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Findings, Issues, and New Directions for Research on Emotion Socialization

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Abstract

This special issue consists of 20 articles that focus on issues related Eisenberg and colleagues' (Eisenberg, Cumberland, & Spinrad, 1998; Eisenberg, Spinrad, and Cumberland, 1998) model of emotion socialization processes and their relevance for a range of aspects of children's socioemotional functioning. The various papers have addressed a variety of issues including key mediating pathways, predictions of emotion-related socialization behaviors (ERSBs), moderators of pathways, and various potential outcomes of ERSBs. Methods used in the articles include experimental interventions and non-experimental longitudinal studies. The goals for this commentary include organizing the findings in this special issue to better highlight their relevance for the 1998 heuristic model and suggesting issues to consider in future research. Moreover, some gaps in the literature are noted. Finally, several minor changes to the model are suggested.

Keywords

Emotion socialization; parenting; self-regulation; emotion

When Roy Baumeister, editor of *Psychological Inquiry*, asked me if I would write a target review article (and a response to solicited commentaries) for that journal (Eisenberg, Cumberland, & Spinrad, 1998; Eisenberg, Spinrad, & Cumberland, 1998), I was studying the socialization of empathy-related emotional reactions and the role of children's emotionality and regulation in their sympathy. At that time, there was little published work available on the processes that mediate or moderate the relations between parental socialization of emotion and children's adaptive or maladaptive outcomes. Therefore, Amanda Cumberland (a graduate student), Tracy Spinrad (a postdoctoral fellow), and I constructed a heuristic model that would take a stab at delineating possible predictors of emotion-related socialization behaviors (ERSBs), pathways of ERSBs to a range of child outcomes, and potential mediating and moderating variables of these pathways (see Eisenberg, Spinrad, et al., 1998, for the figure revised based on the 1998 commentaries, and Figure 1 in this article for a recent slightly revised model). Frankly, I did not think our 1998 article (and response to commentary) would have much impact on the field; moreover, Roy Baumeister was concerned that our paper was not provocative enough to elicit much interest. Thus, I have been quite surprised that the article seems to have had a substantial influence on

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the direction of subsequent research and theory. It has been gratifying to follow the research spawned, in part, by our model, and to read the interesting articles in this special issue.

Central Pathways in the Model: From ERSBs to Child Arousal and Other Child Outcomes

Many important issues were addressed by the set of articles in this issue; in addition, a number of questions for future work were highlighted. For me, some of the most interesting data pertain to the role of top-down self-regulation (deliberate or top-down self-regulation; see Nigg, 2017) and/or physiological arousal in pathways from ERSBs (or related parenting variables) to important child outcomes.

For example, Curtis, Zhou, and Tao (2020) found that Chinese-American parents' discussion of emotions with their children was positively related to children's higher effortful control (i.e., dispositional top-down self-regulation) 1.5 years later (when controlling for its stability across time), and higher effortful control was concurrently associated with higher levels of children's sympathy and socially appropriate behaviors (controlling for the stability of the latter construct across time). Similarly, Perry, Dollar, Calkins, Deane, and Shanahan (2020) found that parent- or teacher-reported child emotion regulation and/or physiological regulation (i.e., vagal withdrawal during a frustrating task) at age 10 mediated the relation between mothers' supportive ERSBs (reported expressive encouragement, emotion focused reactions, and problem focused reactions to their children's negative emotions) at age 5 and measures of adjustment at age 15 (e.g., internalizing problems, an aggregate measure of social competence, low risk taking, and/or school problems; controlling for stability of externalizing problems). In addition, they found that mothers' nonsupportive reactions to children's negative emotions (parental distress, minimizing the child's emotion, punitive reactions) at age 5 predicted poorer physiological regulation (vagal withdrawal) and lower mother- and teacher-reported emotion regulation at age 10, which in turn predicted greater social competence at age 15. Also using a physiological indicator of self-regulation, Zhang, Gatzke-Kopp, Fosco, and Bierman (2020) reported that developmental change from RSA augmentation to RSA withdrawal when viewing an anger scene partially mediated the relation between supportive emotion-related parenting (e.g., aspects of parent emotional expression, supportive reactions to emotions, and facilitating children's discussion of emotion) and the reduced likelihood of escalating trajectories of externalizing symptoms from kindergarten to second grade. In combination, these studies support central mediating paths by physiological arousal and/or top-down self-regulation.

