To examine the influence of older siblings on the sex-typed toy play of younger siblings, a study was undertaken of 60 children, 2 to 5 years old, with equal numbers of boys and girls with older brothers, older sisters, and no older siblings. Children's toy collections were inventoried and classified into conventionally male toys, or toys of the world, such as transportation vehicles, sports equipment, and action figures, and conventionally female toys, or toys of the home, such as dolls and housekeeping toys. Parents were surveyed to determine children's favorite toys and the extent that toys were shared among siblings. Results of the study included the following: (1) toy collections were found to be strongly related to gender, with boys playing with more toys of the world and girls with more toys of the home; (2) girls with older sisters had more girl-typed toys than other girls, and boys with older brothers had more boy-typed toys than other boys; (3) boys with older sisters had more girl-typed toys than other boys but, surprisingly, girls without older brothers had more boy-typed toys than other girls; (4) while all of the same-sex siblings shared toys, only 54% of opposite-sex siblings reported sharing; and (5) with respect to opposite-sex siblings, 86% of the younger brother-older sister pairs shared most of their toys, while 17% of the younger sister-older brother pairs did so.
The Influence of Older Siblings on the Sex-typed Toy Play of Young Children

Alison Nash
State University of New York at New Paltz

Kimberly Fraleigh
University of Maryland, Baltimore County

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Alison Nash"

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC).

ABSTRACT

The toys collections found in the homes of young children were examined to determine if older siblings influence the sex-typed toy play of their younger siblings. Toys were classified into categories representing conventional boy-type toys (e.g. transportation vehicles, sports equipment, action figures; i.e., toys of the world) and conventional girl type toys (dolls, housekeeping toys, i.e., toys of the home). We found that girls with older sisters had more girl-type toys than other girls, boys with older brothers had more boy-type toys than other boys, boys with older sisters had more girl-type toys than other boys, and surprisingly, girls without older brothers had more boy-type toys than other girls. The findings are discussed in terms of the shared and unshared environments of young siblings.
Introduction

We examined the shared and unshared environments (Dunn & Plomin, 1990) of young siblings by focusing on an aspect of these environments especially created for children -- their toys. We were interested in the effect of gender on the extent that siblings shared particular kinds of toy environments. Although there have been studies indicating that older siblings may influence the sex-typed behavior of the younger child, the findings have been inconsistent. Some have found greater stereotypic sex-typing among same-sexed siblings, and explain this in terms of sibling modeling (e.g. Brim, 1958). Others have argued that same-sexed siblings are usually more dissimilar on dimensions such as sex-typing in order to avoid comparison and competition (Schacter, 1982).

Rather than focus on the extent of stereotypic sex-typing in the children, we examined the extent of such sex-typing in their environment. The extent that siblings model or differentiate themselves from one another may be paralleled by the extent that they share similar toy environments.

Method

Subjects
Sixty children between 2 and 5 years of age participated in this study, with equal numbers of boys and girls with older brothers, older sisters, and no older siblings. The average age in each sibling category ranged between 3.1 and 3.8 years.

Toy Categories
Children’s toy collections were classified into categories similar to those used by Rheingold and Cook (1975) (transportation vehicles, military, dolls, housekeeping, doll clothes, books, art supplies, etc.). We also combined categories to form larger categories suggested by Rheingold and Cook: toys of the world (Table 1), typically associated with boys, and toys of the home, (Table 2), typically associated with girls. Toys not falling within these two categories were considered to be neutral.

Procedure
We took an inventory of all the children’s toys by videotaping the toy collections and later classifying the toys. In addition, we collected information about the children’s favorite toys (parents listed the 5 toys that their children most played with in the past 2 weeks). We also collected information about the extent of sharing of toys among siblings: we took an inventory of all the toys belonging to each appropriate-aged child in the family, and obtained information from the parents and children about which toys were shared.
Data analyses were performed to answer two questions:

(1) Are there differences in the extent of sex-typed toys among the different sibling categories?

(2) Are there differences in the extent of sharing among the different sibling categories?

One child from each family was included in the multivariate analysis of variance used to examine sibling effects on the extent of sex-typed toys in children's collections. Sibling pairs were used as the unit of analysis in comparisons of toy sharing across the different sibling categories.

Results

A 3 (sibling status) X 2 (sex) multivariate analysis of variance, with age included as a covariate, indicated a significant effect of sex ($F=7.2, p=.00$), and a significant sex by sibling status interaction ($F=1.8, p<.05$).

Gender Influences

We found that the contents of boys' and girls' rooms in our sample were remarkably similar to toys found in children's rooms nearly two decades ago: As in Rheingold and Cook (1974), boys had significantly more toys of the world, and girls had significantly more toys of the home (Table 1). In addition, boys played significantly more with toys of the world than did girls, and girls played significantly more with toys of the home than did boys: Boys favorite five toys included an average of 3.0 world toys, whereas girls included an average of 0.9 world toys ($F=48.9, p=.00$); girls favorite five toys included an average of 1.4 home toys, whereas boys included an average of 0.2 home toys ($F=43.5, p=.00$).

Sex by Sibling Influences

EXTENT of SEX-TYPED TOYS: Our major goal was to examine the influences of older siblings on children's sex-typed toy play. The significant sex by sibling status interaction indicated that sibling influences depended on the sex of the children. Having a same-sexed older sibling appears to increase the number of sex-typed toys for both girls and boys; girls with older sisters had significantly more girl-typed (home) toys that other girls, and boys with older brothers had significantly more boy-typed (world) toys than other boys (Fig. 1). Having an older opposite-sexed sibling affected boys and girls differently: Boys with older sisters had more girl-typed toys than other boys (but far less than girls had), but girls without older brothers had more boy-typed toys than other girls (Fig. 1). Univariate analyses which followed the MANOVA revealed similar patterns for transportation vehicles, military toys, action figures, sports equipment, dolls, and doll paraphernalia.

