

descriptions of items in the ITSC.

The binomial method, paired difference t-test and descriptive statistics were used when appropriate, to test the hypotheses generated in this study. Findings revealed significant disagreements between parents' and Brown's cultural stereotypes of sex roles on a majority (86.1%) of the items found in the ITSC ($p < .05$; $p < .01$). However, there were no significant agreements or disagreements between fathers' and mothers' stereotypes of sex roles on a majority (58.1%) of the items found in the ITSC. Furthermore, boys' and girls' sex-role preferences were significantly ($p < .10$; $p < .05$; $p < .01$) more masculine and feminine, respectively, when based on their fathers' and mothers', rather than on Brown's, cultural stereotypes of sex roles. While boys and girls did not have significantly more masculine and feminine sex-role preferences, respectively, when based on their fathers' than on their mothers' stereotypes of sex roles, older boys had slightly more masculine sex-role preferences when their preferences were based on their fathers' stereotypes of sex roles, while younger boys had slightly more masculine sex-role preferences when their preferences were based on their mothers' stereotypes of sex roles. Furthermore, older girls had slightly more feminine sex-role preferences when their preferences were based on their mothers' stereotypes of sex roles, while younger girls had slightly more feminine sex-role preferences when their preferences were based on

their fathers' stereotypes of sex roles.

In general, findings indicated that both fathers' and mothers' stereotypes of sex roles should be considered in studies of sex-role preferences among young children. In addition, findings could be used to support a need for further assessment of the adequacy of theoretical positions which strongly emphasize the contribution of one parent to children's sex-role preferences. Limitations of the study and suggestions for future research were also discussed.

Comparison of Preschool-Aged Children's Sex-Role
Preferences Related to Cultural
and Parental Stereotypes

by

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Typed by Mary Jo Stratton for Marilyn Kidder

This study is dedicated to my mother and father, who have given me constant support and encouragement throughout my college career. The completion of this thesis may serve as a small way of saying "thank you."

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COMPARISON OF PRESCHOOL-AGED CHILDREN'S SEX-ROLE PREFERENCES RELATED TO CULTURAL AND PARENTAL STEREOTYPES

CHAPTER I

INTRODUCTION

Interest in the broad area of personality development has stimulated a large body of research focusing on sex-role development among young children. Current theoretical discussions or reviews of research on sex-role preferences among young children (Biller and Borstellmann, 1967; Hartup and Zook, 1960; Hetherington, 1965; Mussen and Distler, 1959, 1960; Mussen and Rutherford, 1963; Reed and Asbjornsen, 1968; Rutherford, 1964; Spencer, 1967; Sugawara, 1971; Summers, 1970) almost always report results which have been obtained with the IT Scale for Children (Brown, 1956). This test consists of pictures of toys, activities and figures commonly associated with the masculine and feminine sex roles in our culture. Test procedures require that the child choose from among the variety of pictures presented to him, those which the IT figure would like to have, play with or be like. The IT figure is presumed to be ambiguous with respect to sex, therefore, it is assumed that when the child makes his choices from among the pictures presented to him, he is indirectly reflecting his preferred sex onto the IT figure, thus revealing his own sex-role preference.

In constructing the IT Scale for Children (ITSC) as a measure of sex-role preference, Brown (1956) took into consideration the previous works of Terman (1925), Benjamin (1932), and Rabban (1950) in the area of sex-role development. The selection of items included in the test was based on contrasting behavior patterns, culturally identified with male and female roles. The pictures of different toys, activities and figures typical for boys in contrast to girls and vice versa, along with the more obvious differences between adult masculine and feminine roles to which the child is continually exposed, formed the content of the test (Brown, 1956). In our culture, for example, boys normally play with trucks and trains, wear shirts and trousers and grow up to use shaving articles, whereas girls typically play with dolls and dishes, wear dresses and grow up to use cosmetics. Preferences for such culturally defined male and female items were assumed to be indicative of preferences for aspects of our culture's masculine and feminine roles. A basic assumption underlying the ITSC as a measure of sex-role preference, therefore, is the notion that the child, through interaction with the society in which he lives, comes to develop a preference for such cultural stereotypes of sex roles.

Although the ITSC is based on cultural stereotypes of the masculine and feminine sex roles, Brown (1958), in a later article, questioned its validity as a measure of sex-role preference. He

suggested a weakness in his own instrument related to the exclusively masculine and exclusively feminine categories of the items in his test. He noted that within our culture the notion of masculinity and femininity has changed dramatically. More important, however, he noted that patterns of parental roles and responsibilities have also changed. These changes, he indicated, must play a role in influencing a child's perception of what is masculine and what is feminine.

Research in the broad area of the relationship between certain parental variables and sex-role development among young children has supported Brown's (1958) suggestion that parents do contribute to the development of children's sex-role preferences. A wide variety of parental variables have been shown to be positively related to the development of appropriate sex-role preferences in young children. Some of these variables include: parental punitiveness (Bieri and Ratzberg, 1963; Biller, 1968a, 1969a; Freedheim, 1960; Lefkowitz, 1962; Moulton et al., 1966; Mussen and Distler, 1959, 1960; Mussen and Rutherford, 1963); parental nurturance (Mussen, 1961; Mussen and Distler, 1959, 1960; Mussen and Parker, 1965; Mussen and Rutherford, 1963; Rutherford, 1964; Stiemel, 1960); parental power (Biller, 1968a, 1969a; Doherty, 1970; Freedheim, 1960; Hetherington, 1965, 1967; Lefkowitz, 1962; Moulton et al., 1966; Mussen and Distler, 1959, 1960; Rutherford, 1964); parental masculinity and femininity (Altucher, 1957; Lansky, 1964; Mussen and Rutherford,

1963); parental availability (Altus, 1958; Biller, 1968b, 1969b; Hetherington, 1966; Santrock, 1970); and parental encouragement of children's involvement in sex-typed activities (Biller, 1968a, 1969b; Mussen and Rutherford, 1964).

More recently, Lynn (1959) has hypothesized that the age and sex of children should also be considered in research or discussions regarding the relationship between parents and their children's sex-role development. Examination of research in this area led him to postulate that both male and female infants initially identify with their mothers. Girls retain this initial identification with their mothers, whose availability in the home permits her to serve as a direct model for identification. Boys, however, must shift from this maternal identification to a culturally stereotyped masculine-role identification. Since the father is not readily available in the home, the boy does not have a direct model, rather, the father presents only a "general" model for identification. Therefore, through rewards and punishments from his mother and female teachers for sex-typed behavior, the boy obtains a cultural stereotyped masculine-role identification. "Consequently, males tend to identify with a cultural stereotype of the masculine role, whereas females tend to identify with aspects of their own mothers' role specifically" (Lynn, 1959, p. 130).

Purpose of the Study

The primary purpose of the present study is to explore preschool-aged children's sex-role preferences as they relate to both cultural and parental stereotypes of sex roles.

Definition of Terms

1. Sex-role preference: as measured by Brown's ITSC (1956), operationally defined in terms of the preferential responses of subjects to culturally defined sex-typed objects and activities in the test.
2. Brown's cultural stereotypes of sex roles: defined by Brown in designing the ITSC as a measure of children's sex-role preferences; operationally defined in terms of items and activities culturally associated with one sex or the other.
3. Parental (fathers' and mothers') stereotypes of sex roles: defined by parents in the present study; operationally defined in terms of items and activities found in the ITSC parentally associated with one sex or the other.

Assumptions

1. The ITSC is an adequate measure of sex-role preferences among preschool-aged children (Brown, 1956; Hartup and Zook,

1960; Schell and Silber, 1968).

2. The items of the ITSC may be used to obtain parental stereotypes of sex roles for preschool-aged children.

Hypotheses

Hypothesis I: Comparisons of Brown's cultural and fathers' stereotypes of sex roles will reveal no significant disagreements.

Hypothesis II: Comparisons of Brown's cultural and mothers' stereotypes of sex roles will reveal no significant disagreements.

Hypothesis III: Comparisons of fathers' and mothers' stereotypes of sex roles will reveal no significant disagreements.

Hypothesis IV: Boys' sex-role preferences based on Brown's cultural and parents' (fathers' and mothers') stereotypes of sex roles will reveal no significant differences.

Hypothesis V: Girls' sex-role preferences based on Brown's cultural and parents' (fathers' and mothers') stereotypes of sex roles will reveal no significant differences.

Hypotheses I, II and III were tested using the binomial method. The paired-difference t-test and descriptive statistics were used to test Hypotheses IV and V. A probability level of .05 or beyond was used as the significance level. The variables of age and sex were considered in the test of Hypotheses IV and V.

CHAPTER II

REVIEW OF LITERATURE

Due to the complexity of the research related to the problem of the present study, this review of literature is organized into three major sections. The material in these sections is presented in order to: review research findings in the area of cultural contributions to children's sex-role preferences; summarize research in the area of parental contributions to children's sex-role preferences; and present a theoretical framework regarding the relationship between contributions of culture and parents to the development of sex-role preferences of young children.

Cultural Contributions

The development of sex-role preferences among young children has often been related to cultural stereotypes of sex roles. Brown's (1956) IT Scale for Children (ITSC) is the instrument most widely used in studying children's sex-role preferences. This test consists of 36 pictures of toys, activities and figures commonly associated with the masculine and feminine roles in our culture. The subject is shown a drawing of an IT figure, considered ambiguous with respect to sex. He is then asked to choose from a group of pictures the items "IT" would prefer to "have, play with or be like" (Brown, 1956). It is

assumed that when the child chooses these items for the IT figure he is revealing his own sex-role preference.

In constructing the ITSC as a measure of sex-role preference, Brown (1956) took into consideration the previous works of Terman (1925), Benjamin (1932), and Rabban (1950) in the area of sex-role development. The selection of pictures of items included in the test was based on contrasting behavior patterns, culturally identified with male and female roles. In our culture, for example, boys normally play with trucks and trains, wear shirts and trousers and grow up to use shaving articles, whereas girls typically play with dolls and dishes, wear dresses and grow up to use cosmetics. Preferences for such cultural stereotypes of male and female items were assumed to be indicative of preferences for aspects of our culture's masculine and feminine roles (Brown, 1956).

Results obtained with the ITSC have shown a marked difference in the sex-role preferences of boys and girls. The most frequently cited results indicate that while boys' scores on the ITSC are consistently high (masculine) from the age of three through the elementary school years, girls' scores have not been consistently low (feminine). Girls at the age of three tend to score in the mid-range of the scale (neither strongly masculine nor strongly feminine). From the age of four, however, they begin to score lower (more feminine) and either maintain this level or score higher (more masculine) during the

elementary school years (Brown, 1956, 1957; Endsley, 1967; Hartup and Zook, 1960; Lansky and McKay, 1963; Reed and Asbjornsen, 1968; Schell and Silber, 1968; Sugawara, 1971; Summers, 1970; Ward, 1969).

A standard interpretation of these results for boys and girls has been that boys develop and maintain appropriate sex-role preferences earlier than girls. The explanation customarily has been that they do so because of

. . . the greater prestige, power and attractiveness of the male role, because of the greater clarity in our culture about what is appropriate male behavior than what is appropriate female behavior, because of the greater pressure put on boys than on girls to learn sex-appropriate behavior. . . and because girls are much less likely to experience punishment and much more likely to be reinforced for behaving like boys than boys are for behaving like girls (Schell and Silber, 1968, p. 379).

It should be noted, however, that while most studies in the area of sex-role preferences among young children support the above mentioned findings, Ward (1969) in his study with five-year-old children reported conflicting results. His findings indicated that appropriate sex-role preferences were clearly established for both boys and girls by five years of age, suggesting that the timing for the development of appropriate sex-role preferences may be very close in both boys and girls, rather than earlier in boys.

Parental Contributions

Theories of Personality

Theories of personality generally agree that the process of

identification is important in sex-role development.¹ Basically, identification refers to the process by which a child imitates or models the behavior of his parents, thereby incorporating these traits into his own personality. The specific process of this identification varies according to individual theories. For the purpose of the present study, three variables related to identification will be discussed; parental punitiveness, nurturance, and power.

