To explore early sex-role development, this study examined the gender schemas of parents in relation to the sex-typed toy preferences of their own young children. Subjects were 82 parents of children between the ages of 3 and 8. Test stimuli consisted of 2 equivalent lists of 24 occupations, each list containing 8 occupations coded as typically male, female, or neutral. Each item was presented singly. In the immediate-response condition, subjects were asked to decide as quickly as possible whether each occupation was most appropriate for men, women, or both. In the delayed-response condition which followed, the second list of occupations was presented and subjects were asked to think over their response until a signal sounded (after a 2.5 second delay). Parents' judgments were compared with judgments about sex-typed toys made by their children in a separate study. Parents also completed questionnaires to measure personal sex-typing, general attitude towards women's roles, and views about prospective play activities and future career options of their children. Analysis showed that parents' gender-category judgments were not related to their children's judgments. However, there was a number of parent-child gender-schema links, including a relationship between mothers' judgments of previously sex-typed feminine occupations as appropriate for both men and women, and their sons' reduced avoidance of feminine toys. (MM)
Sex-Role Development in Young Children:
Relationships to Behavioral and Attitudinal Measures of Parental Gender Schemas

by

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ABSTRACT

Automatic and reflective gender-schema processing modes were examined in parents of young children aged 3 to 7 by requiring gender-category judgments of occupations under speeded- and delayed-response reaction-time task conditions. Parents' judgments were compared with parallel data available for their children (Perry & Sung, 1993). Parents also answered three paper-and-pencil questionnaires which measured their own gender schematization (sex-typing), general attitude towards women's roles, and gender-related parenting views. While parents' gender-category judgments were not related to their children's parallel measures, a number of parent-child gender-schema links were evidenced, including a relationship between mothers' judged gender flexibility of feminine occupations and their sons' reduced avoidance of feminine toys. It was concluded that the present reaction-time methodologies provide a promising avenue for the parallel investigation of gender-schema related processes in parents and children.
INTRODUCTION

The degree to which parents play a role in their children's sex-role development has long been a topic of interest to researchers, but the extent and nature of the contributions made by each parent in this regard remain unclear (Huston, 1983; Lytton & Romney, 1991). Cognitive developmental theory (Kohlberg, 1966) asserts that little sex typing takes place prior to the attainment of gender constancy at about age 5-6, and thus suggests that parental influences upon early sex-role development will be minimal. Social learning theory, on the other hand, exemplified in Bandura's (1977, 1986) social cognitive theory, posits that sex-typed behaviors, like other types of social behaviors, are a consequence of anticipated positive outcomes for same-sex appropriate behaviors and negative outcomes for same-sex inappropriate behaviors, and empirical research which indicates considerable sex-typed behavior in children prior to the age of gender-constancy attainment is consistent with this perspective (e.g., Leinback & Fagot, 1986; Maccoby, 1988; Ruble & Stangor, 1986).

Gender schema theory (Bem, 1981, 1985) furnishes a useful framework for the study of cognitive mechanisms which may play a part in children's early sex typing and which may provide avenues for parental influence upon the young child. That gender schemas are operative even in young children has been shown in recent work by Carter and his colleagues (e.g., Carter & Levy, 1988). The present study sought to further our understanding of early sex-role development by examining the gender schemas of parents in relation to the sex-typed preferences of their own young children. Behavioral as well as attitudinal measures of parental gender schemas were incorporated by asking parents to make gender-category judgments under both speeded and delayed reaction-time task conditions, employed as indices of automatic and reflective gender-schema processing modes, respectively. The children's data, collected in a separate study (Perry & Sung, 1993), included parallel measures of automatic and reflective gender-schema processing in addition to assessment of sex-typed toy preferences.
HYPOTHESES:

1. The child's sex-typing will relate more strongly to the parent's gender schemas as revealed by automatic-mode processing than as indicated by either reflective-mode processing or questionnaire-based attitudinal measures.

2. Parental automatic-mode gender schema processing will show a stronger relationship to children's sex-typing for mothers than for fathers.

3. Parental attitudinal measures of gender schematization will be more closely related to parents' reflective-mode than their automatic-mode gender schema processing.

4. Consistency between the mother's and father's degree of gender schematization will be greater for reflective-mode gender schema processing and questionnaire-based attitudinal measures than for automatic-mode performance.

