Remembering Children’s Emotions: Sources of Concordant and Discordant Accounts Between Parents and Children

Linda J. Levine  
University of California, Irvine

Nancy L. Stein  
University of Chicago

Maria D. Liwag  
Ateneo de Manila University

Parents were asked to recall recent events that had evoked happiness, sadness, anger, and fear in their children. Children (N = 77, 2.3–6.6 years) indicated whether they remembered each event, and if so, they described the event and how it had made them feel. Agreement between parent and child concerning how the child felt varied as a function of emotion. Children agreed with their parents’ emotion attributions most often for events that parents recalled as having evoked happiness and sadness, less often for fear, and least often for anger. Children disagreed with parents’ attributions of happiness and sadness most often when parents and children differed concerning the attribution of children’s goals. Discordant reports about children’s anger were most frequent when parents and children reported conflicting goals. Discordant reports about fear were most frequent when parents and children focused on different parts of the temporal sequence surrounding the event.

In this study we examined parents’ and children’s memories for children’s emotional experiences. Understanding children’s emotional responses from their point of view plays an important role in good parenting. Maccoby and her colleagues (Maccoby & Martin, 1983; Parpal & Maccoby, 1985) have suggested that children develop dispositions to accept or resist parental influence based in large part on their perceptions of parental sensitivity and responsiveness. Similarly, according to Dix (1991), parent–child relationships benefit greatly when parents try to understand how events have affected the emotions, needs, and desires of their children. If parents can understand and recount events from their children’s perspective, they are more likely to establish cooperative and harmonious relationships. Crockenberg and Litman (1990) and Farber and Mazlish (1980) also have stressed how important it is for parents to validate, rather than deny, the emotions that their children experience and report.

Despite widespread recognition of the importance of parental understanding and perspective taking, little is known about the rate of agreement between parents and children regarding children’s emotional experience. Studies on adaptive parenting have primarily assessed ways in which different parenting styles affect children’s behavior (Dix, 1991). Few studies have examined sources of agreement and disagreement between parents’ and children’s reports when recalling events from the children’s perspective. To address these issues, we asked parents to recall four recent events in which they had observed their children express the basic emotions of happiness, sadness, anger, and fear. Children were then presented with brief descriptions of the events that their parents had described. Children were asked whether they remembered these events, what had happened, and how they had felt. Parents’ and children’s accounts were compared in order to elucidate sources of concordance and discordance in their memories. Parents were asked to generate the events because it was necessary to have access to events that both parties had witnessed in order to assess concordance between parents’ and children’s accounts of emotional episodes. In addition, parental accounts of children’s emotions are frequently relied on in everyday and clinical settings.

Theoretical and empirical grounds exist for expecting features of parents’ and children’s reports to be concordant with one another. According to Stein and Levine (1987, 1990) and Stein, Trabasso, and Liwag (1993), people experience emotions when they appraise an event as leading to a change in the status of a goal (see also Folkman & Lazarus, 1990; Frijda, 1988; Lazarus, 1991; Lazarus & Folkman, 1984; Mandler, 1982, 1984; Oatley & Johnson-Laird, 1987). Young children’s understanding of emotion is similar to that of adults in many ways. Like adults, young
children describe their emotional experiences in terms of changes in their ability to attain their goals (Stein & Levine, in press). By 3 years of age, children can recognize and label different facial expressions of emotion (Camras & Allison, 1985; Huttenlocher & Smiley, 1990; Russell & Bullock, 1986); identify the emotions likely to be evoked by different types of events (Borke, 1971; Denham & Couchoud, 1990a, 1990b; Levine, 1995; Stein & Jewett, 1986; Stein & Levine, 1989); and generate specific causes and consequences for the basic emotions of happiness, sadness, anger, and fear (Harris, Olthof, & Terwogt, 1981; Liwag & Stein, 1995; Russell, 1990; Stein & Levine, 1989; Trabasso, Stein, & Johnson, 1981; Wade & Stein, 1994). Furthermore, the types of events that children describe as eliciting basic emotions are very similar to those described by adults (Stein & Levine, 1989; Stein & Liwag, 1997; Stein, Wade, & Liwag, 1997). Given that young children and adults represent emotional experience in similar ways, commonalities would be expected in their memories for emotional experiences.

Potential sources of discordance between parents’ and children’s accounts also exist, however. To infer how children feel in response to a particular event, parents must rely not only on external cues such as children’s expressive behaviors (e.g., face, voice, gestures, and utterances) but also on their inferences about their children’s goals and causal appraisals during the experience of an emotion. Even though similar general appraisal processes are at work in parents and children, it is still possible for their accounts to differ depending on the specific goals and causal inferences that parents attribute to their children during an emotional experience. Parents may be especially prone to recall their children’s emotional experience in a discordant fashion when their inferences about their children’s goals and beliefs differ from their children’s own appraisal of the emotional event.

Furthermore, parents’ own goals and beliefs during emotional episodes may significantly influence the emotional responses they attribute to their children. Memory for social events has been shown to be a function of the specific beliefs and goals that an observer or participant brings to a situation (Anderson & Pitchert, 1978; Asch & Zukier, 1984; Black, Turner, & Bower, 1979). To the extent that observers and participants share beliefs and goals, their interpretations of and memories for an emotional event are expected to be concordant with one another. To the extent that observers’ and participants’ beliefs and goals are at variance with one another, differences in their interpretations of and memories for the event are expected to occur. Indeed, Levine (1997) found that people tend to be inaccurate, even when recalling their own past emotions, if their beliefs and goals at the time of recall differ from those held at the time they experienced the emotions.

The frequency and source of discordant memories between parents and children can be expected to differ for specific emotions. The appraisals of events that lead to the experience of happiness are quite distinct from those that lead to the experience of negative emotions. People experience happiness when they appraise events as having resulted in the attainment of a goal or valued state (e.g., Frijda, 1988; Outley & Johnson-Laird, 1987; Stein & Levine, 1987, 1989). In parent–child interactions, for example, children typically express happiness when they are allowed to pursue activities that give them pleasure or when parents set up circumstances that allow their child to succeed at carrying out an activity (Liwag & Stein, 1995; Stein & Jewett, 1986; Stein et al., 1993). In such situations, children’s goals are usually apparent, and conflict between the goals of children and their parents is relatively rare. Thus, when parents recall that their children experienced happiness, children would be expected to recall the same emotional response.

