

AN ABSTRACT OF THE THESIS OF

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In the past, a major emphasis of child development research and theory building has been the study of acquisition of sex role learning. Today, an additional dimension is seen in the study of the effect of sex role stereotypy on self-concept. As a result of the research in this area, the thesis was developed that adherence to one's selection of sex roles--whether correct by society's standards or not--produces self-consistency, which in turn produces a higher self-concept.

The purpose of this research was to ascertain whether there is a difference in sex role preference (i.e. adherence to sex role stereotypy) of children at selected ages, between sexes, and among socioeconomic strata. Another purpose is to examine the influence of self-consistency (i.e. sex role confirmation defined as adherence to self-identified sex roles) in determining the effect of sex role stereotypy on self-concept as a learner.

Individual examinations using The Sex Role Learning Index to estimate sex role preference and sex role confirmation, and using The Self-Concept and Motivation Inventory to estimate self-concept were given to a sample of 36, four and five year old children. This sample of 36 children were selected at random from a stratified and classified population of seven group care facilities. To be included in the sample, the children fell into the average or bright range of intelligence as identified by The Slosson Intelligence Test. After administering both inventories in carefully controlled settings, the scores were subjected to two, three-way analyses of variance, two one-way analyses of variance, and two Pearson Product Moment Correlations with significance being set at the .05 level.

Hypotheses. Ten null hypotheses were tested in the study: (1) there is no significant age effect; (2) there is no significant sex effect; (3) there is no significant socioeconomic effect; (4) there is no significant interaction between age and sex; (5) there is no significant interaction between age and socioeconomic status; (6) there is no significant interaction between sex and socioeconomic status; (7) there is no significant interaction between age, sex, and socioeconomic status; (8) there is no significant self-concept effect; (9) there is no significant relationship between self-concept and sex role preference;

and (10) there is no significant relationship between self-concept and sex role confirmation.

Results and Conclusions. All hypotheses were retained except Hypothesis Two, in which a significant difference did occur between male and female children, with the males adhering more to sex role stereotypy than the girls. In addition, further exploration, based on multiple linear regression analysis, produced a pattern which showed children that scored higher on sex role preference than sex role confirmation also scored higher in self-concept.

One conclusion of the study was similar to those in the review of literature (i.e. boys adhere more to sex role stereotypy in everyday activities than girls). An additional conclusion was that self-consistency did not play a part in determining sex role learning's effect on self-concept at four and five years of age. Although the hypothesis regarding socioeconomic status was retained, the children in the study from the middle socioeconomic class tended to have more stereotypic responses than the low socioeconomic status children. Age and sex also tended to have a combined effect on sex role preference. The classic developmental stages of Erickson, Piaget, and Kohlberg appeared to provide a rational framework for understanding the effect of sex role learning on self-concept in four and five year old children.

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# SEX ROLE AND SELF-CONCEPT IN YOUNG CHILDREN

## Chapter I

### INTRODUCTION

In recent years, members of formal institutions in society have expressed concern about the limitation of human potential by adherence to sex role stereotypy. For this reason, a major emphasis in child development research and theory has been the study of acquisition of sex roles, initially acquired through gender identity (Kohlberg, 1966).

Knowledge of gender, identifying one's own gender and the gender of others, comes before three years of age (Thompson, 1975), along with the sense of self (Lewis, 1977). Language is also developing, and this new skill influences the learning of sex role behavior (Hymes, 1972). Other influences of sex role learning are toys (Benjamin, 1932; Brown, 1956b; DeLucia, 1960; Rabban, 1950) and symbolic models in picture books and on television (Mischel, 1970). The learning of sex roles is also an outcome of identification with parents and their adopted sex roles (Spencer, 1974). This process of learning sex roles is discovered in a number of learning theories: psychoanalytic theory (Freud, 1935), social learning theory (Mischel, 1966, 1970; Mussen, 1969; Sears, 1965), and cognitive developmental theory (Kohlberg, 1966; Kohlberg and Zigler, 1967).

Sex role definition, the first step in sex role learning, draws parameters around the category of one's own gender. Children learn to attach cultural expectations and standards to this category. Whether valid or not, these expectations and standards can generate lasting behavioral consequences (Mischel, 1970; Kagan and Moss, 1962). During his third and fourth years, a child learns sex roles by associating selected aspects of perceived reality with one sex or the other (Flerx, Fidler, and Rogers, 1976; Kohlberg, 1966; Reid, 1975). The child of this age begins to adhere to the prescriptions and proscriptions of cultural sex role stereotypy (Biller, 1968; Kagan, 1964; Hartup and Zook, 1960). In adherence to sex role stereotypy, children indicate a sex role preference (Brown, 1956a), and in adherence to their own perception of sex roles, children indicate sex role confirmation (Edelbrock, 1976).