Using a statistical method that examined across-individual change and intra-individual change, Neppl et al. (2020) reported that intra-individual variation in effortful control (while controlling for baseline effortful control) mediated the association between intra-parent level of positive parenting (i.e., variation in a parent's positive mood, communication, and assertiveness) and variation in a child's school performance (but not externalizing problems). This result indicates that within-family deviations in parenting and child variables have implications for the development of school performance through variations in a given child's effortful control. Although their measure of positive parenting in this study

was not a pure measure of ERSBs, as is discussed below, it seemed to include some aspects of emotion socialization.

Neppl, Jeon, Diggs, and Donnellan (2020) findings suggest that it is useful to examine both between-family/individual and within-individual change when studying ERSBs and socialization more generally. It could be useful to speculate on connections between these two types of variation and change. Within-parent variation in ESRBs might initially affect within-child variation in self-regulation and physiological arousal in specific situations and over relatively short periods of time. However, the average level, frequency, and type of parental ERSBs might eventually result in relatively stable inter-individual differences that predict children's general adjustment more than do fluctuations in their parents' ERSBs. It would be informative to examine if there is change over development in the relative strength of intra-individual and inter-individual patterns of associations represented in our model.

In addition to the mediated pathways found in the aforementioned articles, there was considerable evidence in other articles that ERSBs and other (likely related) aspects of parenting predicted children's self-regulation (Cui et al., 2020; Godleski, Eiden, Shisler, & Livingston, 2020; Speidel, Wang, Cummings, & Valentino, 2020), amygdala-vmPFC functioning (Chen, McCormick, Ravindran, McElwain, & Telzer, 2020), affective intensity (Cui et al., 2020), and/or (mal)adjustment (e.g., Thompson et al., 2020), when mediation sometimes was either not found or not examined. These findings provide additional partial support for some paths in the model.

In general, then, the findings in a number of papers suggest that ERSBs and quality of parenting more generally are related to children's affective arousal and self-regulation, processes that would be expected to have an underlying neural basis. Based on a review of relevant literature, Tan, Oppenheimer, Ladouceur, Butterfield, and Silk (2020) argued that variations in parenting style/quality have been linked to individual differences in the structure and function of neural networks implicated in the processing of emotion and regulation of children and adolescents. For example, Tan et al. noted that there is the most support for an association of positive parenting (style/quality *and* ERSBs) with cortical thinning and reduced activation in regions within the salience and implicit ER networks. They further argued that positive parenting seems to promote the development of more mature, voluntary emotion regulation-related neural processes, a suggestion entirely consistent with our original model. Tan et al. framed their conclusions as an extension of Eisenberg, Cumberland, et al.'s (1998) argument that parental ERSBs help shape emotional development through their effects on children's emotional arousal.

In longitudinal models examining mediated relations, it is clear that there often is considerable stability in parenting, top down self-regulation, and child outcomes (e.g., Neppl et al, 2020; Thompson et al. 2020). Thus, it is important to consider the time-lags between assessments. It is probably difficult to obtain evidence of predicted pathways over time for relatively short periods of time (e.g., even a year), especially when the same reporters provide information on a construct over time (due to high stability). Studies with longer longitudinal time lags often produced some of the most compelling findings in regard to (e.g., Boldt et al., 2020; Godleski et al., 2020; Perry et al., 2020). However, if one wishes to

assess associations between variations in a given parent's ERSBs and variation in the behavior of his/her child, it would seem optimal to make numerous assessments of the constructs across a fairly short time period, as well as look at prediction over the longer term.

