

The Three Bears Are All Boys: Mothers' Gender Labeling of Neutral Picture Book Characters¹

Judy S. DeLoache²

University of Illinois

Deborah J. Cassidy

Northern Illinois University

C. Jan Carpenter²

University of Illinois

Two studies examined mother's labeling of gender-neutral characters in young children's picture books. In the first study, mothers and their 18- to 38-month-old children looked at three popular children's books together. The mothers' use of masculine or feminine names or pronouns to refer to gender-neutral characters was recorded. The data revealed an extreme masculine bias: 95% of all characters of indeterminate gender were referred to by the mothers as males. In a second study, specially prepared picture books were used to examine the effect of gender-relevant variables on the mothers' labeling. The results replicated Study 1 in showing a strong bias toward referring to neutral pictures with masculine labels: The incidence of masculine labels was again high and, in addition, was relatively impervious to most of the gender-relevant manipulations included in the books. The one variable that had a strong, consistent effect on the mothers' labeling was the presence of an adult in the pictures: Child Characters were nearly always referred to as males when they appeared alone; they were more likely to be given feminine or neutral

¹This research was support in part by Grants HD-05951 from NICHD and R01 MH33082-01 from NIMH to the first and third authors, respectively. We wish to thank Linda Roots and Elizabeth Lewis for their assistance with data analyses.

²To whom reprint requests should be addressed at Department of Human Development and Family Ecology, University of Illinois, 1105 W. Nevada, Urbana, Illinois 61801.

lables when they were pictured in the presence of an adult. This result is related to Carpenter's [“Activity Structure and Play: Implications for Socialization,” in M. Liss (Ed.), Social and Cognitive Skills: Sex Roles and Childrens Play, New York: Academic Press, 1983] model of the development of sex-typed behavior. The data are also discussed with respect to the well-documented sexist bias in picture books for preschool children.

It is well-established that children exhibit sex-typed behavior and beliefs at an early age. Toddlers prefer to play with sex-appropriate toys (O'Brien, Huston, & Risley, 1981), and by three years of age children show strong preferences for sex-typed activities (Huston, 1983; Maccoby & Jacklin, 1974). Two- and three-year-old children are aware of cultural stereotypes about sex-appropriate activities, toys, emotions, and future roles (Kuhn, Nash, & Bruckner, 1978).

Psychologists have long been interested in how cultural norms and sex role stereotypes are transmitted to young children. Some information about sex-appropriate behavior is conveyed directly, for example, “Boys don't play with dolls.” However, except for toy choice, instruction is probably a fairly rare method for the transmission of sex role information. Adults make extensive use of less direct means, such as differential reinforcement of children's behavior and modeling of sex-appropriate behavior (Fagot, 1978). Even less direct sources of information about sex roles are various media, including television and books, to which young children are exposed. (Television programs and books for children have both received heavy criticism for being sexist—for containing predominantly male characters and portraying both sexes in highly stereotyped roles, e.g., Sternglanz & Serbin, 1974; Weitzman, Eifler, Hokada, & Ross, 1972.)

Much of the information that parents transmit to their young children is conveyed not only indirectly, but unintentionally as well. Even mothers who endorse liberal ideals and do not believe in sex typing respond to young children differently as a function of the child's perceived sex. For example, in a series of studies, adults have been observed interacting with an infant that they have been led to believe is either male or female (regardless of the actual sex of the infant). Adult subjects give feminine sex-typed toys such as dolls to infants they think are girls, and footballs or hammers to boys (Bell & Carver, 1980; Frisch, 1977; Will, Self, & Data, 1976). They encourage motor activity in infants perceived as boys, and interpersonal behavior and nurturance in girls (Frisch, 1977; Smith & Lloyd, 1978).

These studies are important because they show that adults unwittingly behave differently to boys and girls, and in the process communicate sex-

stereotyped information to them. The goal of the research reported here was to examine mothers' communication of gender information to their two- and three-year-old children. We were specifically interested in how the mothers would interpret gender-neutral information, that is, in the extent to which the mothers' own sex role stereotypes would be imposed on neutral content.

We used picture book interactions to ask this question partly because book "reading" is one of the most common forms of routine interactions between parents and young children (DeLoache & DeMendoza, 1987, Dunn & Wooding, 1977). It should be noted that, in early picture book interactions, very little actually reading occurs. Many of the picture books for young children contain little or no text, and parents often ignore whatever text is present, simply preferring to label the pictured objects and characters, and to describe the action at a level the child can understand (DeLoache & DeMendoza, 1987). Thus, picture books and parents' interpretations of them may represent an important source of sex role information for very young children.