Lack of adherence to sex role stereotypy is seen in young children who display anxious and impulsive behaviors (Sutton-Smith and Rosenberg, 1960). These behaviors may be caused by a frustration of self-consistency when children are confronted with learning societal sex roles. Self-consistency and stability are important in the daily operation of self-concept because the individual is able to predict his or her own behavior and therefore feels more self-confident (Hamacheck, 1971). Positive feelings about one's self, or the lack of those feelings, are reflected in

one's behavior (Hamacheck, 1971); thus, self-concept is said to place limitations on human potential. Rogers (1970) points to his experiences in psychotherapy, his observations of others, and his own growth experiences as convincing evidence that within, each person is a wanting to be free. Maslow (1954, p. 46) makes this same observation when he says: "What man can be, he must be." For this reason, phenomenological models of psychology suggest that human behavior is primarily a result of internal phenomena rather than external phenomena.

The processes of forming self-concepts, of maintaining self-concepts, and of acquiring sex roles develop, at least in part, early in life. Therefore, the study of the part sex role stereotypy plays in the development of children's self-concepts can contribute to the understanding of personality development. Research concerning sex role preference is needed to discover its variance in acquisition at selected ages, between sexes, and among socioeconomic classes.

### Need for the Study

Assumptions that cultural sex role stereotypy limits human potential both internally and externally are the basis for legislation and legal processes. They also provide the basis for investigations and for formal actions of government agencies through affirmative action

prohibiting sex discrimination in both educational programs and employment practices (NFIE, 1975; HEW, 1975; WGPO, 1976).

At the nongovernmental level, the Women's Action Alliance has developed a nonsexist early childhood education to free children from sex role stereotypy and has allowed them to develop their fullest potential, unhampered by societally imposed restrictions regarding appropriate behavior for each sex (Sprung, 1975). Paralleling the women's movement is the establishment of new goals for nonsexist child rearing practices (Hirsch, 1974; Carmichael, 1977). The advertising of nonsexist child care services for families that attended the National Women's Conference in the fall of 1977 exemplifies this new goal.

The processes described above assert that sex roles which pigeonhole certain behaviors as appropriate for one or the other sex are harmful and limit human potential. Facts to support these assertions are currently obscure, since both sex role and self-concept research suggest similar problems. These problems include the proliferation of conflicting terms and constructs, varied definitions of terms, lack of research precision, and poorly constructed measuring instruments.

In the course of human development, the crucial preschool years establish many complex behavioral patterns (Hymes, 1963). For this reason, a better understanding of

the effect of selected environmental factors in young children has become highly desirable. The relationship of sex role stereotypy to self-concept and the variances in the acquisition of sex role stereotypy are two of these environmental factors. Research on these subjects could help teachers, counselors, parents, and others to gain deeper insights into the behavior and development of children and could provide the opportunity for more growth producing situations in both educational processes and everyday life experiences.

### The Purpose of the Study

The purpose of the study is to ascertain whether there is a difference in sex role stereotypy between children at selected ages, between sexes, and among socioeconomic strata. Another purpose is to examine the influence of self-consistency in determining the effect of sex role stereotypy on self-concept as a learner.

### Assumptions

Certain assumptions have been made in formulating the problem statements:

1. Human social behavior can be classified in terms of sex role.
2. Children identify sex roles at an early age.
3. A child's adherence to sex roles is measurable through

self-report.

6. Self-consistency interferes with the understanding of the effect sex role stereotypy has on self-concept.

### Statement of the Problem

1. The study is designed to determine the differences and similarities in sex role preference according to age, sex, and socioeconomic strata of selected four and five year old children.
2. The study is designed to determine the effect of a possible relationship between sex role preference and self-concept with self-consistency as an influential factor.

### Expectations

Eight hypotheses have been developed using the variables of age, sex, socioeconomic status, self-concept, and sex role preference. Two descriptive hypotheses have been developed which use the variables of sex role preference, sex role confirmation, and self-concept. The null form has been used to state these hypotheses in Chapter 3 (see p. 48-49). These ten hypotheses have been tested at the .05 level. The following expectations have been used in developing the ten hypotheses:

1. Age does have a significant effect on sex role preference.

2. Sex does have a significant effect on sex role preference.
3. Socioeconomic status of the child's family does have a significant effect on sex role preference.
4. Age and sex do have a significant interactive effect on sex role preference.
5. Age and socioeconomic status of the child's family do have a significant interactive effect on sex role preference.
6. Sex and socioeconomic status of the child's family do have a significant interactive effect on sex role preference.
7. Age, sex, and socioeconomic status of the child's family do have a significant interactive effect on sex role preference.
8. Sex role preference does have a significant effect on self-concept as a learner.
9. Self-concept as a learner does correlate significantly with sex role preference.
10. Self-concept as a learner does correlate significantly with sex role confirmation.