An issue that requires examination is prediction by ERSBs of children's emotional and behavioral regulation in specific socialization interactions, and the predictive effects of both ERSBs and children's situation-specific arousal and regulation on their cognitions and behavior in the given context (as well as subsequently). In most relevant empirical studies, socialization and children's self-regulation and/or other outcomes have been assessed in different contexts, often using measures designed to assess trait rather than state variables. Moreover, although researchers have frequently identified relatively consistent relations between socializers' typical pattern/frequency of ERSBs and children's typical functioning, it would be useful to examine relations of specific ERSBs to specific outcomes in ongoing socialization-relevant interactions (see Lunkenheimer, Hamby, Lobo, Cole, & Olson, 2020).

Experimental Interventions

An exciting aspect of a number of articles was the inclusion of (or review of) experimental interventions that tested pathways relevant to our heuristic model. For example, Kehoe et al. (2020) conducted a 6-session intervention (Tuning into Teens) targeting parents' emotion awareness/ regulation, beliefs about emotion, and emotion coaching skills. Although findings sometimes differed depending on the reporter of given constructs, mediation analyses indicated that parents who participated in the intervention reported improvements in their emotion awareness/regulation and emotion socialization (e.g., dismissing children's emotions), which in turn, related to reductions in youths' internalizing difficulties. Consistent with these results, in their review of relevant literature on interventions related to ERSBs, Hajal and Paley (2020) presented evidence indicating that interventions can improve parental understanding of their emotions and their own self-regulation, which in turn predict improvements in parents' ERSBs and declines in children's dysregulation/regulation.

Interventions targeting other aspects of emotion socialization also are promising. Speidel et al. (2020) found that a brief intervention designed to enhance mothers' sensitive guidance while reminiscing with their child predicted positive change in maltreated children's emotion regulation; moreover, maternal sensitive guidance, positive parenting, and positive family expressiveness mediated this relation. Zhang, Lee, Zhang, Piehler, and Gewirtz (2020) administered an intervention emphasizing appropriate discipline, problem solving, emotion coaching, and mindfulness to a sample of military families with at least one deployed parent. The intervention resulted in steeper declining trajectories of both mothers' and fathers' reported nonsupportive ERSBs that, in turn, mediated the effect of the intervention on a decline in children's internalizing problems (although the finding was marginally significant for mothers). Moreover, for mothers only, change in self-reported nonsupportive ERSBs was also associated with fewer externalizing problems in children. The intervention did not affect supportive ERSBs, suggesting that interventions can affect some types of ERSBs and not others.

In a pilot study of another high-risk sample, Katz et al. (2020) found that an intervention designed to foster the emotion coaching of mothers who were survivors of intimate partner violence appeared to enhance mothers' emotion awareness, coaching, and validation; reduced mothers' sermonizing/lecturing/scolding in parent-child interaction; increased mothers' sense of parenting competence; enhanced school-age children's and mothers' physiological regulation and children's parent-reported emotion regulation; decreased negativity during parent-child interaction; and decreased children's depressive symptoms. Because of the small sample size, effect sizes were used to detect effects, but the pattern of findings was encouraging.

Intervention studies, when they involve random assignment to groups and have both immediate and longer-term follow-up assessments, can be especially informative because they test whether ERSBs (or whatever measure of parenting) have a causal effect on children's self-regulation and/or other outcomes such as adjustment. Such studies could also be used to test the role of many of the mediators and moderators suggested in our model or in studies in this issue.

Predictors of Socializers' ERSBs

In our model, a variety of child and socializer characteristics were examined as predictors of socializers' ERSBs. The articles in this special issue provide examples of predictor variables to consider in future work, including parental self-regulation (which tends to predict optimal use of ERSBs; Hajal & Paley, 2020), as well as mothers' perceptions of their own mothers' nonsupportive responses to their distress in childhood, which negatively predicted mothers' responsiveness to their infants' distress (Leerkes, Bailes, & Augustine, 2020). Surprisingly, Neppl et al. (2020) found no effects of children's effortful control on parenting. Moreover, Thompson et al. (2020) did not find that children's temperament (irritability and executive functioning), mothers' reports of their depressive symptoms, or observed quality of general parenting (i.e., parental affective quality and positive structuring of the environment) predicted either self-reported supportive or nonsupportive ERSBs nine months later when controlling for stability of ERSBs. However, all but child negative emotional reactivity correlated with nonsupportive ERSBs (in the expected directions) at the initial assessment and nine months later. Perhaps nine months was too limited a time to detect change in ERSBs or child outcomes in the modeling because of stability of the variables over a relatively short period of time.

