's success. Externalizing behavior problems, including aggression, impulsivity, and non-compliance, is the most frequently cited concern in educational settings (Cormier, 2008). These problems are common among kindergarteners (McClelland, Morrison, & Holmes, 2000), and are associated with concurrent and subsequent academic and social difficulties (Bulotsky-Shearer & Fantuzzo, 2011; Keane & Calkins, 2004). The inability to regulate emotions is one of the biggest contributors to children's externalizing behaviors (Hill, Degnan, Calkins, & Keane, 2006; Keenan & Shaw, 2003). Internalizing behavior problems in childhood, such as depression and anxiety, pose a significant public health problem, even subclinical levels. Studies have shown that internalizing symptoms in early childhood increase the likelihood of symptoms in kindergarten and elementary school, are related to later academic difficulties, and put children at risk for psychopathology in adulthood (Mian, Wainwright, Briggs-Gowan, & Carter, 2011; Wood, 2007).

As children get older, less supportive parental responses to children's negative emotions may communicate parents' expectations for greater emotion regulation. Additionally, parent demands that mirror schools' expectations for children create more consistency across contexts. Intervention research evaluating programs designed to address children's emotional and behavioral problems has demonstrated that partnerships between parents and teachers emphasizing consistency between home and school were effective in improving cooperation and self-control among early school-age children over a 2-year period (Kay, Fitzgerald, & McConaughy, 2002).

Individual differences in children's behavior problems also affect parents' responses (Bell, 1968; Shaw & Bell, 1993). Aggressive and non-compliant behavior in children makes it more difficult for parents to care for them and tends to elicit more negative reactions from parents (Belsky, 1984; Dix, 1991). Empirical studies have frequently documented reciprocal associations between parenting and child externalizing behaviors. Child externalizing behaviors have been shown to increase negative parenting responses and negative parenting responses have been shown to increase child externalizing problems in a bidirectional manner among 2- to 4-year-old preschoolers (Smith, Calkins, Keane, Anastopoulos, & Shelton, 2004), across the transition to elementary school among 3- to 6-year-olds (Combs-Ronto, Olson, Lunkenheimer, & Sameroff, 2009), and among school-age children 6–9 years old (Pearl, French, Dumas, Moreland, & Prinz, 2014). Relations between negative parenting responses and child internalizing symptoms have also been demonstrated. Greater maternal negative affectivity (Fang & Gagne, 2018), and less autonomy support (Lunkenheimer, Ram, Skowron, Peifeng, & Yin, 2017) and sensitivity (Kok et al., 2013) have been associated with more internalizing symptoms among preschoolers. However, these effects tend to be small (McLeod, Weisz, & Wood, 2007), are not consistent across studies (Kopala-Sibley et al., 2017), and provide little support for child effects (Hipwell et al., 2008). In models specific to parents' emotion socialization practices, Eisenberg and colleagues (1999) demonstrated that 6- to 8-year-old children's externalizing behaviors were associated with greater non-supportive parental responses to children's negative emotions 2 years later. However, Newland and Crnic (2011) identified stronger support for parent-driven effects than child-driven effects in their longitudinal study of mothers' child-directed negative affective expressions and 5-year-olds' anger displays. By examining relations between child behavior problems and later maternal responses to negative emotions, and links between maternal responses and later child behavior problems, we can delineate the direction of effects.

1.3 | The current study

To attempt to clarify mixed findings regarding bidirectional effects specific to parent emotion socialization and children's behavior problems and elucidate inconsistencies in the adaptive utility of supportive parental practices between late preschoolers and early school-age children, the current study investigates these processes over time among a

group of 5-year-olds, a group of 6-year-olds, and a group of 7-year-olds. We examine reciprocal effects in our 2-year study by modeling stability in mother and child behavior with bidirectional relations over time.

Overall, we expect supportive maternal responses, specifically problem-focused and emotion-focused responses, to provide fewer ameliorative benefits for later behavior problems among the older children compared to the younger children. Similarly, we expect non-supportive maternal responses, specifically punitive and minimizing responses, to produce fewer detrimental consequences for later behavior problems for the older children vs. the younger children. We also expect that children's behavior problems will be associated with fewer supportive maternal responses and greater non-supportive responses over time, and we predict that these associations will be stronger among older children for whom an inability to control distress is less likely to be tolerated. Although we are testing models for both externalizing and internalizing behaviors, we anticipate associations are more likely to emerge between maternal responses and child externalizing behavior compared to internalizing based on past research.