#### Limitations of the Study

1. The study is limited to four and five year old children selected at random from seven group care



facilities in chosen suburban areas of Seattle, Washington.

2. The study is limited by the nature of the task of relating and contrasting self-concept, a personality construct, to sex role preference and sex role confirmation, values of society and values of self.
3. The study is limited in that self-concept, sex role preference, and sex role confirmation are measured through self-report.
4. The study is limited in that self-concept as a learner is only a part of global self-concept.
5. The study is limited by the selected definitions of sex role preference, sex role confirmation, and self-concept.
6. The study is limited by the accuracy, validity, and reliability of instruments purporting to measure human behavior through self-report.
7. The study is limited by the small number of subjects.
8. The study is limited by the different settings used during the administration of the inventories which could possibly affect the scores. Transportation of the children from the seven group care facilities to a common testing site was impossible because of insurance risks.
9. The study is limited by certain arbitrary decisions necessarily made for conducting the study, by the

adaptation of a particular stratification model for socioeconomic groupings, by the division of self-concept scores into low, average, and high groups, and by the inclusion of only those children who scored within the average or bright range of intelligence.

### Methodology

Seven hypotheses are formulated using the three independent variables of age of the child, sex of the child, and socioeconomic status of the child's family. These hypotheses are investigated by using two, three-way analyses of variance to determine if significant differences exist between the main effects and the interaction of the dependent variable, sex role preference. The eighth hypothesis is tested by using two, one-way analyses of variance to determine if any significant differences exists in sex role preferences scores of children after they have been divided into groups according to low, average, and high measures of self-concept. Finally, Pearson Product Moment Correlations are used to measure the relationship between sex role preference and self-concept in the ninth hypothesis and the relationship between sex role confirmation and self-concept in the tenth hypothesis. The level of significance is set at the .05 level for use with all three statistics.

### Definition of Terms

Operational definitions are adopted in the construct areas of self-concept, sex role learning, and self-consistency.

#### Self-Concept

Self-concept is the way a preschool child views him or herself as a learner. These views are derived from perceptions regarding external influences on learning such as everyday interactions with peers, family, and school as well as everyday experience with the physical environment. Internal motivations of striving for consistency also influence these views (Stagner, 1951). Two facets of self-concept (role expectation and self-adequacy) are examined (Farrach, Milchus and Reitz, 1975). Role expectation is said to be influenced by external experiences while self-adequacy is said to be influenced by internal motivators. The operational definitions of role expectation and self-adequacy are congruent with the definitions used in The Self-Concept and Motivation Inventory, Preschool/Kindergarten Form (the SCAMIN by Farrach, Milchus, and Reitz, 1975). In this study these operational definitions are used as combined test scores from the SCAMIN to represent a self-concept score:

Role expectation. Role expectation is the positive acceptance of the aspirations and demands that the child

thinks others--significant others--expect of him or her.

Self-adequacy. Self-adequacy is the positive regard with which a child views his or her present and future probabilities of success.

### Sex Role Learning

Sex role learning is the acquisition of roles related to gender. Both sex role preference and sex role confirmation are included in sex role learning. The operational definitions of sex role preference and sex role confirmation are congruent with the definitions used in The Sex Role Learning Index (the SERLI by Edlebrock, 1976). In this study, these operational definitions are represented by test scores from the SERLI:

Sex role preference. Sex role preference is the desire to adhere to the culturally defined masculine and feminine roles.

Sex role confirmation. Sex role confirmation is the desire to adhere to one's own perceptions of masculine and feminine roles.

### Self-Consistency

Self-consistency is one's tendency to create and maintain a constancy in self-evaluation.

In addition to the adopted definitions for constructs defined above, the following operational definitions are used:

### Sex

Sex is the gender label attached to a child at birth.

### Age

Age is measured by chronological years from birth to the time of this study.

### Socioeconomic Status of the Child's Family

The socioeconomic status of the child's family is a descriptive category of social class. The Hollingshead Four Factor Index of Social Status (Hollingshead, 1975), which takes into consideration education, occupation, sex, and marital status is used to determine this category. This index is used in this study for stratification purposes.