Godleski et al. (2020) examined mothers' and fathers' depression, warmth/support, and antisocial behavior, as well as interparental conflict, as predictors of parent-reported ERSBs and children's adjustment. Parents' psychopathology when their children were young predicted parents' ERSBs, and the indirect association between parent partner conflict and children's engaging with delinquent peers in early adolescence was mediated by paternal non-supportive ERSBs (note that the relation from parental conflict to paternal non-supportive reactions held only for families with parental alcoholism, and the model included stability paths for some but not all variables being predicted across time). Moreover, maternal (or paternal) depression in the early years of their children's life predicted nonsupportive maternal (or paternal) ERSBs when children were in kindergarten, which in

turn negatively predicted children's emotion regulation in fourth grade. Thus, the findings in this study highlight a number of parental variables associated with parents' ERSBs.

Although Di Giunta et al. (2020) did not assess ERSBs, in a study of 9 countries (including 12 subgroups), they found that mothers' and fathers' irritability when children were age 13 positively predicted, and mothers' self-efficacy about anger regulation when children were 13 negatively predicted, both parents' harsh parenting and adolescents' irritability a year later; moreover, the latter two outcomes in turn predicted more internalizing and externalizing problems at age 15 (controlling for stability of predicted constructs over time). Di Giunta et al. obtained few differences in findings by culture, and none for critical model paths. These findings suggest that parental irritability and self-efficacy probably predict at least some parental ERSBs.

It is noteworthy that different patterns of findings frequently have been obtained for supportive and nonsupportive ERSBs (Cui et al., 2020; Godleski et al., 2020; Perry et al., 2020). In many of the studies including both supportive and nonsupportive ERSBs, ERSBs (and sometimes the child mediating and outcome variables) were self-reported, and different biases might exist in regard to parents' reports of positive and negative ERSBs. In future work, it would be useful to examine if measures of ERSBs that are not self-reported relate differently to child and socializer characteristics, as well as to children's adaptation.

Moderated Paths

A few of the studies in this special issue addressed moderation of pathways in the model by variables such as sex and family risk status (Godleski et al., 2020), or prior initial level of children's adjustment (Kehoe et al., 2020). For example, Godleski et al. found that the path from partner conflict in early childhood to paternal non-supportive ERSBs a few years later was significant for alcoholic fathers but not for fathers in the control group. It is likely that child and parent characteristics, cultural factors, and the context interact with one another when predicting ERSBs as well as child outcomes. For example, the relation of child irritability or shyness to parents' use of ERSBs might differ for boys and girls or for children in different cultures. And perhaps moderation is less common than we expected. However, few researchers have examined moderators of the various pathways in the model. Given that it is quite possible that some types of ERSBs are more effective at some ages than others, research examining age as a moderator of pathways to and from ERSBs (e.g., in Figure 1) is especially needed if development is to be better incorporated into the model.

Agents of Emotion Socialization

Although much of the original research on ERSBs pertained to mothers, a number of the articles in this special issue include data providing support for the importance of both parents' ERSBs (Zhang, Lee, et al., 2020; Godleski et al., 2020; Lunkenheimer et al., 2020) and attachment security with mothers and fathers (Boldt et al., 2020). In the future, it is important to identify differences in the predictors of, and potential consequences of, mothers' and fathers' ERSBs, as well as examine additive and multiplicative effects of

different socializers' behaviors on children's self-regulation, arousal, and other child outcomes.

