Exploring Sex Differences in the Emotional Content of Mother-Child Conversations About the Past¹

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In this study, the ways in which mothers and their 30-35-month-old children discussed the emotional aspects of past experiences was explored. Although previous research has established that children this age talk about emotions, and some studies have found sex differences between motherdaughter and mother-son dyads in these conversations, no study has examined explicitly the way in which emotions about the past are discussed. This is an important research question because emotional aspects of events may help provide an evaluative framework for thinking about and talking about the past. The results suggest that, with daughters, mothers focus more on positive emotions and tend not to attribute negative emotions to the child. With sons, positive and negative emotions are discussed equally. Moreover, mothers never discuss anger with their daughters but they do with their sons. Finally, mother-daughter conversations emphasize the emotional state itself, whereas mother-son conversations often discuss the causes and consequences of emotions. The way in which these patterns might contribute to children's developing understanding of gender-appropriate emotional reactions are discussed.

Recent research has demonstrated that children begin talking about past events almost as soon as they begin talking at all (Engel, 1986; Hudson, in press; Nelson, 1988), and even young children can recall events over extend-

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ed periods of time (Fivush, Gray, & Fromhoff, 1987). However, it is also true that, for very young children, conversing about the past most often occurs at the instigation of adults. Although children as young as 18-20 months of age may participate, at least minimally, in conversations about their past, it is not until several months later that children begin to initiate and contribute substantially to these conversations (Eisenberg, 1985; Sachs, 1983). Several studies converge on the finding that children are learning the conventionalized narrative forms for talking about past events by participating in these early adult-guided conversations (Eisenberg, 1985; Fivush & Fromhoff, 1988; Hudson, in press; Sachs, 1983).

But talking about a personally experienced event involves more than reporting the "who, what, where, and when" of an event (e.g., Neisser, 1982). As Labov (1982) has pointed out, narratives about past events almost always have an evaluative component. We talk about particular past events because they are interesting, or fun, or frightening. A past event only becomes meaningful when it is put into a perspective that allows us to evaluate the event's personal significance. If children are learning the narrative conventions for reporting about the past by participating in adult-child conversations, might they also be learning an evaluative framework for past events in these conversations? The present research represents a first step in beginning to explore this questions by examining the emotional content of early mother-child conversations about the past. The way in which mothers and their young children talk about emotional states and reactions relating to particular past events might provide some clues about the way in which children are beginning to put past events into an evaluative framework.

We know that children begin talking about emotions as early as 18 months of age (see Bretherton, Fritz, Zahn-Wexler, & Ridgeway, 1986, for a review), and by 28 months of age most children can easily talk about their own and others' feelings, as well as discuss the causes and consequences of emotional states. That is, 2-year-old children not only label emotional states, but also talk about why someone might feel that way (e.g., "I'm mad because you took my toy") and what the consequences of particular emotional states might be (e.g., "Mommy's gonna hold me so I won't be scared anymore").

Moreover, the way in which mothers use emotional language has been shown to be related to children's use of such language (Beeghly, Bretherton, & Mervis, 1986; Dunn, Bretherton, & Munn, 1987; Usher, Ridgeway, Barrett, Nitz, & Wagner, 1988; Zahn-Wexler & Ridgeway, in press). In general, mothers who use more emotion words have children who use more emotion words. In addition to significant correlations between mothers' and children's use of emotion terms themselves, Usher et al. (1988) also found significant correlations between mothers' tendency to explain the causes and conse-

quences of emotional states and their 25-38-month-old children's ability to explain emotions. These kinds of findings have led researchers to speculate that children are learning how to interpret emotional situations and reactions through participating in adult-child social interaction. Adults may be implicitly teaching children both how to talk about emotions and what emotional reactions are appropriate in particular situations (e.g., Lewis & Michalson, 1982).

Several studies have also found sex differences between mother-daughter and mother-son conversations about emotions. Mothers seem to talk more about emotions with their daughters than their sons, and girls seem to talk more about emotions than do boys (Dunn et al., 1987; Zahn-Wexler & Ridgeway, in press). Further, although references to negative emotions, such as anger and fear, seem rare (Dunn et al., 1987), Greig, Alvarez, and Ulman (as discussed in Lewis & Michalson, 1982) found that mothers were more likely to talk about anger with their sons than with their daughters. Thus, it may be the case that males and females are learning to interpret and evaluate emotional experiences in somewhat different ways even this early in development.