### "Present" Scores

"Present" scores are said to measure a child's current adherence to everyday activities.

### "Future" Scores

"Future" scores are said to measure a child's expected adherence to models of adult sex role behavior later in life.

### Developmental Task

A developmental task is a phrase used in this study based on a definition by Havighurst (1953):

A developmental task is a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to his happiness and to success with later tasks, while failure leads to unhappiness in the individual, disapproval by the society, and difficulty with later tasks (p. 2).

### Developmental Stage

A developmental stage is a phrase used in this study to indicate a period, level, or degree in the process of human development, growth, and change associated with an identifiable group of developmental tasks.

### "Classic" Developmental Theories

The phrase "'classic' developmental theories" is used in this study to refer to the theories of psychosocial developmental stages (Erikson, 1963), the developmental stages of intelligence (Piaget, 1952) and the developmental stages of moral reasoning (Kohlberg, 1969).

### Summary of Chapter

A description is given of the present concern about the possible limiting of human potential through the effect of sex role stereotypy on young children. This concern indicates the need to study sex role learning and its

effect on self-concept. Ten hypotheses are used to focus on variances in sex role acquisition and in the relationship between sex role stereotypy and self-concept. The statistical tools used are the three-way analysis of variance, testing variation in sex role preference in the first seven hypotheses; the one-way analysis of variance, testing the effect of sex role preference on self-concept in the eighth hypothesis; and the Pearson Product Moment Correlation, testing self-concept's relationship to sex role preference and sex role confirmation in the ninth and tenth hypotheses.

The report of the study proceeds with a review of relevant sex role preference research on the variables of age, sex, socioeconomic status, and self-concept. The supposition that the effect of sex role stereotypy on self-concept is influenced by self-consistency is also presented.

## Chapter II

### REVIEW OF THE LITERATURE

Governmental policies and feminism are moving to reduce inhibiting sex role stereotypy under the assumption that it is restrictive and causes dysfunctional consequences which limit human potential. For this reason, empirical evidence concerning sex role learning, its acquisition and its effect on mental health is imperative. Chapter I describes the importance of investigating these concerns early in a child's life.

It is known that sex role learning is an important aspect of personality development. Constantinople (1967), DeLucia (1963), and Thomas (1971) state that sex role learning determines many of the attitudes and preferences of both children and adults. As Kagan and Moss (1962) point out, selective adoption and maintenance of several behavioral domains hold a central position in identifying sex roles. They go on to say:

The expression of aggression competitiveness, passivity, dependency, or sexuality is determined, in part, by the individual's assessment of congruence of the behavior with traditional sex role standards (p. 271).

Other findings suggest that early sex role learning is also an enduring aspect of personality (Bloom, 1964; Kagan and Moss, 1962). Consequently, the development of selective preferences for sex role behavior has been a major concern



in child development research and theory during the past decade (Lynn, 1969; Maccoby, 1966; Maccoby and Jacklin, 1974).

The purpose of this review of literature is to examine particular foci of previous research on sex role preference and of other research that reflects on the relationship between sex role learning and self-concept. The first section reviews the definitions and measurement of sex role preference, and major research findings of variations in sex role preference by age, sex, and socioeconomic status, and the effect of sex role learning on self-concept. This section closes with the delineation of some of the limitations involved in studies of this nature. The second section reviews the major findings of the effect of sex role preference on self-concept and suggests that self-consistency may influence this relationship. Discussions concerning sex role confirmation, self-consistency, self-concept, and the methodological problems of measuring self-concept are also included in the second section.

#### Previous Research on the Correlates of Sex Role Learning

Sex role preference is the motivation to adhere to the culturally defined prescriptions (i.e. directions given by society) and proscriptions (i.e. denouncements made by society) of the masculine and feminine sex roles (Biller

and Borstelmann, 1967). In other words, sex role preference involves "the behaviors associated with one sex or the other that the individual would like to adopt, or that he perceives as the preferred or more desirable behavior" (Brown, 1956b).

A wide variety of measurement techniques, including occupational interest interviews (Bridges, 1927; Looft, 1971), doll play interviews (Honzik, 1951; Santrock, 1970), game and activity preferences (Rosenberg and Sutton-Smith, 1959, 1960; Terman and Miles, 1936), and picture preferences (Benjamin, 1932; Brown, 1956a,b; DeLucia, 1963; Fauls and Smith, 1956; Rabban, 1950; Vance and McCall, 1934; Edelbrock and Sugawara, 1978) are used to focus on sex role preference in young children. These techniques are used to measure variances and effects of sex role acquisition and preference in many different socio-cultural studies. Table 1 lists studies which report major findings about sex role learning among young children.