One study in this issue examined peers' emotion socialization. Although Cui et al. (2020) found that peer socialization of emotion predicted children's negative emotional intensity, prosocial behavior, and internalizing symptoms, they did not find that the relations to prosocial behavior and internalizing symptoms were mediated by children's emotion regulation or emotional lability. Nonetheless, it is likely that peers' ERSBs have an effect on children's expression of emotion and adjustment. An initial step in the study of peers' ERSBs might be to document the frequency of their ERSBs and the types of ERSBs they use most.

Valiente, Swanson, DeLay, Fraser, and Parker (2020) reviewed research supporting the view that peers, teachers, and the classroom context can shape children's regulation, adjustment, emotion, and academic competence. Most of the studies they reviewed did not explicitly examine ERSBs. Nonetheless, given the multiple studies cited by Valiente et al. documenting associations between school-related variables and children's functioning, it seems likely that mediators of these relations include ERSBs. Thus, another important area for future research is emotion socialization in non-familial contexts, as well as by non-parental socializers.

The Role of Attachment

Given that security of parent-child attachment is believed to reflect sensitive and responsive parenting, especially when children are distressed (see Eisenberg et al., 1998b), socializers who have a secure attachment would be expected to typically use supportive ERSBs. Findings presented in this issue provide some support for the role of attachment in emotion socialization. For example, Leerkes et al. (2020) found evidence for the intergenerational transmission of emotion socialization through attachment-relevant mechanisms: Mothers who reported that their own mothers were high on non-supportive responses to their distress in childhood engaged in more self-focused and negative processing of their infants' cries at 6 months of age, which in turn predicted less supportive responding to their toddlers in distressing situations. Although an adult attachment measure—coherence of mind—did not predict parenting—it does not seem as relevant to ERSBs as the sensitivity of mothers' reactions to their children's distress.

Boldt, Goffin, and Kochanska (2020) found that children's emotion regulation in delay tasks at ages 3 to 5.5 years mediated the relation of children's security of attachment (with both mothers and fathers) at age 2 to children's internalization of adults' values at 10 to 12 years of age. Moreover, parent-reported trait-like self-regulation of anger mediated the relation of attachment with both parents to children's regulation of negativity in social interactions. In addition, for mothers only, there was a pathway from attachment security to children's emotion regulation in contexts involving parental control (e.g., parental prohibitions, instructions to clean up), which in turn predicted children's subsequent regulation of negative emotion in social interaction (see Boldt et al. for one additional unexpected mediated pathway).

The aforemetioned findings are generally consistent with what one would expect based on attachment theory. However, an important question is what mediates the relation of attachment security to a range of positive outcomes, including children's top-down self-regulation (Pallini et al., 2018). Are parents of securely attached children especially prone to use sensitive discipline such positive ERSBs and/or does the sensitivity reflected in parents' use of positive ERSBs promote a secure attachment? Perhaps the use of ERSBs is simply one aspect of mothers' behavior in a secure attachment. I do not think the issue is this simple, however; in some cultures, certain types of ERSBs (e.g., encouragement of the expression of emotion) might not be normative or associated consistently with a secure attachment. My best guess is that attachment quality is a dyadic construct, reflecting the nature of parent-child dyadic interactions, that is promoted by parents' initial responsivity to infants' distress and, once established, increases the likelihood of parents using a range of supportive rather than nonsupportive ERSBs.

To further complicate the issue, the nature of the relation of attachment security status to parental emotion socialization might differ for different modes of emotion socialization. For example, parental expression of positive versus negative emotion might be intimately tied to the security of the attachment relation (because warm, sensitive parents tend to express positive rather than negative emotion whereas insecure attachments have been linked to parental rejection, unavailability, and inconsistent support of the children; Ainsworth, Blehar, Waters, & Wall, 1978). In contrast, parents' discussion of emotion with their child and coaching on problem-solving strategies are not inherently related to the attachment construct. Conceptualizing the relation between quality of attachment and parents' use of positive ERSBs may involve similar issues to conceptualizing the relation between parental style (or general quality of parenting) and the use of ERSBs (see below).

