Maternal Scaffolding and Children's Narrative Retelling of a Movie Story

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Five-year-old children (n = 31) watched a brief videotaped segment from a movie with their mother, discussed the movie story with her, and then retold it to an experimenter. The quality of the stories the children told was related to the scaffolding strategies used by their mothers. Children whose mothers focused their own and the children's attention on the story, prompted the children's memories with questions and explanations, talked about the characters' emotions, corrected the children's mistakes, and engaged in extended exchanges about critical topics in the story during the preparatory discussion told significantly better stories than children whose mothers did not use such strategies and children in a control group (n = 14) who did not discuss the story with their mothers. Children's recall of objective actions in the story was most strongly predicted by joint mother-child attention, extended exchanges on critical topics, and the mother's correction of the children's mistakes. Children's comprehension of characters' internal states was most strongly predicted by the number of questions the mother asked, extended exchanges, and correction. These findings have implications for how adults can promote children's ability to understand, remember, and narrate a story.

Two little girls, five years old, each watched an excerpt from a movie with their mother, discussed what they had seen with her, and then told an experimenter the story. One girl's story to the experimenter was detailed and dramatic:

There was a girl and she found footprints and it was a reindeer. But first she heard a boom, and that reindeer got hurt. And then she was running and running and couldn't find it. Then her dad came up and said, "Get in here!" and he said it in a mad way. And then, umm, he drived, and then the girl said, "Daddy look out!" because there was a reindeer right in the road and it was hurt. And then he said,

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"It's hurt!" and he got a gun. And then he was about to shoot it, and the. . .the ma. . .the sis. . .the little daughter, she was fighting him, and then when they were fighting and then they turned and he was gonna shoot the reindeer. . .It was magic. The reindeer went away! And that was the end.

The other girl's story was much briefer and incomplete:

Umm, the little girl is walking through the woods to find her reindeer. Then she saw tracks from him. And then she fell down and then. . . then he was hurt. And then, umm, he, her dad was going to shoot him, and then he was gone.

What led to the differences in the quality of the two children's stories? Were their stories related to the discussions the children had with their mothers? How did the mothers prepare their children to retell the story, and how was their behavior related to children's subsequent narrative recall and comprehension? It was our goal in the present study to identify maternal conversational strategies that were associated with children's narrative performance.

We believe that this goal is important for several reasons. One reason is that in preparing children to retell stories, mothers could be helping them carry out the kinds of tasks they will encounter in school—tasks in which an adult sets problems, interacts with the children to help them solve problems, and provides support for the children's independent problem solving. The nature of the mother-child discourse about the movie resembles the kinds of question asking/answering and adult assisting that take place in schools (Cazden, 1997). Also, during the preparation for retelling a story, mothers could be helping their children understand narrative structures, which may be useful in enabling children to derive meanings from stories studied in school settings. Moreover, children's ability to structure narratives in ways expected by teachers has been seen as important for their smooth transition to literacy; the ability to produce decontextualized language, such as being able to retell a movie story, is a crucial skill in literacy acquisition (e.g., Snow, 1983, 1993; Snow, Burns, & Griffin, 1998; Snow & Dickinson, 1990).

By talking about the movie after viewing it, mothers, too, were employing decontextualized language strategies—using procedures to make information linguistically explicit and linking utterances together in extended discourse so as to sustain talk about the world beyond the here and now. When adults use such strategies, this also may be important for children's literacy development. "Whereas experiences such as book reading are considered vital to the development of literacy," Dickinson (1991) suggests, "similar facilitation also might be provided by conversations with mothers, fathers, and teachers. . and practice producing decontextualized discourse likely translates into skills that support later literacy functioning" (pp. 260–261). Parent-child talk about television—"electronic text"—has also been identified as important because it "throws new light on the reading process as a whole" (Maybin & Moss, 1993, p. 138).

In addition to predicting literacy, children's narrative development is regarded as an intrinsically interesting and complex developmental achievement and a fundamental organizational process that underpins representational development, the construction of knowledge bases, and problem-solving strategies (Low & Durkin, 1998; Nelson, 1996; Shapiro & Hudson, 1991).

Thus, there are a number of ways in which this task of preparing children to tell a story that they have watched on TV may reflect adult behaviors that are important for children's early academic success and shed light on the development of children's literacy and other cognitive competencies. Our goals were to investigate how mothers went about discussing the movie with their children and to determine what kinds of maternal behavior were most closely linked to children's ability to produce a good narrative.

SCAFFOLDING

A useful construct in analyzing how mothers might assist their children in telling a narrative is "scaffolding." The concept of scaffolding was developed on the basis of studies of mother-child dialogues during a variety of activities-construction/assembly tasks, storybook reading, and other, non-academic tasks—in which the objective has been to help young children perform the task (Diaz, Neal, & Vachio, 1991; Ninio & Bruner, 1978; Pratt, Green, MacVicar, & Bountrogianni, 1992; Wood, Bruner, & Ross, 1976; Wood & Middleton, 1975; see Rogoff, 1998). Wood, Bruner, and Ross (1976) defined scaffolding as an adult- or expert-facilitated process that enables a child or novice to solve a problem, carry out a task, or achieve a goal that would be beyond his or her unassisted efforts. A basic principle of scaffolding is that it should enable learners to focus on mastering elements within their range of competence. Wood and Middleton (1975) found that those mothers who scaffolded successfully, as measured by the child's independent performance, were those who had systematically changed their instructions on the basis of the child's response to earlier interventions and were able to estimate the child's current ability or readiness for different types of instructions. Thus, mothers who scaffolded well tended to be responsive to their children, altered their communications contingent upon the children's communications, and selected communications within the intellectual grasp of the children.

According to McCabe and Peterson (1991), mothers' scaffolding is critical to children's narrative development. In their research, when mothers used more scaffolding, by extending the topic and asking clarifying questions or questions about new topics, children were able to produce richer narratives about their experiences. Fivush and her colleagues (Fivush & Fromhoff, 1988; Reese & Fivush, 1993; Reese, Haden, & Fivush, 1993) found that mothers who were more talkative and elaborative as they reminisced about past events with their children had children who included more information in their narratives of personal experience than those whose mothers used less scaffolding. Snow and Tabors (1996), similarly, reported that mothers who used a collaborative style of discourse, consisting of leading questions, information-rich clarification questions, summaries, and evaluations, were more successful in eliciting personal narratives from their children at the dinner table. Parents who asked their children for

clarification and gave them information, in mealtime discussions, were also more likely to have children who could read early (Davidson & Snow, 1995).

