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Children's Reasoning regarding Sex-typed Toy Choices

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EISENBERG, NANCY; MURRAY, EDWARD; and HITE, TINA. *Children's Reasoning regarding Sex-typed Toy Choices.* CHILD DEVELOPMENT, 1982, **53**, 81–86. The purpose of the present study was to explore the meaning of children's choices in toy preference tasks and to determine if children's understanding of sex appropriateness of toys is an important conscious determinant of sex-typed object choices. 3- and 4-year-old children were interviewed to determine which sex-typed toys they thought they themselves, another boy, and another girl would like and dislike, and were questioned about their reasoning for each choice. Further, when the children played with various toys during free play, they were questioned concerning their reasons. According to the data, the children used considerable amounts of sex-role-oriented thinking (11%–55%) to justify their answers regarding other children's likes and dislikes. They used significantly less of this type of reasoning to justify decisions regarding their own toy preferences (especially their likes) in the test situation. Further, children seldom justify their actual toy choices during play with references to sex-role stereotypes. Rather, they tended to choose favorite toys for themselves (and others) based primarily on what the toy could do. Thus, tests of own toy preference and tests assessing children's knowledge of others' preferences may not be equivalent in meaning. Further, it is questionable that children's sex-typed preferences are the result of conscious attempts to act in accordance with sex-role stereotypes.

For a considerable time researchers have been assessing sex typing in children with tasks in which an adult elicits preference statements from children who are presented with real or pictured sex-typed toys (e.g., DeLucia 1963; Vance & McCall 1934). Only recently, however, have researchers empirically examined the significance and meaning of performance on such tasks (e.g., if the choice of sex-appropriate toys indicates that the child is capable of categorizing toys based on sex-role stereotypes and/or is an indirect measure of the degree to which a child has internalized sex-role stereotypes).

In a series of studies, Blakemore, LaRue, and Olejnik (1979) explored the association between performance on a preference task and children's understanding of the sex appropriateness of toys (when asked to indicate which sex would prefer various toys). While they found that 4- and 6-year-olds both preferred sex-typed toys and exhibited a knowledge of sex-role stereotypes, they obtained less consistent relationships between toy preference and knowledge of stereotypes for younger children. Thus, they suggested that measures of preference are highly associated with knowledge of sex-role stereotypes (for older but not for younger children). Moreover, Blakemore et al. interpreted their findings for the 4- and 6-year-olds as supporting Kohlberg's (1969) claim that children's conscious knowledge of what things are sex appropriate is an important determinant of sex-typed activity and object preferences.

While Blakemore et al. showed that sex-typed preferences frequently are coupled with knowledge of sex-role stereotypes (for older children), they did not collect data pertaining to the actual interdependence between sex-role preferences and sex-role knowledge, to the nature of any interdependence (if a causal relationship is conscious or not), or to other possible explanations for children's toy preferences. Thus, it is not clear that even older children's stereotyped toy preferences are due to their understanding of the sex appropriateness of various toys, and if knowledge of sex-role stereotypes engenders purposeful attempts to be-

have in "appropriate," sex-typed ways. Consequently, we must ask what preference choices and sex-role knowledge tasks do indicate, and if children are consciously motivated to choose sex-typed toys once they are aware of sex stereotypes. The purpose of the present study was to examine these issues by assessing children's cognitions concerning their performance on these tasks.

Toy preference tasks generally involve the use of a predetermined set of toys (usually pictures of toys rather than real toys) in a contrived setting. Thus, such tasks assess children's hypothetical toy preferences rather than their actual toy preferences in the natural environment. However, it is possible that children use the criterion of sex appropriateness differently when making hypothetical and real toy choices. Therefore, in the present study, we examined reasoning about actual toy choices as well as choices on preference and knowledge tests.

Method

Subjects

Participants in the various parts of the research were 68 predominantly Caucasian children (all but six; five were of Hispanic and one of Korean origin), 10 girls and 13 boys in classes for 3-year-olds, and 22 girls and 23 boys in classes for 4-year-olds (12 other children either refused to respond or responded incomprehensibly to all questions). All children came from a middle-class suburban area.