The Relation of Global Parenting Style to ERSBs

In Eisenberg et al. (1998b), we attempted to address the issue of the relation between global parenting styles such as warmth and control and specific parenting actions the reflect beliefs, goals, or values related to specific domains of behavior (e.g., the expression and experience of emotion), including ERSBs. In our model, we suggest that at least some ERSBs stem from and mediate relations of quality of parenting style to children's arousal, self-regulation, and other child outcomes. In addition, based partly on arguments by Darling and Steinberg (1993), we suggested that prediction by emotion socialization of child outcomes is sometimes moderated by parenting style—for example, children are likely more receptive to specific parental attempts to socialize emotion if they have a warm relationship with the parent. Moderation might be more likely for ERSBs that are somewhat less directly tied to warmth versus harsh parenting styles (e.g., coaching, discussion of emotion, and problem-focused reactions [helping the child to solve the problem that caused the child's distress]). To our knowledge, these predictions, especially the latter one, have not been sufficiently tested.

Considering the papers in this special issue, Godleski et al. (2020) found that maternal warmth/sensitivity predicted mothers' supportive ERSBs; the same relation was not found in their model for fathers although fathers' warmth/sensitivity was negatively correlated with

paternal nonsupportive ERSBs in zero-order correlations. This pattern is consistent with the view that parenting style relates directly to some ERSBs that reflect support versus harsh parenting, such as parents' expression of emotion and punitive reactions to a child's expression of emotion.

In support of the view that general parenting style and ERSBs are not entirely overlapping constructs, Speidel et al. (2020) found that maternal sensitive guidance, family positive expressiveness, and positive parenting (i.e., parenting style) all had unique relations to children's subsequent self-regulation whereas negative family expressiveness and sensitive guidance uniquely predicted child lability/negativity while controlling for prediction by positive parenting. More research examining unique and interactive prediction by parenting style and ERSBs of the child outcomes in our model is needed to address their overlap and uniqueness.

Diversity of Samples and Cultural Considerations

Much of the past research on ERSBs has been conducted with North American samples, often with Caucasian children and youths comprising the majority of the sample. The studies in this issue indicate that research on emotion socialization with samples containing a majority of ethnic/racial minority students is increasing in frequency (e.g., Cui et al., 2020; Curtis et al., 2020; Leerkes et al., 2020; Perry et al., 2020). Moreover, a number of high-risk samples were studied in articles in this issue, including families with maltreated children (Speidel et al., 2020), one or more parent deplored in the military (Zhang, Lee, et al., 2020), mothers exposed to family violence (Katz et al., 2020), or fathers with an alcohol problem (Godleski et al., 2020). Nonetheless, only two of the studies in this set of articles was conducted with samples from countries outside North America. In their study with 12 cultural samples, Di Giunta et al. (2020) found little evidence of cultural differences in the predictors of, and predicted outcomes of, harsh parenting. Although cultures may differ in the relative frequency of some ERSBs, the relation of ERSBs to child and parent characteristics or child outcomes often may not differ dramatically. Nonetheless, given different cultural norms regarding the expression, discussion, and handling of emotion (see Eisenberg et al., 1998a, 1998b; Raval & Walker, 2019), cultural likely plays an important role in at least some aspects of emotion socialization.

Raval and Walker (2019) reviewed research on caregivers' socialization of emotion and child functioning in diverse families and cultures. Much of this research was conducted within a single culture, or included within-cultural subgroup comparisons, not cross-cultural comparisons. They argued that our 1998 model should be expanded to better unpack the role of culture. Specifically, they proposed three culturally grounded factors as predictors of caregivers' ERSBs: caregivers' socialization goals, beliefs about emotion, and preferences for communication. I would argue that these are simply slight expansions on our model in which "Cultural Factors", "e.g., Emotion-related beliefs, norms and values" (Eisenberg, Spinrad, et al., 1998, p. 320, Figure 2) are depicted as predictors of ERSBs: In our view, cultural values and norms dictate socialization goals and preferences for communication. They also suggested including "culturally embedded factors" such as "Exposure to different

cultural worldviews" and "Child appraisals of caregiver behavior" (Raval & Walker, 2019, p. 149), which seems to be compatible with the model.