We studied how mothers referred to pictures of animal characters that were not marked in any way as being of one gender or the other: The characters did not differ in body size or shape, or in facial features (no long eyelashes or well-defined lips to specify female), and they wore no clothes or gender-specific articles such as jewelry or hair bows. There are three possibilities for how a mother might interpret any given picture: (1) The mother might perceive the character as a male and label it accordingly, (2) she might see the character as female and apply a feminine label, or (3) she might interpret the pictured character as of unspecified gender and refer to it neutrally. However, in English, the only way to refer to a person or animal of indeterminate gender is by using masculine pronouns—"he" and "him". Thus, one might expect that even if mothers did not perceive a majority of the pictures as being of male animals, they might still use a preponderance of masculine pronouns in labeling them.

It is important to know to what extent parents use masculine pronouns when presenting gender-neutral information to their children, because we know that young children do not interpret masculine pronouns in the gender-neutral sense allowed in English. Hyde (1984) presented schoolchildren with sentences that described a child participating in some activity, for example, "When a kid goes to school, he often feels excited on the first day." When the masculine pronoun was used, the children almost always interpreted the sentence as being about a male character. When questioned, very few of the first- and third-grade subjects understood the rule for gender-neutral usage. Thus, children process intended gender-neutral uses of "he" and "him" as male; they do not understand a speaker's or writer's intent to refer to a character of unknown or unspecified gender.

Hyde's research suggests that a bias in maternal labeling might be expected to have consequences for the child's sex schema (Martin & Halverson, 1981). Hearing a preponderance of masculine labels applied to picture book characteristics might lead the young child to conclude that males are more numerous or important than females. Similarly, if mothers interpret pictured activities in terms of cultural sex stereotypes, that stereotyped information may be incorporated into the child's sex role schemas, even though such is not the mother's intent and may in fact be contrary to her general values and intentions. For example, most mothers probably want their daughters to explore the environment, to play actively, and to enjoy a wide variety of toys and materials. The child may not abstract that these activities are appropriate for girls if the mother labels all active characters in a book with masculine pronouns, and mentions feminine or neutral pronouns only when a character plays with a doll or sits in an adult's lap. Thus, through their everyday picture book interactions with their young children, mothers may inadvertently communicate, and their children may abstract, a sex-biased and stereotyped view of the world.

The goal of the two studies reported here was to examine how mothers of preschool children talk about gender-neutral characters in picture books. The first study examined the extent to which mothers used masculine and feminine labels to refer to characters in popular picture books for young children. In the second study, mothers and children looked at specially prepared picture books. Here, we were interested in the influence of relatively subtle stereotypes on the labels transmitted by mother to child. We specifically chose to study the effect of more subtle variables, because we were certain that strongly held stereotypes (such as sex-appropriate occupations) would influence the mothers' behavior and we wanted to get some idea of how susceptible mothers were to the influence of less powerful stereotypes.

We selected four dimensions to portray in the picture books: (1) *Affect*—Females are commonly believed to be more emotionally expressive than males. Further, adults and children see girls are more likely to cry and boys more likely to show anger (Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970; Kuhn et al., 1978). (2) *Activity level*—Boys are expected to be more active than girls. Subjects of all ages identify physical activity as a male characteristic (Kuhn et al., 1978; Williams, Bennet, & Best, 1975). (3) *Interaction*—A commonly held stereotype is that females of all ages are more sociable than males. (4) *Adult-supplied structure*—This dimension refers to adult-supplied rules or information about appropriate behavior in an activity. In classroom and laboratory studies with both preschool- and school-aged children, structure has been manipulated by the presence or absence of an interacting adult in an activity. In these studies, boys prefer activities with little adult instruction or modeling, while girls prefer activities

with an adult present (Carpenter, 1983; Carpenter & Huston-Stein, 1980; Carpenter, Huston, & Holt, 1986; Huston, Carpenter, Atwater, & Johnson, 1986). Adult-supplied structure is not a variable for which mothers would be expected to have elaborate stereotypes; however, since the predominant location of children relative to adults is a reliable difference in the behavior of boys and girls, mothers may be influenced by it in their perception of gender-neutral characters.

STUDY 1

The first study was an analysis of how mothers of very young children referred to characters of unspecified gender in popular children's books. The analysis was performed on transcripts for mother-child reading interactions that were originally collected for other purposes (DeLoache, 1984).