Parents’ understanding of events that evoke anger from the perspective of their children is more problematic. Parents are often directly involved in the events that produce anger in their children, and they may be the cause of the anger they perceive in their children (Stein et al., 1993; Stein, Wade, & Liwag, 1997). Furthermore, parents themselves may experience anger or other intense negative emotions, especially if their goals are in conflict with their children’s goals (Gottman, 1993; Stein & Albro, 1997a; Stein & Ross, 1996). Research on conflict resolution has demonstrated that when two people are in the process of resolving a dispute, the primary goal of each participant, particularly in the initial part of the interaction, is to persuade the other person of the legitimacy of his or her own goals and point of view. The attentional and memory resources needed to accomplish this task require that each participant focus on information that would support his or her point of view and contradict the other’s point of view. As a result, each participant’s representation of the conflict may be skewed in the direction of his or her own goals and beliefs and may include erroneous information about the other’s goals and beliefs (Noller, 1980, 1984; Ross, 1989; Ross & Conway, 1986; Ross & Sicoly, 1979; Stein, Bernas, & Calicchia, 1997; Stein & Miller, 1993). When parents and children have conflicting goals, then, parents’ representation of their children’s goals and beliefs may be quite different from their children’s. These conditions would be expected to result in discordant memories for children’s emotional experience, especially in situations of anger (Gottman, 1993).

Discordant accounts of children’s emotions may also arise from focusing on different parts of the emotional experience during recall. Observers of another person’s emotion may focus primarily on events and actions in close temporal proximity to the display of emotion. The individual who experienced the emotion, however, may include events prior to or subsequent to the focal emotional event in recounting his or her reaction. Focusing on different parts of an emotional experience may occur most often when parents recall their children expressing negative emotions, particularly fear and anger.

When children recall an event that evoked a negative emotion, they may focus primarily on how the problem which evoked the emotion was resolved. This is particularly relevant to memory for fear experiences that typically involve the perception of a threat, in which harm has not yet occurred but is believed to be highly probable (e.g., Stein & Levine, 1987; Stein et al., 1993). For example, if a perceived threat evoked momentary fear in a child, but receiving protection and comfort from a parent afterward resulted in feelings of relief or happiness, these latter feelings may be more important to the child in remembering the event. Thus, if children focus on the long-term outcomes that resulted from a fear situation, their reports of emotion would be expected to be discordant with their parents’ reports because of their failure to recall or focus on how they felt immediately after the threat occurred. Similarly, children may focus on the long-term outcomes of anger-eliciting situations rather than on their feelings immediately after a provoking incident. The emotional responses of anger and sadness co-occur with great frequency, but sadness is often the enduring
emotional response when conflicts result in the loss of something valued by the child (Borke, 1971; Denham & Couchoud, 1990b; Levine, 1995, 1996; Lewis, 1989; Stein & Jewett, 1986; Stein & Levine, 1989; Stein & Trabasso, 1989; Trabasso et al., 1981). Thus, even though children may have displayed anger in response to a conflict, they may recall their emotional response as one of sadness if sadness was the more enduring emotional response.

In summary, three factors were expected to influence whether parents and children reported the same or discrepant emotions: (a) whether parents and children agreed on children’s goals during the emotion episode, (b) the presence or absence of goal conflict between parents and children during the episode, and (c) the use of a similar or different time frame in recalling and reporting the episode. Specifically, we predicted greater concordance between parents and children for events that parents described as evoking happiness than for events that parents described as evoking negative emotions. Goal conflict between parents and children in anger episodes was expected to lead to frequent discordant accounts of children’s emotions. The time frame adopted in reporting the emotional episode was also expected to regulate the frequency of discordant reports concerning events that parents recalled as eliciting negative emotions, particularly fear and anger.

We also wished to explore how children’s age and gender relate to the degree of concordance between parents’ and children’s accounts. Some research findings suggest that few age differences should be observed. As described previously, by 3 years of age, young children are quite competent at talking about emotional states. This competence should be especially apparent when young children are asked to describe salient events from their own experience. On the other hand, older children may describe more emotional responses to events than the younger children (Harter & Whitesell, 1989), and this would increase the likelihood of a match between the emotions observed by parents and those reported by their children. In addition, some researchers have argued that children acquire an understanding of the representational nature of mental states such as emotions and beliefs at about the age of 4 (e.g., Gopnik, 1993; Perner, 1991). To explore potential age differences in children’s descriptions of emotions, then, we contrasted the reports of children older than 4 with those of younger children.

Gender differences might also be observed in children’s emotion reports. In studies of interactive conversations about emotional experiences between parents and their preschool children, parents have been found to discuss sadness more often with daughters than with sons (Adams, Kuebli, Boyle, & Fivush, 1995; Kuebli & Fivush, 1992) and anger more often with sons than with daughters (Fivush, 1991). Moreover, the frequency of parents’ talk about emotions has been found to predict preschool children’s understanding of emotions (Dunn, Brown, & Beardsall, 1991).

Thus, concordant reports between parents and children might be more frequent when girls are recalling events that evoked sadness and when boys are recalling events that evoked anger. Boys’ and girls’ descriptions of emotions may also be influenced by their developing understanding of social norms. In elementary school, older children have been found to be more knowledgeable than younger children concerning social norms for the display of emotions (Saarni, 1993), with boys and girls adhering to somewhat different norms (e.g., Underwood, Coie, & Herbsman, 1992). With increasing age, boys may be less willing than girls to admit experiencing fear or sadness, whereas girls may be less willing than boys to admit experiencing anger.