Parental Punitiveness

Freud (Hall and Lindzey, 1970) explains identification in terms of punitiveness, or "identification with the aggressor." He states that the child will imitate or model the behavior of a punitive or threatening parent to avoid threats or punishment from that parent. Several studies in the area of sex-role preference among young children support his hypothesis. Studies reviewed here deal with the relationship between boys' sex-role preferences and parental punitiveness. No studies could be found dealing with girls.

Several studies with boys between the ages of two and six found

¹The term "sex-role development" refers to a wide variety of concepts including sex-role discrimination, sex-role preference, sex-role adoption and sex-role identification (Lynn, 1959). Due to the fact that the present study centers upon the development of children's sex-role preferences, only studies in this area will be reviewed. For a detailed review of literature on different aspects of sex-role development, see Sugawara, 1971.

that boys high in masculine sex-role preferences perceived their fathers as more limit-setting, threatening and punitive than did boys low in masculine sex-role preferences. The ITSC and a Game Preference Test were used to measure boys' sex-role preferences. Perceptions of parental punitiveness were obtained through child interviews and structured doll play situations (Biller, 1968a, 1969a; Freedheim, 1960; Mussen and Distler, 1959; Mussen and Rutherford, 1963).

Mussen and Distler (1960) using the ITSC with kindergarten boys and maternal interviews, found similar results. Boys low in masculine sex-role preferences had mothers who were more punitive than did boys high in masculine sex-role preferences. These results hold true for pre-adolescent (Game Preference Test), adolescent (M-F scales of the MMPI), and college-age (Gough Femininity Scale) boys (Bieri and Ratzberg, 1963; Lefkowitz, 1962; Moulton *et al.*, 1966).

Studies of boys from preschool to college age reviewed, therefore, support the finding that there is a relationship between punitiveness of parents and sex-role preferences of boys.

Parental Nurturance

Among some social learning theorists the concept of identification is related to the warmth and nurturance of parents (Baldwin, 1967), thus the child will imitate and model behaviors of the nurturant

parent because of love and respect for him. This type of identification has also been called "anaclitic identification." Evidence in support of this hypothesis has come from a variety of studies in the area of sex-role preferences among young children. Most studies have used boys as subjects; studies with girls have been relatively sparse.

Mussen and Distler (1959, 1960) and Mussen and Rutherford (1963) found that boys high in masculine sex-role preferences actually had, and also perceived, their fathers as more affectionate, warm and nurturant than did boys low in masculine sex-role preferences. These studies used the ITSC to assess kindergarten boys' sex-role preferences and interviewed the boys and their mothers for information on paternal nurturance. Furthermore, Rutherford (1964) in studying second grade children, noted that boys' masculine sex-role preferences were positively related to fathers' involvement in activities with their sons.

Studies with older boys show similar results (Mussen, 1961; Steimal, 1960) indicating that boys high in masculine sex-role preferences perceived their relationship with their fathers as more warm and affectionate than did boys low in masculine sex-role preferences. In these studies, the M-F scale of the MMPI and the Strong Vocational Interest Blank were used to measure sex-role preferences, while a questionnaire and the Thematic Apperception Test were used to measure their perceptions of parental warmth and affection.

Findings from studies with girls parallel these findings for boys. Studies by Mussen and Parker (1965) and Mussen and Rutherford (1963) with kindergarten girls found that maternal nurturance, as measured by maternal interviews, was significantly related to high feminine sex-role preferences among girls. Girls' sex-role preferences were measured by the ITSC.

In general then, research reviewed in the area of parental nurturance supports the assumption that parental warmth and nurturance is related to the sex-role preferences of children. For boys from kindergarten to adolescence, high masculine sex-role preferences are related to paternal warmth and nurturance. For girls of kindergarten ages, high feminine sex-role preferences are related to maternal warmth and nurturance.

Parental Power

A third and more comprehensive theory also exists. This theory, often referred to as "role theory" or the "power oriented theory" (Baldwin, 1967), is a logical extension of both Freudian and social learning theories. Proponents of this theory argue that the child identifies with a parent not solely because the parent is warm and nurturant, or because the parent is punitive and threatening, but because the parent is more "powerful." Power, as originally defined in this theory, refers to the degree to which a parent is both an

effective rewarder and an effective punisher. More recently this term has been applied to a parent who is more dominant in the family situation, more controlling of the resources valued by the child, and more disciplining and warm toward the child (Sugawara, 1971). There are several studies in the area of sex-role preferences among young children which support this theoretical position. As previously indicated, studies have tended to focus upon boys and girls have been relatively neglected.

Studies with kindergarten boys indicate that boys high in masculine sex-role preferences had fathers who were more warm, nurturant, affectionate, dominant and limit-setting than did boys low in masculine sex-role preferences (Biller, 1968a, 1969a; Hetherington, 1965, 1967; Mussen and Distler, 1959, 1960). The ITSC and a Game and Toy Preference Test were used to measure boys' sex-role preferences, while parental interviews were used to measure parental power. Similar findings were reported for pre-adolescent and adolescent boys (Freedheim, 1960; Lefkowitz, 1962; Moulton et al., 1966). Furthermore, Hetherington's (1965, 1967) findings with kindergarten boys suggest that boys low in masculine sex-role preferences had mothers who were more warm and nurturant, and more dominant in decision-making than did boys high in masculine sex-role preferences.

The relationship between maternal power and sex-role preferences in boys can also be inferred from studies centered upon the

relationship between father absence and sex-role preferences of young boys (Altus, 1958; Biller, 1968b; Hetherington, 1966; Santrock, 1970). As indicated by Lynn and Sawrey (1959), father absence, per se, is not the only variable that affects the behavior of the child. Influences of the mother due to her greater over-protectiveness, dominance and control over the child may also affect the boy's sex-role development.

Findings for girls regarding the relationship between sex-role preferences and maternal power parallel results reported for boys (Hetherington, 1965, 1967; Rutherford, 1964). These studies report that girls high in feminine sex-role preferences had mothers who were more dominant in decision-making and more warm and nurturant than girls low in feminine sex-role preferences. The ITSC and parental interviews were used to assess girls' sex-role preferences and maternal power, respectively. Doherty (1970) obtained similar results with adolescent girls using the Gough Femininity Test.

With respect to paternal power, Hetherington (1967) in her study with girls 4 to 11 years of age, found that girls high in feminine sex-role preferences did not have fathers who were more warm and nurturant and more dominant in decision-making than did girls low in feminine sex-role preferences. Parental interviews were used to gain information on paternal power, while the ITSC was used to measure girls' sex-role preferences.

In general then, research in the area of parental power supports

the assumption that parental power is related to sex-role preferences among young children.

Other Parental Variables

Aside from the variables of parental nurturance, punitiveness and power, other parental variables have also been shown to be related to the development of sex-role preferences among young children. Among these variables are the masculinity and femininity of parents, parental availability, and parental encouragement of children's involvement in sex-typed activities.

Parental Masculinity and Femininity

Identification with parents, per se, may not lead to the development of masculine or feminine sex-role preferences among young children. The influencing factor may be the amount of masculinity of the father and femininity of the mother. Three studies have been found which deal specifically with these variables in research with young children. While Mussen and Rutherford (1963) found that the masculinity of fathers or the femininity of mothers were not related to sex-role preferences among kindergarten boys, studies with adolescent boys reported that fathers who played the traditional feminine role in the home (i. e., helping with the housework) had sons who were low in masculine sex-role preferences (Altucher, 1957;

Lansky, 1964). The Gough Femininity Scale was used as a measure of sex-role preferences and parental interviews were used to obtain information regarding the masculinity and femininity of the parents.

Furthermore, among kindergarten girls, Mussen and Rutherford (1963) found that the masculinity of fathers was positively related to high feminine sex-role preferences among girls. The femininity of mothers, however, was found to have no relationship with girls' sex-role preferences. The ITSC was used to measure children's sex-role preferences and an interview was used to measure parental masculinity and femininity.

Parental Availability

Studies in the area of parental availability most often deal with father absence and its relationship to the development of boys' sex-role preferences. Only one study was found dealing with father absence and its relationship to the development of girls' sex-role preferences. No studies could be found regarding the relationship between mother absence and the development of sex-role preferences among young children.

Studies found regarding the relationship between father absence and the development of sex-role preferences in boys indicate that father-absent boys had less masculine sex-role preferences than father-present boys. These findings were reported for boys 4 to

5 years of age (Biller, 1968a, 1969b; Santrock, 1970), for boys 9 to 12 years of age (Hetherington, 1966) and for college age (Altus, 1958) boys. Sex-role preferences for boys 4 to 5, and 9 to 12 years of age were measured by the ITSC, the Game Preference Test and a Picture Preference Test. The M-F scales of the MMPI were used to assess college-age boys' sex-role preferences.

In reference to the study dealing with father-absent, four- to five-year-old girls, Santrock (1970) found that girls from father-absent families showed slightly more feminine sex-role preferences on the ITSC than girls from father-present families.

While the studies just reviewed suggest that father absence is associated with the development of sex-role preferences among young children, especially among boys, findings should be understood with caution. Hetherington and Deur (1971), Biller and Borstellmann (1967), and Biller (1970), in their reviews of literature regarding the broad area of father absence and personality development, indicate that variables such as types of father absence (i. e. , temporary or continuing, separation, divorce, occupational demands, military service, or death), quality of father-child relationship before separation, nature of mother-child relationship after separation, and the presence of male surrogates (siblings, relatives) in the home may all affect children's overall personality development. Furthermore, variables such as socioeconomic status, sex, age, race and time of

separation can also modify the consequences of father absence.

Parental Encouragement

Another variable considered important in studying the relationship between parents and their children's sex-role preferences has been parental encouragement of young children's involvement in sex-typed activities. While Mussen and Rutherford (1963) using a Game and Activity test as a measure of parental encouragement, found no relationship between fathers' or mothers' encouragement of sex-typed activities and the sex-role preferences (ITSC) of kindergarten children, contrasting results were found by Biller (1968a, 1969b). Using the ITSC, a Toy and Game Preference Test, and maternal interviews, Biller (1968a, 1969b) found that maternal encouragement of boys' involvement in masculine activities was positively related to masculine sex-role preferences of both father-present and father-absent boys.

Furthermore, studies with girls have shown that fathers', rather than mothers', encouragement of involvement in sex-typed activities was related to feminine sex-role preferences among girls. The ITSC and parental interviews were used in these studies with kindergarten and second grade girls (Mussen and Rutherford, 1963; Rutherford, 1964).

A Theoretical Framework

In a series of articles Lynn (1959, 1961, 1962, 1966) presented a framework regarding the development of sex roles among young children. Dissatisfied with present research in the area of sex-role development among young children, Lynn distinguished between sex-role identification and parental identification, as well as the processes involved in achieving these identifications. Sex-role identification refers to a child's identification with the cultural stereotypes of sex roles, while parental identification refers to a child's identification with his own parents. On the basis of these distinctions he was able to differentiate between the processes of identification among boys and girls.

Examination of research in this area led Lynn (1959) to postulate that both male and female infants initially identify with their mothers. Girls retain this initial identification with their mothers, whose availability in the home permits her to serve as a direct model for identification. Boys, however, must shift from this maternal identification to a culturally stereotyped masculine-role identification. Since the father is not readily available in the home, the boy does not have a direct model, rather, the father presents only a "general" model for identification. Therefore, through rewards and punishments from his mother and female teachers for sex-typed behavior, the boy obtains a culturally stereotyped masculine-role identification.

Consequently, Lynn (1962) hypothesized that the girl learns specific mother identification, while the boy learns cultural masculine-role identification.

The position of Lynn appears to integrate the differential contributions of culture and parents to the development of sex-role preferences among young children. The present study will attempt to explore preschool-aged children's sex-role preferences as they relate to both cultural and parental stereotypes of sex roles.

CHAPTER III

METHOD

Subjects

A sample of 47 children of preschool ages and their fathers and mothers acted as subjects for the present study. All children were enrolled in either one of three preschool programs established by the Family Life Department at Oregon State University. The following criteria were used in selecting children for the present study:

1. that the children came from families where both parents were present,
2. that the children came from families of middle- and upper-socioeconomic classes,
3. that the children were of the Caucasian race,
4. that the children were between the ages of 3 years-3 months and 5 years-3 months at the time the data were collected,
5. that the children had no physical defects which might affect their performance in carrying out specific tasks required of them in the present study.