2 | METHOD

2.1 | Sample

The majority of recruitment consisted of letters sent home with kindergarten and first grade children attending public schools in a large metropolitan area in the Southwestern United States. At the first time point, 187 mothers and their 5- to 7-year old children ($M = 6.43$ years, $SD = .75$ years) participated in the study; 62 children were 5 years old ($M = 5.62$, $SD = .28$), 75 were 6 years old ($M = 6.43$, $SD = .29$), and 50 were 7 years old ($M = 7.43$, $SD = .27$). Participating children were evenly split by gender (50% female), and were ethnically diverse; 56% of children were European American, 15% were African American, 8% were Hispanic, and 21% were of mixed or other ethnicities. The sample was also economically diverse; 36% of families were considered low-income (income-to-needs ratios < 2), 52% middle-income (income-to-needs ratios 2–5), and 12% high-income (income-to-needs ratios > 5). Mothers in the current sample were highly educated; 92% had attended at least some college, and 63% had at least a 4-year college degree.

Eighty-seven percent ($N = 163$) of mothers who participated in the first wave of data collection completed electronic follow-up surveys at Year 2. On average, mothers who reported at Year 2 did so 1.01 years after Year 1 ($SD = .07$), at which point 43 children were 6 years old ($M = 6.64$ years, $SD = .26$ years), 63 were 7 years old ($M = 7.44$ years, $SD = .28$ years), 49 were 8 years old ($M = 8.41$ years, $SD = .25$ years), and eight children were 9 years old ($M = 9.23$ years, $SD = .26$ years). The time interval between the Years 1 and 2 assessments was not significantly associated with child age, $r = .088$, $p = .278$. There were no significant differences in families who participated at Year 2 vs. those lost to attrition on maternal supportive and non-supportive responses at Year 1, $t(184) = -.617$, $.322$, $ps = .538$, $.748$, child externalizing, $t(184) = .199$, $p = .842$, and internalizing behavior, $t(184) = .676$, $p = .500$, family income-to-needs ratio, $t(183) = 1.696$, $p = .092$, child age at Year 1, $t(158) = .545$, $p = .099$, child gender, $\chi^2(1) = .006$, $p = .938$, or child ethnicity, $\chi^2(5) = 5.408$, $p = .638$. Additionally, although the environment and method in which mothers completed questionnaires differed (laboratory pen-and-paper at Year 1, online at home at Year 2), there were no significant differences in bivariate associations between study variables at Year 1 compared to associations between study variables at Year 2 according to Fisher's r -to- z transformations.

2.2 | Procedure

As part of a larger project examining mother-child conflict resolution, mothers and children participated in a 1-hr laboratory visit. Firstly, research assistants discussed written and verbal details of study procedures with mothers and children separately, and mothers provided consent and children provided assent. The current analyses focus on mother-reported survey measures completed during this laboratory visit, including demographic information along with questionnaires about their behavior and their child's behavior. One year after the laboratory visit, mothers were sent online surveys using Qualtrics survey software, including the same parent and child behavior questionnaires completed at the Year 1 laboratory visit.

2.3 | Measures

2.3.1 | Maternal response to children's negative emotions

The coping with children's negative emotions scale (CCNES; Fabes, Eisenberg, & Bernzweig, 1990) contains 12 hypothetical scenarios describing a child's negative emotional reactions to various situations (e.g., *If my child falls off his/her bike and breaks it, and then gets upset and cries*). At the Year 1 laboratory visit and in the Year 2 online questionnaire, mothers were asked to select the likelihood that they would respond in each of six ways for each of the 12 scenarios (1 = *very unlikely*, 7 = *very likely*). Response subscales include expressive encouragement (e.g., *I would tell him/her that it is okay to cry when you feel unhappy*), emotion-focused (e.g., *I would soothe my child and do something fun with him/her to make him/her feel better*), problem-focused (e.g., *I would help my child think of something to do [to solve the problem]*), punitive (e.g., *I would tell my child to calm down immediately or there will be consequences*), minimizing (e.g., *I would tell my child that he/she is being a baby about it*), and distress (e.g., *I would become angry and irritated with my child*). The problem-focused and emotion-focused subscales were averaged to create a supportive responses composite. As done in previous research (McElwain et al., 2007; Wong, McElwain, & Halberstadt, 2009), we focused on these two subscales due to their conceptual similarity in facilitating coping. The punitive and minimizing subscales were averaged to create a non-supportive responses composite. These subscales were also combined for conceptual reasons in that they measure overt responses directed toward the child whereas the distress subscale assesses parents' emotional reactions that may not necessarily be expressed to the child. Reliability was high at Years 1 and 2 for the supportive ($\alpha_s = .83, .87$) and non-supportive scales ($\alpha_s = .85, .88$).