Method

Subjects

The mothers of ten children, six males and four females, provided data for the analysis of maternal gender assignment. The children ranged in age from 18 to 38 months, with a mean age of 30 months. Names of children were obtained from birth announcements in the local newspaper, a preschool program, and from other parents. Mothers were contacted by telephone and asked to participate in a study of mother-child interaction.

Procedure

All observations were conducted in a laboratory playroom. The mother was told that we were interested in mother-child interaction in two common situations—playing with toys and looking at picture books together. The mother and child were given a set of toys and left to play together for approximately ten minutes. After the play session, they were seated in a large, comfortable chair and given three books. The mother was asked to look at, talk about, or read the books with her child however they would normally do at home. The mothers thus had no idea we were interested in their assignment of gender to the characters in the books. All sessions were taped.

Transcripts were used to code the mother's use of pronouns (*he, his, him; she, her*) or gender-specific names to refer to the pictured characters.

Materials

Three books were used for the observations of mother-child picture book interaction. Although the books were not specifically selected to have gender-neutral characters, all three contained some characters that did not have their gender specified in any way; that is, these characters were not wearing gender-specific clothing or other articles, they did not have male or female facial or body features, they were not visually specified as to sex (e.g., milk cows, stags), as they were not engaged in sex-typed activities. (Other characters in the books were clearly portrayed as one gender or the other. Our analyses concern only those characters that were not specified.) The three books were as follows: (1) The farm scene (pp. 16-17) from Richard Scarry's *Best Word Book*. There are only a few lines of text accompanying the farm scene. Although some of the pictured animals are clearly of one gender or the other (the milk cow is obviously female, the rooster is male, the "farmer" bears are referred to in the text, and "Kenny" and "Kathy"), the picture contains 9 animals of unspecified gender (a horse, some ducks, a pig, etc.). (2) *Frog, Where Are You?*, a popular book by Mercer Mayer in which there is no text at all but a strong story line conveyed by the pictures. Most (6 of 9) of the animal characters are not marked as male or female. (3) *Ten Teddy Bears in Fairyland* is a book with a counting theme based on ten teddy bears whose number diminishes by one from each page to the next. It has a nursery rhyme text, but most mothers ignored the text. It contains 7 animals (mostly peripheral characters) of indeterminate gender.

Results and Discussion

The data consisted of the number of times each mother referred to the gender-neutral characters with a masculine or feminine pronoun or name. The mother labeled a total of 49 characters with gender-specific labels, and 46 (95%) of these were male. In all, the mothers used a total of 104 gender-specific labels, of which 102 (98%) were masculine references. Most were the pronouns "he," "him," and "his."

Although we had expected the mothers to use masculine labels more often than feminine ones, we were surprised at the almost total reliance on male labels. One of the only two feminine labels was one mother's reference to a large duck pictured with two smaller ducks as "Mrs. Duck."

These data reveal the existence of an extreme bias in mothers' labeling of gender-neutral animal pictures. If a character was not specifically marked as female, the mother used a masculine pronoun to talk about it. We cannot tell from these data whether the mothers perceived the pictures as male animals or whether they were simply using masculine pronouns in a gender-neutral sense. Regardless of the mother's mental state and intent, the child presumably perceived a virtually all male cast of characters. As mentioned earlier, children interpret the gender-neutral use of masculine pronouns to specify maleness (Hyde, 1984). Thus, a young child who is involved in a picture book interaction with his or her mother experiences an extremely sex-biased story.

STUDY 2

The purpose of the second study was to examine further mothers' proclivity for applying male labels to gender-neutral characters. We wanted to see to what extent to extreme bias evident in Study 1 could be modified by manipulating the type of activities in which gender-neutral characters were pictured. One obvious way to influence mothers' behavior would be to portray visually neutral characters in highly stereotyped activities. For example, an anthropomorphized animal standing in front of a classroom of small animals would almost certainly be referred to as a female; and an animal driving a truck would just as certainly be male. We were interested in the effect of the more subtle gender-relevant variables described earlier, so a special picture book was prepared to include examples of those particular variables.

Method

Subjects

Subjects were 36 mothers, each accompanied by her two- or three-year-old child. Each child was within one month of his or her second or third birthday at the time of the observation. Half the children were female and half were male. Subjects were obtained in the same way as in Study 1.