Interestingly, adult females have been found to talk more about emotional issues and to be more sensitive to the emotional reactions of others than are adult males (Block, 1983). Documenting early socialization experiences that might lead to these later differences thus becomes an important area for research. It seems quite likely that differences in the ways in which emotions are talked about with males and females early in development would contribute to the gender differences observed in adulthood. Thus, in this research, possible sex differences in the way in which emotions are integrated into discussions of past events were explored.

Finally, although many of the previous studies have included conversations about past events in their analyses of emotional language (e.g., Beeghly et al., 1986), no study has explicitly examined the emotional content of these kinds of conversations. Talking about emotions relating to past events differs in fundamental ways from talking about present emotions. Most important, when the mother and child talk about an emotional state or reaction to a past event, the child must recall both the past event and the emotional reaction. Because the child is not directly experiencing the event and the emotional reaction, it is possible that the child is better able to reflect on and interpret emotional experience in this situation. Second, as discussed earlier, talking about emotions associated with past events helps provide an evaluative framework for the past. An important part of our self-concept relies on our memories of past events; who we are is at least partially dependent on what we have done in our lives and how we feel about those events (Brewer, 1986; Fivush, 1988; Neisser, 1988). In this way, the emotional content of

past events may help contribute to children's developing sense of self by providing them with an "appropriate" interpretation of their feelings about and emotional reactions to the events of their lives.

Thus, the major purpose of this research was to examine the emotional content of mother-child conversations about the past. Children between 30 and 35 months of age were selected for the study because previous research has established that by this age children are often engaging in such conversations with adults and are easily able to talk about emotions. Because the study was exploratory in nature, no specific predictions were made. However, based on related research, it was assumed that mothers and children would include emotional information in their conversations about the past, and that there might very possibly be some sex differences in the way in which mothers talked about emotions with daughters and with sons.

METHOD

Subjects

Eighteen mothers and their 30-35-month-old children (mean age of 33 months) participated in this study. Half of the children were female and half were male. Mothers were recruited through county birth records and all dyads were white and of middle-class socioeconomic status.

Procedure

Once the mother agreed to participate in the research, one of three female investigators visited the home. Mothers were told that we were interested in what young children remembered about their past experiences, and were asked to engage their child in conversation about specific, one-time events that they thought their child would be likely to remember. Although we discussed the kinds of events we were interested in beforehand (e.g., last Christmas, an airplane trip, going to a movie), mothers were free to choose the number and types of events to discuss with their child. No mention was made of our interest in the emotional content of these conversations. Thus, mothers' and children's use of emotional language was spontaneous. Sessions lasted approximately 30–40 minutes (longer if the child needed to take breaks from the questioning). Interviews were conducted in a quiet room, with the mother and child seated on the floor facing each other. The investigator sat to the side taking notes on the ongoing conversation; in addition, all sessions were tape-recorded and transcribed verbatim for analysis.

Coding

Coding of the transcripts was conducted in two phases. First, the number and type of emotion words used was calculated, and second, the conversations within which the emotion words were embedded were analyzed. Both of these schemes were adapted from previous research on mother-child use of emotional language (Beeghly et al., 1986). Only those parts of the transcripts in which at least one partner was talking about a past event were included in these analyses.

Emotion Words. All words refering to an emotional state or reaction were tallied for the mother and child independently. Emotion words were further divided into positive emotion words (e.g., happy, liking, fun) and negative emotion words (e.g., scared, sad, mad, not liking). In addition, all emotion words were coded for whether they referred to the emotional state of the child, the mother, or a third person. Two coders independently tallied the emotion words used in 25% of the transcripts, and achieved 96% agreement on the number, type, and reference of emotion words used. Each coder then tallied one-half of the remaining transcripts.

Conversations About Emotions. Once the emotion words were isolated, more extended conversations about emotions could be identified. All conversational utterances that had an emotion as their topic (as described below) were considered part of a conversation about emotion even if an emotion term was not used explicitly in the utterance. Conversations about emotions fell into one of three major categories, two of which were further divided into subtypes, as follows.