Shared picture-book reading is another venue for maternal scaffolding that has gained attention as a powerful context for children's language learning and emergent literacy (Goldfield & Snow, 1984; Morrow, 1993; Snow & Dickinson, 1990). It has been observed that, in this context, mothers support the child's interpretation and verbal production of stories from pictures by engaging in cycles of communications that feature object-labeling, question-answering, and responsive feedback. By the time their children are three years old, good maternal scaffolders are transferring some of the responsibility for naming objects to the children and are using questions to help them elaborate and clarify what they know. Goodsitt, Raitan, and Perlmutter (1988) found that as preschool children displayed more competency during book reading sessions, mothers used progressively less specific word vocabulary teaching, focused less on specific child experiences, and devoted more of their communications to story content rather than identification of pictures. Over time, mothers shifted toward a focus on more complex content such as story structures and correction of children's misunderstandings and their questions became more complex and decontextualized.

Not only have mothers been observed to engage in scaffolding while they are reading books with their young children, but this maternal behavior has also been found to be associated with the children's behavior. Lange and Carroll (1997) observed mothers interacting with their four- to six-year-old children while looking at picture storybooks, and then the children looked at picture storybooks with an experimenter. Children whose mothers discussed how events in the book happened, interpreted the actors' intentions, described causes and effects, and related events in the book to autobiographical experiences, included more of these kinds of verbalizations in their discussions with the experimenter. They also remembered more details in a test of story recall. Haden, Reese, and Fivush (1996) found that children whose mothers embellished and elaborated on indirectly specified information in the storybook understood and retold the story better (although these differences were not statistically significant because of the small sample studied). These studies of naturally occurring mother-child book reading thus suggest that maternal scaffolding may facilitate children's story recall and retelling.

The value of maternal scaffolding is further supported by experimental studies in which parents have been trained to use a dialogue style when looking at picture books with their children. Whitehurst, Falco, Lonigan, and Fischel (1988) developed a videotape training program, the Dialogic Reading Training Program, that can be used with preschool-aged children in joint picture book reading. Adults are trained to be active listeners for children's stories—asking the children questions, encouraging their responses through praise and repetition, and expanding their utterances. The researchers found large effects of participation in this parent-training program on children's language development when compared with control groups (Arnold, Lonigan, Whitehurst, & Epstein, 1994; Lonigan & Whitehurst, 1998; Whitehurst et al., 1988).

The present study involves a different context from those that have been studied

in investigations of maternal scaffolding in the past—movie viewing, not picturebook reading, dinner-time conversation, or problem solving. But it was expected that the benefits of maternal scaffolding would also be found in this context. Collins and his associates have conducted several studies on children's viewing of television programs and have shown that preschool and young school-age children do not understand narrative structure and causal connections very well; this limits their comprehension of television stories (Collins, 1982; Collins, Wellman, Keniston, & Westby, 1978). Several other researchers, similarly, have found that it is not until the end of early childhood that children are able to understand the basic narrative components of television stories (Lorch, Bellack, & Augsbach, 1987; Pingree, Hawkins, Rouner, Burns, Gikonyo, & Neuwirth, 1984; Smith, Anderson, & Fischer, 1985). As Low and Durkin (1998) point out, however, television is so pervasive in the lives of contemporary children, it seems inevitable that developing narrative skills must be influenced by watching television, yet we know relatively little of how this proceeds. One process that may be involved in children's learning about narrative from television is adult scaffolding. Collins, Sobol, and Westby (1981), for example, found that children who heard facilitating commentary by an adult while they were watching a televised drama understood more of the implicit program content related to the adults' statements than children without this support.

We predicted that the children who told the best stories from the television movie would be those whose mothers used more scaffolding to prompt their memories and to expand their understanding of the movie presentation. Because children's narrative performance was not assessed at the same time as the mothers provided scaffolding, but later, when the children told the story to a new listener, this study provided a more stringent test of the hypothesis that mothers' scaffolding supports children's learning and memory than do studies in which maternal scaffolding and children's performance have been assessed at the same time.

SEVEN STRATEGIES

The research literature on how adults use scaffolding strategies to foster children's learning produced an array of possible ways in which mothers could support their children's ability to produce a narrative. Seven of these—length of discussion, joint mother-child attention, orientation to the task, questioning, correction of misunderstanding, emotional support, and extended exchanges on critical topics—were selected for inclusion in the present study. These seven strategies do not encompass all aspects of scaffolding. One key element that is missing is the gradual reduction of adult support as the child demonstrates increasing competence. It was not possible to observe this aspect of scaffolding in the time-limited interactions recorded in this study. Further research with more extensive, extended, and repeated interactions would be valuable to extend the investigation of scaffolding we have begun here.

Length of Discussion

At the most obvious level, simply talking with the child about the movie could serve as a valuable preparation for story retelling. The longer the conversation, the better the preparation. An extensive literature demonstrates that children whose mothers talk to them more have advanced language and literacy skills (e.g., Hart & Risley, 1995; Hess, Holloway, Dickson, & Price, 1984; cf. Snow et al., 1998), and another, somewhat less extensive literature suggests that lengthy mother-child conversations may foster children's narrative ability (Fivush, 1991; Fivush & Fromhoff, 1988; Hudson, 1990; McCabe & Peterson, 1991). These findings support the hypothesis that children whose mothers talk with them more about the movie will tell better stories, because long discussions offer more opportunities for scaffolding.

Joint Mother-Child Attention

Attention is required for initiating and regulating rehearsal of information that is being learned (Baddeley, 1986; Guttentag, 1984), and in this case, attention to the story is a prerequisite for scaffolding. In his pioneering studies of picture story book reading, Bruner (1983) found that an important maternal role was to focus the child's attention on critical story features. It is reasonable to expect, thus, that the more the mother's and child's attention was focused on the story during the time they were preparing for the story retelling (and the less their attention wandered elsewhere), the more the child would learn and the better the story he or she would be able to retell.

Orientation to the Task

Another simple scaffolding strategy mothers might use to prepare their children to tell a better story would be to remind them that they are going to have to retell the story to the experimenter. Presumably, this reminder would increase the child's motivation to learn more about the story in discussing it with the mother and might lead to the child's maintaining a more focused orientation to the task. We expected that children whose mothers used the strategy of reminding them that they would have to retell the story would take the preparation more seriously and eventually tell more complete and accurate stories.