Materials

The stimuli for the study were specifically constructed picture books. Each book consisted of 14 9.5 by 6.5 inch watercolored line drawings fasten-

ed in a ring binder. The 14 pictures seen by each subject were selected from a total set of 29 pictures. Subjects received different random orders of the pictures, subject to the limits described below.

All the pictures portrayed anthropomorphized bears of neutral gender. Bears were chosen because they are appealing to young children, and they are not stereotyped (like cats) or visually marked as being of a given gender (like deer or lions). The pictures were very carefully drawn by an artist to be neutral with respect to gender. The bears differed in size to indicate adult and child status, but all the bears of a given age group were of the same height, shape, and facial features. None of the bears was portrayed with clothing.

Each of the total set of 24 pictures fell into one of four content categories: affect, interaction, activity level, and adult-supplied structure. Some of the individual pictures were presented to all subjects (and hence functioned as within-subject variables), whereas other pictures were seen by only half the subjects (thus serving as between-subject variables).

For the *affect* category, each picture showed a single bear who was smiling, crying, or looking angry. For each facial expression, three different pictures were prepared in which the bear was portrayed against a different background—either sitting by a rock, walking through a forest, or sitting at a picnic. Each subject received a total of three pictures in this category—one of each affect, each of which appeared in a different setting. Since affective expression is more a part of the female stereotype, we expected that these pictures would be less likely to elicit male labels than less emotionally charged ones. We also expected that the angry picture would elicit more male labels than the other two.

The pictures in the *interaction* category portrayed adult and child bears together, but they differed in the extent and type of interaction portrayed. One picture showed an adult bear hugging a child bear, and another was an adult spanking a child. Each subject received one or the other of these pictures in the booklet. A second set of pictures showed a child bear approaching one of two adult bears: Half the subjects saw a picture in which the child bear was approaching the adult on the left, and for the other half the child was moving toward the adult on the right. In a third set, a child bear was standing next to one of two adults. Half the subjects saw the bear standing near one adult and half near the other. In a third set, one picture showed a child and an adult bear sitting on a couch watching television together, and the second picture showed a single bear watching television alone. Each subject received one or the other of these two pictures. We expected that feminine labels would more often be applied to adult bears who were pictured as highly nurturant (hugging the child) or who were generally involved in higher levels of interaction with a child bear.

For *activity level*, one picture depicted a bear going down a slide (active) as a second bear looked on (passive). A second picture showed two bears in a car, one in the driver's seat (active) and one in the passenger's seat (passive). All subjects received both pictures. Another activity level contrast involved two pictures—in one a bear is jumping a rope, in the other a bear is walking along, dragging the rope. Each subject received one picture or the other. We expected that the more active bears would elicit more male labels than the passive bears.

The fourth category was *adult-supplied structure*, based on the work of Carpenter (1983). This dimension varied the degree of involvement and supervision of an adult bear in a child bear's activity. Carpenter and her colleagues have found that girls prefer and spend more time in activities in which adults provide rules and structure for the activity, whereas boys tend to prefer activities with low levels of adult structure. We wanted to see if mothers would label pictures of child bears differently as a function of the presence and degree of involvement of an adult bear in the child's activity. Two series of four pictures each presented four different levels of adult-supplied-structure. In each series, a child bear was pictured (1) alone, (2) with a noninteractive adult bear present but sitting across the room, (3) with an adult bear sitting nearby and watching or sharing the child's activity, and (4) with an adult bear helping the child perform the activity. For one set of pictures, the activity portrayed was stacking seriated rings on a pole, for the other it was drawing a picture. Each subject received four pictures, two from each set. For each subject, two pictures were from levels 1 and 2 above and two were from 3 and 4. We expected that the child bears would receive more feminine labels in those pictures in which an adult was sharing or supervising a child's activity than those in which the child was working independently of adult guidance. Based on the general stereotype that women more often help children than men do, we also expected that more highly interactive adult bears would receive more female labels.

Procedure

All observations took place in a laboratory. After a short period during which the experimenter talked to or played with the child, the mother and child were asked to sit together at a small table or in an armchair. The mother was asked to look at and talk about the pictures in the book in the same way she would do at home with her child. The only exception was that she was instructed to talk about each of the 14 pictures in the book individually, rather than as a continuing story about a set of characters. This request

was made in an effort to prevent the mother's assigning a name or gender to one of the bears and using the same label for the rest of the pictures.