2.3.2 | Child behavior problems

The child behavior checklist (CBCL; Achenbach, 1991) contains 120 items describing various child behaviors. At the Year 1 laboratory visit and the Year 2 online questionnaire, mothers were asked to report on how well each behavior described their child currently or within the last 6 months on a 3-point scale (0 = *not true*, 1 = *somewhat or sometimes true*, 2 = *very true or often true*). Internalizing and externalizing behavior problems were scored at Year 1, $\alpha_{\text{internalizing}} = .84$, $\alpha_{\text{externalizing}} = .88$, and Year 2, $\alpha_{\text{internalizing}} = .85$, $\alpha_{\text{externalizing}} = .86$. The raw externalizing behavior score—a sum of 33 items describing aggressive and delinquent behaviors—along with the raw internalizing behavior score—a sum of 32 items measuring behavioral tendencies indicative of anxiety, depression, and withdrawal—were used in the current analyses. Raw scores were used rather than age- and sex-normed standardized scores in order to evaluate change from Years 1 to 2.

2.3.3 | Covariates

Mothers reported on demographic covariate information at the Year 1 laboratory visit, including child gender and family income. Due to the tendency for comorbidities in internalizing and externalizing behaviors in children, the internalizing behavior subscale of the CBCL (Achenbach, 1991) was included as a covariate in the externalizing behavior outcome model, and the externalizing subscale was included as a covariate in the internalizing behavior outcome model.

3 | RESULTS

3.1 | Analysis plan

We used path analysis with child age as a grouping variable in Mplus v7.11 (Muthén & Muthén, 1998–2012) with full information maximum likelihood estimation to construct two separate cross-lagged models testing whether maternal supportive and non-supportive responses at Year 1 predicted child behavior problems at Year 2, with the first model predicting externalizing behaviors and the second model predicting internalizing behaviors. By including autoregressive paths from Year 1 maternal supportive and non-supportive responses to Year 2 supportive and non-supportive responses, and from Year 1 child behavior problems to Year 2 child behavior problems, cross-lagged models accounted

for the stability of these parent and child behaviors over time. Grouping by child age allowed us to evaluate the magnitude and significance of standardized path estimates separately for 5-, 6-, and 7-year-olds.

Each model included demographic covariates, including child gender and family income-to-needs ratio, which were allowed to correlate with study variables at both time points. In the externalizing behavior outcome model, internalizing behaviors were correlated with study variables at both time points, and in the internalizing behavior outcome model, externalizing behaviors were correlated with study variables at both time points. To account for interdependence among mothers and children, children's behavior problems were correlated with mothers' supportive and non-supportive responses at each time point. Mother supportive and non-supportive responses were also correlated with one another to account for behavioral consistencies within mothers. We evaluated model fit using the chi-square (χ^2) statistic, the root mean square error of approximation with confidence interval (RMSEA, CI), and the comparative fit and Tucker–Lewis indices (CFI, TLI). Close model fit is indicated by non-significant χ^2 values, RMSEAs below .05, and CFI and TLI values above .95 (Bentler, 1990; Brown & Cudek, 1993; Hu & Bentler, 1999).

To determine whether path estimates were significantly different for 5-, 6-, and 7-year-olds, we used chi-square difference (χ^2_D) tests to compare the fit of models constraining regression paths to be equal across age groups to various models that freely estimate specific cross-lagged paths of interest for each age group. In these analyses, the baseline model with regression path estimates constrained to be equal across age groups assumes that there are no significant differences in any of the estimated autoregressive or cross-lagged paths based on child age. We compared the χ^2 model fit index of this baseline model to a series of nested models, each removing the constraint on one specific path and allowing that path to freely vary for a given age group. If freeing paths for specific age groups did not result in significant decreases in the χ^2 model fit index, we concluded that freeing these paths did not result in improvements in model fit, indicating that there were no significant differences by age group in the associations specified by the tested path.