Method

Participants

Seventy-seven parent–child pairs participated in the study. The parent sample consisted primarily of mothers (90%); the remainder of the sample consisted of fathers (9%) or a grandparent (1%). The average age of the parents was 36.5 years ($SD = 4.8$; range = 27–52 years), and 89% had a college degree. The ethnic backgrounds of the parent–child pairs were Caucasian (77%), African American (14%), and varied ethnicity (9%). Thirty-three children were 4 years old or younger (age range = 2.3–4.0 years; $M = 3.3$ years), and the remaining 44 children were older than 4 years (age range = 4.1–6.6 years; $M = 5.0$ years). The younger group included 15 girls and 18 boys; the older group included 20 girls and 24 boys. Families were recruited from five preschools and day-care cooperatives in a middle-class community on the south side of Chicago.

Materials

Parents and children participated individually in interviews in which they were asked to recall four emotional events. The events were generated by asking parents to recall instances during the past week in which they had observed their children experience each of four emotions: happiness, sadness, anger, and fear. To increase the probability that parents would report instances during which their children had actually experienced the emotion under consideration, we asked parents to base their inferences concerning their children’s emotional state on facial, verbal, or behavioral expressions of emotion. Two factors determined our decision to ask parents about recent events. We wanted to obtain events from the parents that were still memorable to children, and we wanted to select a time period within which parents would have enough opportunities to observe all four emotions in their children.

After nominating specific events that had elicited each emotion, parents were asked to recall the entire episode that surrounded their children’s expression of emotion. Parents’ accounts were then transcribed. The event that had evoked each emotion was abstracted from the parent’s account of the entire emotional episode. We then described the event to the child, using a summary statement composed primarily of the parent’s own words. Parents’ accounts thus served as the stimulus materials for the children’s interviews.

In interviews with the children, only the events described by parents were presented. Children were not given information concerning their parents’ attributions of the children’s emotional reactions, goals, or behaviors. Children were simply asked if they remembered each event occurring. If children did remember the event, they were asked to describe what happened, and then they were asked to answer a series of questions about the event and their reactions to it.

Design

Interviews with parents preceded the interviews with children by one day. In both parent and child interviews, the order of emotion narrations was varied by using a Latin square design to ensure that each type of emotional experience was recalled approximately equally often in first, second, third, and fourth positions.

Procedure

Parent interview. Interviews with parents were conducted individually at the parents’ homes or in the children’s preschool or day-care centers. All interviews were audiorecorded and lasted approximately 1½ hours. Parents
were asked to recall four episodes that had occurred in the past week in which they had observed their child express feelings of happiness, sadness, anger, and fear. The instructions included the following specific questions: “Have you seen your child become (happy/sad/angry/afraid) within the last week?” If parents said yes, they were asked “What happened to make your child feel that way?”

After parents had spontaneously recalled as much as possible about their child’s emotional experience, they were asked two sets of questions. The first set of questions concerned the child’s thoughts, goals, and behavioral responses to the event. Parents were asked (a) “When (insert event nominated by parent) happened, why did your child feel (insert specific emotion)?” (b) “What did your child think about?” (c) “What did your child wish he or she could do?” (d) “What did your child do?” and (e) “Did your child feel any other way besides (insert emotion named by parent)?” When parents reported that their child had felt more than one emotion, Questions a–d were repeated for each emotion reported. The second set of questions asked parents to judge whether their child would agree with their attributions of the child’s emotions. The specific questions were (a) “Do you think your child will agree with you that he or she felt (insert emotion named by the parent)?” (a yes or no response was requested) and (b) “On a scale from 1 to 10, with 10 being ‘definitely certain’ and 1 being ‘not at all certain,’ how certain are you that your child will report having felt (insert emotion named by parent)?” The certainty questions (second set) were asked concerning the requested emotions only (i.e., happiness, sadness, anger, and fear).

Child interview. Children were interviewed individually at home or at school without their parents’ being present. Each interview session was videotaped and audiorecorded and lasted approximately 30–45 min. Children were told that their parents had talked to the interviewer about several events that had happened in the past week. The interviewer then presented children with a one- or two-sentence summary of their parent’s account of one event, such as “We’re going to talk about the time last week when you wanted to watch Care Bears and your mommy wouldn’t let you. Do you remember that time?” If children did not remember the emotion-eliciting event, the interviewer went on to the next event and presented it in a similar fashion.

If children said they remembered the event, they were asked to describe the event and their reactions to it: “Can you tell me exactly what happened?” “When (insert event) happened, how did you feel?” Children were then asked the same questions that their parents had been asked concerning their reactions to the event: (a) “Why did you feel (insert emotion named by child)?” (b) “What did you think about?” (c) “What did you wish you could do?” (d) “What did you do?” and (e) “Did you feel any other way besides (insert emotion named by child)?” When children indicated that they had experienced more than one emotion, Questions a–d were repeated for each emotion reported. The interviewer used the same procedure for all four emotion-eliciting events.

Finally, after children had responded to the probe questions for all four events, they were informed of the primary emotion that their parent had described and they were asked whether they had experienced that emotion (e.g., “When your mommy told us that you wanted to watch the Care Bears and she would not let you, she said that you felt angry. Do you remember feeling angry?”).

Coding parents’ and children’s emotional responses. Parents’ and children’s reports of their emotional responses were coded by using an affective dictionary of synonyms for the four basic emotions of happiness, sadness, anger, and fear as well as other emotional responses (Stein & Carstensen, 1997; see also Stein, Folkman, Trabasso, & Richards, 1997). For example, if children reported feeling glad, smiley, or good, their emotional response was coded as happy. If they reported feeling scared, afraid, terrified, or horrified, their emotional response was coded as fear.

Two coders categorized parents’ and children’s emotional responses as happy, sad, angry, afraid, or other. The raters agreed on 98% of the coding decisions. The dictionary of emotion synonyms is available from Nancy L. Stein.

Results

Parents’ and Children’s Recall of Emotional Events

Preliminary analyses revealed no significant differences in the number of emotion episodes described by children, or in the rates or sources of concordance or discordance, when mothers described their children’s emotions versus when fathers or a grandparent described children’s emotions.

