Constructing Emotional and Relational Understanding: The Role of Mother–Child Reminiscing about Negatively Valenced Events

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Abstract

Although there is some evidence from cross-sectional studies that reminiscing is an important context in which children construct socioemotional understanding, longitudinal evidence is lacking. The goal of this study was to examine longitudinally the links between the quality of reminiscing at 42 months and children’s subsequent socioemotional development at 48 months. At 42 months, mothers and children reminisced about a past negatively-valenced emotional event. These conversations were coded for maternal elaboration, the children’s contribution and engagement, and the degree to which meaning was co-constructed by the dyad. At 42 and 48 months, children took part in laboratory measures of socioemotional development. Whereas there were few links between concurrent reminiscing quality and sociomoral development, aspects of reminiscing quality at 42 months (including children’s engagement and the dyad’s co-construction of meaning) were related to children’s emotional understanding, empathy, representations of relationships, and moral-self at 48 months. This study provides some of the first longitudinal evidence that reminiscing conversations are linked with children’s subsequent sociomoral understanding.

Keywords: emotion; communication; empathy

Introduction

The importance of shared discourse for shaping children’s social-cognitive understanding is an idea that is consistent with sociocultural theory and the ideas of Lev Vygotsky (1978). Vygotsky argued that children’s social-cognitive development was mediated by the tools provided by their culture. Language, in particular, was one of the most important tools that a culture provided for children. Language, especially shared

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discourse, provides an avenue through which children can partake in cultural contexts and appropriate cultural values. Moreover, discourse with parents (and other more experienced cultural participants), is one avenue through which children create understanding and meaning. The child, however, does not passively internalize parental messages in discourse. Rather, both the parent and the child are active participants in co-creating meaning in the context of shared discourse with each other. Ultimately, therefore, it is the co-created dialogue that is internalized by the child and that shapes a child’s subsequent social-cognitive understanding.

Drawing on this theory, it seems plausible to argue that children acquire an understanding of emotion in the context of shared conversations with parents. Parents can verbally guide children’s understanding of their emotional experiences through shared discourse about the child’s ongoing and past experiences with emotion (see Fivush, Berlin, Sales, Mennuti-Washburn, & Cassidy, 2003; Laible, 2004a). Parents can essentially serve as emotion ‘coaches’ (see Gottman, Katz, Fainsilber, & Hooven, 1996) by helping to clarify the causes of emotion and the role that emotion plays in relationships, and by giving children information on how to cope with emotion (Denham, Zoller, & Couchoud, 1994; Gottman et al., 1996; Laible & Panfile, 2009). Moreover, children are also learning how to discuss emotion in these early conversations with caregivers (Dunn, Bretherton, & Munn, 1987; Usher, Ridgeway, Barrett, Nitz, & Wagner, 1988). As a result, it is not surprising that researchers have found consistent links between the quality of discourse that parents have with children about emotion (and its causes) and children’s affective perspective taking and emotional discourse (Brown & Dunn, 1996; Denham et al., 1994; Dunn, Brown, & Beardsall, 1991).

Recent theorizing has also suggested that parent–child reminiscing about children’s past experiences with emotion might be a particularly potent context in which emotional understanding is socialized (see Fivush, 1993; Laible, 2011; Laible & Panfile, 2009; van Bergen, Salmon, Dadds, & Allen, 2009). Given that in the context of strong emotion, particularly negative emotion, children’s cognitive processes might be pre-occupied with managing emotion, conversations about children’s ongoing emotional experiences might not be the most fruitful avenue through which socialization occurs (Laible & Panfile, 2009). Instead, by discussing the child’s experiences with emotion later in the day, once children’s strong emotions have dissipated, parents can help to provide psychological insight into the causes and consequences of the child’s emotions, as well as clarify the emotions of others who shared in that experience. Moreover, because the child’s past experience with emotion is represented through language (and recreated with the guidance of a caregiver), children may be able to better reflect upon their emotional states and reactions in the context of reminiscing (Fivush, 1993) than during the actual emotional experience. Finally, because reminiscing has been shown to shape children’s autobiographical memories, that is, their memories for personal experiences, (Bauer & Burch, 2004; Farrant & Reese, 2000; Fivush & Vasudeva, 2002; Hudson, 1990; Nelson, 1996), there are good reasons to believe that reminiscing is closely tied with children’s developing self-concept (Nelson, 2003). Thus, by discussing emotion and the role that emotion plays in relationships in the context of reminiscing, mothers are helping to shape children’s emotional self-concepts (e.g., ‘I am easily upset’ or ‘my anger upsets other people’) (Fivush et al., 2003). Recent work has found links between emotional mother–child reminiscing and aspects of children’s self-concept (see Bird & Reese, 2006).