A measure of attitudes about sex roles was given to each mother—the Sex Role Egalitarianism Questionnaire (Thompson, 1975). The 37 items on this questionnaire involve pairs of sentences, one of which represents an egalitarian response, the other a nonegalitarian response to a hypothetical social situation. We used the children's form of this test (which Thompson, 1984, used with elementary, junior high, and senior high school subjects) to elicit the mothers' attitudes concerning appropriate behavior for children rather than for adults. At the end of the session, the mother was fully debriefed regarding the purpose of the study.

Audiotapes of the sessions were transcribed, and the transcripts were coded for the mother's assignment of gender by using pronouns or gender-specific names to refer to the pictured characters. The mothers' reference to each character was coded only once. If the mother applied a gender-specific label, it was coded as either masculine or feminine. If a character was only referred to nonspecifically with respect to gender, it was coded neutral. Examples of responses that were classified into each category include the following: masculine—he, him, this guy, the boy bear, daddy bear; neutral—it, they, them, little bear; feminine—she, her, mommy bear.

Results

For purpose of analysis, the maternal labels were assigned numerical scores as follows: masculine—1, neutral—2, feminine—3. Thus, the lower the score, the greater the extent of masculine bias. Because of the seminaturalistic nature of the experimental situation, there were several sources of missing data. For example, sometimes the child labeled the picture before the mother said anything. The mothers occasionally skipped pictures, and they sometimes discussed a picture without explicitly referring to all the bears in it. All the analyses were corrected for the missing data.

The first question concerned the overall extent of masculine bias in the mothers' labeling of the picture books. Averaging across all characters and pictures, 51.5% of the characters were referred to with masculine labels. Only 13.5% were labeled as females, and 35.0% received neutral labels. Thus, there was a clear masculine bias in the mothers' labeling, although it was not so extreme as in the first study. However, in the present study, the mothers sometimes referred collectively to all the characters in the multiple-character pictures as "they." To correct for this collective labeling of groups, we deleted all "they" references. Of the remaining cases in which the mothers referred to individual characters or used specific group terms (e.g., "the bears"), 62%

were masculine, 22% neutral, and 16% feminine. Thus, the data from Study 2 generally replicate those of Study 1 in showing a strong bias on the part of mothers of young children to apply masculine labels to picture book characters.

The bias present in the second study was less extreme than the shown in Study 1, due to some of the gender-relevant variables we manipulated to assess their effect on the mothers' labeling of gender. There were three main findings that emerged: (1) the maternal bias toward masculine labels is very resistant to influence by subtle variables; (2) some of the variables we studied did reduce the masculine bias in the mothers' labels; and (3) the single most effective variable was the presence of an adult bear in a picture. Child bears pictured alone were nearly always labeled male, but this bias was diminished when they appeared in the presence of an adult bear.

To examine the effects of the four classes of variables, we conducted a series of analyses of variance (ANOVAs) on the mothers' gender assignment scores with the between-subjects variables of sex (2) of child. Picture was either a between- or within-subjects-variable, depending on the particular contrast being tested.

Affect. There was no difference in the mothers' labels of the smiling ($M = 1.25$), crying ($M = 1.08$), and angry ($M = 1.00$) pictures. Almost all (92%) were given masculine labels.

Activity Level. The predicted effect for activity level was found for one of the pictures in the group. The picture that elicited differential labeling of active and passive characters was the slide picture: The child bear going down the slide was more often labeled male ($M = 1.3$) than was the child watching ($M = 1.9$). The main effect of activity level in this picture was significant in an age by sex by activity level ANOVA [$F(1,12) = 7.12$, $p < .03$]. There was also a significant Age \times Sex interaction [$F(1,12) = 6.94$, $p < .03$]. Mothers of three-year-old girls gave more neutral or feminine labels ($M = 2.5$) than did mothers of three-year-old boys ($M = 1.3$), but there was no difference for mothers of two-year-old girls and boys ($M = 1.5$ and 1.6 , respectively).

The only other significant result with respect to activity level was an Age \times Activity Level interaction that occurred with the jump rope pictures [$F(1,25) = 5.44$, $p < .03$]. Mothers of three-year-olds gave more masculine labels for the picture of the active bear jumping the rope than for the passive bear carrying the rope. For mothers of two-year-olds, there was a smaller difference in the opposite direction.