Questioning

Another way in which mothers might promote their children's ability to retell the story would be to ask the child questions. Asking a comprehensive set of questions covering critical aspects of the story content can be considered an aspect of scaffolding, because such questions prompt children to think about the characters and events in the story and point to specific story elements that need to be remembered. Questions function as instigators, activators, and organizers of mental operations, because they demand that children become actively engaged in mental activities (Sigel & Saunders, 1979; Sigel & Kelley, 1988).

Researchers have demonstrated that when adults ask children questions, the children learn more academic content (Brown & Wragg, 1993; Perry, Vander-Stoep, & Yu, 1993; Whitby, 1992), gain more in achievement (Brophy & Good, 1985), learn to read earlier (Davidson & Snow, 1995), understand better what they are reading (Mangano & Benton, 1984), have improved language skills (Arnold et al., 1994), and recall more unfamiliar material (Symons & Greene, 1993). Adult questioning also has been linked to children's narrative performance. Pratt, Kerig, Cowan, and Cowan (1988) found that the children who provided the most advanced narratives when retelling a fictional story were those whose parents asked them more specific information questions, such as "What was the dog doing?" "Was the bike broken?" Albanese and Antoniotti (1997) showed that teachers who were instructed to ask children a variety of questions or to ask them as many questions as possible, while they were reading the children a story, facilitated the children's comprehension and narrative retelling of the story more than teachers who did not ask questions. Jukes (1997) demonstrated that when an adult experimenter asked children questions about events in a video of a circus enacted with toy figures, the children recalled more about the video three days later than did children in a control group. There is ample evidence, then, that adult questioning improves children's memory and performance and is likely to benefit their narrative production.

Correction of Misunderstanding

An additional strategy by which mothers could stimulate and support their children's understanding and memory of the movie story would be to correct their misunderstandings. It has been reported in several studies that children whose mothers correct their story telling perform at higher levels than those whose mothers do not (McCabe & Peterson, 1991). Accurate feedback has been correlated with improved performance in a reasoning task administered to kindergarten and first grade children (Spiker, Cantor, & Klouda, 1985), and, in a recent study, Tenenbaum and Leaper (1998) classified telling the child the correct answer following the child's incorrect answer as a good scaffolding strategy. It seemed reasonable to expect that in the present study children whose mothers corrected their mistakes would tell better stories.

Emotional Support

Mothers could also help their children understand the movie better and tell a more complex story by providing them with emotional information and support. Talking about the emotions of the characters in the movie or about the child's reactions to the characters' emotions could provide a scaffold for increasing the child's understanding of internal states and intentions. Researchers have found that children whose mothers included more references to intentions and feelings in conversations about their shared experiences (in the present or the past) also included more such references in their own speech to their mothers (Tessler & Nelson, 1996) or, later on, to an experimenter (Haden, Haine, & Fivush, 1997).

Children whose mothers used more evaluatives when they were reading picture books together (for example, mentioning the internal states of characters and quoting their speech), also increased significantly in their use of evaluatives after hearing the story (Alexander, Harkins, & Michel, 1994). We expected that children in the present study whose mothers talked more about emotions would tell stories that included more about the characters' internal states and intentions.

Extended Exchanges on Critical Topics

An essential characteristic of scaffolding in a verbal task such as storybook reading is that the adult extends the child's comments and questions. In an extended exchange, the adult's questions and assertions are directly linked to the child's responses and thus to the child's understanding of the story. The conversation involves sequences of connected comments, as the adult builds on the child's knowledge. The adult asks a question, then affirms the child's correct answer, corrects a wrong answer, or leads the child to correct himself. The adult elaborates on the child's comments or provides a further explanation and thereby encourages the child to elaborate on his previous idea. The adult asks the child an open-ended, framing question, which prompts recall of a specific detail or event, then asks a clarifying question, which requests more detail, or a leading question, in which the child is called upon to agree or disagree with the adult's premise. Extended exchanges in which the adult asks such questions and proffers such explanations and elaborations stimulate the child to think of and articulate new solutions and further ideas (Cazden, 1988; Mehan, 1979). We expected in the present study that children who had experienced such extended exchanges with their mothers about critical topics in the story would tell better narratives to the experimenter.

It was our goal, then, in the present study to investigate whether and to what extent each of these seven scaffolding techniques was related to children's competency to produce a narrative based on a movie story.

METHOD

Sample

The sample consisted of 45 pairs of mothers and children (24 boys) living in Orange County, California. The mean age of the children was 5.3 years (SD=.2; range = 4.7 to 6.0) The families had been recruited randomly from hospital births that met the following criteria: mother 18 years of age or older, fluent in English, having no medical complications at the birth, and not planning to move within the next three years; infant not from a multiple birth or needing to stay in the hospital for more than 1 week after birth. The average level of parents' education was 15.2 years (for both mothers and fathers); 56% of the mothers and fathers had graduated from college. All but one of the children were Caucasian (the other one was Asian). Of the mother-child pairs, 31 had been randomly selected soon after the infant's birth to participate in the NICHD Study of Early Child Care (see

NICHD Early Child Care Research Network, 1996); they had already been to the university playroom three or four times before the procedures for this study were administered. As part of a larger assessment of the child's development, these mothers and children were asked to watch a brief excerpt from a movie together and discuss it. Fourteen other mothers formed a no-discussion control group, the purpose of which was to investigate experimentally whether there was an effect of mother-child discussion on children's narrative performance, beyond self-selected differences among mothers and children. These mothers were in the eligible pool for the NICHD Study, but they had not been among those randomly selected after the infant's birth for participation in the study. They had given permission to be contacted later for possible participation in other research, and six of them had already been to the university playroom on at least one previous occasion. There were no significant differences between the mother-discussion and no-discussion groups in the mean age of the children, the proportions of boys and girls, or the mean level of education of the parents (Fs < 1).

The Story

The videotaped story was a 5-minute segment selected from the movie *Prancer*, a commercial children's film about a girl who becomes closely attached to one of Santa's reindeer. The segment contained the following events: Jessica, an eightto nine-year-old girl, follows an animal's tracks and hears shots as she walks through snowy fields. Her father comes across her unexpectedly while driving his truck on a forest road to go shopping. He criticizes her for being in the forest alone. She explains she was looking for Prancer. They then have a tearful confrontation when her father tells her he is thinking about sending her to live with her Aunt Sarah because he is unable to give her the things she needs now that her mother is no longer there. Jessica yells to her father to stop and the truck screeches to a halt as Prancer suddenly appears on the road in front of them, his leg bleeding. The father goes to get his gun to put the animal out of its misery. Jessica tries to stop him. "No, Daddy, no!" They turn around and the animal has mysteriously disappeared.

