A study was made to determine whether fathers and mothers provide different types of linguistic and cognitive experiences for their preschool children. Sixteen preschoolers, divided into two groups by age and sex, participated in the study with their parents. During home visits each child was observed interacting with each parent individually. Each dyad was audiotaped and videotaped while playing with play-doh or looking at a picture book for up to 30 minutes. Parental questions were coded for level of distancing strategies. A parental warmth measure assessed parental actions that expressed enthusiasm, playfulness, enjoyment of the child, enjoyment of doing something with the child, compassion, or understanding. A parental sensitivity measure globally rated parents' sensitivity to their child's cognitive level, emotional state, and physical state. Results indicated that task situation and sex of the child influenced parental speech and interaction with their preschool children. Fathers and mothers were comparable in their cognitive demands. The task in which the dyad engaged was important in the use of distancing strategies. Sex of child contributed to differential treatment. Although all parents exhibited warmth and sensitivity, parents of daughters exhibited more warmth and greater sensitivity than did parents of sons. (RH)
The Cognitive Demands Of Fathers' and Mothers' Questions to Their Preschoolers

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Introduction

It has been suggested that fathers and mothers provide different types of cognitive and linguistic experiences for their children (Gleason, 1975, 1979, and 1983; McLaughlin, White, McDevitt and Raskin, 1983; and Rondal, 1980). Mothers are considered to be warm and sensitive, providing linguistic support by adjusting their speech to children's needs and abilities, and by asking questions that children can readily answer. In contrast, fathers are considered to be less sensitive to their children's language abilities; they are viewed as placing more linguistic demands upon children and, in so doing, raising children's performance. It is conjectured that fathers are more cognitively demanding of their children than are mothers.

The purpose of the current study was to determine whether fathers and mothers provide a different linguistic and cognitive experience for their preschoolers.

Method

Subjects

The subjects were 16 preschoolers and their fathers and mothers. The children were divided into two groups by age and sex. One group of eight children (four boys and four girls) had a
mean age of 2 1/2 years; the other group of eight children (four boys and four girls) had a mean age of 3 1/2 years.

All of the children were firstborns from middle-class, English-speaking, white, intact families who resided in a Midwestern metropolitan area. They were recruited through local day care centers.

Procedures

Two home visits were made within seven days of each other. Each child was observed interacting with each parent individually. Each dyad was audiotaped and videotaped for a maximum of 30 minutes while playing with play-doh and looking at a picture book. In every instance parents were instructed individually and interacted with their child in the absence of the other parent.

Measures

The audiotapes were transcribed and all parental questions were coded for low, medium, and high level distancing strategies as identified and defined in Flaugher and Sigel's Parent-Child Interaction Schedule (PCI). Sigel (1980) has hypothesized a "distancing" theory suggesting that there are specific verbal behaviors (distancing strategies) used by parents that advance their child's development of representational thought. He has identified three levels of distancing strategies and their mental operational demands: Level (1) - low distancing strategies, which focus upon the present, are statements or inquires that encourage a child to label, to describe or to demonstrate a current
situation; Level (2)- medium distancing strategies, which focus upon the past, are statements that encourage a child to reproduce a situation, and to use information from previous experiences; Level (3)- high distancing strategies, which focus on the future, are statements that challenge a child to plan, to evaluate, to infer, to propose alternatives, and to resolve conflicts.

A parental warmth measure, which was taken from the PCI, was scored from the videotapes. This measure assessed on a 3-point Likert scale (low, medium and high) the parental actions that expressed enthusiasm, playfulness, enjoyment of the child, enjoyment of doing something with the child, compassion, or understanding. A parental sensitivity measure, also taken from the PCI, and scored on a 3-point Likert scale was used to make a global rating of the parents' sensitivity to their child's cognitive level, emotional state and physical state.

Statistical analysis

A 2 X 2 X 2 X 2 (age of child, sex of child, sex of parent, type of task) ANOVA with repeated measures was used to analyze the data. Grouping variables were age of child and sex of child; repeated measures were sex of parent and type of task.

Results

As shown in Table 1 no differences were found in the levels of distancing strategies used by fathers and mothers. A main effect for task was significant. More medium distancing strategies were used during the picture book task than during the play-doh task ($F(1,12) = 11.30, p < .006$).
Figure I shows that sex of parent was nonsignificant as a main effect for the warmth and sensitivity measures. A significant main effect for sex of child was found for the parental warmth measure ($F(1,12) = 9.69, p < .01$) and for the parental sensitivity measure ($F(1,12) = 4.82, p < .05$). Parents of daughters exhibited greater warmth and sensitivity than did parents of sons.

Conclusions

The results of this study indicate that the task situation and the sex of the child influenced parental speech and interactions with their preschool children.

Fathers and mothers were comparable in their cognitive demands. The task in which the dyad engaged was important in the use of distancing strategies.

The sex of the child contributed to differential treatment. Although all of the parents exhibited warmth and sensitivity, parents of daughters exhibited more warmth and greater sensitivity than did parents of sons.
Cognitive Demands

References


Table 1

Percent of Low, Medium and High Level Distancing Strategies Used by Fathers and Mothers During Each Activity

<table>
<thead>
<tr>
<th>Activity</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play-doh</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fathers</td>
<td>81.84</td>
<td>5.72</td>
<td>12.44</td>
</tr>
<tr>
<td>Mothers</td>
<td>80.63</td>
<td>5.61</td>
<td>13.76</td>
</tr>
<tr>
<td>Both parents</td>
<td>81.24</td>
<td>5.66</td>
<td>13.10</td>
</tr>
<tr>
<td>Picture book</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fathers</td>
<td>79.78</td>
<td>7.77</td>
<td>12.45</td>
</tr>
<tr>
<td>Mothers</td>
<td>78.40</td>
<td>11.60</td>
<td>10.00</td>
</tr>
<tr>
<td>Both parents</td>
<td>79.09</td>
<td>9.68*</td>
<td>11.23</td>
</tr>
</tbody>
</table>

*p < .006
Figure 1. Mean ratings of parental warmth and parental sensitivity toward daughters and sons.