Adult-Supplied Structure. The level of adult-supplied structure influenced the mothers' gender assignments. There was a pronounced effect for the adult bears and a smaller effect for the child bears. Almost three-quarters of the labels given to the *adult* bear who was simply present (sitting across

the room and not interacting with the child) were masculine. In contrast, for the pictures in which the adult bear was nearby (watching or sharing the activity) or actively helping the child perform the activity, only 16 and 17% of the labels were masculine.³ An analysis of gender assignment scores for the adult bear compared the adult-present picture with the mean for the near and helping pictures combined. The main effect of adult structure was significant [$F(1,14) = 11.4, p < .005$]. The combined mean gender assignment for the present but noninteractive adult was 1.47, compared to the mean of 2.2 for the more highly interactive (near and helping) adult. The closely interacting adult bears provided the only instances in the entire data set in which feminine labels actually outnumbered masculine labels; that is, the helpful adult was more often referred to as "she" or "Momma bear" than as "he" or "Daddy."

The level of adult-supplied structure influenced the mother's labeling of the *child* bear in the predicted direction, although this result was not significant. The mean levels of gender assignment scores for the child bear were child bear alone—1.2, with an adult bear present or near—1.4, and with an adult bear helping—1.5.

Interaction. Analyses of the interaction pictures produced only one significant effect, but one highly consistent with the above results. The bear who was portrayed watching television alone was usually referred to as a male ($M = 1.3$), but the child bear who was watching television with an adult bear often received a feminine or neutral label ($M = 1.9$). The main effect of adult presence was significant in an Age \times Sex \times Adult presence ANOVA [$F(1,23) = 6.96, p < .02$].

Both the adult-supplied structure and the interaction dimensions indicated that a child bear who was pictured with an adult bear present was more likely to receive a feminine or neutral label than a child bear who appeared alone in a picture. To examine this phenomenon further, we compared the combined mean for all the pictures in which a single child bear was portrayed alone ($M = 1.1$) to the combined mean of all child bears pictured with an adult bear present ($M = 1.6$). The main effect of adult presence was significant in an Age \times Sex \times Adult Presence ANOVA of the combined means [$F(1,31) = 95.41, p < .001$].

³The lower level of masculine bias in labeling in the adult-supplied structure and interaction conditions could simply reflect a tendency for the mothers to use the collective plural pronoun, "they," when discussing pictures with multiple characters. This is not an adequate explanation, however. For one thing, a variety of truly neutral labels were used, including, "little bear," "baby bear," "three bears," "teacher," "wee bear." Furthermore, in the adult-supplied structure condition, the mothers' assignment of gender to the adult bear differed as a function of the degree of interaction in the pictures. This difference could not have occurred if the mothers were simply referring to the multiple-character pictures as "they."

The mothers' responses to the Sex Role Egalitarianism Questionnaire were analyzed in an Age \times Sex of Child ANOVA, but there were no significant effects. The overall means for the mothers' scores were two-year-old males—31.2, two-year-old females—30.2, three-year-old males—33.0, and three-year-old females—30.2. Since the maximum score on this test is 37, these mothers displayed highly egalitarian attitudes. (Their means are considerably higher than the 20.7 reported for 11th-grade respondents—Thompson, 1984).

Discussion

Mothers of young children show an extreme sex bias in their labeling of gender-neutral characters in picture books. Study 1 suggests that, if a character is not specifically marked in some way as a female, it will almost always be labeled by the mother as a male. Whether the mothers used the masculine pronoun in a gender-neutral sense or because they perceived the characters as males, their behavior presumably led their children to think of the characters as actually being male (Hyde, 1984). Thus, these children experienced an extreme sex bias in the books "read" to them by their mothers.

Study 2 also showed that mothers of young children are strongly predisposed to apply male labels to neutrally pictured characters. The overall pattern of results indicated that the mothers were basically quite resistant to changing this bias. For example, even though affective expression in general, and crying in particular, are female-stereotypic behaviors, the affect dimension had no effect on the mothers' labeling of the pictures as male.

These data have clear and important implications with respect to young children's picture book interactions with adults, one of the most common forms of parent-child and teacher-child interactions. For many years, parents and educators have been concerned about the extent of sexism present in books for young children. Numerous content analyses of children's books published over the past two or three decades have documented the existence of a strong sexist bias. The most obvious bias is that males far outnumber females as main characters. This is true for picture books for preschool children (Engel, 1981; Hurst, 1981; Nilsen, 1975; Weitzman et al., 1972), as well as elementary school textbooks (Saarnio, Jacklin, & Tittle, 1973; U'ren, 1971; The women and girls that do appear in children's books are portrayed in a restricted number and range of occupations, social roles, and activities, compared to male characters. (Hurst, 1981). Also, both sexes are typically portrayed in highly traditional and sex-stereotyped roles and activities (Engel, 1981; Ray, 1982; Weitzman et al., 1972). These analyses have led to widespread concern that the sexist bias in early books may lead to more conservative and stereotyped gender concepts in both sexes, and may have

negative effects on girls' self-concepts and on their life goals and expectations. Educators and publishers have espoused the goal of a more egalitarian portrayal of sex roles in elementary textbooks (e.g., Macmillan, 1975; McGraw-Hill, 1974; Scott, Foresman, & Company, 1972).