### Sex Role Preference and Age

Several researchers are studying age effect on children's sex role preference (Brown, 1956b, 1957; Duryea, 1967; Hartup and Zook, 1960; Schell and Siber, 1968; Sugawara, 1971; Thompson and McCandless, 1970). By the age of three, a child has a concept of gender that he relates

Table I. MAJOR STUDIES OF SEX ROLE LEARNING IN YOUNG CHILDREN.

Focus	Findings	Researcher
Definition of Sex Role	Desired sex role behavior is defined negatively for boys.	Hartley, 1959
	Boys learn masculine role by avoidance of feminine behaviors.	Lynn, 1964
Adherence to Sex Role	Children avoid opposite sexed toys in presence of an adult.	Hartup, Moore, and Sager, 1963; Kobasigawa, 1959
	Verbal punishment maintains or increases appropriate choice of sex typed behavior.	DeLucia, 1960; Spencer, 1963
	Brighter children show earlier sex role stereotyping behavior than average children.	Kohlberg and Zigler, 1967
Culture	Dichotomous sex role patterns were seen in a direct cross-cultural comparison of sex role development in children.	Kobasigawa, 1959
Educational	Boys who develop adequate sex roles learn faster in verbal conditioning situations.	Epstein and Liverant, 1963
	Boys who develop adequate sex roles show superior achievement on reading tests.	Anastasiow, 1965
	Boys and girls classify school objects as feminine rather than masculine.	Kagan, 1964
	Egalitarian literature presentation reduces stereotypic thinking. This is more effective at age five than four and for females more than males.	Flerx, Fidler, and Rogers, 1976

to himself (Maccoby, 1966) and has a definite sex role preference; these, however, vary with a child's sex (Hartup and Zook, 1960). The child tends to make value judgments about things and to maintain that whatever he makes, does, or owns is as good or better than those things other children do, make, or own (Maccoby, 1966). The naive or egocentric tendency to value anything associated with or like themselves causes children to value positively objects and activities that represent a particular gender identity (Brown, 1957). Both sexes between the ages of three and five increase in their ability to discriminate their own and opposite sex role (Biller and Borstelmann, 1967). Boys apparently continue to increase in their preference for the masculine role, while girls reach a peak in feminine preference at about five years of age and then maintain this level until adolescence (Brown, 1956b, 1957; DeLucia, 1963; Hartup and Zook, 1960).

The literature of the "classic" developmental theories contributes some understanding of the effect of age on behavior. These theories, however, do not speak directly about the effect of age on sex role learning behavior. The literature of the "classics" includes the psychosocial developmental stages (Erikson, 1963), developmental stages of intelligence (Piaget, 1952), and developmental stages of moral reasoning (Kohlberg, 1969).

Erikson posits that personality development continues throughout the whole life cycle and that each stage has a positive as well as a negative component. Within each stage a new dimension of "social interaction" becomes possible; that is, a new dimension in people's interaction with themselves, and with their social environment becomes available. The new dimension of social interaction that emerges during the first year of life involves basic trust at one extreme and mistrust at the other. The degree to which the children come to trust the world, other people, and themselves depends to a considerable extent upon the quality of the care that the children receive. Erikson (1963) points out that if the problem of basic trust-versus-mistrust is not resolved during the first year of life, it arises again at each successive stage of development. During the second and third years of life, building upon the child's new motor and mental abilities, the feeling of autonomy emerges. As the child develops new motor and mental abilities during the second and third years of life, he or she begins to feel autonomous. The child takes pride in new accomplishments and wants everything for him or herself. If the parents recognize the young child's need to do what he or she is capable of doing, then the child develops a sense of autonomy instead of shame. The balance of autonomy with shame acquired during this period can be altered by later events.

Finally, at about the age of the children in this study, ages four and five, the child can initiate motor, language, and fantasy activities. The psychosocial stage, Initiative vs. Guilt, is successfully completed if the child is encouraged in fantasy and play activities. If this encouragement does not occur, the child may experience persistent guilt over self-initiated activities throughout later stages of his development. This psychosocial stage, paralleling the oedipal stage of psychoanalytic theory, suggests the young child takes the parent of the same sex as a rival. At the same time, the young child imitates this parent of the same sex to compete for the love object, usually the parent of the opposite sex. Since both the psychoanalytic and psychosocial stage emphasize the importance of fantasy at this age, these stages appear to be concomitant to the Preoperational Stage that Piaget (1952) describes in his ideas on the development of intelligence.