- 1. Single utterances: One speaker mentions an emotion but the other speaker does not respond in any way to this reference. Single utterances about emotions were of three types:
- (a) Attribution: An attribution of an emotional state that is neither confirmed or disconfirmed by the other speaker (e.g., the mother asking "Were you scared?" and receiving no response or a change of topic from the child.
- (b) Comment: A comment about the emotional tone of an event that is embedded in a longer comment or question about some other aspect of the event (e.g., "Remember we went on that scary ride, and what did we ride in?" or "We had such fun at our house at Christmas. Do you remember who was here?").
- (c) Mnemonic cue: The use of an emotional state as a cue to recall some information about the event other than emotions (e.g., "What did you like best in the museum?").

Conversations consisting of two or more conversational turns (i.e., at least one turn for each conversational partner) about an emotion were

coded into one of the following categories, examples of which are provided in Table I.

- 2. Attributional conversation: The topic of conversation is about the emotional state or reaction itself, without reference to the cause or consequence of the emotion. Attributional conversations were further divided into one of three subtypes:
- (a) Confirmation: One speaker attributes an emotional state to self or other, and the second speaker confirms that this was the correctly identified emotional state. By definition, confirmations can include only two conversational turns, one from each speaker.
- (b) Elaboration: One speaker attributes an emotional state to self or other, and the second speaker expands or elaborates on the emotional state rather than simply confirming the existence of that state. Elaborations can include two or more conversational turns.
- (c) Negotiation: One speaker attributes an emotional state to self or other, and the second speaker explicitly disagrees with the attribution.
- 3. Explanatory conversation: The topic of conversation focuses on the causes or consequences of an emotional state rather than on the emotional state itself. Although it is logically possible for explanatory conversations to be negotiations of causes or consequences, in fact, this never occurred in these transcripts. All explanatory conversations were elaborations of causes and consequences.

Two judges independently coded 25% of the conversations about emotions into one of these 7 categories (i.e., as one of the 3 types of single utterances, 3 types of attributional conversations, or as an explanatory conversation) and achieved 90% agreement. The remaining conversations were coded by one of the judges.

RESULTS

Mothers discussed an average of 9.63 past events (range from 6 to 17 events) with their children, a mean of 10.25 with sons and 9.00 with daughters, which is not a significant difference as determined by a t test. Two of the dyads, one mother-daughter and one mother-son, used no emotional language at all and were therefore excluded from analysis. The remaining 16 dyads used emotional language in 54% of the events they discussed, 50% for mother-son dyads and 57% for mother-daughter dyads, which does not differ significantly. All further analyses focused on the emotional words used and the conversations in which the emotion words were embedded.

Table I. Examples of Conversations About Emotions (M, Mother; C, Child)

Attributional conversations

A. Confirmations

- 1. M: Did you like the movie ET?
 - C: Yes.
- 2. M: That was fun, wasn't it?
 - C: Yeah.

B. Elaborations

- M: (We saw) motor boats. And do you remember when people ride behind them?
 Yes.
 - M: That looks like fun, doesn't it?
 - C: Yeah, I like to ride the boat.
 - M: You would? I would too.
- 2. C: Alligator gonna get me.
 - M: An alligator. Were you afraid an alligator was going to get you?
 - C: Yeah
 - M: Were you really scared?
 - C: Yeah.

C. Negotiations

- 1. M: Did you cry when you talked to Santa Claus?
 - C: Yeah. M: You did? I don't remember. You cried last year. I don't remember
 - you crying this year. You were pretty excited.
 - C: But I no sad.
 - M: You weren't sad?
 - C: Yes.
- 2. M: They were big bears. Did they scare you?
 - C: Uh-hmm.
 - M: A little bit, just a little bit?
 - C: Oh, I'm not scared of bears.
 - M: You're not scared of bears? Well, that's good.

Explanatory conversations

- 1. M: ... Why was Big Bird angry? Do you remember why Big Bird was angry?
 - C: It was his birthday.
 - M: It was his birthday. And what happened? Why was he angry,
 - 'cause it was his birthday? ... What did he think? Why was he angry? Who was he angry with?
 - C: Oscar.
 - M: He was angry at Oscar, right, And why was he angry at Oscar?
 - He thought they forgot his ...?
 - C: His birthday.
 - M: Right.
- 2. M: Were you scared?
 - C: Yeah.
 - M: And who held you?
 - C: Daddy held me.
 - M: Daddy held you real tight so you wouldn't be scared, didn't he?