Eliminating sexism in books for preschoolers may be more difficult in some respects, because of one unique aspect of how preschool picture books are used: Young children's exposure to picture books is mediated through other people—parents, older siblings, teachers. This point is especially important because one strategy adopted to reduce the sexist bias in picture books is the use of gender-neutral characters. For example, some of the Dr. Seuss books contain personified animals of neutral sex, the idea being that children could identify with the characters regardless of race or sex (Nilsen, 1975).

Our data suggest that this approach will not reduce the preschool child's exposure to sexism in picture books. In fact, our study indicates that picturing the characters in a gender-neutral way is actually counterproductive, since the adult "reading" the picture book with the child is likely to produce an even more gender-biased presentation than the average children's book does. In the content analyses of children's picture books, approximately two-thirds of the characters are male. In our study, virtually all of the neutral characters were labeled as males. Thus, the only strategy that is likely to succeed in achieving more egalitarian sex roles in young children's picture books is to portray more overtly female characters in a wider variety of nonstereotyped roles.

The results of the present study also have implications for the understanding of early sex role development. The largest and most consistent effect in Study 2 had to do with adult-child interaction. The one variable that substantially affected in the degree of masculine labeling was whether the child bear was pictured alone or in the presence of an adult. A similar effect occurred for the adult bears. An inattentive adult bear at a distance was referred to as a male, whereas a close, attentive, interactive bear was a female. As noted earlier, the only pictures in our entire set that elicited more feminine than masculine labels were those in which the adult bear was nearby and helping the child.

The prominence of adult presence in determining the mothers' labeling of the characters suggests that this is a salient feature of their own sex schemas: Girls are found in the company of adults, boys spend time alone. Similarly, women are more helpful and attentive to children than are men. Our results suggest that these aspects of mothers' sex schemas may be more likely than many others to be communicated to their young children. Although our findings are obviously limited to picture book interactions, this may be only one arena in which mothers communicate that remaining close to an adult is a salient aspect of being female.

According to Carpenter's (1983) model of the development of sex-typed behaviors, a variety of sex differences originate, in part, because girls spend more time than boys do in activities in which an adult is also participating and providing structure. Sex-typed feminine behaviors, such as asking for help, compliance, and bids for recognition, appear more often in high adult-structured activities. Male sex-typed behaviors, such as aggression, negotiation, and leadership attempts, are more common in low adult-structured activities (Carpenter & Huston-Stein, 1980; Huston & Carpenter, 1985). Thus, the mother's transmission of stereotypes about adult-child interaction may have important and long-lasting consequences in the child's development. Information the mother provides may influence her very young child's schema for sex-appropriate interactions with adults. The child's sex schema guides his or her initial choice as well as a long-term preference for activities, and different skills and interests are acquired as a function of the activities in which the child participates.