It makes sense to explicitly add cultural factors to the list of sample moderators in our model; doing so was an addition to the model that I planned to make even before finding the Ravel and Walker (2019) article. In our model, the box of "Moderators" is depicted as affecting the relation of ERSBs to children's arousal and child outcomes, as well as the relation of children's arousal to child outcomes. In the Raval and Walker (2019) model, moderators are depicted as affecting "child emotion regulation" rather than pathways to or from child emotion regulation so it is difficult to know which pathways they believed are moderated by culture.

In any case, Raval and Walker reviewed literature indicating that there are some cultural differences, as well as some similarities, in how caregivers socialize emotion, meta-emotion philosophy, and in their beliefs about emotions. They concluded that there are numerous gaps in this emerging body of data, and that there is a need to examine culturally embedded factors guiding emotion socialization, cultural factors as moderators, culturally salient emotions, and culturally relevant caregivers. I heartily agree with their conclusion.

Methodological Innovations

Some articles in this special issue provide initial findings regarding promising methods to incorporate in future research on ERSBs. First, Chen, McCormick, Ravindran, McElwain, and Telzer (2020) found that observed and reported supportive (but not nonsupportive) maternal emotion socialization behaviors when children were 33 months of age predicted adolescents' amygdala-vmPFC connectivity when labeling and observing angry faces. The findings were cautiously interpreted by the authors as suggesting that early maternal ERSBs predicted adolescents' relatively mature vmPFC down-regulation of amygdala activation. In addition, supportive practices also predicted greater amygdala activation, which they suggested might reflect higher sensitivity to others' emotional cues. These findings are consistent with Tan et al.'s (2020) emphasis on including neural measures in studies of emotion socialization. Second, Lougheed, Brinberg, Ram, and Hollenstein (2020) examined emotion dynamics during emotionally laden discussions between mothers and daughters: Dyadic differences in who tended to regulate emotion were found. These dyadic differences were associated with adolescents' social anxiety symptoms, at least when dyads were discussing happy/excited and worried/sad emotional experiences. Specifically, daughters' social anxiety symptoms were associated with their maintaining neutral expressions while their mothers up- and down-regulated their own positive expressions. In addition, lower levels of daughters' social anxiety symptoms were associated with their mothers maintaining neutral expressions while their daughters' up- and down-regulated their own positive expressions. Although Lougheed et al. (2020) found relatively few significant relations given the number of analyses conducted, their methods provide an example of a novel way to quantify dyadic interactions when involved in a conversation providing opportunities for emotion socialization. It would be interesting to link the indices of emotion regulation in the dyads to the content of the emotion discussion.

Using another novel approach, Lunkenheimer et al. (2020) found that mothers' and fathers' dyadic synchrony of positive emotion (i.e., matched high positive or matched low positive emotion, as compared to neutral or negative emotion) when their children were 3 years of age—perhaps a measure reflecting dyadic emotion regulation—was predicted by both mothers' and fathers' ERSBs (i.e., emotional expressiveness and emotional responsiveness) and, in turn, negatively predicted children's aggression two years later. This syncrony may partially reflect parental attempts to control children's experience of positive emotion and/or may serve to socialize children's emotional responding without intentionally doing so. An interesting aspect of the measure of synchrony is that it might also reflect bi-directional socialization processes.

Summary of Adjustments to the Model

As is usually the case, the design of some studies in this special issue is not ideal; for example, stability paths are sometimes missing in some longitudinal studies and sometimes studies would benefit from a greater use of multiple reporters/measures. Nonetheless, in combination, the studies in this special issue provide support for some aspects of our model and also highlight new, promising directions and variables to consider as predictors and sequelae of ERSBs. In thinking about the research since 1998 and this set of papers, I would make some modest changes in the model in the 1998 articles. First, although predictors of ERSBs (on the left side of the model; e.g., child and parent characteristics, cultural factors, and context) are designated as predicting only ERSBs in the figures in Eisenberg et al. (1998a, 1998b), they obviously also can predict children's arousal in socialization contexts as well as at least some of the numerous child outcomes listed in Figure 1. It was simply too cumbersome to include these many additional pathways in the 1998 model and the primary focus in the 1998 model was on ERSBs, but I have now added a note in this regard to the new Figure 1. I also note that there might be linear relations and interactions among the four sets of predictors. Moreover, additional text regarding the role of culture was added to the box on "Cultural Factors" as well as the list of "Moderators." No doubt, as additional research is published, further changes in the model will be needed, and I look forward to seeing the next generation of research findings.