This movie segment was selected because it contained emotional content in a narrative context. We anticipated that it would elicit children's empathy and arouse in them a complex range of emotions, including fear, anger, and sadness when the deer was in danger and relief and happiness when the deer escaped. The segment was also selected because it provided mothers with interesting and complex material to discuss with their children, including the magical disappearance of the deer and the moral issues of why a young girl shouldn't be in the forest alone, why a hurt animal should be put out of its pain, and why families without money might need to send their children to live with relatives.

Mothers were informed, in detail, about the content of the movie segment ahead of time and were told that it was potentially emotionally arousing and might elicit some discomfort or distress from the child. All mothers in the study agreed to let their child view the tape; none of them expressed concern about the tape while it was being shown or afterward. Although emotionally arousing, the material in

Prancer was not excessively threatening. Only about one quarter of the children showed mild distress or discomfort when the father and girl were arguing about going to live at Aunt Sarah's, and three children were mildly or moderately distressed when the father threatened to shoot the deer; only one child was so upset that she was unable to discuss the movie with her mother or tell the story to the experimenter. To alleviate this child's distress, she was shown another videotape—of a happy story—and discussed it with her mother, before going home.

The content of the movie was within the understanding of children of this age. When asked direct questions about the video clip, another group of five-year-old children demonstrated a relatively high level of recall and understanding for events in the movie (Beck & Clarke-Stewart, 1998); 97% knew how the girl felt about the dad threatening to shoot the deer; 90% knew that the girl was looking for the deer, that the dad stopped because the deer was in the road, and that the dad took out his gun; 80% knew the girl was sad about going to live with her aunt; 70% knew that she was happy to find the deer; 50% knew that the girl was walking in the forest, that the father was going shopping, that the girl was sad the deer was hurt, and that the deer disappeared; 33% knew what the dad and girl talked about in the truck and how the reindeer got hurt.

Approximately one third of the mothers thought that their children had previously seen the movie *Prancer*. To be sure that greater familiarity with the movie plot did not contribute to children's narrative performance, we compared the stories told by children who had seen the movie with the stories of children who had not, in an analysis of variance. There were no significant differences between the two groups in recall of objective facts and events in the videotape (F < 1) or comprehension of characters' motives and feelings (F < 1).

Procedure

Each mother-child pair was assessed alone in a child development laboratory playroom at the university. After a number of other developmental assessment procedures had been completed, mothers were told that they would be watching a brief excerpt from the movie *Prancer* with the child and then the child would be expected to retell the movie story to an experimenter who had not seen it. The mothers were instructed to watch the movie with the child and then talk to the child about the movie as they would at home. The videotape was put in the VCR, and an experimenter told the child to watch the tape carefully because he or she would be telling the story afterwards to someone who hadn't seen the movie. Mothers and children then watched the *Prancer* videotape clip. After viewing the videotape, mothers and children in the mother-discussion condition discussed the story together for as long as they cared to. When the mother signaled that the discussion was over, a second experimenter entered the room and the mother left. The experimenter then presented the child with a "storyteller badge," seated him or her in the special "storytelling chair," and encouraged the child to tell her the best story he or she could about everything he or she had just seen in the movie. During the storytelling, when the child paused, the experimenter asked, "Is there

anything else?" This process continued until it was clear that the child was finished telling the story. The same procedure was followed for children in the no-discussion group, except that they did not discuss the movie with their mother.

Coding and Measures

Mother-Child Discussion. The conversations mothers and children had in preparation for the child's retelling the movie story were video recorded and transcribed. Codes for the mother-child conversations were developed by compiling an exhaustive set of the mothers' and children's questions, comments, and corrections. These were then categorized to form seven variables reflecting the seven scaffolding strategies discussed in the introduction.

LENGTH OF DISCUSSION. The length of the mother-child discussion, before the mother signaled that they were finished, was measured in terms of the number of conversational turns taken by the pair—a turn being all the speech uttered by one person before any was uttered by the other person, regardless of the length of the utterances.

MOTHER-CHILD JOINT ATTENTION. A measure of joint mother-child attention was created by counting the number of conversational turns in which mother and child were both on-task, that is, talking about the movie, divided by the total number of turns in their discussion. Because this variable was not normally distributed, it was subsequently transformed to a trichotomy for analyses (1 = < .50 turns) on-task, (1 = < .50 turns) on-task, (1 = .50 turns)

ORIENTATION OF CHILD TO TASK. Mothers were classified according to whether or not they reminded the child about the task ("Well you have to tell this whole thing to Miss Maureen. You have to tell her what you saw." "Do you think you'll be able to tell Maureen about the story that we saw?" "Now you're gonna tell the story. You have to tell them the story because they didn't watch it.").

Number of questions. This measure consisted of the number of different questions about the story that the mother asked the child; for example, "What was the girl doing in the forest?" "Where was the father going?" "What did the father and girl talk about in the truck?" "How did the girl feel about going to live with Aunt Sarah?" "Why did the father stop the truck?" "What happened to the deer?" Because this variable was not normally distributed, a log transformation was performed before it was used in analyses.

Correction of misunderstanding. Mothers were classified according to whether or not they made at least one correction of their child's misunderstanding about the story during their discussion. Of the 31 children who discussed the movie with their mothers, 24 expressed clear misunderstandings about the story (e.g., thinking that the girl was going to have to live with her aunt because her father was mad at her or because she wasn't behaving). Mothers' corrections generally followed the children's mistakes immediately: "You think that's why? I don't think that was it. Didn't you hear what the daddy said . . . ""No, it wasn't because she wasn't behaving. Hello? It was because times were difficult, right?"

"No, no, no. He was angry because he was afraid, right?" Other corrections were made in the context of longer, extended exchanges on critical topics.