It thus appears that young children of both sexes share at
least a portion of their toy environment with older sisters; both boys and girls share a feminine toy environment with older sisters. However, only boys share a masculine toy environment with their older brothers; younger sisters do not share this environment with their older brothers. Girls whose environments are most likely to contain toys of the world are girls with no brothers at all. A similar trend was found for the toys that the children actually played with most: girls with older sisters had more world toys among their favorites than other girls (p<.08).

SHARING OF TOYS: We next attempted to see if girls with sisters had more boy-typed toys in an effort to differentiate them from their older sisters, or whether sister pairs shared their toys. We compared the extent of toy sharing across the different sibling categories, and found that same-sexed sibling were more likely to share all or most of their toys than opposite-sexed siblings: All of the same-sexed siblings, i.e., pairs of brothers and pairs of sisters alike, shared most of their toys, whereas only 54% of opposite-sexed siblings shared most of their toys. We next asked whether sharing among opposite-sexed siblings was influenced by the sex and age composition of these siblings. A Fisher exact probability test indicated that boys with older sisters were significantly more likely to share toys than girls with older brothers: 86% of the younger boy-older girl sibling pairs shared most of their toys, whereas 17% of the younger girl-older boy pairs did so (p<.05).

Discussion

The extent that siblings share their toy environment may depend on whether an attempt is made by parents, or the children themselves, to have older siblings serve as models for the younger ones, or to differentiate the siblings by providing each with their own, unique toy environments. The sex of both siblings appears to play a role in this process.

Children in same-sexed siblings pairs share similar toys environments with one another. Girl sibling pairs have more stereotypic feminine toys (toys of the home) and boy sibling pairs have more stereotypic masculine toys (toys of the world) than other children. Thus modeling/reinforcement of sex-role stereotypes appears to operate in these same-sexed sibling families.

Similarly, girls share some of their toy environments with younger brothers, perhaps because girls are more encouraged to share in general. Thus young boys with older sisters are exposed to more toys of the home than are other boys. The older sisters may thus model and reinforce traditionally feminine toy play for their younger brothers. In contrast, boys do not appear to share their toy environments with their younger sisters. Older brother/younger sister pairs have greater unshared toy environments than other sibling types, and are the most differentiated in their exposure to sex-typed toys; the younger girls are surrounded by toys of the home, and their older brothers by toys of the world.
It should be noted that although pairs of sisters have the most stereotypical feminine (home) toys, they also have more stereotypic masculine (world) toys than other girls. It appears that girls gain access to toys of the world when there is no boy in the family (whereas boys only gain access to toys of the home when there is a girl in the family). Perhaps, with no boys in the family, parents may be more willing to push their girls out a bit more into the world. However, when there is a boy in the family, the toys of the world tend to go to him.

References


<table>
<thead>
<tr>
<th></th>
<th>BOYS</th>
<th>GIRLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation ***</td>
<td>25.8 (SD=15.0)</td>
<td>6.4 (SD=5.6)</td>
</tr>
<tr>
<td>Military *</td>
<td>4.6 (SD=9.1)</td>
<td>0.0 (SD=0.1)</td>
</tr>
<tr>
<td>Action Figures **</td>
<td>26.6 (SD=26.8)</td>
<td>0.1 (SD=0.2)</td>
</tr>
<tr>
<td>Tools *</td>
<td>3.8 (SD=4.5)</td>
<td>1.2 (SD=2.2)</td>
</tr>
<tr>
<td>Sports ***</td>
<td>9.1 (SD=5.8)</td>
<td>4.5 (SD=3.2)</td>
</tr>
<tr>
<td>Combined Toys of the World ***</td>
<td>61.2 (SD=42.6)</td>
<td>12.9 (SD=9.3)</td>
</tr>
</tbody>
</table>

* p<.05
** p<.01
***p<.001
## TABLE 2

**MEAN NUMBER OF TOYS OF THE HOME**

<table>
<thead>
<tr>
<th></th>
<th>BOYS</th>
<th>GIRLS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dolls</strong> ***</td>
<td>1.4 (SD=2.1)</td>
<td>15.5 (SD=10.2)</td>
</tr>
<tr>
<td><strong>Doll Paraphernalia</strong> ***</td>
<td>2.2 (SD=4.1)</td>
<td></td>
</tr>
<tr>
<td><strong>Housekeeping</strong> ***</td>
<td>1.8 (SD=1.9)</td>
<td>9.6 (SD=8.6)</td>
</tr>
<tr>
<td><strong>House Models</strong> ***</td>
<td>0.2 (SD=0.3)</td>
<td>1.1 (SD=1.2)</td>
</tr>
<tr>
<td><strong>Appearance Figures</strong> (My Little Pony, Little Mermaid) *</td>
<td>0.1 (SD=0.3)</td>
<td>8.5 (SD=9.2)</td>
</tr>
<tr>
<td><strong>Combined Toys of the Home</strong> ***</td>
<td>6.2 (SD=6.7)</td>
<td>46.2 (SD=23.7)</td>
</tr>
</tbody>
</table>

* p<.05  
** p<.01  
***p<.001
Fig 1  Average number of toys of the world and toys of the home by sex and sibling status