Piaget (1952) argues that the mind never copies reality but instead organizes and transforms it. Therefore, when speaking of the second stage of intellectual development, the Preoperational Stage existing between two and seven years of age, Piaget says the child needs to master symbols occurring in language, fantasy, and play. Piaget's stages of intellectual development all emphasize mental growth as occurring by integration and substitution,

and like the psychosocial stages of Erikson (1963) each stage must be met to some satisfaction before growth continues. As an outcome of intellectual growth, Piaget (1952) postulates that the young child makes moral decisions on the basis of fear of punishment and moral realism. This postulation compliments the Preconventional Level of Moral reasoning described by Kohlberg (1969).

Kohlberg (1969) sees young children from birth to about the age of ten through thirteen as being very concerned about their welfare. For this reason, this age child tries to avoid punishment by obeying rules set by those who have more power. This punishment-obedience orientation is the first stage of Kohlberg's Preconventional Level of Moral Reasoning.

In all of these "classic" developmental theories, successive stages continue above the stages described here. In reviewing these "classics", the developmental tasks of four and five year old children are seen as the initiation to and mastery of symbols on the basis of what the child sees or fantasizes.

### Sex Role Preference and Sex

Several theories are used to explain sex differences in children's learning of sex roles, including psycho-analytic theory (Freud, 1935; Parson and Bales, 1955) social learning theory (Mischel, 1966, 1970; Mussen, 1969; Sears,

1965) and cognitive-developmental theory (Kohlberg, 1966; Kohlberg and Zigler, 1967). Psychoanalytic explanations indicate that the sexes differ fundamentally in their ability to resolve the conflict caused by early sexual attraction to the parent of the opposite sex (Freud, 1935). Parsons and Bales (1955) extend this Freudian concept of identification to include a sociological frame of reference, by postulating the child's identification with the parents as being based upon the reciprocal role relationship between parent and child.

Specifically, the more common explanation of sex differences in sex role preference involves socio-cultural factors (Hartup, Moore, and Sager, 1963; Brown, 1956b, 1957; DeLucia, 1963; Kagan, 1964; Lynn, 1959). According to social learning theory, children learn sex roles through observation, reinforcement, and modeling. Hence, the child, by observing peers, parents and other adults, as well as assimilating information through mass media, learns to associate certain characteristics with one sex or the other. Krumboltz and Krumboltz (1972) say reinforcing events occur constantly whether or not they are intended. Both desirable and undesirable behaviors are learned through chance encounters. In other words, everyone with whom the child comes in contact may possibly serve to reinforce or fail to reinforce any given behavior. People, prestigious to the child, are the most effective



reinforcing agents. In the case of little boys, for example, the adult male is sought and emulated. Yet, many boys are more in the company of the female adult than the male adult. Hence, when the little boy does have the opportunity to observe the adult male a high degree of modeling may take place. Edelbrock (1976) states:

In sex role learning boys develop preferences for their sex role earlier than girls do because of the greater prestige, power, attractiveness and clarity of the masculine role, and because they are more likely to be punished for adopting characteristics of their opposite sex role (p. 11).

Often through modeling--usually of the parent of the same sex--and by being rewarded and punished for certain behaviors, children are shaped to the behaviors and qualities deemed appropriate for their sex. The research of Lynn (1959) and Hartup et al. (1963) which shows that boys learn the masculine role by avoidance of females and the findings of Kobasigawa (1959) which indicate that children avoid opposite sexed toys in the presence of adults are examples of behavioral shaping.

Alternatively, cognitive developmental theory emphasizes the development of the child's own concept of sex categories and explains how he or she fits into them. Kohlberg (1966) says that the young child develops a concept of "we males" or "we females" which causes the adoption of the characteristics associated with one of these groups to be reinforcing to the child. More

succintly, the cognitive developmental view emphasizes the process of socialization of the self where the child's own understanding of sex categories becomes critical to the learning of sex roles. Edelbrock and Sugawara (1978) indicate that the process of sex role acquisition may proceed with boys initiating stereotypic role behavior early in life and then broadening this role. Girls appear to do the opposite (i.e. they appear to have a broad range of current everyday sex role behavior and then stereotypy later on in life).

Research studies of sex differences in sex role preference differ in findings (Edelbrock, 1976). For example, Ward (1968), Hartup, Willard and Zook (1960), and Flerx et al. (1976) find that the preschool girls show greater group variance than preschool boys in a measure of sex role preference; while Lansky and McKay (1963), however, find the preschool boys to have the greater variance. Comparisons between studies like these are, at best, difficult because of differences in sampling procedures.