EMOTION WORDS. This measure consisted of the number of emotion words used by the mother in her discussion of the story with the child. It included words related to the child's and mother's emotions and words describing the emotions of characters in the movie. "What scared you? Did you feel bad for the little girl?" "Was her daddy mad at her?" "I know she was upset, she was almost crying. How did that make you feel?" "Pretty sad?" Because this variable was not normally distributed, it was converted to a trichotomy for analyses (0 = no emotion words; 1 = 1-3 emotion words; 2 = > 3 emotion words). In addition, a dichotomous variable was created to distinguish between mothers who did and who did not talk about the child's feelings.

EXTENDED EXCHANGES ON CRITICAL TOPICS. Mothers were given a positive score for this variable if they engaged in a conversational exchange lasting at least five consecutive turns on one of the four critical topics in the story (the girl being alone in the forest, the girl having to go live with Aunt Sarah, the father shooting the deer to put it out of its misery, or the deer's disappearance). These exchanges consisted of alternating mother and child questions and answers, like Cazden's (1988) IRE sequences, in which an adult Initiates with a question, the child Responds, and the adult Evaluates the response, or Mehan's (1979) extended conversational units, which are topically related sets of IREs. To be coded as an extended exchange, the mother asked the child a question that prompted recall; clarified the child's response and elaborated on it, giving an explanation or correction if necessary; then asked another question to follow up on the same topic, encouraging the child to say more, and so on. An example of an extended exchange between one mother and child was as follows:

Mother: And why was the daddy angry?

Child: Cause she was wandering all around?

Mother: Okay, and was he angry in a bad way, or a good way?

Child: A bad way.

Mother: Why was it bad?

Child: Cause he was yelling at her.

Mother: Do you know why he was angry?...Why was he angry at her for wan-

dering around?

Child: Cause she wasn't supposed to.

Mother: Yeah. Why? What could happen?

Child: She could have got shot.

Mother: Okay, he was angry, because he was what. . .?

Child: Because she could have got shot.

Mother: Uh huh, how was he feeling? 'Cause he was. . .?

Child: ...Mad

Mother: He was mad, but more than mad he was. . .

Child: At the girl?

Mother: No.

Child: The reindeer!

Mother: No, no, no. He was angry because he was afraid, right? What was he afraid

of?

Child: Afraid she was gonna die.

Mother: Afraid she was gonna die? Yeah. Well, yeah he was afraid she might get

hurt wandering around in that snow, right?

An example of an extended exchange between another mother and child is as follows:

Mother: What were they talking about on the road to get groceries?

Child: The reindeer.

Mother: Were they talking about a reindeer? I thought they were talking about

something else. Was the little girl upset about something?

Child: Yeah.

Mother: What was she upset about? Child: To go living with her Aunt.

Mother: Why did she not want to live with her Aunt? Child: Cause she was, cause she wanted to stay.

Mother: What?

Child: She wanted to stay with her father, but umm...

Mother: Her dad, she wanted to stay with her daddy?

Child: Yeah.

Children's Narrative Performance. The narrative stories the children told the experimenter were video recorded and transcribed. Researchers then created an exhaustive set of coding units, which included all statements from all children's stories. These were divided into (a) units reflecting recall of objective actions (for example, the girl was walking in the woods, the sound of shots was heard, the father was going shopping, he yelled at the girl, the deer was injured, the father went to the back of the truck); 18 such units were coded, and (b) units reflecting comprehension of characters' thoughts, feelings, and goals (for example, the girl was searching for the deer, the father was angry because the girl was in the forest, he intended to send her to live at her aunt's, the girl was sad about moving to her aunt's, the father wanted to shoot the deer, the girl was unhappy about this); 14 such units were coded. These two aspects of narrative were coded separately because they reflect two levels of narrative competence. They parallel the two levels that make up Bruner's (1986) dual landscape of narratives: the landscape of action, which parallels our measure of recall of objective actions, and the landscape of consciousness, which parallels our measure of comprehension of internal states.

Two measures of narrative performance were thus constructed: recall of objective actions, which consisted of the total number of objective events and actions included in the child's narrative, mean = 4.9, SD = 2.6, range = 0 to 11, and comprehension of internal states, which consisted of the total number of comprehension units included in the narrative, mean = 2.4, SD = 2.0, range = 0 to 7. These two scores were moderately highly correlated (r = .62, p < .01).

Reliability. Transcripts were coded by two pairs of coders, who were blind to the purposes of the study and to each other's coding. One pair coded the

mother-child discussion of the videotape; a second pair coded the children's stories. The coder pairs trained until they achieved 90% reliability on selected transcripts, then they each coded the rest of the transcripts independently, resolving all discrepancies through blind consultation with a study investigator. Kappas between the pairs of coders calculated on the entire set of mother-child transcripts and narrative transcripts exceeded .95 for all variables.

Associations with Other Child Variables. Associations between children's narrative performance and three other child variables were examined in order to determine whether it was necessary to control for these factors statistically in analyses of the effects of mother-child discussion. Other research suggests that narrative performance is related to the child's age (Varnhagen, Morrison, & Everall, 1994), verbal ability (Snow, Tabors, Nicholson, & Kurland, 1995), and gender (Haden et al., 1997; Kuebli, Butler, & Fivush, 1995). In the present study, with a more limited age range, narrative performance was not related to the child's age, gender, or two measures of the child's verbal ability—expressive language on the Reynell Developmental Language Scales (Reynell, 1991; alpha = .86) and school readiness on the Bracken Scale of Basic Concepts (Bracken, 1984; alpha = .93). It was, therefore, not necessary to control for these variables in the analyses relating narrative performance to maternal discussion or scaffolding.

Follow-up Questions

Six months after they had viewed the videotape, the mothers and children came to the playroom for another assessment visit. At that time, the mothers were shown the *Prancer* videotape (again) and asked the question: *You remember the last time you came to our playroom you watched this video with your child, talked about it, and then the child told the story to one of our assistants. If you were going to do the same thing today, that is, watch the video and then prepare your child to tell the story to an assistant, how would you do it? Then they were asked, Which of the following events in the movie would you tell the child about? (The events listed were: where the father was going, why the father wanted the girl to go live with Aunt Sarah, who shot Prancer, why the father wanted to shoot Prancer, and how the deer disappeared.)*

RESULTS

How Did Mothers Prepare their Children to Retell the Story?

