This study examined the proposition that Caucasian children between 3 and 5 1/2 years who behave in most sex appropriate ways have a greater knowledge of sex stereotypes than children who do not exhibit such behavior. The children in the study were 35 Most Masculine boys, 31 Least Masculine boys, 38 Most Feminine girls and 39 Least Feminine girls. Forty preschool teachers selected the subjects from 22 classes in 8 private nursery schools in a large metropolitan area by the method of pair comparison; subjects were then rank ordered. Knowledge of sex stereotypes was measured using (1) a set of 8 pictorial cards depicting stick figures differing on one stereotype feature, and (2) a set of 16 questions concerning sex stereotypes. Individual children were shown the pictorial cards in fixed order and asked to point to the girl or boy. They were then asked 16 questions. Results did not support the hypothesis that knowledge of sex stereotypes and cognitive maturity affect sex role behavior. Girls were found to have more knowledge of sex stereotypes in general as well as of their own sex stereotypes when compared to boys. It is proposed that more attention be paid to the establishment of criterion groups in studies attempting to explore the process of sex role development which is still little understood. (GO)
YOUNG CHILDREN'S SEX ROLE AND KNOWLEDGE OF SEX STEREOTYPES

By

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Young Children's Sex Role and Knowledge of Sex Stereotypes

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Children in the preschool years are able to label themselves as boys and girls and have an awareness of some biological as well as psychological characteristics which have been sex stereotyped (Hartup & Zook, 1960; Schell & Silber, 1968). Awareness of differences in the psychological characteristics and roles of their parents are also beginning to develop (Emmerich, 1959; Kagan, Hosken & Watson, 1961).

It would seem to follow from the cognitive-developmental approach to socialization proposed by Kohlberg (1969) that those children who can identify their own sex and who have a greater knowledge of sex stereotypes would be more developed in their gender identity than children who do not have as great a knowledge. In his theory, gender identity is acquired through a process of cognitive maturing and the accompanying acquisition of values. Some support for this theory has been found in studies which use mental age and sex as the independent variables and sex role preferences and imitation of like sex as the dependent variables. Brighter children of the same chronological age have been found to have more developed sex role attitudes (Kohlberg & Zigler, 1967).

There is some question as to whether attitudes and preferences reflect the actual behavior of the children or even their feeling about themselves. Additional support could be obtained for Kohlberg's cognitive-developmental approach to the acquisition of gender identity if it could be found that those children who exhibit more appropriate sex role behavior have a greater
knowledge of sex stereotypes. It is assumed that extent of knowledge at a
given chronological age reflects degree of cognitive maturity.

Thus, it is hypothesized that children who have been identified as
exhibiting more appropriate sex role behavior, have a greater knowledge
of sex stereotypes. In this study preschool teachers' ratings of mascu-
linity and femininity and chronological age are the independent variables,
while knowledge of sex stereotypes is the dependent variable.

Subjects. The children in this study were 35 Most Masculine boys, 31
Least Masculine boys, 38 Most Feminine girls, and 39 Least Feminine girls
from 22 classes in eight private nursery schools located in a large metropo-
litan area. All of the children were Caucasian, had two natural parents,
and were between the ages of 3 and 5½ years. The subjects were part of a
larger study conducted in 1964 when sex stereotypes were generally not
questioned as to legitimacy. Originally there were 40 subjects in each sex
role group, but for technical reasons (age, lack of two parents, and lack of
"knowledge" scores), subjects were eliminated from the present analyses.

Selection of subjects. The children were selected for study by the
method of pair comparisons (Guilford, 1954). Each of 40 preschool teachers
received a list of paired names of boys in her classroom (M = 10.4, SD = 2.7
per classroom) and a list of paired names of girls. (M = 9.4, SD = 2.5 per
classroom). She was instructed to decide which child in each pair of names
was more like she expected a little boy to be or a little girl to be. In
other words the teacher was instructed to circle the name of the child in
each pair whom she considered more masculine for boys and more feminine for
girls. The terms masculine and feminine were not defined so that the teachers
would use their own definitions of appropriate sex role behavior.
After the pair comparisons task was completed, the boys' names and the girls' names were rank ordered separately. The children at the top and bottom of the rank order for each teacher were designated as Most Masculine and Least Masculine boys and Most Feminine and Least Feminine girls.

Measures of knowledge of sex stereotypes. Two measures of knowledge of sex stereotypes were constructed by the investigator and a colleague. One measure consisted of eight 3 x 5 pictorial cards. Each card showed a pair of stick figures identical except for one of the following sex stereotypes: clothing, hair, chest, height, strength, sitting posture, adventurousness, and independence.

The second measure consisted of 16 questions concerning sex stereotypes. Half of the questions were male stereotypical and half were female stereotypical. The stereotypical answers to the questions were agreed upon unanimously by 8 male and 7 female colleagues. Examples of the questions were: "Does a lady or man cry more?" "Who is not afraid of things, a lady or a man?" "Who can't sit still for very long, girls or boys?" (See Table I for a complete list of the questions.)

Procedure. In individual sessions, each child was shown the pictorial cards in a fixed order. The instructions were: "I have some pictures of boys and girls to show you. When I ask, please point to the girl or to the boy." For each card, one-half of the children in each sex role group were asked to point to the girl and the other half, to the boy.

For the 16 questions, each child was instructed: "I am going to ask you some questions about boys and girls, men and ladies. Answer them as best you can." If the child did not seem to understand, a question was first
repeated and then, if necessary, slightly reworded. The questions were asked in a fixed order, but the presentation of the choice words, men or ladies; boys or girls, was counterbalanced.