Number and Type of Emotion Words

Across all events, for males and females combined, mothers used a total of 188 emotion words and children used a total of 29 emotion words.

Table II. Mean Number of Emotion Words
Used by Mothers and Children per Event by
Sex of Child

	Type of emotion			
	Positive	Negative	Total	
Mothers				
Males	1.29	1.41	2.70	
Females	1.50	0.72	2.22	
Children				
Males	0.06	0.28	0.34	
Females	0.14	0.16	0.30	

In order to equate for differences due to differing numbers of past events discussed for the 16 dyads, the number and type (positive or negative) of emotion words were calculated as mean per event for each dyad. The mean number of emotion words used per event are displayed in Table II by sex of child and type of emotion for mothers and children. As can be seen, mothers include a fair number of emotion words in discussions of the past (a grand mean of 2.46 emotion words per event), but children used few emotion words in their recall (a grand mean of 0.32 emotion words per event). It should be noted that children in this study use substantially fewer emotion words than has been found in previous research, which has not focused exclusively on conversations about past events (Bretherton et al., 1986). This finding will be discussed further below.

Two separate 2 (sex of child) by 2 (type of emotion word) analyses of variance, one on mothers' use of emotion words and one on children's use of emotion words, yielded no significant effects. Mothers of female and male children used similar numbers of positive and negative emotion words in conversing about the past, as did the children themselves. Although the means displayed in Table II suggest that mothers of females used fewer negative than positive emotion words and that they used fewer negative emotion words than do mothers of males, this interaction did not reach significance (F(1,14))= 1.98, p = .18]. However, in order to explore this slightly tendency in more detail, the percentage of positive emotion words to the total number of emotion words used by mothers was calculated. With daughters, 73% of the emotion words used were positive, whereas with sons, only 50% of the emotion words mothers used were positive. This difference approaches significance [t(1,14) = 3.31, p = .09]. Thus, there is some limited indication that mothers are using more positive than negative emotion terms with daughters, but approximately equal numbers of positive and negative emotion terms with sons.

The next analysis considered the referent of emotion words. Because children used so few emotion words overall, and several children used either

	Mothers		Children	
Emotion word	Males	Females	Males	Females
Positive	$(n = 53)^a$	(n = 54)	(n = 3)	(n = 10)
Like	55	48	0	64
Fun/good ^b	25	40	67	9
Нарру	8	6	33	18
Favorite	4	4	0	0
Other (excited,				
proud, silly)	8	2	0	9
Negative	(n = 55)	(n = 26)	(n = 10)	(n = 6)
Scared/afraid	50	39	27	33
Angry/mad	21	0	27	50
Sad/cry	14	54	9	17
Don't like	13	4	36	0
Upset	2	4	0	0

Table III. Percentage Use of Each Emotion Word Mentioned by Mothers and Children

no positive or no negative emotion words at all, statistical analysis of referent was not possible, but of the emotion words children did use, 74% referred to the child. For mothers of males, 87% of the positive emotion terms referred to the child, and for mothers of females, 86% of the positive emotion terms referred to the child. For mothers' negative emotion terms, 70% referred to sons but only 27% referred to daughters. A 2 (sex of child) by 2 (type of emotion) analysis of variance of the percentage of emotion terms referring to the child confirmed a main effect for type of emotion [F(1,14) = 26.08, p < .001], and a significant sex by type of emotion word interaction [F(1,14) = 7.84, p < .05]. Thus, when mothers of females do use negative emotion terms, they use them to refer to the negative emotions of someone other than the child. In contrast, mothers do attribute negative emotions to their sons.

Because of the obtained sex differences, it seemed appropriate to take a closer look at exactly which positive and negative emotion terms mothers and children used in discussing the past. As can be seen in Table III, which displays the various emotion words mothers and children used along with the percentage use of each emotion word, the range of emotion words was quite small.

Median tests were conducted on the mothers' percentage use of each emotion word to determine possible differences in frequency of use with sons and daughters. (Because children used so few emotion words overall, statistical analyses were not possible on their usage.) Again, there were no differences in mothers use of positive emotion words by sex of child, but

^aTotal number of words in each category.

