This study examined the effect of the amount and diversity of information about a child on adults' perceptions of the child's personality traits and sex-typed interests. A sample of 197 college students (ranging in age from 18 to 28 years) were randomly assigned one of three exposure conditions: (1) maximum exposure (subjects observed six boys, ages 6 to 8 years, play for 2 minutes each in six environmental settings); (2) limited exposure (subjects observed a boy play in two of the six settings); and (3) and no exposure (subjects did not observe a boy play, but instead saw still video pictures of a boy and the settings). After exposure, subjects completed questionnaires that measured recall of displayed behaviors and perceptions of the child's masculine and feminine personality traits, interests in toys, and participation in games. Measures of subjects' sex-role orientations were also collected to control for possible observer biases. Compared to subjects who observed the boys in a limited number of settings, those who had the maximum exposure displayed less adherence to sex-stereotypes, describing the boys as having not only more masculine, but also more feminine personality traits and interests. Although women perceived the boys to be more masculine than did men, sex-role orientation was not related to perceptions. (MN)
Reducing Sex-typed Perceptions of Children: The Role of Environmental Exposure

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Reducing sex-typed perceptions

Abstract

When adults describe the personality traits of children they often use sex-typed descriptors. The effects of familiarity with children on adults' sex-typed perceptions of those children were examined by manipulating the amount of exposure to 6-year-old boys playing in a variety of environmental settings. 197 men and women (18-28 years old) were assigned to 1 of 3 exposure conditions (0, 2, or 6 settings). Compared to subjects who observed the boys in a limited number of settings, those who had the maximum exposure displayed less adherence to sex-stereotypes, describing them as having not only more masculine, but also more feminine personality traits and interests. Although women perceived the boys to be more masculine than did men, sex-role orientation was not related to perceptions.
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When adults are asked to describe the personality traits of children, a common pattern emerges. Regardless of the children's personalities, people describe them using sex-typed labels (Condry & Condry, 1976; Huston, 1983). For example, boys are typically described in masculine terms such as independent and aggressive, with few, if any feminine labels used. The same pattern is observed for girls, as they are often described in feminine terms, with little mention of masculine traits. Although this pattern is common among adults, particularly for males (Condry & Condry, 1976), people who spend large amounts of time with children are less likely to adhere to sex-typed descriptors than are those who have little contact with children (Lamb, 1982; Sagi, 1982).

What is it about time that makes the difference? Time allows the opportunity to become familiar with an individual, to gather information through observation of behaviors and the circumstances surrounding those behaviors. Time by itself, however, does not seem to be enough. The diversity of information available may also affect the kinds of descriptors used (Linville, 1982; Linville, Fischer, & Salovey, 1989). It may be important to see that while an individual may act one way in setting X, she acts another way in setting Y.

The purpose of the study reported here is to investigate the effect of the amount and diversity of information about a child on adults' perceptions of the child's personality traits and sex-typed interests. Because male children are often described in
more sex-typed terms than are female children, the focus of this study will be on adults' impressions of young boys.

Familiarity and the Role of Information

When people form impressions of individuals, they rely on three main sources of information: the target individual, the context, and the observer (Secord & Backman, 1974). The target individual, or the person being perceived, contributes characteristics such as their physical appearance, group membership (e.g. gender), and behaviors. The context, or environment in which the target is observed, gives information about the circumstances surrounding those behaviors. And the observer, which represents the perceiver's own background, includes the perceiver's preexisting schemata such as their biases, stereotypes, and sex-role orientation. Although these three sources can be conceptualized separately, the role that the target and context play is ultimately determined by the preexisting social concepts of the observer.

The relative importance of the observer is likely to depend on how much information about the target and context is available. For example, when information from the target or context is limited or ambiguous, people refer to other sources such as their own social concepts to fill the information gaps (Funder, 1987). It is under this condition that stereotyped descriptions would be prominent. With greater knowledge, however, the importance of the observer changes. The perceiver has fewer information gaps and
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more specific knowledge upon which to form impressions. Research on the role of familiarity indicates that familiar compared to unfamiliar targets are not only described in more diverse/less redundant terms, but more importantly, perceptions of familiar targets are less extreme (Condry & Scheibe, 1992; Linville, 1982; Linville, Fischer, & Salovey, 1989). There is less tendency to perceive the target in an "all or none" manner. Because stereotypes are by definition simple and extreme, these findings suggest that familiarity may lead to decreased use of stereotypes. It is possible that the bipolar pattern we observe in adults' descriptions of children, the "all boy" or "all girl" phenomenon, could be reduced through greater familiarity.