Procedure

The study was conducted in two phases. In phase 1, one of two experimenters (one of each sex) was present in the classroom approximately 1 hour a session at free play time (2–3 times weekly for 7–8 weeks; experimenters were balanced across age groups). During this time, whenever a child played with a designated masculine (transportation toys, sandbox, large blocks, carpentry tools), feminine (dolls, dollhouse, kitchen toys, feminine clothing, felt pens and crayons), or neutral (puzzles, Play-Doh, board games) toy, he or she was approached by the experimenter who casually asked the child, "What is it you like about the toy?" or, if necessary, "Why do you like that toy?" No child was interviewed more than once about a particular toy (if the child responded to the first interview attempt). The children's verbatim responses were recorded manually by the experimenters for coding at a later time.

The choice of designated masculine, feminine, and neutral toys was based on several sources of data. First, all of the designated toys except feminine clothing, sandbox, and carpentry tools were examined in a study by Connor and Serbin (1977) and were both labeled in sex-typed ways by adults and preferred by the expected sex (or, for the case of neutral toys, not preferred by either sex) during play sessions at a preschool. Second, the designation of the toys as masculine, feminine, or neutral was consistent with adults' ratings of the toys in another study (Eisenberg-Berg, Boothby, & Matson 1979). Finally, according to unpublished observational data from a third study conducted in the same preschool used in the present study (Eisenberg-Berg, Hand, & Haake 1981), boys preferred to play in the areas where the sandbox, carpentry tools, blocks, and transportation toys were located; girls preferred to play in the kitchen, dress-up, and doll areas; and there was no sex difference in play at the tables where puzzles and board games were usually used. Further, our a priori classification of toys in the present study is supported by the distribution of boys and girls who were viewed playing with the different types of toys (see Results).

In phase 2, the children were interviewed individually by the same experimenters as in phase 1 to determine which of a predetermined set of sex-typed toys they thought they themselves, a boy named Sam, and a girl named Sally would like, and why they thought as they did. First, the children were told to pretend they had had a birthday party and had received the four toys placed in front of them (two masculine toys, a truck and large blocks; two feminine toys, a doll and a teapot). Then they were asked, "Can you tell me which of these toys you like best?" and "Can you tell me what you like about this toy?" The children were then asked to pick the "worst toy" and to specify why they did not like it. Next, the children were questioned in a similar manner regarding the toy preferences of both a boy and girl (each of whom was depicted in a drawing at his or her birthday party). Order of questioning regarding the preferences of the other boy and girl was randomized across subjects. As for phase 1, verbatim responses were recorded manually.

Coding

The children's reasoning in both phases was coded into the following categories: *do—*

reasoning relating to what one can do or cannot do with the toy (e.g., "you can wash her hair" or "you can't roll it"; *specific characteristics*—reasoning relating to particular positive or negative characteristic of the object (e.g., "it's an ugly color"); *general characteristics*—reasoning relating to very general positive or negative characteristics of the toy (e.g., "it's fun"); *consequences*—reasoning relating to the consequences of playing with the toy (e.g., "other children will play" or "you'll get beat up"); *fantasy*—the child relates a fantasy as a reason (e.g., "I'm driving to work"); *association*—reasoning relating to a positive or negative association with the toy (e.g., "it's like my mommy" or "I don't like truck drivers"); *familiarity*—reasoning relating to familiarity (or lack thereof) with the toy (e.g., "I have one at home"); *sex role*—reasoning relating to the appropriateness of a toy for an individual based on sex of that individual (e.g., "it's for girls," "boys don't like dolls"); *other*—reasons not described above (but not unintelligible responses).

For the phase 1 data, each child's reasoning was converted to proportion of each type of reasoning regarding (*a*) feminine toys, (*b*) masculine toys, and (*c*) neutral toys. Thus, if a given girl reasoned about three masculine toys using (1) do, (2) specific characteristics, and (3) both sex role and fantasy for the three toys, respectively, she received scores of 33%, 33%, 16.5%, and 16.5% for these four categories of reasoning for reasoning regarding masculine toys (all remaining categories of reasoning would have been scored 0%). For phase 2 reasoning, the child's reasoning regarding why he or she liked a toy him or herself (self-like), why he disliked a toy (self-dislike), and why the other boy and girl liked or disliked particular toys (boy/like, boy/dislike, girl/like, girl/dislike) were coded separately. As in phase 1, the child's reasoning regarding each of the six questions was coded as percent of reasoning in each of the various categories (children sometimes used more than one type of reasoning to answer a particular question). Also coded was if the children said they and the hypothetical girl and boy preferred a sex-appropriate toy. Interrater reliabilities for the various scoring categories ranged from 67% to 100% (% agreement/% agreements + disagreements). Children who did not respond to a question or did not provide enough information to code were omitted from any analyses involving the uncodable response.