^bGood was only counted as an emotion term when used in the sense of having a "good time," but not when used in a moral sense, as in being a "good boy" or "good girl."

there were for negative emotion words. Specifically, whereas "angry/mad" accounted for 21% of mothers' negative emotion words with sons, not one single mother ever used this term with their daughter, a significant difference at the p < .05 level. Notice that this is true despite the fact that female children did use this term in their recall. On the other hand, "sad/cry" accounted for 54% of the negative emotion words mothers' used with daughters but only 14% of the negative emotion words used with sons, although this difference did not reach significance. Finally, mothers used "scared/afraid" words about equally with sons and daughters. These results indicate that mothers talk about different negative emotions with daughters than with sons.

In summary, although mothers use approximately equal numbers of emotion words with sons and daughters in discussing the past, clear sex difference emerge when the referent and the content of the emotion words are considered. With sons, mothers use both positive and negative emotion words equally, and attribute both positive and negative emotions to the child. With daughters, there is a slight indication that mothers use more positive than negative emotion words, and when mothers do use negative emotion words with their daughters they do not attribute these emotions to the child. Moreover, mothers talk about anger with their sons, but never with their daughters. There is also some suggestion that mothers talk about sadness more with daughters than with sons.

Conversations About Emotions

The next question focused on the conversations in which the emotion words were embedded. As discussed in the section on coding, there were 3 major categories of conversations; single utterances, attributional conversations and explanatory conversations, with single utterances and attributional conversations further divided into subtypes. Because of the small sample size, statistical analyses were not appropriate to these data; therefore, they are included only as summary descriptions.

Single Utterances. Single utterances were categorized as attributions (if not responded to), comments, or mnemonic cues. Virtually all single utterances were made by mothers, indicating that when the child did mention an emotion word, the mother picked up and extended this response. Both the number of mothers displaying each of these categories in her questions and the number of individual instances of each category was calculated. Ta-

³Two single utterances were made by children, one male and one female. Both were self-referenced attributions of an emotional state that the mother did not respond to.

	Utterance type			
Sex of child	Attribution	Comment	Mnemonic cue	
	Positive em	otions		
Male				
No. of mothers	3	3	2	
No. of instances	6	5	8	
Female				
No. of mothers	2	2 5		
No. of instances	2	2 9		
	Negative em	otions		
Male				
No. of mothers	I	3	1	
No. of instances	1	3	1	
Female				
No. of mothers	1	3	1	
No. of instances	1	3	2	

Table IV. Number of Mothers Using, and Number of Instances of Each Single Utterance Type by Type of Emotion and Sex of Child

ble IV shows these numbers for positive and negative emotions by sex of child. Mothers of females and males used these types of utterances about equally. Interestingly, using an emotion word as a mnemonic cue was reasonably effective. Of the 19 instances, 7 (37%) resulted in the child recalling some information about the event.

Attributional and Explanatory Conversations. Table V shows the number of dyads and the number of instances of attributional conversations (confirmation, elaboration, and negotiation), and explanatory conversations, along with the percentage of each type of conversation that was initiated by children. The obtained pattern indicates that, for positive emotions, mother-sons dyads engaged in confirming attributions (11 instances) but not in elaborating on attributions (0 instances; see Table I for examples of these conversation types). Mother-daughter dyads, in contrast, elaborated on attributions of positive emotions (11 instances) as well as confirming them (5 instances). Negotiations and explanations of positive emotions were rare for both sexes. For negative emotions, a very different pattern emerges. Mother-daughter dyads never confirmed a negative emotion, but mother-son dyads often did (7 instances). Both mother-son and mother-daughter dyads elaborated on negative emotions (5 and 3 instances, respectively). Negotiations of negative emotions occurred about equally with sons (6 instances) and daughters (7 instances).

