Mother/Child Interaction in Reading and Telling: Are There Social Group Differences?

Differential language development and preparation for school among young children of different racial and social groups has been asserted for decades. A study focused on mother-child interaction in two common activities: reading children's books and telling narratives about both shared and unshared experiences. A socially diverse group of 46 mothers and their 3-year-old children, half White, half African American, were compared. Each racial group was evenly divided among children whose mothers had no college, some college, and a bachelor's degree or more. Income ranged from under $5,000 to $75,000 in both racial groups. No children were in preschool or institutional day care, although more than half in each group were in family day care while their mothers worked. At-home sessions consisted of four experimental activities: (1) mother and child read "The ABC Exhibit"; (2) mother and child read "Mole and Mouse Clean House"; (3) mother asked child to tell experimenter about something exciting or fun they had done lately; and (4) experimenter made playdoh with the child (without mother) and mother then asked child how they did it. All mothers, including African American working class mothers, used known-answer questioning and provided other forms of "scaffolding" to assist their children in telling and reading. White mothers used more known-answer questions only in "The ABC Exhibit": in other tasks there were no differences of race or social economic status. Six figures present the data. (AC)
Mother-child interaction in reading and telling:
Are there social group differences?

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Abstract

Differential language development and preparation for school among young children of different social groups has been asserted for decades. This study focuses on mother/child interaction in two common activities: Reading children's books and telling narratives about both shared and unshared experiences. A socially diverse group of 46 mothers and their three-year-old children were tested in their homes. Half of the dyads were white, half African American. Contrary to some claims, all mothers, including African American working-class mothers, used known-answer questioning and provided other forms of "scaffolding" to assist their children in telling and reading. White mothers used more known-answer questions only in the ABC book; in other tasks there were no differences of race or SES.

Introduction

The assertion that some social groups prepare their children for school less well than others has been widely accepted for years. Language development has been the typical focus of these assertions. Generally it has been claimed that working-class parents do not support their children's intellectual development with "scaffolding" in the same fashion that white middle-class parents do. In particular, Heath (1982) and Labov (1976) have claimed that working-class African American parents do not use known-answer questioning (e.g. What color is that?) with their children. The Heath study has been widely cited to explain the school adjustment problems that teachers often claim to find with this group of children. However, this ethnography in a rural community
in the 1960’s was not a systematic study of the issue. Moreover, different activities were not systematically compared.

The current study was designed to sample mother-child interaction in a socioeconomically diverse group of families, both African American and white. Mother’s education was used to index socioeconomic status (SES) because it was felt that greater exposure to schooling might affect the mother’s style of interaction, especially in school-related activities. Whereas past studies of mother-child interaction have generally been restricted to one activity (either book reading or oral narrative), we have sampled several: an ABC book, a story book, an oral narrative of an exciting or interesting experience, and an oral report of making playdoh. We did this because we felt that there might be cultural or socioeconomic differences between interaction in the written and oral activities. These four activities were studied for all subjects by systematically varying SES and race in a 3x2 design, with three SES groups and two racial groups.

Method

Subjects

Forty-six 3 year-olds (37.2-44.2) participated with their mothers. Half were African American, half white. Each racial group was evenly divided between children whose mothers had no college, some college, and B.A. or more. Income ranged from under $5000 to $75,000 in both racial groups. No children were in preschool or institutional daycare, although more than half in each group were in family childcare while their mothers worked. Subjects were recruited through family daycare
providers and subject referral, as well as through signs in a number of communities and workplaces.

**Procedure**

Sessions were conducted in the home by two investigators, one African American and one white. The experimenter directing the activities was race-matched to the subjects; the other experimenter maintained a controlled atmosphere by entertaining other children, answering the phone, etc. Each session consisted of four experimental activities, the first two of which were counterbalanced:

1. **ABC book:** Mother & child read *The ABC Exhibit*, by Leonard Fisher.
2. **Story book:** Mother and child read *Mole and Mouse Clean House*, by Harriet Ziefert.
3. **Oral narrative:** Mother asked child to tell experimenter about something exciting or fun they had done lately.
4. **Oral report:** Experimenter made playdoh with the child (without mother) and mother then asked child how they did it.
5. **Experimenter conducted vocabulary measure with child and interview with mother** (data currently unavailable).