All pertinent information for selecting the subjects for the present study was obtained from a questionnaire filled out by parents upon acceptance of enrollment of their children into one of the three preschool programs (Appendix A).

Description of the Children

The total sample of 47 children was divided into groups on the basis of sex and age. A description of these groups is summarized in Table 1.

Table 1. Description of Children by Sex and Age.

Characteristic	N	Mean Age (years /months)
<u>Sex</u>		
Boys	25	4 /3
Girls	22	4 /2
Total	47	4 /3
<u>Age</u>		
Older	26	4 /7
Younger	21	3 /6
<u>Sex x Age</u>		
Older boys	14	4 /7
Older girls	12	4 /7
Younger boys	11	3 /10
Younger girls	10	3 /9

Sex

The total sample of 47 children included 25 boys and 22 girls all ranging in ages from 3 years-3 months to 5 years-3 months. The mean ages for the boys and girls were 4 years-3 months and 4 years-2 months, respectively.

Age

The children were also divided into "older" and "younger" age

groups. The older group was composed of 26 children ranging in ages from 4 years-1 month to 5 years-3 months (mean age = 4 years-7 months), while the younger group included 21 children ranging in ages from 3 years-3 months to 4 years-0 months (mean age = 3 years-6 months).

In the older age group 14 children were boys and 12 children were girls. The mean age of both boys and girls in the older age group was 4 years-7 months. In the younger age group 11 children were boys and 10 children were girls. The mean ages for both boys and girls in the younger age group were 3 years-10 months and 3 years-9 months, respectively. A more detailed description of individual children by sex and age can be found in Appendix B.

Socioeconomic Status

Finally, subjects of the present study came from families of specific socioeconomic backgrounds. A number of studies in the area of sex-role development among young children have indicated the importance of this variable in research (Lansky and McKay, 1963; Rabban, 1950; Sher and Lansky, 1968). Hollingshead's "Two Factor Index of Social Position" was used to determine the socioeconomic status of the families in the present study. In developing this index, Hollingshead (1957) assumed (1) that there is a class structure in our society; (2) that positions in this society can be determined by a few

specific characteristics; (3) that these characteristics may be represented numerically for means of statistical analysis. The two factors used by Hollingshead (1957) were occupation and education. Levels of occupation and education were given a scaled score ranging from one to seven, and were multiplied by factor weights of seven and four for occupation and education, respectively. The two products were then added and yielded a socioeconomic status score, ranging from a low of 11 to a high of 77. Socioeconomic status may be grouped into five classes (Hollingshead, 1957, p. 10).

<u>Socioeconomic Status</u>	<u>Range of Computed Scores</u>
I (Upper)	11-17
II	18-27
III	28-43
IV	44-60
V (Lower)	61-77

According to Hollingshead's (1957) index, the families in the present study were distributed among the socioeconomic status positions as summarized in Table 2.

Table 2. Description of Families by Socioeconomic Status.

<u>Socioeconomic Status</u>	<u>N</u>
I (Upper)	26
II	19
III	2
IV	0
V (Lower)	0
Total	47

InstrumentIT Scale for Children (ITSC)

Brown (1956) developed the IT Scale for Children (ITSC) as a sex-role preference scale. The choice of pictures for the scale was based on the earlier works of Terman (1925), Benjamin (1932), and Rabban (1950). Rabban compiled a list of 20 toys, some considered masculine and some feminine, from department stores and advertisements. This list was submitted to a large sample of adults who were asked which they would buy for a boy and which for a girl. The items that were most often selected for boys (i. e., steamroller, dumptruck, auto racer, fire truck, soldiers, cement mixer, knife, gun) and those most often selected for girls (i. e., baby doll, doll buggy, high chair, bathinette, doll dishes, bed, purse, necklace) were used in his study. Brown added pictures of activities and figures commonly associated with our culture's masculine and feminine roles to this list of 20 toys in developing the ITSC.

The ITSC consists of 36 picture cards, 3 x 4 inches, depicting various toys, figures, and activities commonly associated with male and female roles in our culture. The subject is shown a child stick-figure, considered ambiguous with respect to sex, and asked to make choices for this child-figure, whose name is "IT." It is assumed that as the child chooses these items for the IT figure, he is revealing his

own sex-role preference.

The ITSC is divided into three sections. The Toy Pictures Section consists of 16 pictures of toys presented to the child in groups of four. Two are considered masculine (i. e., tractor, dump truck) and two are considered feminine (i. e., necklace, doll). The child is asked to "choose a toy 'IT' would like to play with." Two choices are made for each set of four pictures. The Eight Paired Pictures Section includes eight pairs of pictures, one considered masculine (i. e., building tools) and one feminine (i. e., baking articles) in each pair. The child is shown a pair of pictures and asked to choose what "IT" would rather be or use. The Four Child-Figures Section includes pictures of four child-figures; a girl wearing a dress, a boy wearing a dress, a girl wearing pants, shirt and a tie, and a boy wearing pants, shirt and a tie. These figures are presented simultaneously and the child is asked to "choose the one 'IT' would rather be."

Reliability

The reliability of a test instrument refers to the extent to which repeated applications of the same test to the same subjects under the same conditions yields the same results. The test-retest method to determine reliability was used by Brown (1956) in his original study with the ITSC. Using the Pearson Product-Moment Correlation Method, reliability coefficients of .69 for boys and .82 for girls were

found for children five to six years of age. Hartup and Zook (1960) reported reliability coefficients of .66 for boys and .71 for girls three to four years of age. Borstellmann (1961) reported coefficients of .64 for boys and .80 for girls three to five years of age and also indicated that there was no evidence that the sex of the experimenter produced any consistent effect in the responses of the children to items in the ITSC.

Validity

The validity of a test indicates whether the test measures what it purports to measure. Brown (1956) drew from the works of Terman (1925), Benjamin (1932), and Rabban (1950) to establish operational validity for the ITSC. Sugawara (1971) suggests that the selection of items included in the ITSC were based on contrasting behavior patterns socially identified with the male and female roles in our culture. The choices for a train, trousers, and shaving articles were assumed indicative of preferences for the male role in our culture. The choices of dishes, dresses and cosmetics were assumed indicative of preferences for the female role in our culture.

Scoring Procedures

In Brown's (1956) scoring procedures masculine items were given weighted scores, the weight varying with each section of the

test. Feminine items were given zero scores. The child's total score was placed on a continuum from zero (very feminine) to 84 (very masculine). Scores above or below the median of 42 represented a relative degree of masculine or feminine preference, respectively.

In the present study parental stereotypes, in addition to Brown's cultural stereotypes, were used in scoring (see "administration of the ITSC to parents").

Procedures

Establishment of Rapport

The parents of all children enrolled in the three preschool programs established by the Family Life Department at Oregon State University agreed in advance to cooperate in research projects conducted through the department, therefore, obtaining cooperation from them for the present study posed no major difficulties. Parents appeared interested and willing to cooperate in providing the researcher with the data necessary for part of this research project.

In an attempt to facilitate the administration and increase the reliability of the results obtained in the present study, time was spent in establishing rapport with the children. Due to the fact that most of the children were already familiar with the researcher because she

had often participated in each program, only one day of visitation in each program was necessary to gain familiarity with most children. The children most familiar with the researcher were tested first. However, children were not selected in any order, but were asked to participate when they were not intensely involved in an activity.

When approaching a child for participation in the present study, the researcher said:

(Child's name), I'm back to play a game with the children.

Would you like your turn now?

A few children refused to participate when first asked. To these children the researcher said:

You don't want your turn yet, maybe later or tomorrow.

Only children who were willing to participate were used as subjects in the present study.

Testing Room

Two small rooms adjoining, but separate from the preschool classrooms, were used to test all children. The rooms contained a low table and two chairs, for the child and the researcher. In one room there were some shelves and books which were shielded from the child's view with wooden screens. In each of the rooms the low table faced a blank wall. The rooms were well lighted, with windows facing away from the preschool classroom.

Administration of the ITSC to Children

During administration of the ITSC to all children only one child and the researcher were present in the testing room. The child was seated at the low table to the right of the researcher. The research instrument was placed on the table so that the pictures were directly in front of the child. Brown's (1956) standard testing procedures were used to test all children.

Collection of data occurred during the first three weeks of April, 1971. Approximate testing time was five minutes per child.

Administration of the ITSC to Parents

A college classroom in the Home Economics Building at Oregon State University was used to test all parents of children used in the present study. Three evenings were set aside for testing in a classroom which held approximately 25 couples. Parents were requested to come together for testing. During testing all parents were seated at tables and chairs positioned toward a movie screen. The 36 items from the ITSC were projected individually onto the screen by an overhead projector in the same order as they appeared in the ITSC.

Parents were then asked to judge each of these items according to their own personal standards of masculinity and femininity. More specifically, parents were asked to judge the masculinity and

femininity of each item according to one of the five categories indicated below:

VM = very masculine, specifically defined as exclusively appropriate for boys;

M = masculine, specifically defined as predominantly appropriate for boys, but also appropriate for girls in some situations;

N = neutral, specifically defined as equally appropriate for both boys and girls;

F = feminine, specifically defined as predominantly appropriate for girls, but also appropriate for boys in some situations;

VF = very feminine, specifically defined as exclusively appropriate for girls.

In all cases, parents were asked to respond to the items presented on the screen only on the basis of what they saw in each pictured item, coupled with their own personal standards of masculinity and femininity. These data provided information regarding parental stereotypes of sex roles.

Instructions for administering the ITSC to parents and the score sheet are found in Appendix C. Collection of data occurred during the evenings of May 3, 4, and 5, 1971. Approximate testing time was one-half hour. In order to avoid contamination of the data, parents

were asked not to discuss their testing experience with other parents until all parents were tested. For parents who were not available on the evenings set aside for testing, another special time was appointed.

Parental stereotypes of sex roles for each item in the ITSC were compared with Brown's stereotypes of sex roles for each item. In these comparisons Brown's masculine (M) and feminine (F) categories describing each item in the ITSC were equated with parents' very masculine (VM) and very feminine (VF) categories, respectively.

Fathers' stereotypes of sex roles for each item in the ITSC were also compared with mothers' stereotypes of sex roles for each item. In these comparisons the fathers' very masculine, masculine, neutral, feminine, and very feminine categories describing each item in the ITSC were equated with mothers' very masculine, masculine, neutral, feminine, and very feminine categories, respectively.

Furthermore, parental stereotypes of sex roles for each item in the ITSC were used to determine the sex-role preferences of the children. The categories very masculine, masculine, and neutral represented a masculine choice defined by the parent for an item, while the categories very feminine, feminine, and neutral represented a feminine choice defined by the parent. For example, a boy's choice of an item was scored as masculine if the parent defined the item as very masculine, masculine, or neutral, however, it was scored as feminine if the parent defined the item as very feminine or feminine.

The reverse was true for girls. As in Brown's (1956) scoring procedures, masculine choices were given a weighted score, the weight varying with each section of the test. Feminine choices were given zero. In the Child-Figures Section a masculine choice was given 12 points, while a feminine choice was given zero.

Brown's cultural stereotypes of sex roles were obtained by scoring children's preferences for items in the ITSC according to Brown's original scoring procedures, as mentioned in the "instruments" section of the present study. The children's sex-role preferences based on parental stereotypes of sex roles were compared with children's sex-role preferences based on Brown's cultural stereotypes of sex roles.

CHAPTER IV

RESULTS

The purpose of the present study was to explore preschool-aged children's sex-role preferences as they relate to both culturally and parentally defined stereotypes of sex roles. Forty-seven children, 25 boys and 22 girls of preschool ages, and their parents acted as subjects for the present study. All children were enrolled in one of three preschool programs established by the Family Life Department at Oregon State University.