However, it should be noted that these sex differences cannot be attributed to the mother alone. Fourteen of the 28 (50%) mother-son conversations about negative emotions were initiated by the child, compared to only

Table V. Number of Dyads Engaging In, and Number of Instances of Each Con-
versational Type by Type of Emotion and Sex of Child

	Conversation type			
Sex of child	Confirm	Attributional Elaborate	Negotiate	Explanatory
	Pos	sitive emotions		
Male				
No. of dyads	6	0	1	2
No. of instances	11	0	1	2
Female				
No. of dyads	7	4	0	0
No. of instances	11	5	0	0
	Neg	ative emotions		
Male				
No. of dyads	5	3	5	5
No. of instances	7	5	6	10
Female				
No. of dyads	0	3	3	1
No. of instances	0	3	7	1

2 of 11 (18%) for mother-daughter dyads. For positive emotions, sons initiated 3 of the 14 conversations (21%) and daughters initiated 2 of these 16 (13%) conversations. A 2 (sex of child) by 2 (type of emotion) analysis of variance confirms that males tended to initiate conversations about negative emotions more than females, but there is no sex difference for positive emotions [F(1,14) = 4.26, p = .058].

Perhaps most interesting, mothers and daughters virtually never discussed explanations about the causes or consequences of emotional states. Only one dyad engaged in one explanatory conversation. But 6 of the 8 mother-son dyads engaged in a total of 12 explanatory conversations. Moreover, most of the conversations (83%) focused on negative emotions.

Thus, the conversational patterns indicate that mother-daughter dyads discuss and elaborate on emotional states themselves, rather than discussing the causes and consequences of emotions. Mother-son dyads, in contrast, do engage in explanatory conversations about emotions. Further, in accord with analyses presented earlier, there is a tendency for mother-son dyads to discuss negative emotions more than do mother-daughter dyads. All 8 mother-son dyads engaged in at least one conversation about a negative emotion, and overall, mother-son dyads engaged in 28 conversations about negative emotions. For mother-daughter dyads, 6 dyads engaged in a total of 11 conversations about negative events. However, it is important to note that the increased tendency for mothers of sons to talk about negative emotions may be due to the increased tendency of males to bring up negative emotions when discussing the past.

DISCUSSION

In this research, the way in which mothers and children talk about emotional aspects of past events was explored. The results indicate that mothers talk about past emotions in different ways with their daughters than with their sons. First, although mothers of daughters and sons use approximately equal numbers of emotional terms in discussing the past, mothers of daughters tend to focus on positive emotions, and when negative emotions are discussed, mothers tend to attribute these emotions to persons other than the child. In contrast, mothers of sons use positive and negative emotion words equally, and are just as likely to attribute negative as positive emotions to the child. Further, and perhaps most interesting, mothers of daughters never discuss being angry but mothers of sons do. Second, the way in which emotions are integrated into conversations about past events differs for females and males. Mothers and daughters discuss the emotional state itself, whereas mothers and sons discuss the causes and consequences of emotions.

These findings differ in interesting and potentially important ways from previous research on mother-child conversations about emotions, which has focused on ongoing activities and events in the environment. Most striking, children do not seem to use as many emotions words when recalling the past as when commenting on the present. Whereas previous research has indicated that by 30 months of age, children are participating substantially in talk about emotions, in the present study, 30–35-month-old children used few emotion words overall. However, they did respond in conversationally appropriate ways when their mothers used emotion words.

There are several possible reasons why children use less emotion language when discussing the past than when discussing the present. First, as mentioned in the introduction, when talking about the present, the child is discussing an emotion that is currently being experienced. For past emotions, however, the child must recreate the emotional reaction to the past event. It may be more difficult for young children either to recreate the previously felt emotion or to label an emotion not currently experienced. However, that some children did spontaneously bring up emotional reactions to past events in these conversations suggests that this possibility cannot completely account for the decreased use of emotion terms.

A second possibility is that the decreased use of emotion words is due to children's generally lower level of participation in conversation about the past than about the present. That is, when children of this age converse about past events with their mother, mothers tend to provide a great deal of information about the past events, and children tend to give only one or two words responses (see also Fivush & Fromhoff, 1988, and Hudson, in press). Of course, this pattern of interaction may be a function of this task. Mothers were explicitly asked to elicit their child's memory and these instructions may

disrupt more "natural" discourse styles. In particular, in these studies, mothers tend to be relatively directive in guiding their children's recall to particular aspects of the past event under discussion (see Fivush & Hamond, in press, for a fuller discussion of this issue). Obviously, if children are generally contributing little information to the conversation, they will be contributing little emotional information as well.