**Conversational Coding Categories**

Only mothers' portion of the conversation has been coded at this time. Following are examples of the question and imperative coding categories under consideration in the current study. Reliability was determined using Cohen's Kappa, which was 80.9%.
Known Answer Questions. What are in the nest? What is that?
Is that neat and straight?

Information Seeking Questions. How did you make it?
Did you like the book?

Confirmation Questions. You made that? You had fun? (following child’s statement of fun)

Imperatives. See that? Can you tell Teresa who went?
Listen now. Tell me how you made it.

All other statements. (e.g. all declaratives, acoustical clarifications)

Results
Known-Answer Questions
1. Mothers in all groups used a considerable number of known-answer questions in all activities, ranging from a mean total of 38.17 for African American mothers with no college to 63.0 for white mothers with no college (see Figure 1).

2. The ABC book elicited the greatest number of known-answer questions in all groups, from 15.75 for African American mothers with some college to 35.86 for white mothers with no college (see Figure 3).

3. No SES differences in number of known-answer questions were found for any other task (see Figures 4, 5, 6).
4. A significant effect was found for race (see Figure 1); white mothers used more known-answer questions than African American mothers ($F = 6.33, p = .02$).

5. The source of this effect was the ABC book ($F = 11.47, p = .00$) as shown by ANOVAs performed for each task.

6. One unpredicted interaction occurred for the oral report of making playdoh. There was a SES by race interaction such that years of mother's education was directly related to number of tutorial questions for African American mothers, but inversely related for white mothers (see Figure 6).

Other Coding Categories
1. No SES or race differences were found for any other type of question (i.e. information seeking, confirmation) or imperative.

Discussion
Contrary to Heath's finding that working-class African American mothers do not use known-answer questions, every mother in this study did so. There are several possible explanations for this discrepancy:

1. This was a experimental study with tasks specified by the experimenter; Heath's study was ethnography, with naturalistic observations over a period of time. It is possible that in reality, some mothers do not do activities similar to the experimental tasks.
However, when asked by the experimenters, all mothers claimed to perform similar activities either daily or several times a week.

2. The current sample was from a large metropolitan area; Heath’s subjects were from a very rural area. It is possible that urban dwellers are more homogeneous in child rearing practices than are people in rural areas, where distance allows more separation of cultures. However, housing patterns in metropolitan areas are also commonly very segregated.

3. This study was completed in the past year; Heath’s study was done in the mid 1960s. This seems the most likely cause for the disparate findings regarding tutorial questioning. It is certainly plausible that child rearing practices, especially those related to schooling, have become more similar in the past 30 years. People throughout the country have become more exposed to mainstream culture through television. In particular, preschool children in all our groups watch Sesame Street and often other educational shows as well. All of our mothers reported performing a variety of activities to prepare their children for entering school.

In total white mothers did use more tutorial questions than African American mothers. However, this effect is restricted to one task only, the ABC book. The frequency of such questions in all our activities (averaging 2-3 per minute) suggests that all mothers are likely to use these school-like questions in the similar activities they perform with their children in everyday life. For this reason, we believe that this particular version of the cultural mismatch explanation for low school achievement by young working-class African American children is no
longer plausible. The answers to this problem are probably much more complex than simple language mismatch.
Figure 1: Mean total number known-answer questions used by mother.

![Bar graph showing the mean total number of known-answer questions used by mothers based on their education level and ethnicity.]

- African-American
- White

Mother's Education

Figure 2: Mean percentage known-answer questions of mother's total interactions.

![Bar graph showing the mean percentage of known-answer questions of mother's total interactions based on their education level and ethnicity.]

- African-American
- White

Mother's Education
Figure 3: Mean number known-answer questions mother used with ABC book.

![Bar chart showing the mean number of known-answer questions used by mothers with different levels of education (BA, Some College, No College) for African-American and White mothers.]

Figure 4: Mean number known-answer questions mother used with story book.

![Bar chart showing the mean number of known-answer questions used by mothers with different levels of education (BA, Some College, No College) for African-American and White mothers.]

Figure 5: Mean number known-answer questions mother used with oral narrative.

Mother's Education

Figure 6: Mean number known-answer questions mother used with oral report of making playdoh.

Mother's Education