The Study

To explore this hypothesis, we examined the effects of familiarity on adults' sex-typed perceptions of children. Working from the idea that familiarity is determined not by mere amount of time spent with an individual, but rather through diverse information about the individual, we manipulated familiarity through exposure to a child playing in a variety of environmental settings. Because different contexts elicit different behaviors (Barker, 1968; Gump, 1975), exposure to a variety of settings would allow for the opportunity to gather such diverse information. With this in mind, we hypothesized that subjects with limited exposure to a variety of settings would adhere to typical sex-typed stereotypes, by describing the boys as highly
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masculine with fewer feminine qualities and interests. Those more familiar with the target children were expected to perceive them in a more differentiated manner, describing them as not only masculine but more feminine, as well. The increase in perceived femininity for young boys was expected to be the tell-tale sign for the reduction in sex-typed perceptions, as sex-stereotypes for male children would typically dictate an overall masculine picture.

Stimulus Tapes

To manipulate exposure to the children, videotapes were made of young boys playing in 6 environmental settings. The settings were chosen to represent both indoor and outdoor activities, as well as low and high levels of physical activity. Twenty to 30 minutes of spontaneous play for each setting were edited into 2-minute segments. Although the tapes were constructed to eliminate sex-typed behaviors as much as possible, certain behaviors were deliberately chosen in each setting to include examples related to items on the children’s personality trait measure we used (Children’s Personal Attributes Questionnaire; Hall & Halberstadt, 1980).

The actors included six boys (ages 6 to 8 years), two who functioned as the target children about whom the perceptions were formed. Selection of the two targets was based on physical appearance ratings conducted prior to taping. The children who were most similar in physical appearance were used as target
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children. For the taping session, the boys were paired in groups of two in such a way that the two target children played with each of the four remaining playmate children, but never with each other. Playmate pairings may be found in Table 1.

Method

A sample of 197 Caucasian college students, ranging in age from 18 to 28 years, were randomly assigned to one of three exposure conditions. Subjects in the Maximum Exposure condition observed a target child play for 2 minutes each in 6 different environmental settings. Subjects in the Limited Exposure condition observed a child play in 2 of the 6 settings. The tapes for this group contained three 2-minute segments per setting, followed by still video pictures of the remaining 4 settings. One-third of the subjects in this condition were randomly assigned to one of 3 setting pairs: tree climbing and dog play; car washing and drama; or art and planting. Subjects in the No Exposure condition did not observe a child play, but instead saw still video pictures of a child and of the settings. A summary of the exposure conditions may be found in Table 2. After exposure, subjects completed questionnaires which measured recall of displayed behaviors, and perceptions of the child's masculine and feminine personality traits, interests in toys, and participation in games. Measures of the subjects' sex-role orientations were also collected to control for possible observer biases. Refer to Table 3 for a list of dependent measures.
Results

To test the hypothesis that greater exposure would reduce adherence to sex-typed perceptions, two MANOVAs were performed on the personality traits, games, and toys variables. Because masculinity and femininity can function as independent measures, rather than bipolar opposites, one MANOVA was conducted on the masculine dependent variables, the other on the feminine variables.

For perceived femininity, subjects with greater exposure to the boys were expected to rate them as more feminine than those with little exposure. Although the multivariate effect was not significant, the predicted pattern occurred for perceived feminine personality traits, $F (2, 174) = 3.31, p < .04$. Exposure effects for participation in feminine games and interest in feminine toys, did not reach significance, though the means were in the expected direction. Mean patterns may be found in Figure 1.

Perceived masculinity showed a similar pattern. A multivariate effect indicated that subjects with greater exposure, compared to those with little exposure, rated the boys as more masculine, $F_{\text{Wilks}}(8, 340) = 3.77, p < .001$. This pattern was consistent for all but the interest in toys variable. Mean patterns may be found in Figure 2.

Greater exposure to a variety of settings was expected to provide an opportunity to obtain more diverse behavioral information. Results for the number of masculine and feminine
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behaviors recalled supported this hypothesis. Greater exposure to a variety of settings led to observation of a greater number of both masculine and feminine behaviors, $E_{\text{masculine behaviors}}(1, 71) = 34.03, p < .001; E_{\text{feminine behaviors}}(1, 71) = 3.82, p < .06$.

Subjects who had maximum exposure to the children reported observing more of both types of behaviors ($M_{\text{maximum}} = 5.96, M_{\text{limited}} = 3.45$ for masculine behaviors; $M_{\text{maximum}} = 5.04, M_{\text{limited}} = 4.04$ for feminine behaviors).

The role of the observer on the perceptions of the children was also tested. Sex-role orientation was used in the MANOVAs as a covariate, as well as an independent variable. No main effects or interactions involving this variable were found. The only observer factor which did have an effect was the Sex of Subject variable. Women perceived the boys to be more masculine than did men, $F_{\text{Wilks}}(4, 170) = 2.91, p < .02$.