Results. The number of correct responses to each of the measures of knowledge of sex stereotypes was subjected to 2 x 4 (Age x Sex Role Group) analyses of variance. The younger age group consisted of children between 3 and 4 years and the older group, of children between 4½ and 5½ years.

When correct responses to the 8 pictures of sex stereotypes were analyzed, there were no significant main or interaction effects. There were no differences in stereotypical knowledge by age or sex role group. The total sample mean number of correct stereotypical responses to the 8 pictures was 5.4 with SD = 1.1.

When correct responses to the 16 questions of sex stereotypes were subjected to an analysis of variance, there were no age or interaction effects, but a significant sex-role-group effect was obtained, $F(3, 135) = 3.958$, $p < .01$. The results from t-test analyses between the four sex role identity groups indicated that the mean number of correct stereotypical responses was greater for MF (10.2) than MM (8.8) and LM (8.8). A t-test between the mean number of correct responses for MF (10.2) and LF (9.4) indicated no significant difference.

Several other analyses of the data were performed. The mean number of correct responses to the questions of awareness by boys was compared with the mean number of correct responses by girls. Girls with a mean of 9.71 knew more than boys (M = 8.78), $t(149) = 2.81$, $p < .01$. There were no sex differences found for the pictures of awareness, however.

For the questions of awareness, the mean number of correct responses by girls to female sex-appropriate items was larger than that of boys to the same items, $t(149) = 4.79$, $p < .01$. But the mean number of correct
responses to male sex-appropriate items was the same for boys and girls.

**Conclusion.** The hypothesis that young children who behave in sex appropriate ways have a greater knowledge of sex stereotypes than those children who do not have as great a measure of sex role appropriate behavior was not confirmed. These results suggest that cognitive maturity as expressed in knowledge of sex stereotypes may not be essential to behaving in ways that are sex appropriate, a reflection of gender identity.

One might want to question whether the sex role groups in this study were actually different groups. Discriminant analyses of factor scores derived from behavior ratings of the children in this study indicated that in fact the Most Masculine and Least Masculine boys were different and that the Most Feminine and Least Feminine girls were different (Vroegh, Jenkin, Black & Handrich, 1967). Most Masculine boys were more extroverted, somewhat more competent, and slightly more socially adjusted than Least Masculine boys. Most Feminine girls were more socially adjusted, somewhat more competent, and slightly more introverted than Least Feminine girls.

In the present study, the dependent and independent variables were the reverse of those studies generally cited as support of a cognitive-developmental approach to the study of sex role development. Responses to measures of sex role development by boys and girls of different cognitive maturity have been found to be different with the assumption that sex role development varies with cognitive maturity. However, there is no accompanying evidence of the appropriateness of the sex role behavior of the children. The present study, on the other hand, began with criterion groups of known sex role differences and a hypothesis that knowledge of sex stereotypes would differ also. The hypothesis was not supported.
The same data when analyzed in the typical fashion, i.e., knowledge of sex role differences of boys versus that of girls, supported, in part, some of the earlier findings concerning knowledge of sex role differences. Girls knew more about sex stereotypes in general as well as more about their own sex stereotypes than did boys. Boys, on the other hand, did not know anymore about their own sex stereotypes than did girls. The main difference between the young boys and girls in this study and in other studies with similar findings may well be brightness. Young girls seems to develop physically and mentally faster than boys of the same chronological age, and do better in school in the early years. However, one could hardly drawn any conclusions about the development of sex role from such findings.

The results presented are not meant to be interpreted as support for another theory of sex role development other than the cognitive-developmental approach. Rather it is proposed that more attention be paid toward the establishment of criterion groups in studies attempting to understand the process of sex role development. Inspite of at least 10 theories of sex role development, grouped into three main theoretical camps, Freudian, social learning, and cognitive-developmental, we still know little about the process of sex role development. Why?
References


Table 1
Questions of Awarenessa

<table>
<thead>
<tr>
<th>Item</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Who are quicker to do what the teacher says, girls or boys?</td>
</tr>
<tr>
<td>2</td>
<td>Who is always late, a man or a lady?</td>
</tr>
<tr>
<td>3</td>
<td>Does a lady or a man cry more?</td>
</tr>
<tr>
<td>4</td>
<td>Are boys or girls noisier?</td>
</tr>
<tr>
<td>5</td>
<td>When someone is unhappy, who feels sorry, a man or a lady?</td>
</tr>
<tr>
<td>6</td>
<td>Who have secrets, girls or boys?</td>
</tr>
<tr>
<td>7</td>
<td>Is a girl or a boy more likely to give you a punch in the nose?</td>
</tr>
<tr>
<td>8</td>
<td>Who sing higher, men or ladies?</td>
</tr>
<tr>
<td>9</td>
<td>Who is not afraid of things, a lady or man?</td>
</tr>
<tr>
<td>10</td>
<td>Who use bad or dirty words, ladies or men?</td>
</tr>
<tr>
<td>11</td>
<td>Does a man or a lady eat more?</td>
</tr>
<tr>
<td>12</td>
<td>Who always think about how they look, a girl or a boy?</td>
</tr>
<tr>
<td>13</td>
<td>When something goes wrong, who knows what to do, a man or a lady?</td>
</tr>
<tr>
<td>14</td>
<td>Who keep changing their minds, men or ladies?</td>
</tr>
<tr>
<td>15</td>
<td>Who can't sit still for very long, girls or boys?</td>
</tr>
<tr>
<td>16</td>
<td>Who accidentally break toys, boys or girls?</td>
</tr>
</tbody>
</table>

The correct sex-stereotypical response is underlined.