Therefore, it is not surprising that mother’s willingness and ability to discuss emotional events during reminiscing has consequences for children’s emotional and
relational understanding. Although a number of characteristics of reminiscing have been linked with children’s emotional and relational understanding, including maternal discussion of emotion and the affective quality of the narrative (e.g., warmth), the most consistent predictor of children’s socioemotional development has been maternal elaboration (see Bohanek, Marin, & Fivush, 2008; Laible, 2004a, 2004b; Laible & Song, 2006; Reese & Cleveland, 2006). Maternal elaboration during reminiscing has been linked with children’s emotional understanding, representations of relationships, conscience development, and theory of mind (Laible, 2004a, 2011; Laible & Song, 2006; Reese & Cleveland, 2006). This work suggests that mothers who elaborate during reminiscing (i.e., who provide rich background and who ask varied open-ended questions of the child) have children who demonstrate more emotion knowledge, theory of mind, behavioral internalization, and positive representations of relationships. By elaborating on the child’s past emotional experiences, mothers do several important things that influence children’s developing socioemotional understanding. Firstly, maternal elaboration likely creates a warm interpersonal atmosphere that leads to a child’s willingness to internalize messages about emotion and morality conveyed in the context of reminiscing (Laible & Thompson, 2000). Moreover, this warm interpersonal atmosphere also facilitates the child’s construction of prosocial representations of relationships (Laible & Song, 2006). Secondly, maternal elaboration helps children to create strong (and more detailed) representations of their past emotional experiences, and these representations give children more to draw upon in their current understanding of emotions and relationships.

Overall, the research supports the idea that the quality of mother–child reminiscing is related to children’s socioemotional development (Fivush, 2007), and in fact, might be more predictive of children’s socioemotional development than discourse in other contexts (Laible, 2004a; Reese, Bird, & Tripp, 2007). Despite this, however, most of the work that has been done has examined concurrent links between reminiscing and children’s emotional and relational understanding. Longitudinal work is needed in order to verify that earlier discourse predicts subsequent socioemotional understanding. In addition, however, other aspects of reminiscing, besides maternal elaboration need to be examined, including the child’s contribution to these conversations and the degree to which the dyad is able to co-create a meaningful story about the child’s past experiences. There are good reasons to believe that children’s participation in these conversations and the ability of the dyad to co-create meaning is important in helping them understand emotion and relationships (Vygotsky, 1978), although research on this issue is lacking. Research has supported the idea that children are more likely to subsequently recall an event if they were actively involved in reminiscing (see McGuigan & Salmon, 2004; Ornstein, Haden, & Hedrick, 2004). Similarly, children who were asked to explain the emotions of characters in hypothetical vignettes did better on a post-test for emotional understanding than children who had the emotions explained to them by the experimenter (Tenenbaum, Alfieri, Brooks, & Dunne, 2008). Both of these studies suggest that children’s active involvement in emotional discourse is important for shaping children’s subsequent understanding.

Finally, this study also examined two new outcomes with regards to reminiscing and children’s subsequent understanding: empathy and moral self. There are good reasons to believe that the emotional understanding that such reminiscing promotes might have consequences for a children’s development of moral affect (which in turn promotes the integration of moral values into moral self) (see Laible, Panfile, & Augustine, in press). In addition, however, many of the conversations about the
child’s past emotional experiences center on the conflicts that children have with parents, siblings, or others (as well as children’s aggressive or problematic behavior) (see Laible et al., in press). As a result, such conversations might also prove to be an important context through which compassion and moral values are socialized for a couple of reasons. Firstly, they provide opportunities to discuss children’s aggressive and conflictual behavior after the fact, once children’s strong emotions have dissipated and provide opportunities for parents to scaffold children’s understanding of moral experiences and to discuss why particular behaviors are morally unacceptable (Laible & Thompson, 2000). It seems likely that parents are also discussing the effects of the child’s actions on others through reminiscing, akin to the type of inductive techniques that Hoffman (1963, 2000) argued are important in promoting guilt and empathy. Finally, because shared conversations about past events provide children with information about which events and experiences are important and noteworthy (Bird & Reese, 2006), by highlighting children’s past moral experiences, parents are making clear the importance of moral behavior for the child’s self-concept (Reese et al., 2007). Thus, parents who focus reminiscing on morality-related issues (such as conflict and aggression) likely have children that integrate moral attributes into their sense of self (i.e., ‘moral self’) and see them as central to their definition of who they are.

Therefore, the goal of this study was to examine longitudinally the links between the quality of mother–child reminiscing and children’s subsequent socioemotional development (including children’s emotional understanding, empathy, representations of relationships, and moral self). Reminiscing conversations surrounding a child’s past experiences with negative emotion were taken at 42 months. Children’s socioemotional development was assessed in behavioral tasks that were administered at 42 and 48 months. Children of this age group were selected because previous researchers have found that the quality of reminiscing during the early preschool years predicts concurrent socioemotional development (see Laible, 2004a, Laible, 2004b; Laible & Song, 2006).

Based on previous research, we expected high-quality reminiscing including maternal elaboration, children’s participation in reminiscing, and the quality of the dyadic co-construction to predict children’s subsequent socioemotional and sociomoral understanding (even after controlling for previous understanding).

**Method**

**Participants**

Seventy mother–child dyads were recruited through archival birth announcements printed in a newspaper to participate in a larger study examining the predictors and consequences of mother–child communication about emotions. Letters were sent to mothers of children who would be 42 months old at the time of the first assessment period. In order to retain participants for the second assessment six months later, mothers were offered small monetary payments at the first assessment and slightly larger payments following the second assessment. Children were given a stuffed animal at each assessment period for their participation in the study. Of the participating children, 37 were female and 87.5% were European-American. 70.9% of mothers had at least a college degree or higher. Two mother–child dyads dropped out of the study prior to the second assessment.
Study Overview

At 42 months, mothers and their children took part in a video-recorded laboratory session during which the dyad engaged in 10 minutes of free play as a warm-up task, during which the empathic concern task was administered. Following the free play task, mothers and children took part in the reminiscing task. Children then completed the measures of socioemotional development, while mothers completed questionnaire measures in an adjoining room. At 48 months, the same battery of measures was completed in the lab with the addition of the moral-self measure.