After watching the video clip together, mothers and children engaged in discussions that lasted as little as one minute and as long as five minutes. Their conversations ranged from 4 to 74 turns; on average, they included 33 turns (SD=22). Mothers treated their "assignment" to talk about the movie with the child as an informal conversation; they did not prolong their discussions as if they were preparing the child for an exam. For the most part, during their discussions, mothers and children stayed "on task," that is, talking about the movie; on

average, 90% of their conversational turns were on task. But substantial variation among mother-child pairs was observed, ranging from 25% to 100% of their turns on task. Only 10 of the 31 mothers explicitly reminded their children that they would have to tell the experimenter the story when she came into the room. On average, mothers asked their children 10 different questions (SD = 9.0, range = 0 to 42.) The most common question (asked by 60% of the mothers) was "Why did the deer vanish?" or "Where did the deer go?" Half of the mothers asked "What was the dad going to do to the deer?" About a third of the mothers asked how the dad was feeling in the truck, how the girl felt about going to live with Aunt Sarah, or what the girl was looking for. Of the 24 children who made mistakes about the story when they were discussing it with the mother, 12 were corrected by their mothers; 12 were not. Two thirds of the mothers used at least one emotion word in their discussions of the movie story; the maximum number of emotion words used was 14 (mean = 2.9, SD = 3.9). Half of the mothers asked the child about his or her feelings about the story.

Thirteen mothers had extended exchanges with their children about critical topics in the story. About half of these extended exchanges were about the girl's anxiety over the deer (being lost, hurt, or shot); about one quarter were about the girl's sadness over having to leave her father to go live with her aunt; and about one quarter were about the father's anger over finding the girl walking alone in the forest. Having extended exchanges was correlated with having longer discussions, r(31) = .57; using more emotion words, r(31) = .55; asking more questions, r(31) = .57; and correcting the child's misunderstandings, r(24) = .68, all r's significant at p < .01. Mothers who had extended exchanges with their children also mentioned more different strategies when they were asked six months later how they would prepare the child to tell the story; these strategies included having the child tell the story, recapping what happened, asking the child questions, pointing out missing elements in the child's story, asking if the child had questions, finding out if the child understood the story, and asking about the child's feelings, r(30) = .44, p < .05. They also indicated that they would tell the child about more of the movie events, r(30) = .48, p < .01.

How Well Did Children Tell the Story?

In their narratives, children in the mother-discussion group were most likely to mention the following objective events and actions in the Prancer story: the girl was in the forest (42%); the deer was in the road (26%); the deer was injured (68%); the father went to get his gun (29%); he was going to shoot the deer (71%); the girl tried to stop him from shooting (32%); the deer vanished (61%). They seldom mentioned details such as the girl seeing the deer's tracks in the forest (10%), the father yelling at the girl when he picked her up (16%), the father and girl talking about her going to live at the aunt's (7%), or the girl crying about going to the aunt's (7%). Fifty-five percent of the children mentioned at least one internal state of some character in the video, although no specific internal state was mentioned by the majority of children. The internal state mentioned most frequently was why the girl was in the forest (looking for the deer) (36%).

Table 1. Mean Differences between Mother-Discussion Group and No-Discussion Group in Children's Comprehension of Characters' Internal States and Intentions

	Mother-discussion group	No-discussion group	F (1, 44)
Girl is in forest <i>looking</i> for the deer	.36 (.49)	.00 (.00)	7.36**
Father is angry because girl is in forest	.16 (.37)	.00(.00)	2.57
Father intends to send girl to aunt's	.13 (.34)	.00 (.00)	1.98
Girl is sad about moving to aunt's	.03 (.18)	.00 (.00)	<1
Girl and father are in conflict about moving	.00 (.00)	.00(.00)	<1
Girl is happy to find deer	.00 (.00)	.00 (.00)	<1
Girl is sad to find deer hurt	(00.) 00.	.00 (.00)	<1
Father wants to shoot deer	.13 (.34)	(00.) 00.	1.98
Girl is unhappy about shooting deer	.00 (.00)	(00.) 00.	<1
Girl tries to stop shooting	.10 (.30)	.00(.00)	1.43
Child understands why father wants to shoot deer	.23 (.34)	(00.) 00.	4.98*
Deer is suffering	.07 (.25)	.00 (.00)	<1
Wound is <i>caused</i> by earlier shots	.22 (.37)	.00 (.00)	4.57*
Child explains how deer vanished	.26 (.44)	.00 (.00)	4.65*

Notes: *p < .05

Effect of Maternal Scaffolding on Narrative Performance

To assess the general effect of maternal scaffolding on children's narrative performance, we compared the performance of the two groups of children: those who discussed the movie with their mothers and those who did not. Children who discussed the movie with their mothers included significantly more objective actions in their stories than children who did not (mean number of objective actions or events = 4.90, SD = 2.6, vs. 2.84, SD = 2.1, F(1, 44) = 4.67, p < .04), and significantly more of the characters' motives, thoughts, and feelings; on average, they mentioned 2.4 internal states, SD = 2.0, whereas children who did not discuss the movie with their mother never mentioned an internal state, F(1,44) = 18.9, p < .001. A multivariate analysis of variance for the set of 14 items making up the internal states score was significant, F(44) = 2.17, p < .05, and univariate analyses of variance for the individual items, presented in Table 1, revealed that children with maternal support were significantly more likely to connect the sound of shots to the deer's wound, mention why the girl was in the forest, explain why the father wanted to shoot the deer, and explain the deer's vanishing. A multivariate analysis of variance for the 18 items comprising the objective actions score was not significant, F(44) = 1.2. The results of these analyses thus provide evidence that maternal support facilitates children's subsequent narrative performance, particularly by enhancing the children's understanding and inclusion of characters' thoughts, feelings, and intentions.

Table 2. Correlations between Maternal Scaffolding and Child's Narrative Performance

	Children's Narrative		
Mothers' scaffolding	Recall of objective actions	Comprehension of internal states	
Length of discussion	.28	.38*	
Joint attention	.48**	.37*	
Orientation of child to task	.30	.11	
Number of questions	.34	.54**	
Correction of mistakes $(n = 24)$.57**	.56**	
Emotion words	.21	.37*	
Extended exchanges	.47**	.51**	

Notes: p < .05**p < .01

Associations between Mothers' Scaffolding Behaviors and Children's Narrative Performance

To find out which particular kinds of maternal support were associated with children's narrative performance, we calculated correlations between the maternal scaffolding variables and the child's recall and comprehension of the story as demonstrated in his or her free-standing narrative (see Table 2). Children's recall of objective actions was significantly related to the degree of joint mother-child attention to the story, whether or not the mother corrected the child's mistakes in their discussion, and whether or not the pair engaged in any extended exchange(s) on critical topics in the story. The child's comprehension of story characters' internal states and motivations was related to these three maternal scaffolding variables, and, in addition, to the length of the mother-child discussion, the number of questions the mother asked about the story, and the number of emotion words used by the mother. Simply reminding the child that he or she would have to retell the story to the experimenter later did not significantly affect the child's narrative performance, nor did asking the child about his or her feelings about the story; F(1, 30) < 1 for recall of objective actions; F(1, 30) = 2.0 for comprehension of internal states.