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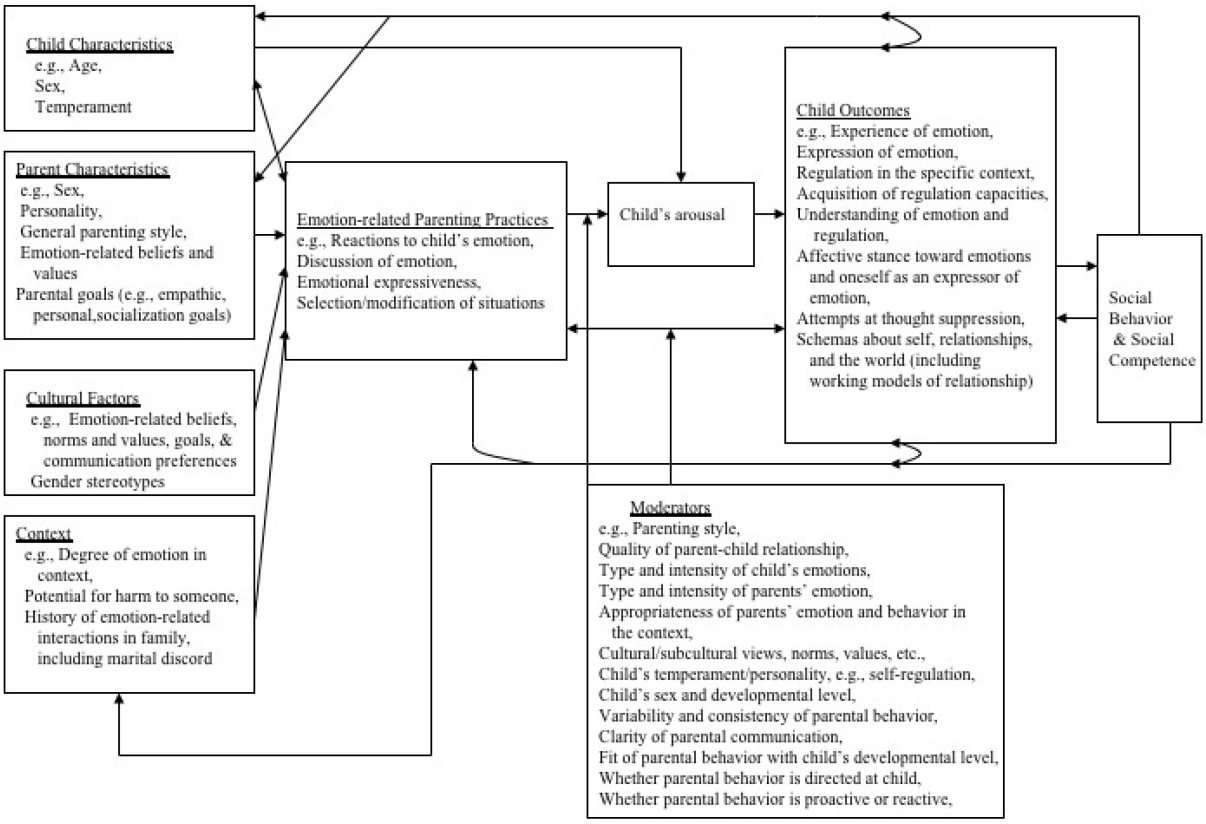

Figure 1. A Heuristic Model of the Socialization of Emotion

Note. There also may be linear relations and interactions among the four predictors on the left. Moreover, these four predictors can predict child outcomes