The mean number of emotion episodes that parents described was 3.9. Thus, almost all parents were able to recall specific instances when their child had experienced all four emotions. Children performed well at recalling the events described by their parents, acknowledging that 87% of the events had occurred. On average, children acknowledged that 3.3 parent-nominated events had occurred. Children recalled significantly more of the happy events (99%) than the negative emotional events described by their parents (83%), Cochran’s $\chi^2(1, N = 66) = 9.23, p < .05$. A significant association between age and recall of emotional events also was found. Younger children acknowledged the anger-eliciting events described by their parents more often (100%) than did older children (73%), $\chi^2(1, N = 52) = 4.84, p < .05$. No other age differences were found. No significant gender differences were found in recall of the events described by parents.

When children agreed that an event had taken place, they provided narrative accounts of these events 95% of the time, and they recalled their emotional reactions to these events 86% of the time. Children’s ability to recall their emotional reactions did not differ across specific types of emotion episodes, with one exception: Boys experienced greater difficulty recalling their emotional reactions to parent-generated fear events than did girls. Boys recalled their emotional response to 72% of parent-nominated fear events, whereas girls recalled their emotional response to 96% of these events, $\chi^2(1, N = 52) = 4.84, p < .05$. No other gender differences, and no age differences, were found in children’s recall of their emotional responses to the events described by their parents.

Number of Emotions Described by Parents and Children

Parents. Although parents were instructed to describe events that had elicited a specific emotion in their children (i.e., happiness, sadness, anger, or fear), 18% of parents reported that their children had experienced additional emotional responses to the events described. The mean number of emotions that parents described per event was 1.25. The results of a one-way analysis of variance (ANOVA) showed no significant differences in the frequency with which parents mentioned multiple emotions across the four emotion-eliciting events.

Children. Twenty-nine percent of the children described more than one emotion when recalling their reactions to the events that their parents had described. The mean number of emotions generated by children in response to each event was 1.32. No significant differences were found in the frequency with which children described multiple emotions across the four emotion-eliciting events. Moreover, no age or gender differences were found in
children’s propensity to describe multiple emotions in response to the events described by their parents.

**Parents’ Certainty Ratings**

The next set of analyses was conducted to assess whether parents believed that their children would agree with their descriptions of the children’s emotions. Responses to the yes–no question were examined first. Across all four emotions, parents reported that yes their child would agree with them, 85% of the time. No differences in the frequency of yes–no judgments were found across the four emotional events described.

The mean rating on the 10-point certainty scale across all four emotion events was 8.1 out of 10 (SD = 2.0), with a rating of 10 representing “definitely certain.” The results of a one-way ANOVA showed that parents were more certain that children would agree with their reports of children’s happiness (M = 8.7) than with their reports of children’s three negative emotions (M = 7.7), F(3, 270) = 5.14, p < .01. No differences were found between parents’ certainty ratings for the three negative emotions. Overall, then, parents were quite certain that their children would recall experiencing the emotion that parents had reported.

**Concordance Between Parents’ and Children’s Accounts of Emotion**

Four concordance analyses were conducted to determine how well parents and children agreed with each other concerning children’s emotional responses to the events that parents had described. The first analysis was the most conservative assessment of parent-to-child concordance. This analysis used as a base the primary emotion attributed by parents in response to our directions to describe an event that made their children feel happy, sad, angry, or afraid. We then assessed how frequently children agreed with their parents’ attribution. A concordant response was defined as a match between the parents’ primary emotion attribution and any emotion that the children described feeling in response to the event. A second parent-to-child concordance analysis was more lenient and included all emotions reported by the parents in response to an event as well as all emotions reported by the children. This analysis was conducted to determine whether inclusion of additional emotional responses increased agreement between parents and children with respect to children’s emotional responses. A third parent-to-child concordance analysis assessed the frequency with which children agreed with their parents after children had been told which emotion their parents observed. A final analysis assessed concordance from children to their parents. In this analysis, children’s emotion reports were used as the base and compared with any emotion that parents had observed in response to an event. In all of these analyses, the rates of concordance between parents and children did not differ significantly by the children’s age group or gender.

**Conservative analysis of concordance from parent to child.** In the first concordance analysis, a parent and child were judged to be in concordance if children reported having experienced the primary emotion that parents described. The frequency of concordant reports differed by emotion, Cochran’s Q(3) = 21.94, p < .001. Pairwise comparisons indicated that concordant reports were most frequent for those events that parents identified as eliciting happiness (.80) and sadness (.72), significantly less frequent for fear (.49), and least frequent for anger (.22).

Because of the low degree of concordance between parent-nominated anger and fear events, we examined the specific emotions children reported when they disagreed with their parents’ assessments. These data are presented in Table 1. When parents recalled their children displaying anger and fear, children’s most frequent alternative emotion report was sadness. The fact that children experienced sadness in response to events reported to have elicited anger or fear is consistent with Stein and Levine’s (1989) findings that events often elicit multiple emotions. Indeed, the same events frequently elicit both anger and sadness (see also Levine, 1995, 1996), so it was not surprising to find that many children reported sadness instead of anger. Surprisingly, however, when their parents remembered them expressing anger or sadness, children reported feeling happy about 20% of the time.¹

**Lenient analysis of concordance from parent to child.** A more lenient concordance analysis was conducted next. In this analysis, a concordant response was defined as a match between any of the emotions described by parents or children in response to an event. The results are shown in Table 2. To facilitate comparison, the first row of Table 2 summarizes the results of the conservative concordance analysis described earlier. The second row of Table 2 shows the results of the lenient concordance analysis. Even using a lenient criterion, agreement between parents and children did not increase significantly, although for each type of emotion event, relaxing the criterion for inclusion increased the rate of agreement by one or two children. The finding that the use of a lenient criterion did not significantly increase agreement may be explained by the fact that most children and most parents reported only one emotional response.