3.2 | Preliminary analyses

Means, standard deviations, and correlations among study variables by child age group can be seen in Tables 1 and 2. Correlations revealed that both maternal supportive and non-supportive responses to children's negative emotions, along with child externalizing and internalizing behaviors, demonstrated moderate to high rank order stability from Years 1 to 2 for all child age groups. Indeed, paired-samples *t* tests determined that base rates of maternal supportive and non-supportive responses did not significantly change from Years 1 to 2 for any child age group, $t(43-65) = -1.91-1.90$, $p_s = .063-.848$. However, base rates of children's externalizing behaviors declined from Years 1 to 2 for 5-year-olds, $t(49) = 2.59$, $p = .013$, 6-year-olds, $t(65) = 4.09$, $p < .01$, and 7-year-olds, $t(43) = 3.20$, $p < .01$. Internalizing behaviors, on the other hand, were not significantly different from Years 1 to 2 for 5-year-olds, $t(48) = 1.27$, $p = .210$, and 7-year-olds, $t(43) = 1.44$, $p = .157$, but increased from Years 1 to 2 for 6-year-olds, $t(64) = 3.02$, $p < .01$. Interestingly, maternal supportive and non-supportive responses were not correlated for any age group at either of the two time points.

3.3 | Age differences in relations between maternal responses and externalizing behaviors

The externalizing behavior model (shown in Figure 1) provided excellent fit to the data, $\chi^2(15) = 15.04$, $p = .449$, RMSEA = .000 (90% CI = .000–.121), CFI = 1.000, TLI = .999, as did the internalizing behavior model, $\chi^2(15) = 17.37$, $p = .298$, RMSEA = .051 (90% CI = .000–.135), CFI = .993, TLI = .952. In both models, mother and child behaviors demonstrated stability over time with significant autoregressive paths between Years 1 and 2 reports among all age groups. Among 5-year-olds, more maternal non-supportive responses to negative emotions at Year 1 predicted higher levels of child externalizing behaviors at Year 2, $\beta = .269$, $p = .023$, controlling for externalizing problems at Year 1. There were no significant associations between maternal responses and child behaviors among the 6-year-olds. Among the 7-year-olds, more non-supportive responses to negative emotions at Year 1 were related to fewer child externalizing problems at Year 2, $\beta = -.187$, $p = .017$, controlling for initial externalizing problems. Maternal supportive

TABLE 1 Correlations among study variables by child age group

	2.	3.	4.	5.	6.	7.	8.
<u>5-year-olds</u>							
Year 1							
1. Maternal supportive responses	.03	-.10	.11	.67**	.04	-.07	.06
2. Maternal non-supportive responses	-	.21	.02	-.13	.78**	.32*	.16
3. Child externalizing behaviors		-	.45**	-.01	.30*	.51**	.21
4. Child internalizing behaviors			-	.09	.06	.19	.64**
Year 2							
5. Maternal supportive responses				-	-.16	.08	.25
6. Maternal non-supportive responses					-	.27	.05
7. Child externalizing behaviors						-	.46**
8. Child internalizing behaviors							-
<u>6-year-olds</u>							
Year 1							
1. Maternal supportive responses	.12	.02	.00	.51**	.02	-.14	.04
2. Maternal non-supportive responses	-	.25*	.50**	.05	.67**	.18	.41**
3. Child externalizing behaviors		-	.36**	.07	.17	.73**	.38**
4. Child internalizing behaviors			-	.06	.48**	.27*	.78**
Year 2							
5. Maternal supportive responses				-	.00	-.08	.00
6. Maternal non-supportive responses					-	.22	.43**
7. Child externalizing behaviors						-	.49**
8. Child internalizing behaviors							-
<u>7-year-olds</u>							
Year 1							
1. Maternal supportive responses	-.04	.09	-.16	.32*	-.20	.08	-.09
2. Maternal non-supportive responses	-	.19	.26	.04	.76**	-.05	.10
3. Child externalizing behaviors		-	.44**	-.02	.15	.86**	.55**
4. Child internalizing behaviors			-	-.07	.18	.58**	.66**
Year 2							
5. Maternal supportive responses				-	-.12	-.08	-.05
6. Maternal non-supportive responses					-	.05	.11
7. Child externalizing behaviors						-	.67**
8. Child internalizing behaviors							-