Discussion

The hypothesis that exposure to a diversity of environmental settings would reduce sex-typed perceptions of children operated on two premises. First, because contexts provide unique opportunities for certain types of behaviors to be displayed, it is likely that the variety of behaviors observed is a function of the amount of exposure to diverse settings. Exposure to a large number of settings would, therefore, provide a greater sample of nonredundant information to the perceiver. This hypothesis was supported. Exposure to a greater variety of settings did indeed
provide subjects with a greater number of displayed masculine and feminine behaviors.

Second, as a function of more information, people were expected to have more diverse perceptions of individuals which could be reflected in a reduced tendency to adhere to stereotyped descriptors. Because sex-stereotyped perceptions for boys would dictate the use of primarily masculine terms, it is the greater use of feminine descriptors that would indicate not only more diversity in perceptions but also a reduced adherence to sex-typed perceptions. This hypothesis was also supported. Perceptions of the children were less sex-stereotyped with greater exposure. People with maximum, compared to less exposure, perceived the boys to be more feminine. Although differences were not significant for participation in feminine games and interest in feminine toys, they were in the expected direction. It should be noted that these nonsignificant differences for games and toys, and the significant but small differences for perceived feminine personality traits may be due to the strength of the exposure manipulation. The 12 minutes of exposure time used to counter sex-typed socialization may not have been enough time to show larger effects. The fact that the differences between exposure conditions were found with such small amounts of exposure makes further pursuit of this variable worthwhile.

Exposure to a greater number of environmental settings not only led to greater perceived femininity, but greater perceived
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masculinity, as well. This increase in both masculine and feminine perceptions could indicate a move toward perceived androgyny. As Spence, Helmreich, and Stapp (1974) indicated, people who possess high levels of both masculine and feminine characteristics are androgynous. The greater levels of both masculine and feminine traits observed in this study for the maximum exposure condition compared to the no exposure condition, would suggest that the greater exposure resulted in a movement toward perceived androgyny, away from the sex-stereotyped pattern.

While the move toward greater perceived androgyny could be a result of the exposure factor by itself, it may also have resulted from greater perceiver confidence. Exposure to a variety of settings provided perceivers with more information upon which to form their impressions, and greater confidence in their ratings. The perceivers' confidence was probably promoted by the information obtained through exposure. Whether it was exposure alone, or the confidence generated by the information provided during exposure, the end result is the same: a reduction in sex-typed perceptions, a greater tendency toward perceived androgyny.
References


Table 1

Pairing Arrangement of the Target and Playmate Children

<table>
<thead>
<tr>
<th>Environmental Settings by Physical Activity Level</th>
<th>Target Child 1</th>
<th>Target Child 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Indoors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>Playmate A</td>
<td>Playmate B</td>
</tr>
<tr>
<td><strong>Outdoors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planting</td>
<td>Playmate B</td>
<td>Playmate A</td>
</tr>
<tr>
<td>Dog Play</td>
<td>Playmate D</td>
<td>Playmate C</td>
</tr>
<tr>
<td><strong>High</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Indoors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drama</td>
<td>Playmate B</td>
<td>Playmate A</td>
</tr>
<tr>
<td><strong>Outdoors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tree Climbing</td>
<td>Playmate A</td>
<td>Playmate B</td>
</tr>
<tr>
<td>Car Washing</td>
<td>Playmate C</td>
<td>Playmate D</td>
</tr>
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</table>
Table 2

Exposure Conditions

<table>
<thead>
<tr>
<th>No Exposure</th>
<th>Limited Exposure</th>
<th>Maximum Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nothing</td>
<td>Tree Climbing</td>
<td>Tree Climbing</td>
</tr>
<tr>
<td></td>
<td>Dog Play</td>
<td>Dog Play</td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td>Car Washing</td>
</tr>
<tr>
<td></td>
<td>Car Washing</td>
<td>Drama</td>
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<tr>
<td></td>
<td>OR</td>
<td>Art</td>
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<td>Drama</td>
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<td>Planting</td>
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</tbody>
</table>
### Table 3

**Dependent Variables, Measures, and References**

1. **Dependent Variable:** Perceived Personality Traits  
   **Measure:** Children's Personal Attributes Questionnaire  

2. **Dependent Variable:** Predicted Participation in Games  
   **Measure:** The Games Inventory  

3. **Dependent Variable:** Predicted Interest in Toys  
   **Measure:** The Toy Preference Inventory  

4. **Dependent Variable:** Subject's Sex-role Orientation  
   **Measure:** Personal Attributes Questionnaire  
Fig. 1. Amount of exposure main effects for perceived feminine traits and predicted interests.
Fig. 2. Amount of exposure main effects for perceived masculine traits and predicted interests.