**Concordance after children had learned of their parents’ emotion attributions.** The third concordance analysis assessed the proportion of children who agreed with their parents’ primary emotion attribution after they had been informed of it. These rates of agreement are presented in the third row of Table 2. Nonparametric proportion tests for two dependent samples were conducted to compare the proportion of concordant reports for each emotion before and after children were informed of their parents’ attributions. The results indicated that although the proportion of concordant responses increased in comparison to the first conservative concordance estimate, only the proportion of concordant responses with parents’ appraisals of anger increased significantly; critical value (1) = 5.92, p < .05. It is important to note that in all three concordance analyses that used the parents’ emotion attributions as the base, the same pattern of agreement over the four types of emotion events was found. Even when children were given an explicit opportunity to agree with their parents, the proportion of events for which children agreed with their parents’ appraisals was

¹ The conservative parent-to-child concordance analysis was repeated by using only the subset of the events for which parents indicated that they were certain their children would agree with their primary emotion attributions (i.e., parents said yes in response to the yes–no certainty question). Restricting the concordance analysis to this 85% of the events did not lead to an increase in the proportion of concordant emotion reports: The proportion of events for which children reported the same primary emotional responses as their parents was .80 for happiness, .68 for sadness, .47 for fear, and .21 for anger.
Table 1
Proportion of Children’s Emotion Reports Concordant With Parents’ Emotion Reports Using a Conservative Criterion

<table>
<thead>
<tr>
<th>Child’s reported emotion</th>
<th>Happiness (n = 76)</th>
<th>Sadness (n = 76)</th>
<th>Fear (n = 74)</th>
<th>Anger (n = 74)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happiness</td>
<td>.80</td>
<td>.19</td>
<td>.06</td>
<td>.22</td>
</tr>
<tr>
<td>Sadness</td>
<td>.07</td>
<td>.72</td>
<td>.19</td>
<td>.39</td>
</tr>
<tr>
<td>Fear</td>
<td>.00</td>
<td>.00</td>
<td>.49</td>
<td>.00</td>
</tr>
<tr>
<td>Anger</td>
<td>.00</td>
<td>.03</td>
<td>.05</td>
<td>.22</td>
</tr>
<tr>
<td>Other*</td>
<td>.13</td>
<td>.06</td>
<td>.21</td>
<td>.16</td>
</tr>
</tbody>
</table>

Note. Proportions in bold typeface represent concordant reports between parents and children. Although 77 parents were interviewed, not all parents were able to generate an event for each emotion. The table indicates the total number of events described by parents for each emotion. In response to the events generated by parents, children reported feeling happy in 96 cases, sad in 103 cases, afraid in 36 cases, angry in 23 cases, and other in 42 cases.

* Other includes cases in which children did not recall the event; did not recall feeling an emotion; or recalled feeling an emotion other than happiness, sadness, anger, or fear.

only .42 when parents attributed anger and .60 when parents attributed fear. These proportions of agreement are significantly lower than children’s agreements with their parents’ appraisals of happiness and sadness, Cochran’s $Q(3) = 18.32$, $p < .01$.

Concordance from child to parent. Children’s emotion reports served as the basis for the final set of concordance analyses. For example, given that children recalled feeling angry in response to an event, we determined how often parents also reported that children had expressed anger. In this analysis, the lenient criterion was used in which all of the emotions that children reported in response to an event were compared with all of the emotions that parents reported. The results of these analyses are shown in the fourth row of Table 2. From the children’s point of view, parents usually agreed with their reports of having felt fear (1.0); parents usually agreed with children’s reports of having felt angry (.93). Parents agreed less often, however, with children’s reports of sadness (.58) and happiness (.71).

These data can be explained by examining the relative frequency of children’s reports of each of the four emotions. Across all children, sadness was expressed 103 times, happiness 96 times, fear 36 times, and anger 23 times. Thus, from the children’s perspectives, they experience more sadness and happiness than their parents report. Even though parents were very accurate at describing events that made their children feel happy and sad, according to the children, parents still failed to report a good portion of their happy and sad feelings. Furthermore, according to the children’s responses, even though parents report that children are angry and afraid when children say they are, parents overattribute both anger and fear in situations in which children report having felt either sadness or happiness.

Sources of Discordance in Reports of Children’s Emotions

To explore the sources of discordance between parents’ and children’s memories for children’s emotions, we focused on three dimensions: (a) Did parents and children agree concerning children’s goals during the emotional episode? (b) Did parents and children have conflicting goals during the emotional episode? and (c) Did parents and children use similar time frames to begin and end their reports of the episode? Unless otherwise stated, no significant gender or age differences were found in analyses of the sources of discordance with parents.

Parents’ understanding of children’s goals. We predicted that parents’ failure to identify their children’s goals accurately would lead to discordant reports of children’s emotions. To assess parents’ understanding of their children’s goals, we first coded parents’ and children’s narratives for explicit statements of goals. Goals were identified on the basis of linguistic markers associated with states of preference, desire, need, intent, and attempt. Thus, statements such as the following were scored as explicit references to goals or preferences: “I really wanted that toy,” “I tried my best,” “I decided to go.” Two raters independently coded the parent and child narratives to identify references to the children’s goals and agreed on 100% of the coding decisions.

Explicit reference to children’s goals (either in free recall of the emotion-eliciting event or in response to probe questions) was made in 97% of the parents’ narratives and in 77% of the children’s narratives. Children’s statements of their own goals were then compared with the parents’ appraisals of their children’s goals. Two coders scored parents’ accounts as accurate or inaccurate, depending on whether parents’ goal appraisals were consistent with their children’s goal statements. Interrater reliability on this scoring was also 100%. Table 3 contains verbatim examples of concordant and discordant goal appraisals from parents and children. Parents were accurate in reporting their children’s goals in 86% of the episodes. A Cochran’s $Q$ analysis showed that the frequency of concordant accounts of children’s goals did not differ by emotion.