#### Sex Role Preference and Socioeconomic Status

Although theorists have been quick to relate sex role learning to socioeconomic status, few research studies of sex role preference in young children according to socioeconomic status exist. Kinsey, Pomeroy, and Smith

(1948) theorize that sex role behavior is channeled by a particular class to which an individual belongs. A declaration by Davis (1950) says that the child's acceptance of his sex role is a function of the family's marriage mores and attitudes toward sexual impulses, both of which are closely connected with social class. Davis also says that social class may be a factor in sex role behavior influenced by the strength of identification with one parent or the other. For example, a less clear masculine sex role preference among boys of the upper class may be related to the role of the upper class mother.

Two studies indicate that socioeconomic level does affect the pattern of sex role learning in eight, nine, and ten year old children from working class homes. These children become aware of sex role patterns earlier than children from middle class homes (Hall and Keith, 1964; Rabban, 1950). In fact, Rabban (1950) finds lower class girls to be aware of sex differences two years earlier than girls of the middle class (Rabban, 1950). Hall and Keith (1964) find lower socioeconomic class girls show a clearer feminine sex role preference than the girl of the upper class. Because these studies are dated and the children's ages are different from the children in this study, their relevance to this study may be in doubt. Research on sex role preference and socioeconomic class in four and five year old children was not discovered.

### Some Assessment Limitations

A misleading picture may occur of both the process through which children develop sex typed preferences (Edelbrock and Sugawara, 1978) and the correlates of sex role preference. Following are some criticisms discovered relating to assessment of sex role preference in young children:

1. Limitations in measurement techniques makes it difficult to distinguish between masculine and feminine roles.
2. The concept of sex role preference implies adherence to exclusively masculine and feminine sex role standards and cannot adequately deal with preferences for items perceived as appropriate for both sexes. Therefore, the choice between sex typed stimuli as a measure of sex role preference is misleading, since the child may not be able to discriminate between the stimuli on the basis of sex role stereotypy.
3. Techniques of measurement limit diversity of masculine and feminine sex roles by narrowly defining these roles by society's standards. Most past measures of sex role preference are not likely to be sensitive to the impact of today's changes in sex roles on the developing child.
4. There is an inadequate delineation of relationship in the concept of preference when the motives for

decision-making dispositions are inferred from actual choices or decisions (Davidson, Suppes, and Siegel, 1957; Schell and Siber, 1968). Since preference is a probabilistic relationship, it cannot be inferred from a single act or choice, but depends upon a series of choices between alternatives that have similar outcomes (Edelbrock, 1976).

5. Effects of experimenter are not taken in consideration in planning the methodology of many of the studies on sex role preference. Previous research with ITSC (It Scale for Children by Brown, 1956a) has not revealed sex experimenter effects (Doll, Fogot and Himbert, 1964). The study by Edelbrock and Sugawara (1978, using the SERLI which correlates highly with the ITSC) shows both boys and girls avoid choosing sex inappropriate items when examined by an experimenter of the opposite sex. Additional support for this effect by the experimenter is found in children avoiding the opposite sexed toy in the presence of an adult (Hartup, Morre, and Sager, 1963; Kobasigawa, 1966).

Most of these criticisms are being directed at the most widely used measure of sex role preference, the ITSC.

### Summary of Review

Much evidence is cited which indicates the confusion surrounding sex role preference and its variation according to age, sex, and socioeconomic status. Conceptual inadequacies by researchers are adding to this confusion by assuming sex role stimuli can be perfectly discriminated and that exclusive masculine and feminine sex roles exist. This concept of exclusivity of masculine and feminine sex roles makes it difficult to construct instruments that measure sex role preference. Methodological problems include experimenter effects, experimenter biases, and instruments that are ambiguous or imply preference can be inferred from a single act or choice.

### Sex Role Preference and Self-Concept

Investigators have expressed concern over possible detrimental effects of sex role standards upon the development of capabilities of men and women (Blake, 1968; Davis, 1967; Hartley, 1959; Horner, 1969; Maccoby, 1963). Both men and women incorporate sex role definitions into their self-concept. According to both Kagan (1964) and Kohlberg (1966), the highly sex typed individual is motivated to keep behavior consistent with an internalized sex role standard, a goal that is presumably accomplished by suppressing any behavior that might be considered undesirable or inappropriate for his or her sex. As a

result of this particular behavior performance, cognitive and value changes occur; that is, values and cognitions deviate to make them consistent with behavior (Festinger, 1957; Brehm and Cohen, 1962) thus ultimately effecting self-concept. Chalvetz (1974) and Bem (1975) see this outcome as relating to poor psychological functioning in adults. Whereas, a narrowly masculine self-concept might inhibit behaviors, an androgynous self-concept might allow an individual to freely engage in both masculine and feminine behaviors.