Reminiscing Task (42 Months)

The conversations about the child’s past negative emotional experiences were elicited following a procedure identical to the one used by Laible and Song (2006). Following the warm-up tasks, the researcher notified the mother that she was interested in shared conversations about the child’s past emotional experiences. Mothers were asked to think about a recent past emotional event that involved both herself and her child in which her child experienced negative emotion. Mothers were instructed to select one-time events (e.g., an injury or misbehavior) rather than ongoing events (e.g., going to bed) and to evoke her child’s memory about the event as naturally as possible. Mothers determined the length of these conversations, which lasted for an average of 48.75 (SD = 21.32) conversational turns. There were common themes that emerged in these conversations. Many of these conversations centered on conflicts with peers, parents, or siblings and often involved the child’s misbehavior (e.g., aggressive or destructive behavior) (48%). The remaining involved injuries to the self or other (24%), missing someone or leaving an event/person that the child was enjoying (13%), or being scared of something, such as thunder (10%). Coders of the transcripts from the reminiscing conversations were blind to both the study hypotheses and child outcome scores. Two coders coded 15 transcripts in common (out of 70) to establish reliability between coders and scores from the main coder (who coded all 70 of the transcripts) were used in the subsequent analysis.

Coding of the Reminiscing Task (42 Months). Mother–child reminiscing conversations were coded for: maternal elaboration, child engagement, and the extent to which the dyad was able to co-create meaning. Elaborative ratings were assigned based on criteria used in previous empirical research (see Laible, 2004a; Laible & Song, 2006). Transcripts were rated on a 5-point scale based on the extent to which mothers contributed new background information to the conversations and asked high-quality open-ended conversations. Thus, high scores (4 or 5) indicated that mothers added new information to almost every conversational turn and asked a variety of open-ended questions. Low scores (1 or 2) indicated that little new background information was added by mothers, and mothers asked mostly repetitive yes/no questions. The intra-class correlation between the two raters for elaborative ratings was .88.

Child engagement/responsiveness was also rated on a 5-point scale using scales that were adapted from Gini, Oppenheim, and Haimovich (2002). High scores indicated that the child was engaged in the task, was responsive to the questions that mothers raised, and contributed new information to the conversations. Low scores indicated that the child was not engaged in the reminiscing conversation, ignored maternal requests for information or responded with limited information, or was distracted from or
uninvolved in the task. The intra-class correlation between the two raters on 15 transcripts for elaborative ratings was .91.

Finally, the reminiscing conversations were coded for the degree to which the mother and child co-constructed meaning using scales adapted from Gini et al. (2002). Once again, this quality (i.e., the quality of the dyadic co-construction) was rated on a 5-point scale. Dyads that were rated high on this quality created meaningful collaborative conversations (i.e., both partners appeared to be ‘on the same page’ with the conversation and both partners contributed information to the conversation). Dyads that were low on this quality had conversations that were not co-constructed (i.e., that were dominated by either the mother or the child), that were low in coherence, and that demonstrated low levels of co-created meaning. The intra-class correlation between two raters on 15 of the transcripts was .85.

Empathic Expressiveness (42 and 48 Months). Empathic responses were observed following the procedure outlined by Zahn-Waxler, Friedman, and Cummings (1983). As children first entered the laboratory, a door to an adjacent room was left open, revealing a baby stroller and accessories (as well as a graduate or undergraduate female research assistant standing next to the stroller). This appeared to have had effectively led the children to believe that an infant was in the next room. Eight minutes into a free play session between the child and the mother, an audio recording of a baby cry was played for one minute. A female research assistant then entered the room and said with distress, ‘I’m looking for my baby’s pacifier’, while the recording of the baby cry continued to play. After searching around the room for one minute, the assistant exited, the baby cry was turned off, and the dyad was left alone to resume free play for an additional two minutes. Mothers were previously instructed not to prompt their children for any type of response during the empathy task. Children’s responses were video-recorded for the purposes of later observational coding. This procedure has previously displayed predictive validity with a theoretically and empirically relevant construct, observed prosocial behavior, lending support to its construct validity (Eisenberg et al., 1993).

Children’s empathic expressiveness was coded on a 4-point scale following Young et al. (1999) for concerned expressions (e.g., facial displays of affect: 1—no concern or change in expression resulting from the baby cry, 2—sobering of attention, slight concern, 3—moderate concern, including brow furrowing for at least five seconds, 4—strong facial concern, including brow furrowing and downward turned mouth for at least eight seconds). Twenty percent of the video recordings (N = 14) were independently coded by a second rater, and adequate inter-rater reliability was obtained. Intra-class correlation coefficients were .80 for 42 months and .89 for 48 months.