When parents were unable to appraise their children’s goals accurately, did this lead to discordance in emotion recall as well? For each emotion, chi-square analyses were conducted on the frequency of concordant and discordant emotion reports when parents and children agreed or disagreed about children’s goals.

Table 2
Proportion of Concordant Emotion Responses Between Parents and Children Using Four Types of Concordance Analyses

<table>
<thead>
<tr>
<th>Type of analysis</th>
<th>Happiness (n = 76)</th>
<th>Sadness (n = 76)</th>
<th>Fear (n = 74)</th>
<th>Anger (n = 74)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent-to-child concordance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservative criterion*</td>
<td>.80</td>
<td>.72</td>
<td>.49</td>
<td>.22</td>
</tr>
<tr>
<td>Lenient criterion*</td>
<td>.80</td>
<td>.76</td>
<td>.51</td>
<td>.27</td>
</tr>
<tr>
<td>Child informed*</td>
<td>.91</td>
<td>.82</td>
<td>.60</td>
<td>.42</td>
</tr>
<tr>
<td>Child-to-parent concordance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lenient criterion</td>
<td>.71</td>
<td>.58</td>
<td>1.00</td>
<td>.93</td>
</tr>
</tbody>
</table>

* Conservative concordance analyses compared the primary emotion attributions of the parents with all emotions reported by the children. * Lenient concordance analyses compared all emotions attributed by the parents with all emotions reported by the children. * Child informed refers to concordance rates after children had been informed of their parents’ emotion attributions.
The results showed that discordant reports concerning happy children’s goals (33%) than when parents were accurate (0%), events were more frequent when parents were inaccurate about ports for anger (inaccurate = 100%, accurate = 68%) and for fear were also associated with more frequent discordant emotion re-

\[ \chi^2(1, 66) = 7.20, p < .05. \]

Disagreements about children’s goals children’s goals (100%) than when parents were accurate (22%), were also more frequent when parents were inaccurate about

\[ \chi^2(1, 67) = 7.40, p < .05. \]

Discordant reports about sad events were also more frequent when parents were inaccurate about

\[ \chi^2(1, 69) = 7.50, p < .05. \]

Parent-child goal conflict. Discordant accounts of children’s emotions were also predicted in situations in which parents and children held conflicting goals. Goal conflict was expected to be more frequent when parents participated in, rather than simply observed, the events that evoked emotions in their children. To test these hypotheses, we first examined parents’ narratives to determine whether parents were simply observers or were also participants in the emotional event. Parents were coded as having participated in the event if they served as the direct cause, perpetrator, or facilitator of their child’s emotion. For example, a mother who reported that her child got angry because she failed to give him his allowance was coded as a participant. A mother who recalled her son’s happiness when she bought him his first Lego Pirate Set was also coded as a participant. On the other hand, a father who witnessed his daughter’s fearful response as she watched the horror movie Beetlejuice was classified as an observer, as was the mother who observed her child’s anger when the child’s brother grabbed the child’s toy saw. Two raters coded parents’ narratives for parental role and agreed on 93% of the coding decisions. The frequency of parental participation varied across the four types of emotion episodes, Cochran’s Q(3) = 30.58, p < .001. Pairwise comparisons indicated that parents participated most often in events that they described as evoking anger (66%); parents also participated significantly more often in events that they described as evoking sadness (49%) than in events that they described as evoking happiness (30%) or fear (26%), which did not differ significantly from one another.

Children’s and parents’ narratives were then coded for the presence or absence of goal conflict. Although parents were not asked directly about their own goals in the episodes in which their children had experienced an emotion, parents explicitly specified their goals in 68% of the emotion episodes. Parents’ goals were identified on the basis of the same linguistic markers used previously to code children’s goals. Goal conflict was coded as being present when parents and children expressed desires or preferences that were mutually exclusive or opposed to one another. Two coders achieved 98% agreement in scoring for goal conflict. Table 4 contains verbatim examples of parent and child narratives with and without goal conflict.

No conflicts were found between parents’ and children’s goals when parents were only observers. When parents participated in negative emotion episodes, clashes between goals were quite frequent, especially in anger episodes. Parents’ goals clashed with their children’s goals 95% of the time in anger episodes, 79% of the time in sad episodes, and 50% of the time in fear episodes. When parents participated in happy episodes, their goals were always concordant with their children’s goals. It is clear then that parental participation in anger episodes was almost synonymous with goal conflict between parent and child.

Was the presence of goal conflict associated with discrepancies between parents’ and children’s emotion reports? To answer this

Table 3: Examples of Concordant and Discordant Goal Statements From Parents and Children

<table>
<thead>
<tr>
<th>Child’s goal</th>
<th>Parent’s appraisal of child’s goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concordant goal appraisals</td>
<td></td>
</tr>
<tr>
<td>Well, I wanted the pacifier. I was thirsty and hungry and all that stuff.</td>
<td>He wanted his pacifier. He wanted the comfort from his pacifier at that moment.</td>
</tr>
<tr>
<td>I was mad because I didn’t like to do that, um doing it, sharing a friend, makes me crazy.</td>
<td>She was very angry yesterday when she wanted to play with Zooey and then Zooey alone but another little girl Anne came over and she had to share Zooey with Anne. She does not like to share her friends. She wants just one friend.</td>
</tr>
<tr>
<td>I just didn’t wanna, I just didn’t want my dad to put me in there, in the baby car seat.</td>
<td>She wanted to sit in the seat belt instead of a car seat. I think she wanted to sit in the seat belt like the adults. She didn’t want to sit in the car seat, the baby seat.</td>
</tr>
<tr>
<td>Discordant goal appraisals</td>
<td></td>
</tr>
<tr>
<td>I felt good and happy and laughy because I like it when dog licked my face.</td>
<td>She doesn’t want him [dog] to lick her face. She says she doesn’t like his kisses early in the morning.</td>
</tr>
<tr>
<td>I was happy because I really don’t wanted Coke. ‘Cause I was playing and I had a toy in my hand.</td>
<td>Like he wants Coke for breakfast or something like that. “I want the Coke. Why can’t I have the Coke?” I want what I want when I want it. That’s what he was thinking. Yeah, he was real mad.</td>
</tr>
</tbody>
</table>
A final factor examined as a potential source of discordance was the time frame that parents and children used in recounting emotional events. Coders rated whether for any given parent–child pair of narratives similar temporal boundaries were used to recall the episode or whether the child included events prior to, or subsequent to, the focal emotion episode described by the parent. Two coders scored all narratives and agreed on 97% of the coding decisions.