Results

In phase 1, 23 girls and 21 boys responded to interviews regarding neutral toys, 23 girls and 12 boys responded to questions concerning feminine toys, and 15 girls and 24 boys answered questions concerning masculine toys (many children were never observed playing with the target toys and some others did not respond comprehensibly to questions). The children used virtually no sex-role reasoning to justify their actual real-life toy preferences (0.42%). Rather, they used much reasoning relating to what a toy did (do), its specific characteristics, and a toy's association with positively valued persons or objects. Mean use of each type of reasoning (combined across masculine, feminine, and neutral toys since the differences between various types of toys were not large) was as follows: sex role, 0.42%; do, 54.90%; specific characteristics, 14.29%; general characteristics, 8.34%; consequences, 0.84%; fantasy, 2.66%; association, 14.77%; familiarity, 0%; other, 3.78%.

To examine the effects of age and sex of the child on their reasoning in phase 1, 2 (sex) × 2 (age: 3- vs. 4–5-year-olds) multivariate and univariate analyses of variance were computed for the nine reasoning categories for (*a*) neutral toys, (*b*) feminine toys, and (*c*) masculine toys. None of the multivariate F's were significant at the .05 level of significance; thus, the univariate analyses were not interpreted.

The mean percents of (*a*) sex-typed toy choices and (*b*) reasoning used by the children in response to each of the six questions in phase 2 are presented in table 1. The children tended to make toy choices consistent with cultural stereotypes. Further, while the children used considerable amounts of sex-role reasoning to justify their choices for other children (particularly boys' dislikes) and their own dislikes, they rarely discussed their own likes in terms of sex roles. A correlated t test between the mean percent of sex-role reasoning (transformed with an arc-sign transformation due to the fact that the data distribution tended to be bimodal) used by each child to justify his or her own toy choices (averaged across the two questions unless a child answered only one question) and those of another child (averaged across all of the questions relating to others' likes/dislikes that the child answered) was significant, $t(60) = -5.06, p < .001$. According to an additional analysis, the children were significantly less likely to use sex-role

reasoning when discussing their own likes than when considering another's likes (averaged across the two questions relating to others' preferences), $t(54) = -4.17$, $p < .001$. Similarly, less sex-role reasoning was used when discussing one's own dislikes rather than those of hypothetical others', $t(51) = -3.27$, $p < .01$. Further, while the children did not differ in amount of sex-role reasoning used to discuss a hypothetical girl's and boy's choices, $t(55) = -1.31$ (combined across likes and dislikes), if only dislikes were considered, the children used more sex-role reasoning when discussing the hypothetical boy's dislikes, $t(48) = -4.90$, $p < .001$.

As for the phase 1 data, 2 (sex) $\times$ 2 (age) multivariate and univariate analyses of variance were computed for each of the six questions. The only significant multivariate F was for the main effect of sex for the question regarding a girl's preference (girl/like), $F(6,46) = 2.31$, $p < .04$. Boys used less do reasoning ($M = 30.00$) but more fantasy ($M = 11.67$) and sex-role ($M = 40.00$) reasoning than did girls (M's $= 59.26$, 0, and 11.11, respectively), univariate F's$(1,46) = 5.83$, 4.06, and 6.95, p's $< .01$, respectively.

A final set of 2 (age) $\times$ (2) sex analyses was computed for the children's toy choices in

TABLE 1

MEAN PERCENT SCORES FOR CATEGORIES OF REASONING AND TOY CHOICES (Phase 2)