Emotional Understanding. To assess their level of emotional understanding, children took part in an affective perspective-taking task developed by Denham (1986). Overall, this affective perspective-taking task has shown good internal consistency and predictive validity (see e.g., Brown & Dunn, 1996; Denham & Couchoud, 1990a, 1990b; Denham et al., 2002; Laible & Thompson, 1998). In the first part of the task, children’s abilities to distinguish facial expressions of emotion were assessed. Each child examined four felt faces on which the expressions of happy, sad, angry, and scared were drawn, and the researcher asked the child to indicate the face that reflected each of the four target emotions. Following this, each child was asked to determine the emotion that each face represented. For both tasks, each child received two points for the correct identification of each emotion or one point for identifying a face with the correct
positive–negative valence. At the end of the task, the researcher corrected the child on any faces that he or she misidentified.

Following this, each child saw hand puppets enact 20 vignettes that were accompanied by both visual and vocal cues by the experimenter (e.g., a big smile and joyful voice when displaying a happy outcome). In eight of the 20 stories (labeled the stereotypical stories), the puppet was shown to feel the same way most people would feel in this situation. In the other 12 vignettes (labeled the non-stereotypical stories), the puppet was depicted as feeling the opposite way the child would feel under the same circumstance. Mothers previously filled out a forced-choice, questionnaire that asked them to predict how their child would probably feel in each of the 12 commonplace circumstances portrayed in the stories. Each of the ‘non-stereotypical’ puppet vignettes were customized to the child’s expected responses.

At the end of each of the 20 vignettes, each child was asked, ‘How did the puppet feel?’ and was then asked to attach the proper felt face to the puppet to indicate the puppet’s emotion. Again, each child received two points for each correct answer or one point for identifying the correct positive–negative valence. The scores on each of the 20 vignettes were summed and following Denham (1986), this score was summed with that of the previous task (i.e., identifying the emotions on the felt faces) to serve as an index of emotional understanding.

Representations of Relationships. In order to assess representations of relationships, children were administered a shortened version of the MacArthur Story-Stem Battery (MSSB) (see Oppenheim, Nir, Warren, & Emde, 1997). The MSSB is designed to assess a child’s ability to resolve relationship-oriented conflicts and is believed to assess a child’s representations of relationships (Bretherton, 1990; Laible & Thompson, 2002). Relevant work has suggested that children’s story-stem completions are related to their real-world family experiences (see Laible, 2006; Laible, Carlo, Torquati, & Ontai, 2004) and to their social behavior (Laible et al., 2004; Oppenheim et al., 1997; Page & Bretherton, 2001), supporting the predictive validity of the measure. The researcher explained to the child that for this game, she would make up some stories using the dolls and that the child would finish each story. Following the introduction, a warm-up story was presented, and the child was encouraged to tell a story by manipulating the dolls. For each story, the stems were presented in a spirited manner, and each story stem ended with the prompt, ‘Can you show me what happens next?’ Non-directive and clarifying prompts, for example, ‘What else happens?’ were used to assist the child’s narratives. The experimenter moved to the next story only after the child had addressed the main conflict presented in each stem or had indicated that he or she was finished with the story.

Children’s verbal responses to the doll stories were transcribed from the videotapes. Any actions that children made with the dolls were also briefly summarized in transcripts (e.g., two dolls embracing). Using a system developed by the MacArthur Narrative Workgroup (see Oppenheim et al., 1997), coders (who were blind to the child’s reminiscing scores) coded the transcripts. The content themes included three negative themes (injury, aggression, and atypical negative responses) and three positive themes (affection/affiliation, empathy/helping, and reparation/guilt). Because children often presented more than one theme in narratives, a story-stem could receive more than one coded content theme. Content themes in each category were summed across all the six narratives to provide an overall frequency of each theme per transcript. In order to reduce the number of content themes, two composites were formed by summing themes based
on conceptual similarity (following Oppenheim et al., 1997 and Laible & Song, 2006): (1) a prosocial/positive composite that included empathy, reparation, and affection/affiliation and (2) a negative/aggressive composite that included aggression, personal injury, and atypical negative responses. Two independent coders coded 15 common transcripts to establish reliability of coding. Percent agreement between the two coders was 85% on the themes at 42 months and 89% at 48 months.

In addition to content themes, story completions were coded for coherence (again following Oppenheim et al., 1997) on a 10-point scale. The odd-numbered anchor points were as follows: 1 (story is fragmented with a shifting storyline), 3 (child understood conflict but did not offer resolution, and part of the story was incoherent), 5 (child understood the conflict and handled it by simplifying the story), 7 (child understood the story and offered resolution, but the story was short with no embellishment), 9 (child understood conflict, offered an embellished resolution, and there were no incoherent segments) (Oppenheim et al., 1997). A composite score of narrative coherence was formed by averaging the scores across each of the six narratives. The average intra-class correlations between the two raters on 15 transcripts were .91 at 42 months and .90 at 48 months.

In order to reduce the number of MSSB variables, these three codes (prosocial themes, aggressive themes, and coherence) were submitted to a principle components factor analysis at each time period. One factor emerged and was retained for subsequent analyses at both time periods ($\lambda = 2.28$, 76.07% of the variance at 42 months; $\lambda = 2.02$, 67.27% of the variance at 48 months) and was labeled ‘positive representations of relationships’. For both factors, positive themes and coherence loaded positively ($>.68$) and negative themes loaded negatively ($>-.84$).