A common time frame was used by parents and children in recalling 72% of all emotion episodes. The likelihood of using a common time frame did not differ across the four types of emotion episodes. Table 5 shows the proportion of discordant reports of children’s emotions for narratives in which parents’ and children’s accounts either shared or did not share a common time frame. Recalling emotion episodes from different time perspectives was significantly associated with higher rates of emotion discordance only for fear episodes, \( \chi^2(1, N = 30) = 3.89, p < .05 \). Indeed, all parent–child fear narratives lacking a common time frame were associated with discordant emotion appraisals (i.e., children did not report feeling fear). In contrast, only 31% of fear narratives with a common time frame were associated with emotion discordance. Thus, children’s failure to report fear reactions that parents observed was frequently due to children’s focus on different parts of the fear episode.

Discussion

Despite widespread recognition of the importance of parental empathy, little is known about the factors that promote or interfere with parents’ understanding of their children’s emotional responses to events. Parental understanding and responsiveness are typically treated as stable characteristics of the parent or parent–child dyad. This study examined situational factors that affect the degree of concordance between parents’ and children’s representations of emotional situations. Parents recalled recent instances in which they had observed their children display happy, sad, angry, and fearful reactions to events. Parents’ accounts of emotion-eliciting events were then used to elicit young children’s memories for the events and for their emotional reactions to those events.

Parents had no difficulty recalling recent emotional events experienced by their children, and children agreed that the majority of these events had taken place. When children recalled an event they were almost always able to describe the event, and in most cases they also recalled their emotional reactions to it. Agreement concerning which emotion children had felt varied as a function of the emotion parents recalled, however. Children agreed with their parents’ emotion attributions most often concerning events that their parents cited as evoking happiness and sadness, less often on

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Similar time frames</th>
<th>Different time frames</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happiness</td>
<td>.07</td>
<td>.00</td>
</tr>
<tr>
<td>Sadness</td>
<td>.23</td>
<td>.00</td>
</tr>
<tr>
<td>Anger</td>
<td>.73</td>
<td>.80</td>
</tr>
<tr>
<td>Fear</td>
<td>.31</td>
<td>1.00*</td>
</tr>
</tbody>
</table>

* *p < .05.*
When parents reported having seen their children express fear or anger, children often recalled having felt sad or happy. These relatively low rates of agreement when parents attributed anger and fear were found even when parents were certain that their children would agree with their emotion attributions and even after children were informed of their parents’ attributions and allowed to revise their own accounts.

Three factors were associated with discordance between parents’ and children’s memories of children’s emotions: (a) disagreement between parents and children concerning children’s goals during the emotion episode, (b) goal conflict between parents and children during the event, and (c) use of differing time frames in describing the event. The factors most highly associated with discordant reports varied by emotion. Although little discordance between parents and children was found for events that parents recalled as evoking happiness and sadness, the emotion disagreements that did occur could be accounted for by parents’ failure to identify their children’s goals.

To illustrate, one mother reported that her son was happy when she took him grocery shopping. This outing was special because it was the only occasion during the week when she and her youngest son had time to spend together without other family members. According to the mother, her son enjoyed the trip because it fulfilled his goal of having his mother to himself. When the child was asked about the shopping trip, he remembered it clearly but said it made him feel sad. He was sad because he knew that when he went shopping with his mother, his older brothers would go into his room, play with his favorite toys, and eat his candy Gummy Worms. Thus, for the child, going on a shopping trip with his mother represented the failure of a set of goals of which his mother was unaware or at least did not report.

We predicted that concordant reports concerning children’s emotions would be most difficult to obtain when parents attributed anger to children. In the majority of parent-generated anger episodes, parents were not simply observers of their children’s emotions, they were also participants in emotionally charged interactions with their children, making prohibitions or requesting compliance from them. According to Dix (1991), in such situations, parents normally have a set of goals distinctly different from the children’s goals, and indeed, goal conflicts between parent and child were frequent in anger episodes. When parents participated in the emotional episode that caused their children’s anger, parents’ own goals conflicted with their children’s goals 95% of the time. As predicted, when parents recalled their children as having felt anger, the presence of conflicting goals between parents and children typically led to discordant accounts of children’s emotions.

Children frequently recalled feeling sad in response to situations in which their parents recalled observing anger. These findings are consistent with Baumeister, Stillwell, and Wotman’s (1990) findings concerning memories of interpersonal conflicts from the perspectives of perpetrators and victims. In situations in which individuals saw themselves as victims, they tended to focus on lasting negative consequences brought about by a transgression. Perpetrators were more likely to restrict their accounts to the eliciting event itself and to minimize lasting damage. An alternative explanation for the anger findings should also be noted, however. Children may have found it more threatening to recall or describe anger at their parents than to recall or describe anger at a friend or sibling. Future research will be needed to assess the relative contributions of goal conflict and parental involvement in producing discrepant memories concerning children’s anger.

Children’s failure to report fear reactions that their parent had observed was often due to children’s focus on different parts of the emotion-eliciting episode. Indeed, all parent–child fear narratives lacking a common time frame were, associated with discordant emotion reports. Parents’ typical response to situations that elicit fear in their children is to act quickly to prevent a threat from being actualized and to alleviate their children’s fear (Liwag & Stein, 1994; Stein & Jewett, 1986; Wade & Stein, 1994). Thus, children may have reported sadness because they focused on the loss that the fear episode had entailed. Children may have reported feeling happy because they recalled a successful parental intervention that had relieved their fear.