A third possibility, which is related to the second, is that mothers are focusing their children's attention on particular emotional states and reactions relevant to the past events, rather than waiting for their children to recall these reactions spontaneously. Thus, for example, when one child recalled, "My boat floated away," the mother responded, "Your boat floated away, that's right. And did that make you sad?" The mother may not simply be labeling the child's recalled emotional reaction in cases such as these; she may be informing the child what the appropriate emotional reaction to such a situation is. Even if we assume that the child did indeed feel sad when the boat was lost, it is still the case that the mother is acknowledging the appropriateness of this emotional reaction to this event. Note that 81% of all conversations about emotions involved confirming, elaborating, or negotiating the emotional attribution itself. This, too, is in contrast to research focusing on current activities, in which much of the emotional content involves explaining the causes and consequences of emotions. Perhaps one of the reasons that mothers focus on emotional attributions in discussing the past is because they are trying to provide their children with information about the appropriateness of particular emotional responses.

This argument is obviously speculative to the data, but if we assume for a moment that it is valid, what implications does it have for interpreting the obtained findings on emotional content? First, that mothers tend to focus on positive emotions with their daughters and tend to only attribute negative emotions to others suggests that females may be learning that they are not supposed to have negative feelings. Even more, sex differences in the actual negative emotion words used suggests that females are learning that anger may be an inappropriate emotional reaction.

This is a particularly interesting finding in light of a study by Condry and Condry (1976) on adults' attributions of emotion to infants. Adults were asked to rate the emotional reactions of a videotaped infant labeled as either male or female (although it was the same infant in all cases) reacting to several stimuli. Reactions of happiness and distress were similar regardless of the gender label, but when the infant was startled, adults judged the "male" infant as angry and the "female" infant as afraid. Condry and Condry interpret their finding in terms of the way in which gender stereotypes influence adults perceptions of infants' behavior.

In the current study, gender stereotypes of appropriate reactions are operating in similar ways. Mothers are willing to attribute anger to their sons but not to their daughters. In a related finding, Greif, Alvarez, and Ulman (as discussed in Lewis & Michalson, 1982) discovered that mothers were more likely to talk about and attribute anger to story characters when discussing the story with their sons than with their daughters. Thus, we can begin to see how the culture's stereotypes of gender-appropriate emotional reactions are integrated into individual children's social interactions, and how these stereotypes may begin to shape the ways in which children come to attribute emotions to themselves and others.

Emotional content of past events may be a particularly important avenue for learning these gender stereotypes because reflection on our past plays such an important role in defining our self-concept (Brewer, 1987; Fivush, 1988; Markus, 1976). Because mothers rarely attribute negative emotions to their daughters and, more specifically, rarely attribute anger to them, females may come to think of themselves as people who are not supposed to experience these emotions. It is not simply that the mother is denying the child is feeling this particular emotion at this particular point in time, but that the mother is denying that the child is the "kind of person" who feels these emotions.

However, it must also be stressed that mother-son dyads tend to talk about negative emotions at the initiation of the child as well as the mother. It is not at all clear why males would be more likely to bring up negative emotions than are females, and no other study has documented this difference. Of course, given that Condry and Condry (1976) found differential attribution of anger to males and females even in early infancy, it is possible that by 30 months of age, children have already learned quite a bit about gender-appropriate emotional reactions. Research examining differential discussion of particular emotions with younger children must be conducted before any conclusions could be drawn. Given the current data, we must assume that differences in the amount of negative emotional content between mother-son and mother-daughter dyads is a function of both conversational partners.

A further difference in mother-daughter and mother-son conversations found in this study concerns the way in which emotions are integrated into the conversations about past events. With daughters, the conversations focus on the emotional state or reaction itself, whereas with sons, the causes and consequences of emotions are often discussed. By talking about causes and consequences of emotions, mothers may be teaching their sons about control of emotions; emotional reactions can be better understood and therefore controlled if one understands the behaviors leading up to and resulting from these reactions. In contrast, females may be learning to focus on the

emotion itself; this might lead to greater sensitivity to emotional state both in oneself and in others, but may not provide as much information about what might cause particular kinds of reactions. However, it must be stressed that no other study has documented this sex difference. More research is obviously necessary before any conclusions can be drawn.

Finally, it must be stressed that this study, as the vast majority of previous research in this area, has studied only white middle-class populations. Clearly, we need to extend this research to other populations. if early adult-child conversations about the past play an important role in children's developing understanding of self and gender, as argued here, then the possibility of cultural differences in these early conversations would have important implications for understanding different developmental pathways.