**Moral Self (48 Months Only).** At 48 months, children took part in a measure of moral self (Kochanska, Devet, Goldman, Murray, & Putnam, 1994; Kochanska, Murray, & Coy, 1997). This measure was only given at 48 months, because the verbal demands placed upon the children were deemed too difficult for the children at 42 months. Previous research has demonstrated that the measure of moral self is linked in meaningful ways with other aspects of conscience development (Kochanska, 2002; Kochanska et al., 1994, Kochanska et al., 1997). For the measure, children saw the experimenter hold two puppets (of the same gender as the child). The children saw each puppet endorse opposite statements that reflected nine moral dimensions (confession, apology, reparation, empathy, concern about good feelings with parent, guilt, concern about others wrongdoing, and internalized conduct). One puppet presented an item that anchored the low end (e.g., ‘I don’t try to help if I see a child hurt’) and the other anchored the high end (e.g., ‘I try and help if I see a child hurt’). After the two puppets endorsed their items, the child was asked by the experimenter, ‘How about you? Which puppet are you more like?’ Following Kochanska et al. (1994), the child’s response was coded as a 0 if he/she endorsed the non-moral statement/puppet and 2 if they endorsed the moral puppet/statement. A child was coded as a score of 1 if they endorsed both puppets. An overall index of moral self was created by summing the nine scales.

**Results**

Descriptive information on the variables and bivariate relations appear in Tables 1 and 2, respectively. Maternal elaboration was significantly positively correlated with
children’s engagement in reminiscing and with the quality of the co-construction. In addition, maternal elaboration was significantly correlated with both concurrent and subsequent emotional understanding and representations of relationships. Moreover, maternal elaboration was positively correlated with children’s empathic expressiveness at 48 months. Children’s engagement in reminiscing at 42 months was significantly correlated with dyadic quality and with children’s subsequent emotional understanding and moral-self. Lastly, the quality of the dyadic co-construction at 42 months was positively related to children’s concurrent and longitudinal representations of relationships, as well as to their subsequent emotional understanding and empathic concern.

In order to examine the hypothesis that reminiscing quality would predict socio-moral development, two sets of regression models were built. Firstly, regression models were built to predict children’s emotional understanding, empathic expressiveness, and positive representations of relationships at 42 months from concurrent reminiscing quality. Secondly, regression models were built to predict children’s socioemotional development at 48 months. Gender and parental education were entered as controls in both models (concurrent and longitudinal), because others have found that these variables relate to socioemotional outcomes and reminiscing (see for example, Brown & Dunn, 1996; Eisenberg, Fabes, & Spinrad, 2006; Fivush, Haden, & Reese, 2006). In the 48-month regression models, previous levels of socioemotional development were controlled for in order to determine the direction of effects (except for moral-self which was only administered at 48 months). The three reminiscing codes (maternal elaboration, children’s engagement, and dyadic co-construction) from the negative event reminiscing conversations at 42 months were entered simultaneously on the last step of the models.

Table 1 Descriptive Information on the Discourse and Outcome Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>42 months</th>
<th>48 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal reminiscing (42 months only)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal elaboration in reminiscing</td>
<td>2.77 (.89; 1–5)</td>
<td>n/a</td>
</tr>
<tr>
<td>Child engagement in reminiscing</td>
<td>3.30 (1.08; 1–5)</td>
<td>n/a</td>
</tr>
<tr>
<td>Co-construction of meaning in reminiscing</td>
<td>3.21 (1.01; 1–5)</td>
<td>n/a</td>
</tr>
<tr>
<td>Outcome measures (42 &amp; 48 months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional understanding</td>
<td>41.60 (11.23; 14–56)</td>
<td>49.54 (6.44; 29–56)</td>
</tr>
<tr>
<td>Empathic concern</td>
<td>2.82 (1.17; 1–4)</td>
<td>2.51 (1.12; 1–4)</td>
</tr>
<tr>
<td>MSSB positive themes</td>
<td>2.29 (1.41; 0–6)</td>
<td>2.27 (1.12; 0–6)</td>
</tr>
<tr>
<td>MSSB negative themes</td>
<td>2.49 (2.22; 0–8)</td>
<td>1.61 (1.64; 0–6)</td>
</tr>
<tr>
<td>MSSB coherence</td>
<td>4.43 (1.33; 1.67–6.33)</td>
<td>5.07 (.87; 2.33–6.83)</td>
</tr>
<tr>
<td>Moral self$\dagger$</td>
<td>n/a</td>
<td>41.41 (8.60; 20–62)</td>
</tr>
</tbody>
</table>