Tests of Hypotheses

Five null hypotheses were generated for this study. The binomial method was used to test Hypotheses I, II, and III. This statistic was used to determine whether the results obtained differed significantly from chance. The formula for the binomial method is:

$$z = \frac{X - M}{\sqrt{npq}}$$

where X represents the total number of disagreements occurring in the sample, M represents the mean number of disagreements in the binomial distribution, and \sqrt{npq} represents the standard deviation of the binomial distribution (Downie and Heath, 1965).

The paired-difference t-test and descriptive statistics were

used to test Hypotheses IV and V. Tests of sex and age comparisons were used to generate t-values. The formula for the paired-difference t-test is:

$$t = \frac{\bar{d}}{\sqrt{s_d^2/n-1}}$$

where \bar{d} refers to the mean of the differences between the children's sex-role preferences on two measurements and $\sqrt{s_d^2/n-1}$ refers to the standard deviation of these differences (Downie and Heath, 1965).

The results of the tests of hypotheses are presented individually. A probability level of .05 or beyond was used as the significance level for testing all hypotheses.

Hypothesis I

Hypothesis I: Comparisons of Brown's cultural and fathers' stereotypes of sex roles will reveal no significant disagreements.

Table 3 presents a summary of the findings regarding comparisons between Brown's stereotypes of sex roles and fathers' stereotypes of sex roles for each item of the ITSC. These findings reveal that fathers significantly disagreed ($p < .05$; $p < .01$) with Brown's cultural stereotypes of sex roles on 31 of the 36 items (86.1%) found in the ITSC. The null hypothesis, therefore, is rejected for these items.

Items for which the null hypothesis could not be rejected

Table 3. Comparison of Brown's Cultural Stereotypes of Sex Roles and Fathers' Stereotypes of Sex Roles for Each Item in the ITSC.

Item	Agree	Disagree	Item	Agree	Disagree
1. necklace	20	27*	20. dress	34	13**
2. dumptruck	4	43**	21. sewing materials	5	42**
3. tractor	5	42**	22. airplane parts	6	41**
4. doll	8	39**	23. cosmetic articles	25	22
5. train engine	3	44**	24. shaving articles	21	26
6. purse	15	32**	25. mechanical tools	2	45**
7. high chair	2	45**	26. household objects	3	44**
8. gun (rifle)	17	30**	27. men's shoes	7	40**
9. cradle	7	40**	28. women's shoes	18	29**
10. racer	0	47**	29. girls playing	1	46**
11. earthmover	9	38**	30. boys playing	1	46**
12. dishes	2	45**	31. building tools	7	40**
13. soldiers	4	43**	32. baking articles	0	47**
14. baby bath	15	32**	33. girl	28	19**
15. doll buggy	13	34**	34. boyish girl (girl dressed as boy)	8	39**
16. knife	13	34**	35. girlish boy (boy dressed as girl)	8	39**
17. Indian princess	8	39**	36. boy	28	19**
18. Indian chief	9	38**			
19. trousers & shirt	4	43**			

**
z = 2.06, p = .01

*
z = 1.56, p = .05

included: items 20 (dress), 33 (girl child-figure) and 36 (boy child-figure) where fathers agreed ($p < .01$) with Brown, and items 23 (cosmetic articles) and 24 (shaving articles) where fathers, as a group, neither agreed nor disagreed with Brown.

Hypothesis II:

Hypothesis II: Comparisons of Brown's cultural and mothers' stereotypes of sex roles will reveal no significant disagreements.

Table 4 presents a summary of the findings regarding comparisons between Brown's cultural stereotypes of sex roles and mothers' stereotypes of sex roles for each item of the ITSC. These findings reveal that mothers significantly disagreed ($p < .05$; $p < .01$) with Brown's cultural stereotypes of sex roles on 31 of the 36 items (86.1%) found in the ITSC. The null hypothesis, therefore, is rejected for these items.

Items for which the null hypothesis could not be rejected included: items 29 (dress) and 33 (girl child-figure) where mothers agreed ($p < .05$) with Brown, and items 1 (necklace), 23 (cosmetic articles), and 36 (boy child-figure) where mothers, as a group, neither agreed or disagreed with Brown.

Table 4. Comparison of Brown's Cultural Stereotypes of Sex Roles and Mothers' Stereotypes of Sex Roles for Each Item in the ITSC.

Item	Agree	Disagree	Item	Agree	Disagree
1. necklace	24	23	20. dress	27	20*
2. dumptruck	1	46**	21. sewing materials	2	45**
3. tractor	4	43**	22. airplane parts	5	42**
4. doll	4	43**	23. cosmetic articles	22	25
5. train engine	2	45**	24. shaving articles	20	27*
6. purse	11	36**	25. mechanical tools	4	43**
7. high chair	2	45**	26. household objects	8	39**
8. gun (rifle)	16	31**	27. men's shoes	6	41**
9. cradle	7	40**	28. women's shoes	12	35**
10. racer	1	46**	29. girls playing	1	46**
11. earthmover	4	43**	30. boys playing	1	46**
12. dishes	3	44**	31. building tools	6	41**
13. soldiers	6	41**	32. baking articles	1	46**
14. baby bath	8	39**	33. girl	27	20*
15. doll buggy	6	41**	34. boyish girl (girl dressed as boy)	9	38**
16. knife	12	35**	35. girlish boy (boy dressed as girl)	9	38**
17. Indian princess	7	40**	36. boy	25	22
18. Indian chief	6	41**			
19. trousers & shirt	6	41**			

**
z = 2.06, p = .01

*
z = 1.56, p = .05

Hypothesis III

Hypothesis III: Comparisons of fathers' and mothers' stereotypes of sex roles will reveal no significant disagreements.

Table 5 presents a summary of the findings regarding comparisons between fathers' stereotypes of sex roles and mothers' stereotypes of sex roles for each item in the ITSC. Findings reveal that fathers significantly disagreed ($p < .05$; $p < .01$) with mothers' stereotypes of sex roles on only 5 of the 36 items (13.9%) found in the ITSC (Items 11, 21, 34, 35, 36). The null hypothesis, therefore, is rejected for these items.

Items for which the null hypothesis could not be rejected included 10 of the 36 items (27.8%) where fathers agreed with mothers and 21 of the 36 items (58.3%) where fathers and mothers did not significantly agree or disagree.

Hypothesis IV

Hypothesis IV: Boys' sex-role preferences based on Brown's cultural and parents' (fathers' and mothers') stereotypes of sex roles will reveal no significant differences.

Table 6 presents a summary of the comparisons between boys' sex-role preferences based on Brown's stereotypes of sex roles and on their parents' (fathers' and mothers') stereotypes of sex roles.

Table 5. Comparison of Fathers' Stereotypes of Sex Roles and Mothers' Stereotypes of Sex Roles for Each Item in the ITSC.

Items	Agree	Disagree	Items	Agree	Disagree
1. necklace	23	24	20. dress	25	22
2. dumptruck	33	14*	21. sewing materials	28	19*
3. tractor	26	21	22. airplane parts	27	20
4. doll	27	20	23. cosmetic articles	26	21
5. train engine	21	26	24. shaving articles	23	24
6. purse	18	29**	25. mechanical tools	26	21
7. high chair	29	18**	26. household objects	31	16**
8. gun (rifle)	21	26	27. men's shoes	25	22
9. cradle	28	19*	28. women's shoes	24	23
10. racer	26	21	29. girls playing	44	3**
11. earthmover	32	15**	30. boys playing	42	5**
12. dishes	29	18**	31. building tools	25	22
13. soldiers	23	24	32. baking articles	28	19*
14. baby bath	20	27	33. girl	22	25
15. doll buggy	27	20	34. boyish girl (girl dressed as boy)	15	32**
16. knife	30	17**	35. girlish boy (boy dressed as girl)	19	28*
17. Indian princess	22	25	36. boy	19	28*
18. Indian chief	24	23			
19. trousers & shirt	21	26			

**
z = 2.06, p = .01

*
z = 1.56, p = .05

Table 6. Comparison of Boys' Sex Role Preferences Based on Brown's Cultural Stereotypes of Sex Roles and on their Parents' (Fathers' and Mothers') Stereotypes of Sex Roles.

Group	N	Comparisons											
		Brown vs Father				Brown vs Mother				Father vs Mother			
		\bar{X}_B	\bar{X}_F	s_e	t	\bar{X}_B	\bar{X}_M	s_e	t	\bar{X}_F	\bar{X}_M	s_e	t
Boys	25	60.12	66.88	1.87	-3.98**	60.12	66.56	1.80	-3.59**	66.88	66.56	1.06	.302
Older	14	63.57	70.71	2.52	-2.83*	63.57	68.43	2.25	-1.92 ⁺	70.71	68.43	1.44	1.59
Younger	11	55.73	62.00	2.92	-2.68*	55.73	64.18	2.51	-3.37**	62.00	64.18	1.22	-1.79

**t = 2.797 (total sample) with 24 d. f. ; 3.012 (older) with 13 d. f. ; 3.169 (younger) with 10 d. f. ; significant at the 1% level.

*t = 2.064 (total sample) with 24 d. f. ; 2.160 (older) with 13 d. f. ; 2.228 (younger) with 10 d. f. ; significant at the 5% level.

⁺t = 1.711 (total sample) with 24 d. f. ; 1.771 (older) with 13 d. f. ; 1.812 (younger) with 10 d. f. ; significant at the 10% level.

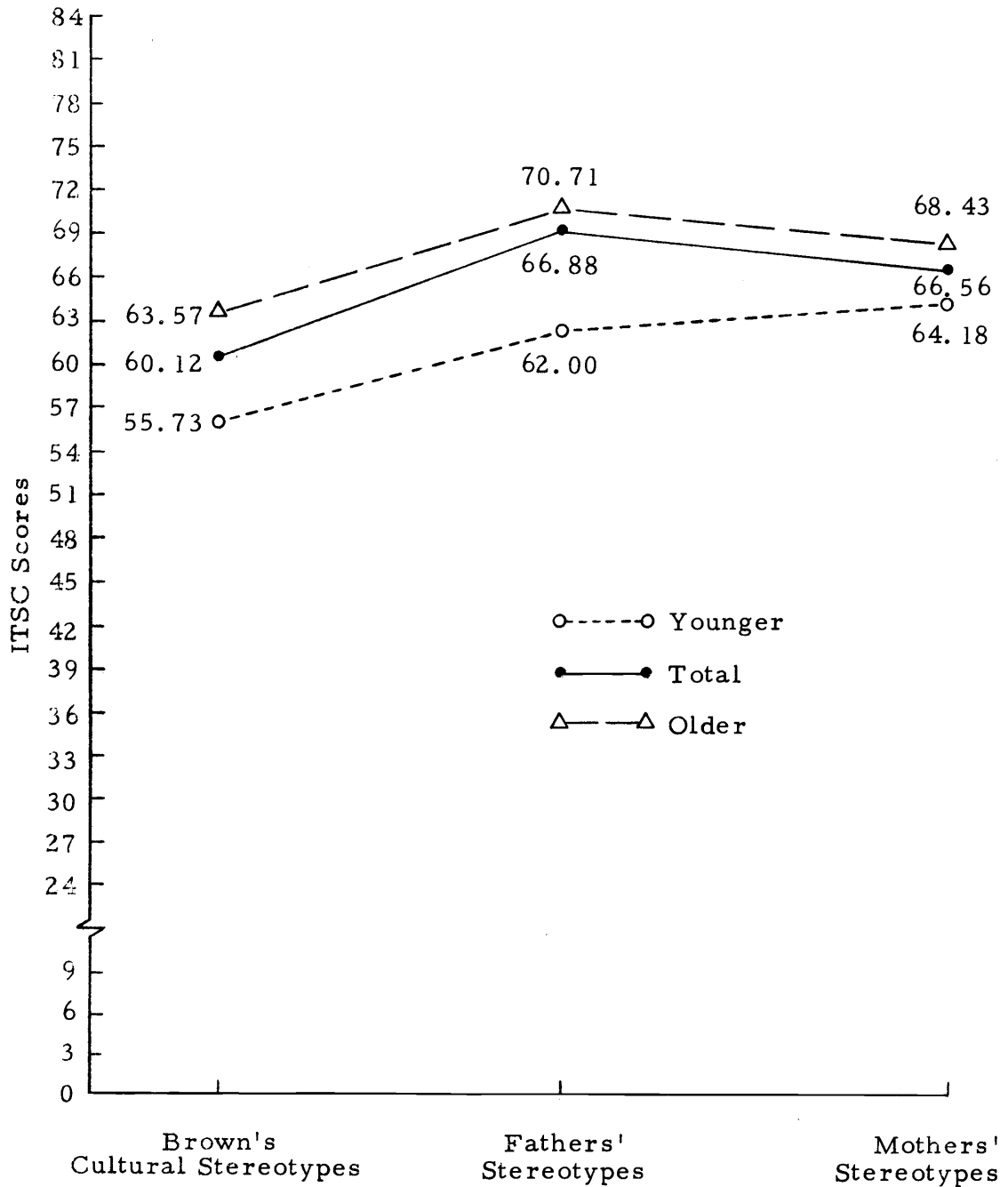


Figure 1. Comparison of the Differences Among the Means of Boys' Sex-Role Preferences Based on Brown's Cultural Stereotypes of Sex Roles and on Their Parents' (Fathers' and Mothers') Stereotypes of Sex Roles.