Few age or gender differences were found. Younger children acknowledged the anger-eliciting events described by their parents more often than did older children. Boys were less likely than girls to recall their emotional responses to events that parents described as having elicited fear. These differences may be due to children’s developing understanding of, and adherence to, emotional display norms (e.g., Saarni, 1993). Outbursts of anger are less acceptable in older than in younger children. Boys may be discouraged from expressing fear to a greater extent than are girls. The lack of age and gender differences found in other analyses is important and may be due to the methodology used. Although marked gender differences have been found when parents and children have been asked to engage in interactive conversations about emotional events (e.g., Adams et al., 1995; Fivush, 1991; Kuebli & Fivush, 1992), these differences did not emerge in the present study in which parents and children were asked to generate their own separate reports of significant events that they had witnessed or experienced. Thus, the context in which emotions are recalled and discussed appears to influence whether gender differences will be observed.

Developmental differences in narrative complexity and content are typically observed when children are asked to talk about events that are somewhat unfamiliar to them or when children are asked to describe events from another person’s perspective (e.g., Harter & Whitesell, 1989; Stein & Albright, 1997b; Stein & Levine, 1989). In the current study, children described salient events of personal importance, most of which had occurred in the familiar setting of their own homes. Under these conditions, even the youngest children were capable of generating a complete episodic narrative with the same degree of coherence as the narratives of the older children. More specifically, detailed narrative analyses were conducted on the content of the younger and older children’s emotional memories, and the results were published in a previous article (Stein & Liwag, 1997). These analyses revealed no significant age differences in the number of appraisals generated, the number of clauses per narrative, or the number of references to goals and plans. The lack of age differences underscores children’s early competence at describing emotional experiences (e.g., Stein & Levine, 1989, in press) and indicates that this competence is especially apparent when children are asked to describe familiar and salient emotional events from their own experience.

This research has important implications for understanding the early socialization of emotion and early event representation. Recent research indicates that the early construction of event representation and autobiographical memory is profoundly affected by
parent–child discourse about the day’s events (Fivush, 1991; Nelson, 1993). If parents differ from their children in their interpretations of the children’s emotions, and if these differences become apparent in their conversations about daily events, this may be one mechanism by which children’s emotional experiences become progressively refined, relabeled, and conceptually organized in culturally appropriate ways. It is important to note, however, that although parents’ accounts of children’s emotions influenced children’s accounts, children were still impressively resistant to altering their accounts after having been informed of their parents’ attributions.

The discordance between parents and children’s memories also has important implications for the interpretation of discrepancies in emotional memories between observers and experiencers of emotions. The problem for parents often lies in inferring children’s primary emotional responses to emotion-eliciting events. Children’s overreporting of happiness and sadness relative to parents’ reports suggests that they often recalled emotions that reflected the status of their goals after the initial conflictual or threatening situation had been resolved. For the experiencer of emotion, then, the final conditions relevant to a threatened goal are critical to the representation of the experience. For observers or perpetrators of emotion, initial emotion-eliciting events and responses appear to be more salient than the goals and emotions at the resolution of the event. The bias of experiencers of emotion toward reporting emotions that reflect their current goals underscores the fact that emotional memories are dynamic entities that are continually updated (Levine, 1996, 1997; Levine & Bluck, 1997; Ross, 1989; Stein, Folkman, Trabasso, & Richards, 1997).

Two limitations of this study should be noted. First, the study examined sources of concordance and discordance between parents’ and children’s accounts, but it could not speak to the accuracy of these accounts. Because we did not obtain objective records of children’s emotional responses at the time they occurred, further research is needed to determine whether the source of the discrepancies lies with the children or with the parents. Parents, children, or both parties might be mistaken in their retrospective accounts of the child’s emotional response. Although the tendency exists to believe that parents’ representations of events are more accurate than their children’s representations of the same events, the results of several recent studies indicate that adults can also be biased and inaccurate in their representations of events, especially during interpersonal conflict (Crockenberg & Litman, 1990; Noller, 1980, 1984; Stein & Liwag, 1997). In future research, children’s emotional responses to events, and both parents’ and children’s interpretations of these responses, might be assessed when they first occur, as well as after a delay. This would allow an assessment of the accuracy of parents’ and children’s representations of children’s emotions as well as provide greater insight into how representations of emotion change over time.

A second limitation of the study is that the procedures for eliciting the recall narratives were different for parents and children. Parents were asked to report incidents in which they observed their children in one of four emotional states. Thus, parents were given the emotion and then proceeded “backward” to recall the emotion-eliciting event. Children, on the other hand, were presented with the emotion-eliciting event and were then asked to recall their emotional response. The fact that parents and children recalled events and emotions using different retrieval procedures may have contributed to differences in their emotion attributions. Children may have experienced multiple emotions in response to a single event. When asked to recount an event that evoked a specific emotion in their children, however, parents may have chosen to focus primarily on the aspects of the event that led to the specific emotion being requested. Children, by being asked to proceed forward from the event to the emotion, may have focused on emotions that were not central to the parents’ report, even though children may have experienced the emotion observed by the parents.

We have suggested that children reported happiness and sadness more often than anger and fear because they focused on the status of their goals after the resolution of the emotional episode. It is also possible, however, that children reported happiness and sadness most often because they are conceptually simpler emotions than anger and fear (e.g., Weiner, 1985; but see Levine, 1995; Stein & Levine, 1987). This alternative explanation is made somewhat less plausible by the fact that the older children recalled feeling happy and sad just as frequently as did the younger children. To rule out alternative explanations fully, however, future studies will be needed in which children’s emotional responses are investigated as they occur or in which children are asked to generate events that evoked each of the four emotions.

In conclusion, these findings suggest that parents, even those who are effective and who have good relationships with their children, may need to be encouraged to gain a fuller representation of their children’s understanding of important emotional events. When parents and children focused on different parts of the emotional episode, when they could not identify their children’s goals, and when their own goals conflicted with those of their children, parents were at risk for not identifying the emotion that children said they had experienced.

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