DISCUSSION

The results of the study clearly suggest that discussion with the mother can improve children's ability to tell a good story. Without any discussion, children's stories were brief and bereft of motives and emotion. With discussion, there were wide individual differences in how well children told the story. When mothers kept the children's attention focused on the story, asked questions and gave information that provided scaffolding for expanding the child's memory and understanding, corrected the child's misunderstandings about the story, and

probed into the nooks and crannies of the story by asking questions that tapped more of the overt events and emotional undercurrents shown in the movie, children's narratives were more detailed and revealed greater understanding of the movie story. Just how dramatic these differences in the quality of mother-child discussions and children's subsequent narratives are can perhaps best be illustrated by presenting the mother-child dialogues that preceded the two children's stories with which we began this paper.

The mother of the child who told the first, more expansive narrative conducted a discussion that included all the elements our analyses showed are associated with children's narrative performance—frequent questions and emotion words, extended exchanges on critical topics, and correction of misunderstandings:

Mother: Where did it go? . . . It just disappeared?

Child: Mmm hmm.

Mother: Oh my goodness, are you okay?

Child: It scared me.

Mother: It scared you? What scared you?

Child: When, when he got shooted. But he ran away. I thought he was gonna

shoot it!

Mother: Oh, no.

Child: But he missed it.

Mother: Yeah. Did you feel bad for the little girl? Child: Yeah. But I really felt bad for that animal.

Mother: For the reindeer? I know he was a nice animal, huh? Well, you have to tell this whole thing to Miss Maureen. You have to tell her what you saw. Can

you tell me about it?...What was it about?

Child: A little girl and a reindeer.

Mother: A little girl and a reindeer? In the beginning she was what...?

Child: Trying to find it.

Mother: She was looking for the reindeer, huh? And then when her daddy drove up,

what happened?

Child: She got, umm, she got in . . . in . . . in trouble.

Mother: She was in trouble? Why?

Child: Because she was looking for the reindeer. She was supposed to look at, at the person whoever shot. . .got it hurt. That was not the dad. And, umm, he

got to kill it, because, anyways, it wouldn't have died.

Mother: You don't think it would have died? Well, have you ever heard that if an

animal like a horse or something gets hurt really bad,

Child: I know, then...

Mother: ... that means you have to shoot it?

Child: I know. I said that. Anyways it would have really died.

Mother: It would have died because it got hurt?

Child: Yeah.

Mother: Well, what about the little girl and her daddy? Was her daddy mad at her?

Child: Yeah

Mother: He was pretty mad, huh? Because she disobeyed him? And then what did

he say he was going to do? Was she going to have to go live with her Aunt

Sarah?

Child: Mmm hmm.

Maternal Scaffolding and Children's Narratives

How come? Mother:

Child: Because he. . . he was mad.

No. You think that's why? I don't think that was it. Didn't you hear what Mother:

the daddy said? He said that her mommy's not there anymore, right? Her mommy must have died or something. And that he couldn't take care of her, that he couldn't buy her the nice things that she needed, and he couldn't take care of her. And for a little while, she was going to have to go live with her Aunt Sarah. It wasn't because he was mad at her, was it?

Why do you think that?

Child: Well, because, uh, okay, he was mad...

Was he mad at her? Or was he just upset because she didn't want to go Mother:

away and live with her Aunt Sarah.

Child: She was upset.

Mother: She was upset? I know she was upset, she was almost crying, huh? How

did that make you feel?

Child: Sad.

Mother: Pretty sad?

Child: And I was about to cry when he got shot, when the reindeer got, when they

turned back, that reindeer was gone!

Mother: I know, that's pretty magical, huh? Maybe that was a magical story, we'll

have to rent it sometime and watch it, you want to do that?

Child: Yeah.

Yeah. How do you think that you would feel if Daddy said you have to go Mother:

stay with Aunty Trish, cause Daddy can't take care of you anymore?

Child: It would make me feel real, real sad.

Real sad? Would you want to stay with Daddy, just like Jessica wanted to Mother:

stay with her daddy.

Child: I would miss my daddy.

Do you think you'll be able to tell Maureen about the story that we saw? Mother:

I think you can.

The mother-child dialogue for the child who told the second story was briefer and provided much less scaffolding.

Child: He disappeared so fast!

Mother:

Child: Why did he disappear so fast, Mom?

Mother: I don't know.

Child: Did he run away too fast and they...they couldn't shoot him? I think

that. . .I think that he. . .he was scared of them.

What was he going to do? Do you think that. . Mother:

Child: You know why he just runned away?

Mother: Why?

Child: He didn't want to be shoot. He didn't want to be shot? Mother:

No. That wasn't very nice. Child:

How do you think that little girl would feel? Mother:

Child: If he shoots him? Then sad.

Mother: Oh. Do you think the daddy should do that?

Child: No, because some reindeers are nice and some reindeers are not. Mother: Did you like the reindeer?

Child: Yeah, I do. He's kind of a nice reindeer I think. Woooooooo. All right, do

you want to go in there?

Mother: No, now you're gonna tell the story, you have to tell them the story

because they didn't watch it.

These examples make clear how mothers can contribute to their children's storytelling performance by keeping the child focused, asking frequent questions, and giving important information. Children's recall of objective actions and events in the movie was particularly rich when their mothers kept the discussion focused on the story rather than wandering "off task" and chatting about matters not relevant to the storytelling performance, corrected the children's errors about the story, and engaged in extended exchanges about critical story topics. Children's understanding of the story, as evidenced by their inclusion of characters' thoughts, intentions, goals, and feelings, was greater when mothers, in addition, asked the children more questions and talked to them more about the characters' emotions.