Findings reveal that boys had significantly more masculine sex-role preferences when their preferences were based on their parents' (fathers' and mothers', $p < .01$) rather than on Brown's cultural stereotypes of sex roles. This was also true for younger boys (fathers', $p < .05$; mothers', $p < .01$). However, for older boys, only the difference between their sex-role preferences based on their fathers' and on Brown's cultural stereotypes of sex roles reached statistical significance ($p < .05$). The null hypothesis, therefore, is rejected for these variables. It should be noted that while not statistically significant, older boys tended to have more masculine sex-role preferences based on their mothers' than on Brown's cultural stereotypes of sex roles ($p < .10$).

The difference between boys' sex-role preferences based on their mothers' and on their fathers' stereotypes of sex roles was not statistically significant. This was true for both older and younger boys in the present study. The null hypothesis, therefore, is not rejected for these variables. It should be noted, however, that older boys had slightly more masculine sex-role preferences when their preferences were based on their fathers' stereotypes of sex roles, while younger boys had slightly more masculine sex-role preferences when their preferences were based on their mothers' stereotypes of sex roles. A graphic presentation of the differences between the means of boys' sex-role preferences based on Brown's cultural

stereotypes of sex roles and on their parents' (fathers' and mothers') stereotypes of sex roles is found in Figure 1.

Hypothesis V

Hypothesis V: Girls' sex-role preferences based on Brown's cultural and on parents' (fathers' and mothers') stereotypes of sex roles will reveal no significant differences.

Table 7 presents a summary of the comparisons between girls' sex-role preferences based on Brown's cultural stereotypes of sex roles and on their parents' (fathers' and mothers') stereotypes of sex roles. Findings reveal that girls had significantly more feminine sex-role preferences when their preferences were based on their parents' (fathers' and mothers', $p < .01$) than on Brown's cultural stereotypes of sex roles. This was also true for older (fathers', $p < .05$; mothers', $p < .01$) and younger (fathers' and mothers', $p < .01$) girls in the present study. The null hypothesis, therefore, is rejected for these variables.

The difference between girls' sex-role preferences based on their fathers' and on their mothers' stereotypes of sex roles was not statistically significant. This was also true for older and younger girls in the present study. The null hypothesis, therefore, is not rejected for these variables. It should be noted, however, that older girls had slightly more feminine sex-role preferences when their

Table 7. Comparison of Girls' Sex-Role Preferences Based on Brown's Cultural Stereotypes of Sex Roles and on their Parents' (Fathers' and Mothers') Stereotypes of Sex Roles.

Group	N	Comparisons											
		Brown vs Father				Brown vs Mother				Father vs Mother			
		\bar{X}_B	\bar{X}_F	s_e	t	\bar{X}_B	\bar{X}_M	s_e	t	\bar{X}_F	\bar{X}_M	s_e	t
Girls	22	42.96	23.27	3.06	6.03**	42.96	24.32	3.20	5.83**	23.27	24.32	3.42	-.412
Older	12	41.50	21.00	7.59	2.70*	41.50	24.75	4.42	3.79**	21.00	24.75	4.90	-.764
Younger	10	44.70	26.00	3.68	5.08**	44.70	23.80	4.37	4.78**	26.00	23.80	4.77	.293

**t = 2.831 (total sample) with 21 d. f. ; 3.106 (older) with 11 d. f. ; 3.250 (younger) with 9 d. f. ; significant at the 1% level.

*t = 2.080 (total sample) with 21 d. f. ; 2.201 (older) with 11 d. f. ; 2.262 (younger) with 9 d. f. ; significant at the 5% level.

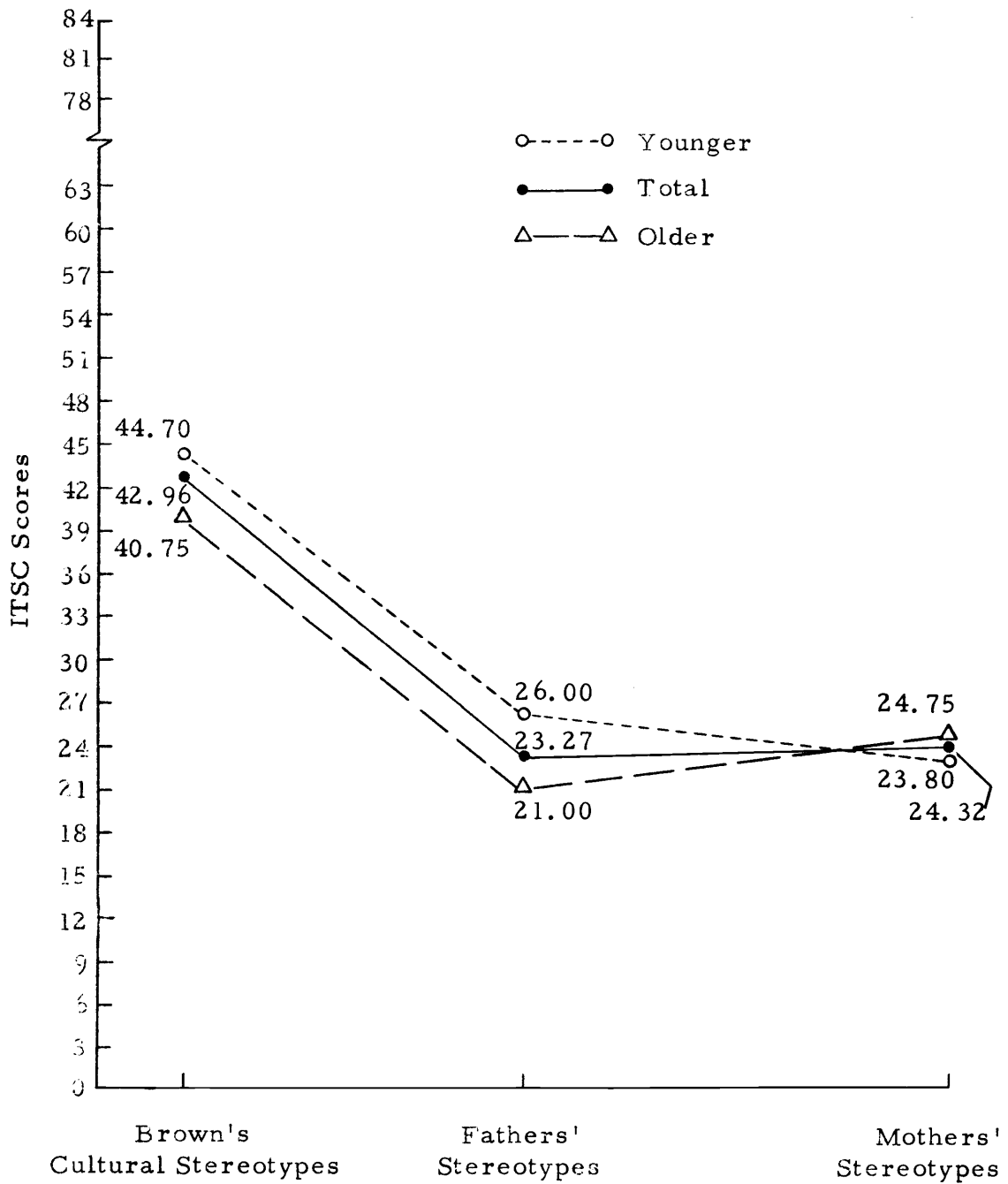


Figure 2. Comparison of the Differences Among the Means of Girls' Sex-Role Preferences Based on Brown's Cultural Stereotypes of Sex Roles and on Their Parents' (Fathers' and Mothers') Stereotypes of Sex Roles.

preferences were based on their mothers' stereotypes of sex roles, while younger girls had slightly more feminine sex-role preferences when their preferences were based on their fathers' stereotypes of sex roles. A graphic presentation of the differences between the means of girls' sex-role preferences based on Brown's cultural stereotypes of sex roles and on their parents' (fathers' and mothers') stereotypes of sex roles is presented in Figure 2.

CHAPTER V

SUMMARY AND DISCUSSION

Summary

Current theoretical discussions or reviews of research on sex-role preferences among young children almost always report results which have been obtained with the IT Scale for Children (ITSC). This test consists of pictures of toys, activities and figures, commonly associated with the masculine and feminine sex roles in our culture. Test procedures require that the child choose from among the variety of pictures presented to him those which the IT figure would like to have, play with or be like. The IT figure is presumed to be ambiguous with respect to sex; therefore, it is assumed that when the child makes his choices for the IT figure from among the pictures presented to him, he is indirectly revealing his own sex-role preference.

Although the ITSC is based on cultural stereotypes of the masculine and feminine sex roles, Brown (1958) suggested a weakness in his instrument due to the changing notion of masculinity and femininity in our culture. More important, however, he noted that patterns of parental roles and responsibilities have also changed. These changes, he indicated, must play a role in influencing a child's

perception of what is masculine and what is feminine.

A wide variety of parental variables have been shown to be positively related to the development of sex-role preferences among young children. Some of these variables include parental punitiveness, parental nurturance, parental power, parental masculinity and femininity, parental availability and parental encouragement of children's involvement in sex-typed activities.

Lynn (1959) suggested that the age and sex of children should also be considered in research or discussions regarding the relationship between parents and their children's sex-role development. He postulated that initially boys and girls identify with their mothers. Girls retain this identification, while boys must shift to an identification with the masculine role. Since the father is not readily available in the home, the boy learns a culturally stereotyped masculine-role identification from his mother and female teachers. Consequently, Lynn (1962) hypothesized that the girl learns specific mother identification, while the boy learns cultural masculine-role identification.

The primary purpose of the present study was to explore preschool-aged children's sex-role preferences as they relate to both cultural and parental stereotypes of sex roles.

The subjects of the present study were 47 children enrolled in three preschool programs established by the Family Life Department at Oregon State University, and their parents (fathers and mothers).

Children were divided into sex and age groups for analysis. Each of the children was given the ITSC to obtain their sex-role preferences. The parents were asked to judge each of the items found in the ITSC in terms of their own personal standards of masculinity and femininity. These judgements were used to determine parental stereotypes of sex roles, while Brown's (1956) original selection of masculine and feminine items in the ITSC were used as cultural stereotypes of sex roles.

The following hypotheses were tested:

Hypothesis I: Comparisons of Brown's cultural and fathers' stereotypes of sex roles will reveal no significant disagreements.

Hypothesis II: Comparisons of Brown's cultural and mothers' stereotypes of sex roles will reveal no significant disagreements.

Hypothesis III: Comparisons of fathers' and mothers' stereotypes of sex roles will reveal no significant disagreements.

Hypothesis IV: Boys' sex-role preferences based on Browns' cultural and parents' (fathers' and mothers') stereotypes of sex roles will reveal no significant differences.

Hypothesis V: Girls' sex-role preferences based on Brown's cultural and parents' (fathers' and mothers') stereotypes of sex roles will reveal no significant differences.

The binomial method was used to test Hypotheses I, II, and III, while the paired-difference t-test and descriptive statistics were used to test Hypotheses IV and V. A probability level of .05 or beyond was used as the significance level for all hypotheses tested. A summary of the results obtained in the present study is presented according to each hypothesis tested.