CATEGORIES OF REASONING	SELF		GIRL		BOY	
	Like	Dislike	Like	Dislike	Like	Dislike
Sex role:						
Combined	1.67	22.41	26.32	21.24	11.32	54.63
Female	3.70	12.00	11.11	10.88	8.70	54.17
Male	0	30.30	40.00	32.00	13.33	55.00
Do:						
Combined	57.50	13.80	43.86	16.66	53.77	9.26
Female	42.59	16.00	59.26	15.38	52.17	8.33
Male	69.70	12.12	30.00	18.00	55.00	10.00
Specific characteristics:						
Combined	22.50	37.07	13.16	39.86	24.53	23.15
Female	25.93	48.00	18.52	49.35	32.61	20.83
Male	19.70	28.79	8.33	30.00	18.33	25.00
General characteristics:						
Combined	3.33	1.72	5.26	0	2.83	3.70
Female	5.56	0	3.70	0	2.17	8.33
Male	1.52	3.03	6.67	0	3.33	0
Consequences:						
Combined	0	1.72	0	10.45	0	.93
Female	0	4.00	0	8.96	0	2.08
Male	0	0	0	12.00	0	0
Fantasy:						
Combined	6.67	3.45	6.14	3.92	1.89	1.85
Female	3.07	8.00	0	7.69	0	4.16
Male	9.09	0	11.67	0	3.33	0
Association:						
Combined	5.00	6.90	1.75	0	3.77	.93
Female	11.11	0	0	0	0	2.08
Male	0	12.12	3.33	0	6.67	0
Familiarity:						
Combined	3.30	12.90	1.75	0	1.89	3.70
Female	7.41	12.00	3.70	0	4.34	8.33
Male	0	13.64	0	0	0	0
Other:						
Combined	0	0	1.75	7.84	0	1.85
Female	0	0	3.70	7.69	0	0
Male	0	0	0	8.00	0	3.33
Percent of own-sex-preferred toy choice:[a]						
Combined	92.4	10.6	86.4	21.2	86.4	12.1
Female	93.3	20.0	83.3	20.0	76.7	16.7
Male	91.7	2.8	88.9	22.2	94.4	8.3

[a] Own-sex-preferred toy choice was a choice consistent with the child's own sex for the "self" questions and consistent with the hypothetical child's sex for the "girl" and "boy" questions.

phase 2 (their own favorite and most disliked toy, and their choice of toys for a girl's and a boy's most liked and disliked toy; 1 = same sex as child or story character toy choice; 2 = opposite-sex toy choice). The main effect for sex of subject was significant, $F(6,57) = 2.33$, $p < .05$, as were the univariate F's for the self/dislike, $F(1,62) = 5.46$, $p < .03$, and boy/like, $F(1,62) = 5.29$, $p < .03$, toy choices. For their own toy choices, boys were more likely than girls to pick opposite-sex toys as most disliked (M's = 1.97 and 1.80, respectively) and to indicate that a hypothetical boy would like same-sex toys more than opposite-sex toys (M's = 1.06 and 1.23, respectively).

Discussion

To summarize, the children used considerable amounts of sex-role-oriented thinking (11%–55%) to justify their answers regarding their perceptions of other children's likes and dislikes. However, they used significantly less of this type of reasoning to justify decisions regarding their own toy choices in the test situation, especially their own preferences, which were sex typed 92.4% of the time. Further, children seldom justified their actual toy choices during play with references to sex-role stereotypes. Rather, in both phases 1 and 2, they tended to choose favorite toys for themselves (as well as for others) based primarily on what the toy could do (on action-oriented reasons). Personal dislikes and a hypothetical girl's (but not boy's) dislikes most frequently were based on reasons relating to specific toy characteristics.

The results are consistent with the conclusion that preschool children frequently choose sex-appropriate toys for other children in sex-role knowledge tasks because of conscious sex-typed considerations. However, since their own toy preference choices were seldom based on sex-typed reasoning (although they obviously are capable of such reasoning), it is questionable that children's own preferences are accurate measures of their conscious understanding of sex-role stereotypes. Further, contrary to Kohlberg's theory, the data are not consistent with the conclusion that children's knowledge of sex-role stereotypes engenders self-conscious, deliberate attempts to choose sex-typed activities and preferences.

Given that children's own preferences and dislikes are seldom justified with sex-typed

reasoning, how does one explain the tendency for children to prefer sex-typed toys and dislike opposite-sex toys? There are at least two plausible explanations. First, toy preferences may be based on characteristics of the toys (especially what they can do), characteristics which may derive their value from previous exposure to sex-appropriate toys (due to adults' socialization practices [Maccoby & Jacklin 1974]). Second, children's knowledge of sex-role stereotypes may lead to preferences for sex-typed toys, but this process may not be conscious. Preferences for sex-typed toys may become so automatic that children do not realize why they prefer these toys. Further, children, like adults (Nisbett & Wilson 1977), may have poor access to motivations underlying their own decisions.

The fact that boys were more likely than girls to choose sex-inappropriate toys as most disliked and a sex-appropriate toy as most liked by another boy is consistent with previous research indicating that there is more pressure for boys than for girls to act in sex-typed ways (Maccoby & Jacklin 1974). Further, since the children used such a high percentage of sex-role reasoning when discussing boys' dislikes, it appears that even young children are aware of the pressures for boys to behave in sex-typed ways.

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