The link between maternal scaffolding and children's narrative performance observed in this study is consistent with previous research on scaffolding but extends that literature to a new outcome—children's narrative retelling of a movie story. The link between scaffolding and picture-book reading in children this age was documented in the unpublished study by Lange and Carroll (1997), who found that when mothers who discussed with their children how events in the book happened, interpreted actors' intentions, described causes and effects, and related events in the book to autobiographical experiences, their children remembered more details of the story and were more likely to talk about intentions, causes, and effects, when they later looked at picture books with an experimenter. The results of the present study are also consistent with those of Reese et al. (1993), who showed that children whose mothers were more highly elaborative and provided more narrative structure by engaging in richly detailed conversations about past events recalled these experiences better, even one or two years later. Moreover, our results are consistent with the findings of experimental studies, in which researchers have demonstrated that these kinds of maternal behavior facilitate children's learning. Dale, Crain-Thoreson, Notari-Syverson, and Cole (1996) showed that when mothers were successfully taught to ask more what/who and open-ended questions and to expand what their children said in shared picture-book reading, their three- to six-year-old children increased in their rate of verbal responses to questions, number of different words used, and mean length of utterance during the book reading. In the experimental study by Arnold et al. (1994), also, elaborative questioning by mothers was associated with improvements in preschool children's storybook language. Finally, Murachver, Clark, and Pipe (1997) found that three- to six-year-old children whose experience with a zookeeper was narrated (described and explained) reported more different items in describing their experience later and were more accurate in reporting the sequence of events they had experienced than children who did not receive such adult support. The results of the present study add to these findings and suggest that maternal scaffolding is related to children's ability to construct a narrative as well as to other measures of children's recall and verbalization.

Based on our findings, it appears that effective scaffolders use a variety of different techniques or strategies to prepare children to tell a good story. They ask many questions, extend children's comments, discuss emotional aspects of the story, and go into important topics at length. They do not wander off topic but stay attentive to the task; when children veer from the story, they guide them back. Their questions prompt children to recall actions and events from the story and provide a test of the child's knowledge, which the effective scaffolders follow up with elaborations, clarifications, corrections, or explanations that increase the child's comprehension of the story. Successful scaffolders engage in extended sequences of comprehension-oriented conversation about critical topics in the story. These exchanges consist of enough conversational turns so that the adult can test the child's knowledge and determine the nature of the child's misunderstandings about the characters; the adult can then correct these misunderstandings or lead the child to correct himself. This process can move the child to a higher level of understanding. Thus, effective scaffolders employ scaffolding strategies that are both deep and wide. They use a "wide" strategy, emphasizing story coverage, when they ask a larger number of questions referring to a wider variety of story elements. They use a "deep" strategy, emphasizing story comprehension, when they extend conversational exchanges by probing, evaluating, and explaining material according to their changing appraisals of the children's understand-

Another way of describing the results of this study is in terms of the different roles mothers play as they prepare their children to tell a story. One role is that of researcher. According to Wood and Middleton's (1975) seminal definition of scaffolding, good scaffolders change their instructions on the basis of the child's response to earlier interventions and are able to estimate the child's current ability or readiness for different types of instructions. Our results suggest that to make these adjustments in the context of preparing their children to retell a movie story, mothers actively research and evaluate their children's knowledge of the story actions and characters' internal states. They test and clarify the children's knowledge largely through questions, which they follow up with further questions or explanations that correct or increase the children's knowledge.

A second role that effective mothers play in this situation is that of *cognitive developmentalist*. Good maternal scaffolders seem to know that their children's narrative recall and comprehension will be facilitated, and presumably that the children's cognitive development will be fostered, by a scaffolded discussion, and they deliberately employ more cognition-enhancing strategies as they actively prepare the child to retell the story. It's not that these mothers simply chat more with the child about the movie; when asked (as in our follow-up interviews), they describe a greater number of different, thought-provoking strategies that they would use to prepare the child to tell the story.

Effective maternal scaffolders also play the role of *psychologist*, as they discuss the emotions of the characters in the story. By explaining more about the movie characters' motives, conflicts, and intentions, they deepen the child's comprehen-

sion of the story. Talking about emotions may also encourage children to empathize with the characters, and empathic understanding may help children understand and reconstruct the story. Moreover, talking about characters' emotions and uncovering the child's reasoning about these emotions enables the adult to raise the underlying moral issues that contribute to understanding the story and to communicate the underlying moral rules to their children. It is undoubtedly not a coincidence that, in this study, the extended exchanges the good scaffolders had with their children *all* involved emotional issues in the story—the girl's anxiety about the deer and her sadness about leaving the dad, the dad's anger about the girl being in the forest. For children at this age, the challenging aspects of narration concern the characters' internal states—motives and emotions. Most five-year-olds have already mastered the ability to retell a story that contains the actions on the causal chain (cf. Beck & Clarke-Stewart, 1998), but they need adult support to understand and incorporate the unseen, underlying motivational and moral themes.

In altering their instructions and trying out a variety of instructions, effective mothers, finally, play the role of *teacher*. They expect and demand that the child stay on task. They point out what is important in the story by the questions they ask. They wield a teacher's red pencil as they correct misunderstandings. During extended exchanges, they encourage the child to reason about important story topics and stimulate the child's comprehension. If the child fails to understand, a mini lecture may be given.

The findings of the study, thus, may have implications for how adults can support children's memory and learning. The evidence from the present study suggests that adults may promote children's narrative competence by engaging them in discussion in a way that focuses their attention on events in the story; reinforces and expands their recall of the story events; supplements their knowledge with clarifications, explanations, and elaborations; corrects their mistakes; and enhances their understanding of characters' underlying emotions and motives. Most research on scaffolding and mother-child collaborative learning has focused on picture books and autobiographical memories with younger children (e.g., Peterson & McCabe, 1994) or on academic tasks with older ones (Hogan & Pressley, 1997). This study suggests that television and movie watching is another venue that can benefit from adult collaboration and support, particularly with children who may have outgrown picture books but have not yet learned to read. Most parents and children have the opportunity to engage in this kind of scaffolded discussion frequently. By talking with their children about the stories they watch on TV, parents and other adults could extend the function of this medium to provide a new kind of teaching opportunity, an opportunity to teach children about narrative. Of course the idea that parents can exploit television as a way of teaching their young children is not new. Children learn language, gather knowledge about the world, and cope with emotions when they co-view television with their parents (Allerton, 1995; Huston & Wright, 1994; Lemish & Rice, 1986). The results of this study demonstrate one more way that adults may take advantage of the television medium—as well as picture books—to foster young children's development.

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NOTE

 These measures, collected when the children were three years old, were available only for the mother-discussion group.

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