METHOD

Subjects

The subjects were 82 parents (26 fathers, 56 mothers) of children between the ages of 3 and 8 who attended a university campus day care center or elementary school.

Materials and Procedure

Gender-category judgment reaction-time task. An Apple personal computer reaction-time program was employed to obtain automatic- and reflective-mode gender-category judgments from parents. Two equivalent lists of 24 occupations, each list containing 8 occupations coded as typically male, female, or neutral on the basis of college student ratings, served as test stimuli. Each item was presented singly on the computer monitor. In the immediate-response (automatic) condition, subjects were asked to decide as quickly as possible whether each occupation was most appropriate for men, for women, or for both men and women, pressing a designated key on the computer keyboard to indicate their choice. In
Parental Gender Schemas

the delayed-response (reflective) condition which followed, the second list of occupations was presented in a similar manner, but with subjects asked to think over their response until a tone sounded (2.5 sec after item onset) and then to respond as quickly as possible at that time. The number of "both men and women" responses to male and female occupations served as measures of gender schema flexibility on this task.

*Paper-and-pencil measures.* The Bem (1974) Sex-Role Inventory (BEM) and Spence and Helmreich’s (1978) Attitude Towards Women Scale (AWS) were used to measure the degree of personal sex-typing and general attitude towards women's roles, respectively. A sex-typing score was derived from the BEM responses by subtracting endorsement of opposite-sex attributes from endorsement of same-sex attributes; thus higher scores indicate a higher degree of sex-typing. Higher scores on the AWS indicate a more flexible attitude towards women’s roles. In addition, Katz and Boswell’s (1986) socialization questionnaire was employed to assess parental views about prospective play activities and future career options which the parent’s child might wish to pursue; higher scores on this instrument indicate a greater degree of gender stereotyping in parenting views.

**RESULTS**

*Parental Gender Schematization*

*Gender-category judgment reaction-time task.* The number of "both men and women" judgments on the reaction-time tasks (Figure 1) served as the dependent variable in a 4-way repeated measures analysis of variance (ANOVA), with parent sex and sex-typing level (see below) as between-subjects variables, and stimulus occupation gender category (masculine, feminine, or neutral) and response condition (immediate or delayed) as within-subjects variables. Assignment to high or low sex-typing level was determined by a median split procedure on the BEM scores within each sex.

As may be seen in Figure 1, parents demonstrated greater flexibility in their gender schematization when answering under the reflective-response condition as opposed to the automatic-response mode, \( F (1,97) = 8.33, p < .01, M_s = 5.58, \)}}
There was also a main effect of occupation type, $F(2, 96) = 77.83, p < .01$, due to more use of the "both men and women" response for neutral than for either masculine or feminine occupations, $Ms = 6.65, 4.62, \text{ and } 4.71$. The only other significant effect was an unexpected interaction of subject sex and sex-typing level, $F(1, 97) = 3.99, p < .05$. While less sex-typed mothers generally made a greater number of flexible judgments than did more sex-typed mothers ($Ms = 5.62, 4.98$), the reverse pattern occurred for fathers, with more flexible judgments shown by less- rather than more-highly-sex-typed men ($Ms = 5.85, 4.84$).

**Paper-and-pencil measures.** Pearson product moment correlations were computed to assess the interrelationships of responding on the several self-report measures as well as the degree of consistency between the self-report measures and the reaction-time task gender-flexibility scores. *Within-parent consistency* was found to be more extensive for mothers than for fathers. While the four reaction-time task flexibility measures (automatic and delayed masculine and feminine occupation judgments) were highly intercorrelated within both sexes, the reaction-time flexibility measures were correlated with self-report measures only for mothers (positively with AWS scores and disapproval of opposite-sex toy play and opposite-sex future-occupation aspirations, and negatively with sex-typing score).

*Correlations between fathers' and mothers' responses* indicated little parental consistency with respect to specific self-report measures except in relation to disapproval of opposite-sex future occupation aspirations in their child, $r = .48, p < .01$. Parents responded in a congruent fashion on two of the reaction-time task flexibility measures, mother-father $r = .38$ and $.43, p < .05$, for automatic-task masculine- and delay-task feminine-occupation flexibility, respectively, and likewise agreed to some extent across different reaction-time judgment subtasks. The father's delayed-judgment flexibility further related to the mother's AWS score as well as to her disapproval of opposite-sex future occupation aspirations for their child. Interestingly, the mother's reaction-time task flexibility was positively related to the strength of several of the father's sex-typed parenting views, suggesting some balancing of gender perspectives.
between the two parents.