In summary, these results suggest that young females and males may be learning to evaluate the emotional aspects of their past experiences in somewhat different ways. Because of the small sample size and the generally exploratory nature of this study, these results must be interpreted with caution. However, given the current findings and their possible implications for children's developing understanding of their past and their selves, future research should be directed toward examining these issues in more detail.

REFERENCES

- Beeghly, M., Bretherton, I., & Mervis, C. Mother's internal state language to toddlers. British Journal of Developmental Psychology, 1986, 4, 247-261.
- Block, J. Differential premises arising from differential socialization of the sexes: Some conjecture. *Child Development*, 1983, 54, 1335-1354.
- Bretherton, I., Fritz, J., Zahn-Wexler, C., & Ridgeway, D. learning to talk about emotions: A functionalist perspective. *Child Development*, 1986, 55, 529-548.
- Brewer, W. What is autobiographical memory? In D. Rubin (Ed.), Autobiographical memory. New York: Cambridge University Press, 1986.
- Condry, J., & Condry, S. Sex differences: A study of the eye of the beholder. *Child Development*, 1976, 47, 812-819.
- Dunn, J., Bretherton, I., & Munn, P. Conversations about feeling states between mothers and their young children. *Developmental Psychology*, 1987, 23, 132-139.
- Eisenberg, A. R. Learning to describe past experience in conversation. *Discourse Processes*, 1985, 8, 177-204.
- Engel, S. The role of mother-child interaction in autobiographical recall. In J. A. Judson (Chair), Learning to talk about the past. Symposium conducted at the Southeastern Conference on Human Development, Nashville, TN, April 1986.
- Fivush, R. The functions of event memory. In U. Neisser & E. Winograd (Eds.), Remembering reconsidered: Ecological and traditional approaches to memory. New York: Cambridge University Press, 1988.
- Fivush, R., & Fromhoff, F. A. Style and structure in mother-child conversations about the past. *Discourse Processes*, 1988, 11, 337-335.
- Fivush, R., & Hamond, N. R. Autobiographical memory across the preschool years: Toward reconceptualizing childhood amnesia. In R. Fivush & J. A. Hudson (Eds.), What young children remember and why. New York: Cambridge University Press, in press.

- Fivush, R., Gray, J. T., & Fromhoff, F. A. (1987). Two year olds talk about the past. Cognitive Development, 1987, 2, 393-410.
- Hudson, J. The emergence of autobiographic memory in mother-child conversation. In R. Fivush & J. A. Hudson (Eds.), What young children remember and why. New York: Cambridge University Press. in press.
- Labov, W. Speech actions and reactions in personal narrative. In D. Tannen (Ed.), Analyzing discourse: Text and talk. Washington, DC: Georgetown University Press, 1982.
- Lewis, M., & Michalson, L. The socialization of emotions. In T. Field & A. Fogel (Eds.), *Emotion and early interaction*. Hillsdale, NJ: Erlbaum, 1982.
- Markus, H. Self-schemata and the processing of information about the self. *Journal of Personality and Social Psychology*, 1977, 35, 636-678.
- Neisser, U. Snapshots or benchmarks? In U. Neisser (Ed.), Memory observed. San Francisco: Freeman, 1982.
- Neisser, U. Five kinds of self-knowledge. Philosophical Psychology, 1988, 1, 35-60.
- Nelson, K. The ontogeny of memory for real events. In U. Neisser & E. Winograd (Eds.), Remembering reconsidered; Traditional and ecological approaches to memory. New York: Cambridge University Press, 1988.
- Sachs, J. Talking about the there and then: The emergence of displaced reference in parentchild discourse. In K. E. Nelson (Ed.), Children's Language, Vol. IV. New York: Gardner Press, 1983.
- Usher, B., Ridgeway, D., Barrett, K., Nitz, K., & Wagner, E. Maternal correlates of children's communication about emotion. Paper presented at the meetings of the International Conference on Infant Studies, Washington, DC, April 1988.
- Zahn-Waxler, C., & Ridgeway, D. Research strategies for assessing mothers' interpretations of infant emotions. In R. Emde, J. Osofsky, & P. Butterfield (Eds.), Parental perception of infant emotions, in press.