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

TABLE 2 Descriptive statistics for study variables by child age group

	5-year-olds M (SD)	6-year-olds M (SD)	7-year-olds M (SD)
Year 1			
Maternal supportive responses	11.45 (1.43)	11.60 (1.29)	11.56 (.94)
Maternal non-supportive responses	2.52 (.76)	2.41 (.75)	2.39 (.68)
Child externalizing behavior	11.69 (7.51)	9.72 (6.46)	9.76 (8.04)
Child internalizing behavior	6.44 (5.19)	6.91 (6.14)	6.78 (5.98)
Year 2			
Maternal supportive responses	11.26 (1.54)	11.28 (1.35)	11.64 (1.41)
Maternal non-supportive responses	2.41 (.88)	2.40 (.77)	2.60 (.78)
Child externalizing behavior	8.62 (6.21)	7.86 (5.71)	8.34 (6.97)
Child internalizing behavior	5.02 (5.73)	5.80 (5.63)	5.81 (6.19)

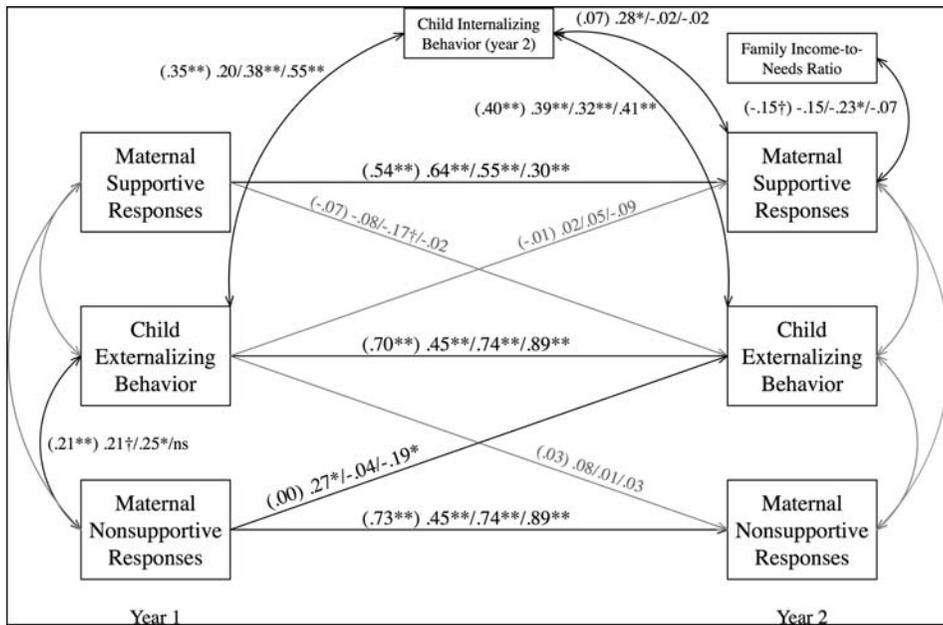


FIGURE 1 Longitudinal path model examining cross-lagged effects between maternal responses to children's negative emotions and child externalizing behaviors. The model controls for child gender, family income-to-needs ratio, and child internalizing behaviors (only significant paths shown). Child gender not depicted due to correlations only reaching trend levels with Year 1 supportive responses ($r = -.22, p = .075$) and Year 2 externalizing behaviors ($r = .22, p = .069$) for 5-year-olds. Gray lines indicate non-significant paths. Black lines indicate significance in at least one of the three age groups. The coefficient in parentheses corresponds to the overall model without grouping children by age, and the following coefficients correspond to the 5-year-old, 6-year-old, and 7-year-old models, respectively. † $p < .10$, * $p < .05$. ** $p < .01$

responses at Year 1 were unrelated to child externalizing behavior problems at Year 2 in both models for all child age groups, and child externalizing problems at Year 1 were unrelated to changes in mothers' supportive or non-supportive responses for all age groups. In the internalizing model, none of the paths from Year 1 maternal responses to Year 2 internalizing problems or from Year 1 internalizing problems to Year 2 maternal responses were significant.