REFERENCES

- Bell, N. J., & Carver, W. A reevaluation of gender label effects: Expectant mothers' responses to infants. *Child Development*, 1980, *51*, 925-927.
- Broverman, I. K., Broverman, D. M., Clarkson, F. E., Rosenkrantz, P. S., & Vogel, S. R. Sex-role stereotypes and clinical judgments of mental health. *Journal of Consulting and Clinical Psychology*, 1970 *34*, 1-7.
- Carpenter, C. J. Activity structure and play: Implications for socialization. In M. Liss (Ed.), *Social and cognitive skills: Sex roles and children's play*. New York: Academic Press, 1983.
- Carpenter, C. J., & Huston-Stein, A. C. Activity structure and sex-typed behavior in preschool children. *Child Development*, 1980, *51*, 862-872.
- Carpenter, C. J., Huston, A. C., Holt, W. Modification of preschool sex-typed behaviors by participation in adult-structured activities. *Sex Roles*, 1986, *14*, 603-615.
- DeLoache, J. S. Joing picture book reading of mothers and one-year-old children. *British Journal of Developmental Psychology*, 1987, *5*, 111-124.
- DeLoache, J. S., & DeMendoza, O. A. P. *Joint Picturebook interactions of mothers and one-year-old children*. Technical report, Center for the Study of Reading, Urbana, IL, 1985.
- Dunn, J., & Wooding, C. Play in the home and its implications for learning. In B. Tizard & D. Harvey (Eds.), *Biology of Play*. Philadelphia: Lippincott, 1977.
- Engel, R. E. Is unequal treatment of females diminishing in children's picture books? *The Reading Teacher*, 1981, *X*, 647-652.
- Fagot, B. I. The influence of sex of child on parental reactions to toddler children. *Child Development*, 1978, *49*, 459-465.
- Frisch, H. L. Sex stereotypes in adult-infant play. *Child Development*, 1977, *48*, 1671-1675.
- Hurst, J. B. Images in children's picture books. *Social Education*, 1981, *X* 138-143.
- Huston, A. C. Sex-typing. In P. H. Mussen (Ed.), *Handbook of Child Psychology*, 4th ed. New York: John Wiley & Sons, 1983.
- Huston, A. C., & Carpenter, C. J. Gender differences in preschool classrooms: The effects of sex-types activity choices. In L. C. Wilkinson & C. Marrett (Eds.), *Gender influences in classroom interaction*. New York: Academic Press, 1985.
- Huston, A. C., Carpenter, C. J., Atwater, J. B., & Johnson, L. Gender, adult structuring of activities and social behavior in middle childhood. *Child Development*, 1986, *57*, 1200-1209.

- Hyde, J. Children's understanding of sexist language. *Developmental Psychology*, 1984, 20, 697-706.
- Kuhn, D., Nash, S. C., & Brucken, L. Sex role concepts of two- and three-year-olds. *Child Development*, 1978, 49, 445-451.
- Maccoby, E. E., & Jacklin, C. N. *The psychology of sex differences*. Stanford, CA: Stanford University Press, 1974.
- Martin, C. L., & Halverson, C. F. A schematic processing model of sex typing and stereotyping in children. *Child Development*, 1981, 52, 1119-1134.
- McGraw-Hill Book Company. *Guidelines for equal treatment of the sexes*. McGraw-Hill Book Company Publications. New York, 1974.
- Macmillan Publishing Company. *Guidelines for creating positive sexual and racial images in educational materials*. New York, 1975.
- Nilsen, A. *Sexism in children's books and elementary classroom materials*, 1975.
- O'Brien, M., Huston, A. C., & Risley, T. *Emergence and stability of sex-typed toy preferences in toddlers*. Paper presented at the meeting of the Association for Behavior Analysis, Milwaukee, WI, May 1981.
- Ray, B. Little boys and picture books. *Catholic Library World*, 1982, X, 74-78.
- Smith, C., & Lloyd, B. Maternal behavior and perceived sex of infant: Revisited. *Child Development*, 1978, 49, 1263-1266.
- Saarnio, T., Jacklin, C., & Tittle, C. Sex role stereotyping in the public schools. *Harvard Educational Review*, 1973, 43, 386-416.
- Scott, Foresman, & Company. *Guidelines for improving the image of women in textbooks*. Glenview, IL, 1972.
- Sternglanz, S. H., & Serbin, L. A. Sex role stereotyping in children's television programs. *Developmental Psychology*, 1974, 10, 710-715.
- Thompson, S. K. Gender labels and early sex-role development. *Child Development*, 1975, 46, 339-347.
- Thompson, S. K. *Adolescents' attitudes about sex-roles egalitarianism: 1976-1982*. Paper presented at the Southwestern Society for Research in Human Development, Denver, CO, 1984.
- U'ren, M. The image of women in textbooks. In V. Gornick & B. Moran (Eds.), *Women in sexist society: Studies in power and powerlessness*. New York: Basic Books, 1971.
- Weitzman, L. J., Eifler, D., Hokada, E., & Ross, C. Sex role socialization in picture books for preschool children. *American Journal of Sociology*, 1972, 77, 1125-50.
- Will, J., Self, P., & Datan, N. Maternal behavior and perceived sex of infant. *American Journal of Orthopsychiatry*, 1976, 46, 135-139.
- Williams, J. E., Bennet, S. M., & Best, D. K. Awareness and expression of sex stereotypes in young children. *Developmental Psychology*, 1975, 11, 635-642.