*Note:* Standard deviations and ranges in parentheses. MSSB = MacArthur story-stem battery. n/a = not applicable.
Table 2  Bivariate Correlations Between Reminiscing Variables and Outcome Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Reminiscing</th>
<th>Emotional understanding</th>
<th>Empathy</th>
<th>Representations of relationships</th>
<th>Moral self</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Maternal elaboration</td>
<td>—</td>
<td>.38**</td>
<td>.28*</td>
<td>.11</td>
<td>.25*</td>
</tr>
<tr>
<td>2. Child engagement</td>
<td>—</td>
<td>.41**</td>
<td>.19</td>
<td>.14</td>
<td>.18</td>
</tr>
<tr>
<td>3. Dyadic co-construction of meaning</td>
<td>—</td>
<td>.19</td>
<td>.33**</td>
<td>.17</td>
<td>.24*</td>
</tr>
<tr>
<td>4. Emotional understanding 42 months</td>
<td>—</td>
<td>—</td>
<td>.58**</td>
<td>.15</td>
<td>.22+</td>
</tr>
<tr>
<td>5. Emotional understanding 48 months</td>
<td>—</td>
<td>—</td>
<td>.06</td>
<td>.30*</td>
<td>.36**</td>
</tr>
<tr>
<td>6. Empathic expressiveness 42 months</td>
<td>—</td>
<td>—</td>
<td>.37**</td>
<td>.09</td>
<td>.20+</td>
</tr>
<tr>
<td>7. Empathic expressiveness 48 months</td>
<td>—</td>
<td>—</td>
<td>.02</td>
<td>.10</td>
<td>.02</td>
</tr>
<tr>
<td>8. Positive representations 42 months</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>.61**</td>
<td>.15</td>
</tr>
<tr>
<td>9. Positive representations 48 months</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>.32**</td>
<td></td>
</tr>
<tr>
<td>10. Moral self at 48 months</td>
<td>—</td>
<td>—</td>
<td>—</td>
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</tr>
</tbody>
</table>

Note: * p < .05, ** p < .01, + p < .10.
None of the models predicting concurrent socioemotional development were significant (R-squares of < .14, ps > .05), and thus, the models are not presented in the tables. Most of the full models predicting sociomoral development at 48 months were significant (see Table 3). For the model predicting emotional understanding, both previous emotional understanding and children’s engagement in the reminiscing conversations at 42 months made significant contributions to the model; \( F(6,61) = 9.34, p < .01 \). Children who were engaged and contributed to the reminiscing conversations surrounding the child’s past negative emotional experiences at 42 months showed higher levels of emotional understanding six months later. In addition, previous emotional understanding predicted subsequent emotional understanding.

Both children’s previous empathic expressiveness (at 42 months) and the degree to which children and mothers co-constructed meaning significantly predicted children’s empathic expressiveness at 48 months; \( F(6,61) = 4.83, p < .01 \). Children who showed

### Table 3 Regression Models Predicting Sociomoral Development at 48 Months from Reminiscing in Negative Event Conversations at 42 Months

<table>
<thead>
<tr>
<th>Step &amp; variables</th>
<th>β at final step</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional understanding:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Gender</td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td>Maternal education</td>
<td>-.07</td>
<td></td>
</tr>
<tr>
<td>Emotional understanding 42 months</td>
<td>.49**</td>
<td>.37**</td>
</tr>
<tr>
<td>2. Maternal elaboration</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td>Child engagement</td>
<td>.26**</td>
<td></td>
</tr>
<tr>
<td>Dyadic co-construction of meaning</td>
<td>.09</td>
<td>.10*</td>
</tr>
<tr>
<td><strong>Empathic expressiveness:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Gender</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Maternal education</td>
<td>-.09</td>
<td></td>
</tr>
<tr>
<td>Empathic expressiveness at 42 months</td>
<td>.32**</td>
<td>.15**</td>
</tr>
<tr>
<td>2. Maternal elaboration</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>Child engagement</td>
<td>-.18</td>
<td></td>
</tr>
<tr>
<td>Dyadic co-construction of meaning</td>
<td>.43**</td>
<td>.18**</td>
</tr>
<tr>
<td><strong>Positive representations of relationships:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Gender</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>Maternal education</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>Positive representations 42 months</td>
<td>.53**</td>
<td>.36**</td>
</tr>
<tr>
<td>2. Maternal elaboration</td>
<td>-.08</td>
<td></td>
</tr>
<tr>
<td>Child engagement</td>
<td>-.15</td>
<td></td>
</tr>
<tr>
<td>Dyadic co-construction of meaning</td>
<td>.48**</td>
<td>.24**</td>
</tr>
<tr>
<td><strong>Moral self:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Gender</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>Maternal education</td>
<td>.13</td>
<td>.02</td>
</tr>
<tr>
<td>2. Maternal elaboration</td>
<td>-.08</td>
<td></td>
</tr>
<tr>
<td>Child engagement</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td>Dyadic co-construction of meaning</td>
<td>.32*</td>
<td>.13*</td>
</tr>
</tbody>
</table>

Note: * p < .05, ** p < .01, + p < .10.
high levels of concern at 42 months to the baby cry demonstrated similar levels of empathic expressiveness six months later. In addition, children and mothers who co-created coherent conversations about the child’s past emotional experiences at 42 months had children who demonstrated more empathic concern six months later.

Children’s positive and coherent representations of relationships at 48 months were independently predicted by children’s previous representations of relationship and the degree to which the dyad co-created an emotionally coherent narrative in reminiscing at 42 months; $F(6,56) = 9.43, p < .01$. Children who had previous positive and coherent representations of relationships in the MSSB were more likely to demonstrate similar representations six months later. In addition, the more mothers and children co-constructed a meaningful narrative at 42 months, the more likely children were to represent relationships positively six months later.

Finally, children’s moral self at 48 months was marginally predicted by the degree to which mothers and children were able to co-construct an emotionally coherent narrative about the child’s negative emotional experience at 48 months; $F(5,61) = 2.16, p = .07$. Thus, children who were part of dyads that co-constructed an emotionally coherent narrative at 42 months were more likely to demonstrate higher levels of moral-self six months later.