We freed one path of interest at a time and used χ^2 difference tests to compare model fit of each freed model to the model with all regression paths constrained across groups to determine whether differences in path estimates were statistically significant across groups. We only tested differences between paths that were found to be different in direction or significance for children in different age groups. Age differences in path estimates from Year 1 non-supportive responses to Year 2 externalizing behavior were significant for 5-year-olds vs. 6- and 7-year-olds, $\chi^2_D(1) = 4.16, p < .05$, and for 7-year-olds vs. 5- and 6-year-olds, $\chi^2_D(1) = 4.46, p < .05$.

4 | DISCUSSION

The current study investigated associations between maternal emotion socialization practices and child externalizing and internalizing behaviors over 1 year for three different child age groups: 5-year-olds, 6-year-olds, and 7-year-olds. We aimed to address the paucity of knowledge on the utility of supportive maternal responses to children's negative emotions as children get older and are expected to regulate themselves more independently. Evidence suggests that while comforting and guiding children through their negative emotional experiences provides social-emotional benefits for preschool-age children (Eisenberg & Fabes, 1994; Fabes, Leonard, Kupanoff, & Martin, 2001; Gottman et al., 1997), the same practices may be unhelpful, or even detrimental, for school-age children (Castro et al., 2015; Dunsmore et al., 2009; Jones et al., 2002). Parents' maturity expectations increase as children move through early elementary school

(Eisenberg et al., 1999), and parental reactions to children's negative emotions that reflect these stricter expectations may encourage children's self-regulation.

Consistent with this emerging evidence, our findings showed different associations between non-supportive maternal responses to children's negative emotions and changes in children's externalizing problems for 5-, 6-, and 7-year-olds. Non-supportive responses, which discourage the display of distress, were related to increases in externalizing behaviors among the 5-year-olds, were unrelated among the 6-year-olds, and were associated with *decreases* in externalizing behaviors among the 7-year-olds. These findings may demonstrate a reversal in the function of these emotion discouraging maternal responses for younger vs. older children. When parents dismiss or punish young children's displays of distress, this likely further increases arousal for children who are not yet able to regulate and cope with frustration on their own, undermining the socialization of adaptive coping responses. However, because older children are better able to regulate and cope with distress independently, less parent intervention provides more opportunity for children to continue to hone these skills. In other words, the same parental response to negative emotional displays increases arousal in negative situations among younger children, but fosters greater coping efficiency among older children. This may explain why similar maternal socialization behaviors result in increases vs. decreases in child externalizing behaviors depending on the child's age. It is important to note that in this example and in this study, we have used child age as a proxy for emotional development. Future work should examine whether mothers' emotion socialization strategies differentially influence children's behaviors over time based on individual differences in children's regulatory skills.

We hesitate to state that minimizing children's emotions and punishing them for expressing distress is a positive parenting strategy even for older children. Dismissing children's emotions is not recommended regardless of the child's age (Gottman et al., 1997). However, non-supportive parental responses as they are measured here can be communicated in different ways and send different messages to children depending on the context (e.g., child age and competence, emotional tone, history of child distress in similar situations). For example, items in the CCNES representing minimizing responses include telling the child it is not a big deal to miss a party because you are sick or that he should not get so upset after shouting and stomping around during an argument with a friend. Items representing punitive responses include sending the child to his room to cool off when becoming angry over something he cannot control or telling him that he needs to be more careful after losing a prized toy. For older children, these messages likely convey an encouragement to cope with the experience independently as opposed to being dismissive and insensitive to the child's needs. Future research should further differentiate developmentally appropriate responses from those that dismiss the child's feelings, as well as examine how the same message can be interpreted differently by the parent and child depending on the context and tone.

Models predicting internalizing symptoms showed no significant associations with maternal responses. This is contrary to Eisenberg et al.'s (1998) model of emotion socialization that suggests non-supportive parental responses to child negative emotions can induce anxiety, suppressed negative affect, and heightened physiological arousal in children. However, other empirical studies have also failed to find associations between maternal responses and children's internalizing behaviors (e.g., Kopala-Sibley et al., 2017), resulting in a mixed literature. Future work that examines more specific child symptoms, older children, or maternal responses to sadness specifically (which was not possible to do reliably in our study using the CCNES) may produce different results. Additionally, mothers' supportive responses to children's negative emotions, which provide comfort and active problem-solving assistance, were not as consequential for changes in children's behavior problems as mothers' non-supportive responses in the current study. Supportive and non-supportive parental responses are distinct behaviors on separate dimensions, as reflected in our primarily non-significant associations between the two types of responses, which is consistent with past research (McElwain et al., 2007). Eisenberg and Fabes (1994) found that mothers' supportive responses were related to children's attentional control and constructive verbalization during frustration whereas mothers' non-supportive responses were related to children's negative affect and emotional intensity in their study of 4- and 6-year-olds. Thus, it is possible that supportive maternal responses are more strongly related to increases in positive child behaviors, such as social skills or empathy, than reductions in negative child behaviors like behavior problems.