**Parent-Child Gender Schema Relationships**

*Children's gender-category reaction-time task judgments.* Neither automatic- nor reflective-mode reaction-time task measures were correlated between parent and child. Mothers' socialization views were inversely related to their daughters' gender category judgments in that strength of maternal approval of feminine future-occupation aspirations in their daughters was linked with degree of flexibility in their daughters' automatic-mode judgments of both masculine and feminine toys as well as their reflective-mode masculine toy responses, $r_s = .57, .59,$ and $.46, p < .01$. The only significant father-daughter correlation was that between fathers' approval of their daughters' play with same-sex (feminine) toys and their daughters' automatic-task feminine toy flexibility, $r = -.60, p < .05$, showing agreement in degree of flexibility of father and daughter in this regard. The one other parent-child correlation related to children's gender-category judgments was an inverse connection between maternal disapproval of opposite-sex toy play and their sons' flexibility on automatic-task masculine toy judgments, $r = .44, p < .05$.

*Children's sex-typed toy preferences.* Children's attraction to same-sex toys (preference for same-sex over neutral toys) was linked only to one parental measure; daughters' attraction to feminine toys was correlated with fathers' endorsement of feminine toy play in their daughters, $r = .70, p < .01$. On the other hand, a number of parent-child linkages were evident with respect to children's avoidance of opposite-sex toys (preference for neutral over opposite-sex toys, shown in Figure 2). Boys' avoidance of feminine toys was negatively correlated with their mothers' gender schema flexibility on both automatic- and reflective-mode reaction-time task judgments, $r_s = -.47$ and $-.43, p < .01$ and $p < .05$, respectively. In contrast, no paternal reaction-time measures related to children's sex-typed preferences; fathers' AWS flexibility score did correlate with their sons' avoidance of feminine toys but in a positive direction, $r = .67, p < .05$, indicating an inverse relationship between father and son gender schema.
flexibility in this regard.

CONCLUSIONS

1. Parent-child gender schema linkages were found between parental gender-category judgments on the reaction-time tasks and children's sex-typing in relation to children's avoidance of opposite-sex toys, with mothers' flexibility with respect to feminine occupation gender assignment related to reduced avoidance of feminine toys in their sons.

2. Girls' gender-category judgment flexibility was related to the strength of their mothers' gender stereotyping as indexed by approval of feminine career aspirations in their daughters.

3. The relationship between parents' sex-typing level and their reaction-time task gender-category judgments varied with sex and stimulus occupation gender category such that stronger sex-typing was related to generally lower judged occupation gender flexibility in women, but to increased feminine occupation flexibility in men.

4. Within-parent consistency across diverse gender schema measures was much more evident for mothers than for fathers.

5. Between-parent consistency was limited in extent, and found more frequently for reaction-time task than self-report indices of gender schemas. Inverse relationships observed between the father's endorsement of same-sex interests in their children and the mother's gender-stereotyped socialization beliefs suggest some counterbalancing of gender perspectives between the two parents.

In sum . . .

The reaction-time task methodologies provide a promising avenue of parallel investigation of gender-schema related processing in both parents and children.
Parental Gender Schemas

It is critical to distinguish the components of same-sex attraction and opposite-sex avoidance in the study of sex-typing.

Parent-child gender-schema linkages are diverse in extent but specific to particular parent sex--child sex relationship configurations.
REFERENCES


SURE
REACTION-TIME TASK GENDER FLEXIBILITY
BY SEX AND SEX-TYPE

FATHERS AUTOMATIC TASK

FATHERS DELAYED TASK

MOTHERS AUTOMATIC TASK

MOTHERS DELAYED TASK

OCCUPATION TYPE

MASCULINE  FEMININE  NEUTRAL  MASCULINE  FEMININE  NEUTRAL
CORRELATIONS OF PARENTAL GENDER SCHEMA MEASURES AND CHILD'S AVOIDANCE OF OPPOSITE-SEX TOYS

MOTHERS AND Sons (n=28)

MOTHERS AND DAUGHTERS (n=25)

FATHERS AND Sons (n=13)

FATHERS AND DAUGHTERS (n=13)

AUTO AUTO DELAY DELAY AWS SAME OPPOS SAME OPPOS BEM
MASC FEM MASC FEM TOY TOY JOB JOB

CRITICAL r VALUE