**Discussion**

The goal of this study was to examine the links between mother–child reminiscing about the child’s past emotional experiences and children’s concurrent and subsequent emotional understanding, empathic concern, representations of relationships, and moral self. Overall, the pattern of findings did support the idea that the quality of early reminiscing between mothers and children predicts children’s later socioemotional development, but that the links that it had with concurrent socioemotional development were weak. This is surprising, because others have found links between aspects of reminiscing quality and concurrent sociomoral functioning (see e.g., Bohanek et al., 2009; Laible, 2004a, 2004b). Most of the previous work, however, has focused on different aspects of reminiscing (e.g., the discussion of emotion) that may have demonstrated stronger links with concurrent understanding. Ultimately, however, it may be that meaning making (and children’s engagement in reminiscing) helps consolidate memories and promote reflection upon their past emotional experiences across time. As a result, the influence of these reminiscing qualities might only be found longitudinally and not concurrently.

Even though the links between concurrent reminiscing and children’s socioemotional development were weak, there were a number of significant correlations between elements of reminiscing and children’s socioemotional development. Consistent with past research, maternal elaboration at 42 months was significantly (but weakly) correlated with children’s concurrent emotional understanding (Laible, 2004a, 2011). Even though this link became stronger across time, maternal elaboration did not make a significant contribution to predicting emotional understanding at 48 months. Instead, this link was washed out by the stronger link that child engagement shared with children’s subsequent emotional understanding. Children who were more engaged in reminiscing at 42 months showed higher levels of emotional understanding at 48 months. Thus, children’s actual willingness and ability to openly discuss their negative emotional experiences was related to more emotion knowledge across time.
There are likely several possible explanations for this finding that children’s engagement mattered for predicting emotional understanding. Firstly, by participating in these conversations, children might reflect more upon the issues raised in them both during and after these conversations. Secondly, as others have found, children are more likely to remember aspects of a reminiscing conversation if they actively participate in it (McGuigan & Salmon, 2004; Ornstein et al., 2004), and this increased memory of their past emotional experiences might give children more emotion knowledge to draw upon in their current understanding. Finally, such a willingness to participate in reminiscing conversations might also be a reflection of a child’s receptive stance toward parental socialization (see e.g., Kochanska, Aksan, & Carlson, 2005). Thus, the more engaged children are in these tasks, the more likely they are to also appropriate parental messages about emotion and morality that are conveyed in the context of such discourse.

The most consistent predictor of children’s concurrent and subsequent sociomoral development was the degree to which mothers and children were able to co-create a meaningful story of the child’s past negative emotional experiences. This construct reflected contribution of both parties, the mother and child, and the extent to which they united to co-construct a meaningful understanding of the child’s past experiences with negative emotion. Thus, dyads who were high in this quality seemed to be on the ‘same page’ when discussing the child’s past experience with negative emotion and both contributed to the story (even though mothers provided the framework for the recollecting). Ultimately, high levels of meaning making in reminiscing at 42 months were associated with more positive representations of relationships concurrently and higher levels of empathic expressiveness, moral self, and positive representations of relationships longitudinally. Given the challenge of negative emotions for young children (and their parents), the ability of the dyad to make meaning out of the child’s past experiences with them likely has important consequences for a child’s socioemotional development (Fivush et al., 2003; Laible & Panfile, 2009). Understanding their past negatively charged emotional experiences likely promotes feelings of security in the child, which in turn enhances children’s feelings of self-worth and positive representations of themselves and others. Moreover, such an understanding of their own past experiences with negative emotion likely creates insight into the negative emotional experiences of others and enhances children’s responsiveness to others’ distress and enhances their sense of moral responsibility for others.

Especially interesting were the links that emotional reminiscing had with children’s moral development, including children’s empathic expressiveness and moral self. There are a couple of reasons for these possible links. Firstly, it is possible that the emotional competence that these conversations promoted, including emotion regulation and understanding, contributed to children’s empathic concern and moral self. Although we cannot rule out the possibility that these conversations contributed to children’s abilities to regulate and control negative emotion, from our data, it does not appear that emotional understanding accounted for the links between reminiscing, empathic expressiveness, and moral self. Thus, it seems these conversations may have more direct influences on moral development and may not be mediated by emotional understanding. Close to one half of these conversations chosen by mothers (46%) focused on children’s conflictual or aggressive behavior, and thus, there are good reasons to believe also that these conversations might promote moral understanding. Firstly, these types of conversations provide for direct discussions of the child’s conflict and misbehavior and provide opportunities for parents to scaffold children’s understanding of why this type of behavior is not acceptable (Laible & Murphy, in press).
Mothers might also have used inductive techniques in these types of conversations, thought to promote guilt and empathy (Hoffman, 1963, 2000), although we did not assess these. Ultimately, the exact mechanisms through which these conversations enhance moral development are unclear, and this is a rich area for future research.