Hypothesis I

There were significant disagreements between fathers' stereotypes of sex roles and Brown's cultural stereotypes of sex roles on 31 of the 36 items (86.1%) found in the ITSC ($p < .05$; $p < .01$).

Hypothesis II

There were significant disagreements between mothers' stereotypes of sex roles and Brown's cultural stereotypes of sex roles on 31 of the 36 items (86.1%) found in the ITSC ($p < .05$; $p < .01$).

Hypothesis III

There were significant disagreements between fathers' and mothers' stereotypes of sex roles on 5 of the 36 items (13.9%) found in the ITSC ($p < .05$; $p < .01$), while there were significant agreements between fathers' and mothers' stereotypes of sex roles on 10 of the 36 items (27.8%) found in the ITSC ($p < .05$; $p < .01$). However,

there were no significant disagreements or agreements between fathers' and mothers' stereotypes of sex roles on 21 of the 36 items (58.3%) found in the ITSC.

Hypothesis IV

Boys had significantly more masculine sex-role preferences when their preferences were based on their parents' (fathers' and mothers', $p < .01$) than on Brown's cultural stereotypes of sex roles. This was also true for younger boys (fathers', $p < .05$ and mothers', $p < .01$). However, among older boys, only the difference between their sex-role preferences based on their fathers' and on Brown's stereotypes of sex roles reached statistical significance ($p < .05$). While not statistically significant, older boys tended to have more masculine sex-role preferences based on their mothers' than on Brown's stereotypes of sex roles ($p < .10$).

Boys did not have significantly more masculine sex-role preferences when their preferences were based on their fathers' than on their mothers' stereotypes of sex roles. This was true for both older and younger boys. However, older boys had slightly more masculine sex-role preferences when their preferences were based on their fathers' stereotypes of sex roles, while younger boys had slightly more masculine sex-role preferences when their preferences were based on their mothers' stereotypes of sex roles.

Hypothesis V

Girls had significantly more feminine sex-role preferences when their preferences were based on their parents' (fathers' and mothers', $p < .01$) than on Brown's cultural stereotypes of sex roles. This was also true for both older (fathers', $p < .05$ and mothers', $p < .01$) and younger (fathers' and mothers', $p < .01$) girls in the present study.

Girls did not have significantly more feminine sex-role preferences when their preferences were based on their mothers', than on their fathers' stereotypes of sex roles. This was true for both older and younger girls. However, older girls had slightly more feminine sex-role preferences when their preferences were based on their mothers' stereotypes of sex roles, while younger girls had slightly more feminine sex-role preferences when their preferences were based on their fathers' stereotypes of sex roles.

Discussion

A discussion of the results obtained in the present study is presented under sub-headings of the hypotheses tested.

Hypotheses I and II

Findings obtained under Hypotheses I and II revealed that both

fathers and mothers of children in the present sample significantly disagreed with Brown's cultural stereotypes of sex roles on 31 of the 36 items found in the ITSC (86.1%). Working on the assumption that the world of young children is often limited to their family situations (Garner and Wenar, 1959; Rutherford, 1964; Wenar, Handon and Garner, 1962) and that in these family situations parents are the primary mediators of our culture's stereotypes of sex roles (Fauls and Smith, 1956; Harsh and Schrickel, 1950; Tyler, Tyler and Rafferty, 1966), these findings suggest that in any study of children's sex-role preferences, it seems wise to consider parental contributions to children's sex-role development. A wide variety of parental variables have been shown to be related to the development of sex-role preferences among young children (Biller, 1968a, b, 1969a, b; Hetherington, 1965, 1967; Mussen and Distler, 1959, 1960; Mussen and Parker, 1965; Mussen and Rutherford, 1963; Rutherford, 1964).

Furthermore, the findings of the present study with respect to parental stereotypes of sex roles, raise important questions in relation to the adequacy of the ITSC as a measure of present day sex-role preferences. These questions are indicated by the significant disagreements between parents' and Brown's cultural stereotypes of sex roles.

A number of studies provide evidence regarding the changing sex roles in our culture over the last decade (Vincent, 1966; Vogel, 1970).

Some of these changing stereotypes of sex roles in our culture are explored in the "limitations of the instruments" section of the present study. If these limitations can be corrected, or if a new instrument to measure sex-role preferences among young children can be developed, parents' and our culture's stereotypes of sex roles may not differ to the extent found in the present study.

Hypothesis III

The findings obtained under Hypothesis III indicated that fathers and mothers significantly agreed (27.8%) on more items found in the ITSC than they disagreed (13.9%), with respect to their own stereotypes of sex roles. However, the finding that parents did not agree or disagree on a majority of these items (58.3%) suggests that in studying children's sex-role preferences, it may be wise to consider the separate contributions of both fathers and mothers to the development of their children's sex-role preferences. A number of studies provide information regarding the differential effects of both fathers and mothers in the development of sex-role preferences among young children (Hetherington, 1965, 1967; Mussen and Parker, 1965; Mussen and Rutherford, 1963). These studies indicated that fathers and mothers do differ in the manner in which they contribute to the development of their children's sex-role preferences.

Hypothesis IV

The findings obtained under Hypothesis IV that boys had more masculine sex-role preferences when their preferences were based on their parents' (fathers' and mothers'), than on Brown's cultural stereotypes of sex roles supports Brown's (1958) notion regarding the important contributions of parents in the development of their sons' sex-role preferences. With respect to boys' sex-role preferences as they relate to their mothers' stereotypes of sex roles, the finding that boys had significantly more masculine sex-role preferences when their preferences were based on their mothers' rather than on Brown's cultural stereotypes of sex roles is in support of Lynn's (1962) theoretical position that boys initially identify with their mothers rather than with the cultural stereotype of the masculine role. This appears to hold true for both older and younger boys in the present study. Furthermore, if the finding that younger boys, as compared with older boys, had slightly more masculine sex-role preferences when their preferences were based on their mothers' rather than on their fathers' stereotypes of sex roles, can be taken as an indication of the development of sex-role preferences among boys, then this finding would suggest support for Lynn's (1962) notion regarding the developmental aspects of sex-typing among boys. He suggests that younger boys identify with their mothers more than older boys, since older boys begin to shift in their identification from their mothers

to a culturally stereotyped masculine role.

However, with respect to boys' sex-role preferences as they relate to their fathers' stereotypes of sex roles, findings in the present study may suggest a weakness in Lynn's (1962) theoretical position. In relegating the fathers' contributions in the development of their sons' sex-role preferences to one of providing only a "general" model for paternal identification, Lynn (1962) may have underestimated the relative contributions of fathers, and overestimated the relative contributions of mothers in their sons' sex-role development. If the present findings that (1) boys had significantly more masculine sex-role preferences when their preferences were based on their fathers', rather than on Brown's cultural stereotypes of sex roles, and (2) older boys, as compared with younger boys, had slightly more masculine sex-role preferences when their preferences were based on their fathers', rather than their mothers' stereotypes of sex roles, can be taken as an indication of the development of boys' sex-role preferences, then these findings suggest that the fathers' contributions to their sons' sex-role preferences may be much more important than Lynn (1962) suggests. Several studies are available which provide information regarding the crucial role of fathers in facilitating appropriate sex-role development among boys (Biller, 1968a, 1969a; Mussen and Distler, 1959, 1960; Mussen and Rutherford, 1963).

Hypothesis V

The findings obtained in Hypothesis V that girls had significantly more feminine sex-role preferences when their preferences were based on their parents' (fathers' and mothers') rather than on Brown's cultural stereotypes of sex roles, confirms Brown's (1958) notion regarding the important contributions of parents in the development of their daughters' sex-role preferences. With respect to girls' sex-role preferences as they relate to their mothers' stereotypes of sex roles, the finding that girls had significantly more feminine sex-role preferences when their preferences were based on their mothers' rather than on Brown's cultural stereotypes of sex roles supports Lynn's (1962) theoretical position that girls initially identify with their mothers. This appears to hold true for both older and younger girls in the present study. Furthermore, if the finding that older girls, as compared with younger girls, had slightly more feminine sex-role preferences when their preferences were based on their mothers', rather than on their fathers' stereotypes of sex roles, can be taken as an indication of the development of girls' sex-role preferences, then this finding may indicate support for Lynn's (1962) notions regarding the developmental aspects of sex-typing among young girls. He suggests that older girls identify more with their mothers than younger girls, since with increasing age, older girls would have

learned much more appropriate sex-typed roles from their mothers than younger girls because they have identified with their mothers for a longer period of time.

However, with respect to girls' sex-role preferences as they relate to their fathers' stereotypes of sex roles, findings again suggest a weakness in Lynn's (1962) theoretical position. In overlooking the relative contributions of fathers to the development of their daughters' sex-role preferences, Lynn (1962) may have underestimated the important father-daughter relationship in girls' sex-role development. If the findings that (1) girls had significantly more feminine sex-role preferences when their preferences were based on their fathers', rather than on Brown's cultural stereotypes of sex roles, and (2) younger girls had slightly more feminine sex-role preferences when their preferences were based on their fathers', rather than on their mothers' stereotypes of sex roles, can be taken as an indication of the development of girls' sex-role preferences, then these findings provide important information overlooked by Lynn (1962) regarding the relative influence of fathers in the development of their daughters' sex-role preferences. Recently, Johnson (1963) argued for the crucial role of fathers in facilitating the development of appropriate sex-role preferences among girls, as well as boys. This theoretical position rests upon the assumption that fathers differentiate their roles in interaction with same- and opposite-sex children,

while mothers do not. In doing this, fathers facilitate the development of appropriate sex roles among children of both sexes. A few studies are available which provide information regarding the role of fathers in facilitating appropriate sex-role development among girls (Doherty, 1970; Mussen and Rutherford, 1963; Rutherford, 1964). More research is needed to delineate the relative contributions of fathers to their daughters' sex-role development.

A general question emerges here in reference to the significant findings obtained under Hypotheses I, II, IV and V. Common to each of these hypotheses is the question of similarity between the original standardization sample Brown (1956) used to determine cultural stereotypes of sex roles, and the sample used in the present study to determine parental stereotypes of sex roles. If the samples are very divergent, then the significant differences obtained in this study could be accounted for on the basis of this difference. While a precise description of Brown's (1956) standardization sample is not available, he does indicate that in selecting items for the ITSC he drew heavily upon the earlier works of Terman (1925), Benjamin (1932), and Rabban (1950). Terman's (1932) sample consisted of subjects from predominantly the middle socioeconomic class; Benjamin's (1932) sample included subjects from the professional, commercial and industrial occupational groups, with a sizeable university population, while Rabban's (1950) subjects were graduate students in education. Since the sample of the present study consisted of subjects from the upper-middle and middle socioeconomic classes (Hollingshead, 1957),

including a sizeable university population, it was assumed that little difference existed between the sample of the present study and Brown's (1956) sample.

Limitations of the Study

Although steps were taken to overcome a number of limitations in the present study, still a variety of problems were encountered which may have individually or collectively influenced the results obtained. These limitations are briefly discussed under the sub-headings of the sample, children's instrument, parents' instrument, and control of variables.

Sample

Major limitations encountered in reference to the sample of the present study included (1) the restriction of the sample to children from families with middle and upper-middle socioeconomic backgrounds, (2) restriction of the sample to children from university-oriented families, (3) restriction of the sample to children from the Caucasian race, and (4) the sample size.

The restrictions of the sample to children from middle and upper-middle socioeconomic backgrounds, from university-oriented families, and from the Caucasian race suggest that generalization of the results obtained to a larger, more varied population is quite limited. Furthermore, although age and sex differences were considered in the present study, inferences must be drawn from these results with caution, due to the limited size of these groups.

Children's Instrument

There are a number of limitations regarding the adequacy of the ITSC as a measure of children's sex-role preferences. Recently, studies have accumulated indicating that the presumed ambiguous IT figure may look more masculine, than either feminine or neuter, to young children (Hartup and Zook, 1960; Lansky, 1963; Reed and Asbjornsen, 1968). If, as some of these studies suggest, the IT figure does look more masculine than either feminine or neuter, then the results of children's sex-role preferences obtained in the present study may be highly questionable, especially among girls. There are other studies, however, that provide evidence in support of the ambiguity of the IT figure (Endsley, 1967; Lansky and McKay, 1963).