In addition to children responding to parenting practices, parents are also responsive to their children's characteristics and behaviors. Child externalizing behaviors have been shown to increase general negative parenting responses in studies with 5- to 7-year-olds (Combs-Ronto et al., 2009; Pearl et al., 2014), as well as mothers' non-supportive responses to children's negative emotions specifically (Eisenberg et al., 1999). Although we expected to find bidirectional effects, child behavior problems at Year 1 were not related to maternal supportive or non-supportive responses at Year 2 in any age group in the current study. Instead, like Newland and Crnic (2011), we found stronger support for parent-driven effects than child-driven effects. This may be due to the fact that child externalizing behaviors significantly changed from Years 1 to 2 for all three child age groups; whereas maternal supportive and non-supportive responses to children's negative emotions were highly stable over this time period. One strength of the current design is that this stability was accounted for in the model. However, this stability likely contributed to our inability to find significant associations between children's behaviors at Year 1 and changes in mothers' responses from Years 1 to 2.

The current study represents an important first step in elucidating a developmental shift in the relation between maternal responses to children's negative emotions and changes in children's externalizing behaviors. Nonetheless, there are some noteworthy limitations. Firstly, we have inferred developmental changes from the differences observed between children in the three age groups, but it is possible that some of these differences may be due to cohort effects. Secondly, the lack of findings between supportive maternal responses and child behavior problems may have occurred because supportive socialization strategies are subtler than non-supportive strategies and associations may be more difficult to detect in age groups of this size. It is also possible that child characteristics, such as temperament, may moderate associations between parental responses and children's behavior problems. A study that follows a larger sample of children from earlier in the preschool years through middle childhood is warranted. Third, we relied on mothers' reports of both responses to negative emotions and child behavior problems. Future research should incorporate observations of maternal responses to children's negative emotions as well as other reporters of children's behaviors, such as fathers or teachers. Still, maternal perceptions are valuable and provide particular insight in this study demonstrating a shift in the function of maternal reports of their own responses to children. Finally, only mothers' responses to children's negative emotions were available in the current study. While mothers tend to be primarily responsible for caregiving and the emotional climate in the home (Erickson, 2005; Finley, Mira, & Schwartz, 2008), children also receive emotion socialization messages from fathers, teachers, peers, and siblings. Studies in this Quartet have examined mother and teacher (Castro, Halberstadt, & Garrett-Peters, this issue) and mother and father (Miller-Slough, Dunsmore, Zeman, Sanders, & Poon, this issue) reports, finding developmental patterns generally consistent with ours. Future work should continue to evaluate characteristics of these alternative sources of socialization, including developmental differences in these messages over time, consistencies and inconsistencies with mothers' responses, and whether they independently or interactively contribute to changes in children's social behaviors over time.

Overall, these findings provide preliminary evidence for a developmental shift in the function of mothers' responses to children's negative emotions, and suggest that maternal responses that discourage children's expression of negative feelings may actually facilitate emotional and behavioral regulation as children move from the late preschool to early school-age years. The shift suggested by these results has yet to be fully explored in the emotion socialization literature. Future research should further examine these processes and investigate the potential role of other parent and child characteristics, such as child temperament, behavioral and physiological regulation, cultural differences in emotion-related practices and beliefs, and parent and child gender.

ACKNOWLEDGMENTS

This work was supported by the Jerry M. Lewis, M.D. Mental Health Research Foundation (formerly the Timberlawn Psychiatric Research Foundation). The authors would like to thank the Family Research Lab student research assistants and the families who generously gave their time to participate.

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How to cite this article: Nelson JA, Boyer BP. Maternal responses to negative emotions and child externalizing behavior: Different relations for 5-, 6-, and 7-year-olds. *Social Development*. 2018;27:482–494. <https://doi.org/10.1111/sode.12296>