As an aside, our findings do not discount the importance of maternal elaboration for predicting children’s socioemotional outcomes. Instead, it suggests that the influence of maternal elaboration may be partially (or fully) mediated by its influence on children’s engagement and the meaning-making process that occurs during reminiscing. Longitudinal work is needed to examine this possibility. In general, maternal elaboration was consistently correlated with outcomes at 42 and 48 months. It was also highly associated with children’s engagement in the task and more highly associated with the creation of meaning during the reminiscing task than was the child’s engagement with the task. Thus, it seems likely that maternal elaboration creates an environment that encourages children’s participation in these tasks and which encourages the child’s reflection upon the issues discussed during reminiscing. In addition, because mothers are still very much the architects of these early conversations, their elaboration is essential for the meaning-making process. Maternal elaboration has been consistently related to children’s provision of memory information in these conversations and to children’s memory of their past experiences (see Fivush et al., 2006 for a review).

As with any study, there are a number of important limitations. Firstly, the study was correlational, and as a result, causal interpretations must be made with caution. Despite this, however, there is growing evidence from intervention studies that causal interpretations are not without merit. A number of intervention studies have found evidence for the idea that training mothers to use more elaborative reminiscing does have consequences for children’s outcomes, especially for children’s memory for events and their emotional understanding (see Boland, Haden, & Ornstein, 2003; Reese & Newcombe, 2007; van Bergen et al., 2009). It is not clear, however, on the basis of this previous research, if the influences of maternal elaborative training might be mediated through the effects that this variable shares with child engagement or dyadic co-construction of meaning. It is also important to note that we did not have a large enough sample to explore the pattern of findings based upon the type of negative emotion discussed (anger versus fear, for example). Future research might want to examine if the type of negative emotion discussed in the dyad has consequences for the child’s acquisition of emotional and relational understanding.

In addition, for the most part, the sample involved middle to upper class well-educated families, and the results have limited generalizability. Previous work has suggested that there are cultural, ethnic, and socioeconomic differences in reminiscing that are likely related to different skills that cultures or subgroups want to promote (see Burger & Miller, 1999; Wang, 2001, Wang, 2007; Wang & Fivush, 2005). For example, work on personal storytelling, closely related to reminiscing, suggests that co-narrated story telling might be more frequent in working class than middle class families (Burger & Miller, 1999). Working class families have been found to produce more stories surrounding negative experiences (especially with regards to physical harm and aggression) (Miller, Cho, & Bracey, 2005) than do middle class families (in part because these are more frequent experiences in their lives). Thus, these stories may help prepare children for the hardship that will be part of their daily lives in poor neighborhoods. Moreover, there is evidence that working class families teach children values in the context of storytelling. Within the context of storytelling, children routinely were taught to assert and defend themselves from mock challenges (see...
Miller & Sperry, 1988). Working class mothers have also been shown to demand a higher level of factual information from their children and to contradict children until children gave the expected answer in the context of storytelling (see Wiley, Rose, Burger, & Miller, 1998). Thus, working class mothers may demand more authority to obedience, more truth telling, and more assertive and aggressive behavior to provocations than middle class mothers, all of which are values that are central to success in economic hardship.

Moreover, our study included only mothers. Research examining differences between mothers and fathers in reminiscing is mixed, with some researchers finding few differences (see Reese, Haden, & Fivush, 1996) and others finding differences (see Fivush, Brotman, Buckner, & Goodman, 2000). Some work has found that for example, mothers talk more about emotional experiences and use more emotion labels than fathers in reminiscing (see Fivush et al., 2000). Thus, there are reasons to believe that impact of reminiscing might vary based upon the gender of the parent (although no one has looked at this issue). Regardless, little work has examined the effects that father–child reminiscing has on children’s socioemotional and socio-moral development, and work in this area is desperately needed. In addition, as children become older, other conversational partners besides parents (e.g., peers and teachers) might also become influential in impacting the children’s emotional and moral understanding through reminiscing, and this will also be a fruitful avenue for future research.

In conclusion, this study provides some of the first longitudinal evidence that the quality of mother–child reminiscing predicts children’s subsequent sociomoral development (even after controlling for previous sociomoral development). In addition, however, the findings from this study support the idea that to truly understand the links that reminiscing has with sociomoral development, researchers need to consider the quality of the meaning making by the dyad (as well as the child’s contribution to these conversations). It might be especially important to explore factors that influence the mother and child’s ability to make meaning in the context of reminiscing. For example, the ability of the mother to be ‘mind-minded’ (i.e., the ability of the mother to view the child as possessing a mind) (Meins, 1997) might be especially important for helping the mother adjust her perspective to match the child and in cocreating meaning. In addition, it will be important to explore how these processes change across development. For example, as children become older and take more responsibility for shaping the nature of these conversations, do maternal elaboration, collaboration, and meaning making still relate to children’s construction of moral and emotional understanding? Some preliminary work hints that, at least, collaboration in these conversations remains important through adolescence (Bohanek et al., 2008), but more work is clearly needed. In addition, our findings might have implications for intervention. Maternal training programs that focus on maternal elaboration might enhance children’s moral and emotional understanding by evoking more meaning making in reminiscing and enhancing children’s engagement in these conversations.

References


Notes

1. Mothers and children engaged in both and positive and negative reminiscing event. However, it was mostly the negative reminiscing event that was linked with children’s outcomes (similar to Laible, 2011). Thus, the positive event data are excluded from this manuscript.

2. Emotional understanding was not correlated with empathic concern. Although emotional understanding was correlated with moral self, the significant links between reminiscing and moral self remain even controlling for previous levels of emotional understanding.

3. This variable was only administered at 48 months.