Aside from the controversy concerning the ambiguity of the IT figure, other serious problems of the ITSC were encountered. After administering the ITSC to more than 47 preschool-aged children, the researcher noted that there were marked variations in the clarity of the drawings of the "masculine" as compared with the "feminine" items in the test. As indicated by Schell and Silber (1968), masculine items appear to be more clearly illustrated than feminine ones. Furthermore, the categories of masculine toys appear more easily distinguishable than the categories of feminine toys. These factors may have led children to favor recognition and choice of the "masculine" over the "feminine" items. Another problem occurred to the researcher after administration of the ITSC. Some of the younger children did not seem aware of all four pictures presented

simultaneously in the Toy Pictures Section, possibly suggesting that the number of pictures per page should be reduced.

Serious problems were also encountered in the Child-Figures Section of the test. In this section, the child is asked to choose from among four child-figures presented to him, which the IT figure would like to be. The pictures of these four child-figures were of (1) a girl wearing a dress, (2) a boy wearing a dress, (3) a girl wearing pants, shirt and a tie, and (4) a boy wearing pants, shirt and tie. For girls, a choice of a girl wearing a dress is considered the most "feminine" choice, followed by a girl wearing pants, shirt and a tie. With dramatic changes in women's fashions occurring within our culture today, it seems quite reasonable to question the adequacy of this section of the ITSC as a measure of children's sex-role preferences (Sugawara, 1971). Today changes in women's fashions indicate that on some occasions, women wearing pants, shirt and tie may be quite "feminine."

Finally, as indicated previously, it seems quite reasonable to question the entire ITSC as a measure of present day sex-role preferences for use with young children. What was considered as "masculine" or "feminine" during the time when Brown (1956) created this test may have markedly changed. The findings of the present study, that parents significantly disagreed with Brown's cultural stereotypes of sex roles on 31 of the 36 items (86.1%) found in the ITSC, can be used in support of this criticism.

Parents' Instrument

Several major limitations may have been operative when administering the pictured ITSC items to parents in obtaining their stereotypes of sex roles. While the directions for administering this instrument requested and clearly emphasized that parents judge these pictured ITSC items on the basis of their own personal standards of masculinity or femininity, the researcher had no way of checking whether this was actually the basis for their choices. Parents may still have made their judgements on the basis of present day cultural stereotypes of sex roles. Also, while parents were asked to judge the pictured ITSC items only on the basis of what they saw in each picture, the sequential presentation of these pictures may have affected their judgements, thus providing the researcher with biased judgements for each pictured ITSC item. Furthermore, although parents were asked not to discuss their testing experience with other parents until all parents were tested, the close friendships established among families within each of the preschool groups over the school year, and the fact that fathers and mothers were seated together during testing may have affected the results obtained. The researcher had no way of checking whether communications between friends of parents did or did not occur.

Finally, the presence of a neutral category in the parents' instrument may have markedly affected the results obtained on their stereotypes of sex roles. The presence of this neutral category may have led parents to choose this category most frequently, thus producing a "halo effect" in the data.

Control of Variables

A wide variety of pertinent variables that may have influenced the results of this study were left uncontrolled. A review of literature regarding parental contributions to children's sex-role preferences suggested that such parental characteristics as punitiveness, nurturance, power, masculinity, femininity, availability and encouragement were of great importance in understanding children's sex-role preferences. These variables were left uncontrolled in the present study. Furthermore, in each of three preschool programs from which the subjects came, personality variables of the teachers were left uncontrolled. Also, no attempt was made to control for other child and environmental variables such as ordinal position, sibling status, IQ, family structure and family size. These variables have been shown in previous research to be pertinent in understanding the development of sex roles among young children. All the problems encountered in this study, therefore, placed severe limitations on interpretations of the results obtained.

Suggestions for Further Research

Several suggestions for future research can be made from the present study on cultural and parental contributions to children's sex-role preferences.

Employment of a larger sample in order to understand the developmental aspects of sex-role preferences among young children is suggested. An analysis of sex and age differences undertaken in

the present study indicated interesting trends among boys and girls in both older and younger groups. A larger sample may allow for a clarification of these tendencies.

In reference to the measurement of children's sex-role preferences, it will continue to remain a debatable point whether the ITSC does indeed measure sex-role preferences among young children. In order to restore the believability of the ITSC as a measure of children's sex-role preferences, the IT figure could be varied in an attempt to develop a more neutral figure. Furthermore, specific items in the ITSC could be altered to fit present day stereotypes of sex roles. Marked changes in our culture's stereotypes of masculinity and femininity indicate that these alterations should be made before the ITSC is used again as a sex-role preference test.

Regarding the scoring procedures used in the present study, only parents' very masculine (VM) and very feminine (VF) categories were equated with Brown's masculine (M) and feminine (F) categories for comparisons on each item in the ITSC. In future studies the other categories of parental judgement (i. e., masculine, feminine and neutral) could be combined in various ways and compared with Brown's categories. Furthermore, in exploring the relationship between children's sex-role preferences as they related to both parents' and Brown's cultural stereotypes of sex roles, and analysis of each item on the ITSC may prove worthwhile (see Appendix D).

As the review of literature suggests, inclusion of a large variety of parental, child and environmental variables should also be taken into account when studying the development of children's sex-role preferences. Consideration of parental variables such as nurturance, punitiveness, power, masculinity, femininity, availability and encouragement; child variables such as ordinal position, sibling status, IQ, and other environmental variables such as family structure, family size and socioeconomic status, could provide us with pertinent information concerning the development of children's sex-role preferences. All these variables have been shown in previous research to be related to sex-role development among young children. An experimental research design might be employed to measure the influence of each of these variables, possibly to delineate both the separate and combined effects of these variables on the development of sex-role preferences among young children.

Finally the role of fathers in the development of children's sex-role preferences should be further explored. The present study, as well as several studies previously reviewed, suggest that fathers may contribute significantly to children's sex-role development in ways much more important than previously realized.

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APPENDICES

No. of brothers _____ No. of sisters _____ Ordinal position _____
(oldest, etc.)

Occupation _____

Rank or title (when applicable) _____

Business address _____ Phone _____

Education: High school: 7 8 9 10 11 12 (Circle one)

College: 13 14 15 16 17 18 19 20 21 22 (Circle one)

List Highest Degree(s) achieved _____

Field(s) of study _____

Religion (Please specify) _____

Race _____ Nationality _____

Health (Mark X on the scale) _____

Poor Good Excellent

Mother's History: Name _____ Age _____

Last First Middle

Birthplace _____

City State Country

No. of brothers _____ No. of sisters _____ Ordinal position _____
(oldest, etc.)

Occupation _____

Rank or title (when applicable) _____

Business address _____ Phone _____

Education: High School: 7 8 9 10 11 12 (Circle one)

College: 13 14 15 16 17 18 19 20 21 22 (Circle one)

List Highest Degree (s) achieved _____

Field (s) of study _____

Religion (Please specify) _____

Race _____ Nationality _____

Health (Mark X on the scale) _____

Poor Good Excellent

Siblings: List all children in the family in order of birth, oldest to youngest. Please include any deceased children and miscarriages.

Name	Sex	Age or age at death	Date of birth	Present school grade or highest	By previous marriage	Adopted
1.						
2.						
3.						
4.						

(Please use reverse side for additional children)

Other members of the household (include resident, nonrelated employees):

	Name	Sex	Relation to Child	Age
1.				
2.				
3.				

(Please use reverse side for additional information)

APPENDIX B

Sex and Age Distribution of Subjects in Preschool

Sex	Age (years/months)	Sex	Age (years /months)
M	5-3	F	5-2
M	5-3	F	5-2
M	4-11	F	5-2
M	4-9	F	5-1
M	4-7	F	5-0
M	4-7	F	4-11
M	4-5	F	4-5
M	4-4	F	4-5
M	4-4	F	4-2
M	4-3	F	4-2
M	4-3	F	4-2
M	4-2	F	4-1
M	4-2	F	4-0
M	4-1	F	4-0
M	4-0	F	3-10
M	3-11	F	3-9
M	3-10	F	3-8
M	3-10	F	3-8
M	3-9	F	3-7
M	3-9	F	3-7
M	3-8	F	3-6
M	3-7	F	3-6
M	3-7		
M	3-5		
M	3-3		

APPENDIX C

INSTRUCTIONS FOR ADMINISTRATION OF THE IT SCALE TO PARENTS

Written Instructions

Each numbered item on your answer sheet refers to a picture you will observe on the screen. These pictures are of toys, activities and figures familiar to children ages 2 through 5 years old. Numbers 1 through 16 are pictures of toys children play with; numbers 17 through 32 are pictures of activities children get involved in; numbers 33 through 36 are figures of children.

After you observe each picture, you will be asked to respond to it. Generally speaking, you are to judge the masculinity or femininity of each picture according to your own personal standards of masculinity or femininity. Specifically, your response to each picture is to be made in terms of one of five categories. These categories include:

VM = very masculine, specifically defined as exclusively appropriate for boys.

M = masculine, specifically defined as predominantly appropriate for boys, but also appropriate for girls in some situations.

N = neutral, specifically defined as equally appropriate for both boys and girls.

F = feminine, specifically defined as predominantly appropriate for girls, but also appropriate for boys in some situations.

VF = very feminine, specifically defined as exclusively appropriate for girls.

In all cases, your response to a picture is to depend only on what you see in the single picture, coupled with your own personal standards of masculinity and femininity.

You are to indicate your response to each picture by circling the appropriate category in each item found on your answer sheet. Respond by circling only one category for each item.

It is important that you answer each item as honestly as possible.

Oral Instructions

Please turn the page, and enter your name in the space provided on the answer sheet. This information will be coded thereby insuring that individual responses will be kept confidential.

Now let us begin with a few example items. As each item is pictured on the screen you will be given several seconds to study it. Please wait for the cue before you judge the item.

This is example item A. (Project airplane)

In looking at this picture, if you clearly feel this picture represents something exclusively appropriate for boys, circle the category VM as your response for Example item A.

If you feel this picture represents something predominantly appropriate for boys, but may be appropriate for girls in some situations, circle the category M as your response for Example item A.

If you feel this picture represents something equally appropriate for both boys and girls, circle the category N as your response for Example item A.

If you feel this picture represents something predominantly appropriate for girls, but may be appropriate for boys in some situations, circle category F as your response for Example item A.

If you feel this picture represents something exclusively appropriate for girls, circle category VF as your response for Example item A.

Now answer Example item A.

Do you have any questions?

This is Example item B. (Project three large rubber balls) (7 seconds)

Now answer Example item B.

Are there any questions on the example items before we begin the test?

This is item 1. (Project necklace)

Now answer item 1.

Answer Sheet

Name _____
 Father _____ Mother _____

Circle only one category per item.

EXAMPLE ITEMS:

Categories

	(very masculine)	(masculine)	(neutral)	(feminine)	(very feminine)
a.	VM	M	N	F	VF
b.	VM	M	N	F	VF

TEST ITEMS:

1.	VM	M	N	F	VF	19.	VM	M	N	F	VF
2.	VM	M	N	F	VF	20.	VM	M	N	F	VF
3.	VM	M	N	F	VF	21.	VM	M	N	F	VF
4.	VM	M	N	F	VF	22.	VM	M	N	F	VF
5.	VM	M	N	F	VF	23.	VM	M	N	F	VF
6.	VM	M	N	F	VF	24.	VM	M	N	F	VF
7.	VM	M	N	F	VF	25.	VM	M	N	F	VF
8.	VM	M	N	F	VF	26.	VM	M	N	F	VF
9.	VM	M	N	F	VF	27.	VM	M	N	F	VF
10.	VM	M	N	F	VF	28.	VM	M	N	F	VF
11.	VM	M	N	F	VF	29.	VM	M	N	F	VF
12.	VM	M	N	F	VF	30.	VM	M	N	F	VF
13.	VM	M	N	F	VF	31.	VM	M	N	F	VF
14.	VM	M	N	F	VF	32.	VM	M	N	F	VF
15.	VM	M	N	F	VF	33.	VM	M	N	F	VF
16.	VM	M	N	F	VF	34.	VM	M	N	F	VF
17.	VM	M	N	F	VF	35.	VM	M	N	F	VF
18.	VM	M	N	F	VF	36.	VM	M	N	F	VF

APPENDIX D

COMPARISONS OF CHILDREN'S AGREEMENT WITH BROWN'S CULTURAL AND
FATHERS' AND MOTHERS' STEREOTYPES OF SEX ROLES
FOR EACH ITEM IN THE ITSC

Item	<u>Brown/Father</u>																
	Agree with Brown						Agree with Father										
	Boys			Girls			Total		Boys			Girls			Total		
	Y	O	To*	Y	O	To	Y	O	Y	O	To	Y	O	To	Y	O	
1.	0	0	0	8	2	10	8	2	0	0	0	8	3	11	8	3	
2.	7	9	16	0	0	0	7	9	7	9	16	1	3	4	8	12	
3.	9	13	22	0	0	0	9	13	9	13	22	2	3	5	11	16	
4.	0	0	0	2	8	10	2	8	0	0	0	2	9	11	2	9	
5.	9	9	18	0	0	0	9	9	9	9	18	4	3	7	13	12	
6.	0	0	0	2	2	4	2	2	0	0	0	2	2	4	2	2	
7.	0	0	0	4	9	13	4	9	5	5	10	5	10	15	10	15	
8.	7	10	17	0	0	0	8	10	7	10	17	1	2	3	8	12	
9.	0	0	0	6	5	11	6	5	0	0	0	6	5	11	6	5	
10.	5	12	17	0	0	0	6	12	10	12	22	5	3	8	15	15	
11.	11	12	23	0	0	0	11	12	11	12	23	1	1	2	12	13	
12.	0	0	0	2	8	10	2	8	0	1	1	2	8	10	2	9	
13.	6	10	16	0	0	0	6	10	6	10	16	2	5	7	8	15	
14.	0	0	0	3	2	5	3	2	0	1	1	3	3	6	3	4	
15.	0	0	0	7	9	16	7	10	0	0	0	7	10	17	7	10	
16.	7	11	18	0	0	0	7	11	7	11	18	1	3	4	8	14	
17.	0	0	0	4	4	8	4	4	1	2	3	4	3	7	5	5	
18.	6	11	17	0	0	0	6	11	6	11	17	0	3	3	6	14	
19.	10	11	21	0	0	0	10	11	10	11	21	4	2	6	14	13	
20.	0	0	0	3	7	10	3	7	0	0	0	3	7	10	3	7	
21.	0	0	0	5	5	10	5	5	0	1	1	5	5	10	5	6	
22.	7	13	20	0	0	0	7	13	7	13	20	1	2	3	8	15	
23.	0	0	0	7	8	15	7	8	0	0	0	7	8	15	7	8	
24.	4	11	15	0	0	0	4	11	4	11	15	0	1	1	4	12	
25.	9	10	19	0	0	0	9	10	9	10	19	4	4	8	13	14	

(Continued on next page)

Brown/Father (continued)

Item	<u>Brown/Father</u>															
	<u>Agree with Brown</u>						<u>Agree with Father</u>									
	<u>Boys</u>			<u>Girls</u>			<u>Total</u>		<u>Boys</u>			<u>Girls</u>			<u>Total</u>	
	Y	O	To	Y	O	To	Y	O	Y	O	To	Y	O	To	Y	O
26.	0	0	0	3	4	7	3	4	0	1	1	3	5	5	3	6
27.	10	9	19	0	0	0	10	9	10	9	19	2	3	5	12	12
28.	0	0	0	4	6	10	4	6	0	0	0	4	6	10	4	6
29.	0	0	0	4	5	9	4	6	4	6	10	4	5	9	8	11
30.	5	8	13	0	0	0	5	8	4	9	13	6	7	13	10	16
31.	9	12	21	0	0	0	9	13	8	13	21	3	2	5	11	15
32.	0	0	0	4	8	12	4	9	1	2	3	4	8	12	5	10
33.	0	0	0	5	5	10	5	5	0	0	0	5	5	10	5	5
34.	0	0	0	0	1	1	0	1	2	2	4	1	1	2	3	3
35.	1	2	3	0	0	0	1	2	0	0	0	2	2	4	2	2
36.	3	9	12	0	0	0	3	9	3	9	12	0	1	1	3	10

*Y = Younger, O = Older, To = Total.

Item	<u>Brown/Mother</u>															
	<u>Agree with Brown</u>						<u>Agree with Mother</u>									
	<u>Boys</u>			<u>Girls</u>			<u>Total</u>		<u>Boys</u>			<u>Girls</u>			<u>Total</u>	
	Y	O	To	Y	O	To	Y	O	Y	O	To	Y	O	To	Y	O
1.	0	0	0	8	2	10	8	2	0	0	0	7	3	10	7	3
2.	7	9	16	0	0	0	7	9	7	9	16	1	4	5	8	13
3.	9	13	21	0	0	0	9	13	8	13	21	3	3	6	11	16
4.	0	0	0	2	8	10	2	8	1	1	2	2	9	11	3	10
5.	9	9	18	0	0	0	9	9	9	9	18	5	4	9	14	13
6.	0	0	0	2	2	4	2	2	0	2	2	2	2	4	2	4
7.	0	0	0	4	9	13	4	9	4	2	6	5	9	14	9	11
8.	7	10	17	0	0	0	8	10	7	10	17	3	2	5	10	12
9.	0	0	0	6	5	11	6	5	1	0	1	6	5	11	7	5
10.	5	12	17	0	0	0	6	12	5	12	17	3	3	6	8	15
11.	11	12	23	0	0	0	11	12	11	12	23	1	3	4	12	15
12.	0	0	0	2	8	10	2	8	1	0	1	2	7	9	3	7
13.	6	10	16	0	0	0	6	10	6	10	16	3	3	6	9	13
14.	0	0	0	3	2	5	3	2	0	0	0	3	2	5	3	2
15.	0	0	0	7	9	16	7	10	2	1	3	6	10	16	8	11

(Continued on next page)

Brown/Mother (continued)

Item	<u>Brown/Mother</u>															
	Agree with Brown						Agree with Mother									
	Boys			Girls			Total		Boys			Girls			Total	
Y	O	To	Y	O	To	Y	O	Y	O	To	Y	O	To	Y	O	
16.	7	11	18	0	0	0	7	11	7	11	18	1	2	3	8	13
17.	0	0	0	4	4	8	4	4	1	1	2	4	4	8	5	5
18.	6	11	17	0	0	0	6	11	6	11	17	1	1	2	7	12
19.	10	11	21	0	0	0	10	11	10	11	21	5	1	6	15	12
20.	0	0	0	3	7	10	3	7	0	0	0	3	7	10	3	7
21.	0	0	0	5	5	10	5	5	1	1	2	5	5	10	6	6
22.	7	3	10	0	0	0	7	3	8	13	21	2	4	6	10	17
23.	0	0	0	7	8	15	7	8	0	0	0	7	8	15	7	8
24.	4	11	15	0	0	0	4	11	4	10	14	1	0	1	5	10
25.	9	10	19	0	0	0	9	10	9	10	19	2	5	7	11	15
26.	0	0	0	3	4	7	3	4	0	1	1	3	5	8	3	6
27.	10	9	19	0	0	0	10	9	10	9	19	2	2	4	12	11
28.	0	0	0	4	6	10	4	6	0	1	1	4	6	10	4	7
29.	0	0	0	4	5	9	4	6	6	6	12	4	5	9	10	11
30.	5	8	13	0	0	0	5	8	4	9	13	6	6	12	10	15
31.	9	12	21	0	0	0	9	13	8	13	21	3	1	4	11	14
32.	0	0	0	4	8	12	4	9	1	1	2	4	9	13	5	10
33.	0	0	0	5	5	10	5	5	0	0	0	4	8	12	4	8
34.	0	0	0	0	1	1	0	1	1	0	1	1	1	2	1	2
35.	1	2	3	0	0	0	1	2	0	0	0	3	2	5	3	2
36.	3	9	12	0	0	0	3	9	3	9	12	0	0	0	3	9

Item	<u>Father/Mother</u>															
	Agree with Father						Agree with Mother									
	Boys			Girls			Total		Boys			Girls			Total	
Y	O	To	Y	O	To	Y	O	Y	O	To	Y	O	To	Y	O	
1.	0	0	0	8	13	21	8	13	0	0	0	7	3	10	7	3
2.	7	9	16	1	3	4	9	12	7	9	16	1	3	4	8	12
3.	9	13	22	2	3	5	11	16	8	13	21	3	3	6	11	16
4.	0	0	0	2	9	11	2	9	1	1	2	2	9	11	3	10

(Continued on next page)

Father/Mother (continued)

Item	Father/Mother															
	Agree with Father						Agree with Mother									
	Boys			Girls			Total		Boys			Girls			Total	
	Y	O	To	Y	O	To	Y	O	Y	O	To	Y	O	To	Y	O
5.	9	9	18	4	3	7	13	12	9	9	18	5	4	9	14	13
6.	0	0	0	2	2	4	2	2	0	2	2	2	2	4	2	4
7.	5	5	10	5	10	15	10	15	4	2	6	5	9	14	9	11
8.	7	10	17	1	2	3	8	12	7	10	17	3	2	5	10	12
9.	0	0	0	6	5	11	6	5	1	0	1	6	5	11	7	5
10.	10	12	22	5	3	8	15	15	5	12	17	3	3	6	8	15
11.	11	12	22	1	1	2	12	13	11	12	23	1	3	4	12	15
12.	0	1	1	2	8	10	2	9	1	0	1	2	7	9	3	7
13.	6	10	16	2	5	7	8	15	6	10	16	3	3	6	9	13
14.	0	1	1	3	3	6	3	4	0	0	0	3	2	5	3	2
15.	0	0	0	7	10	17	7	10	2	1	3	6	10	16	8	11
16.	7	11	18	1	3	4	9	14	7	11	18	1	2	3	8	14
17.	1	2	3	4	3	7	5	5	1	1	2	4	4	8	5	5
18.	6	11	17	0	3	3	6	14	6	11	17	1	1	2	7	12
19.	10	11	21	4	2	6	14	13	10	11	21	5	1	6	15	12
20.	0	0	0	3	7	10	3	7	0	0	0	3	7	10	3	7
21.	0	1	1	5	5	10	5	6	1	1	2	5	5	10	6	6
22.	7	13	20	1	2	3	8	15	8	13	21	2	4	6	10	17
23.	0	0	0	7	8	15	7	8	0	0	0	7	8	15	7	8
24.	4	11	15	0	1	1	4	12	4	10	14	1	0	1	5	10
25.	9	10	19	4	4	8	13	14	9	10	19	2	5	7	11	15
26.	0	1	1	3	5	8	3	6	0	1	1	3	5	8	3	6
27.	10	9	19	2	3	5	12	12	10	9	19	2	2	4	12	11
28.	0	0	0	4	6	10	4	6	0	1	1	4	6	10	4	7
29.	4	6	10	4	5	9	8	11	6	6	12	4	5	9	10	11
30.	4	9	13	6	7	13	10	16	4	9	13	6	6	12	10	15
31.	8	13	21	3	2	5	11	15	8	13	21	3	1	4	11	14
32.	1	2	3	4	8	12	5	10	1	1	2	4	9	13	5	10
33.	0	0	0	5	5	10	5	5	0	0	0	4	8	12	4	8
34.	2	2	4	1	1	2	3	3	1	0	1	1	1	2	2	1

(Continued on next page)

Father/Mother (continued)

Item	Father/Mother															
	Agree with Father						Agree with Mother									
	Boys			Girls			Total		Boys			Girls			Total	
	Y	O	To	Y	O	To	Y	O	Y	O	To	Y	O	To	Y	O
35.	0	0	0	2	2	4	2	2	0	0	0	3	2	5	3	2
36.	3	9	12	0	1	1	3	10	3	9	12	0	0	0	3	9