According to the literature, the relationship between self-concept and conformity to sex role stereotypy is studied with inconclusive results. Findings indicate that for women, consequences of sex role socialization include an affectively ambivalent self-concept (Clifton, 1973; Sherriffs and McKee, 1957; Gump, 1972) and high mental illness rates among women (Chessler, 1973; Gove and Tudor, 1973). All adolescent females in a study by Connell and Johnson (1970) indicated lower self-esteem (valuing component of the self-concept) than the males who had indicated low sex role identification and low self-esteem. In addition, there is more disturbance in self-images among white adolescent females than white males or black males (Simmons and Rosenberg, 1975). In contrast, at a younger age more boys than girls are referred for mental health assistance (Rosen, Bahn and Krammer, 1964).

Supporting this, Flammer (1971) finds the preschool period of development a far less comfortable and stable period of time for boys' self-esteem than girls. Apparently a shift during development may take place so that during childhood, males make up a disproportionate number of all mental health referrals, whereas later in life women do. This shift in mental health stability appears to correlate with the speculation of Edelbrock and Sugawara (1978) that sex role acquisition may proceed in opposite directions for boys and girls (i.e. boys stereotypy sex roles early in life and later broaden these roles, while girls do the opposite). In these studies the authors relate low self-esteem, low self-concept and low sex role identification to poor mental health.

A limitation in sex role preference/self-concept research is found in the use of observation techniques. Since the observer knows the sex of the child, automatic adjustment seems to be made through stereotyped judgments for that sex. An additional limitation is an apparent inferential leap or assumption that a low or negative view of self is caused by sex role stereotypy. Stein, Pohly, and Mueller (1971) and Kohlberg (1966) purportedly show that regardless of individual difference in the level of sex role identification, a sixth grade boy's motivation for an activity is predictable by sex role stereotypy. Again with sixth grade children, Sutton-Smith and Rosenberg



(1960) find that anxiety and impulsivity in children appear to be related to sex role stereotypy. Karre (1975) says that both present and future self-concept in primary school aged children is restricted by societally prescribed sex roles. Contrary to this declaration and assumption is the finding by Ziller, Hagey, Smith and Long (1969) that consistency of social behavior along with social acceptance, social participation, socioeconomic status, and identification with parents are closely associated with high self-esteem (a component of self-concept) in children. Another contradiction is the study by Kirsch, Shores and Kyle (1976) which finds a significant relationship between identity formation and androgynous sex role beliefs in adolescent boys and girls. This relationship appears to become more powerful in the adolescents as the ideal self is judged. In addition, a significant correlation between inner direction in both androgynous and high sex role identifying college women is found by Ott (1976).

These observations in the literature may infer an additional variable, previously ignored, which may be involved in the explanation of the relationship between sex role preference and self-concept. This study suggests that the unidentified variable is self-consistency. In other words, self-consistency, a necessary component of self-concept, may influence the effect of sex role stereotypy on self-concept. Indeed, it may be that the lack of self-

consistency in adhering to sex role stereotypy that creates negative feelings of self. This study suggests that adherence to one's selection of sex role--whether correct by society's standards or not--produces self-consistency. This in turn produces the positive feelings of self that are necessary for stable psychological functioning. This suggestion by no means ignores the fact that societally prescribed sex roles delimit sex role options for many but not all; whereas, a mixed role model of androgyny would increase the possibility of self-consistency because of the larger range of possible sex role choices.

#### Sex Role Confirmation

One of the major conceptual inadequacies of sex role research is the fact that the concept of preference depends entirely upon the assumption that sex typed stimuli can be well discriminated. The new conceptual formulation of sex role confirmation in the SERLI (The Sex Role Learning Index) purportedly makes it possible to estimate the individual child's selection of activities just as the child designates them to be appropriate for the child's sex. By definition, sex role confirmation is the desire to adhere to one's own perceptions of masculine and feminine sex roles; it is a measure of self-consistency. Sex role confirmation is a motivational concept involving the relationship between behavioral choices and the

outcomes of these choices. Measurement of sex role confirmation is based on a child's ordering of items which he or she has designated as being appropriate for his or her sex (Edelbrock, 1976). Therefore, sex role confirmation accounts for the individual variation in the ability to discriminate between sex typed stimuli, as well as measuring adherence to this selection. Through the measurement and comparison of sex role preference and sex role confirmation to self-concept, it becomes possible to explain the influence of self-consistency in the relationship between sex role stereotypy and self-concept.

#### Self-Consistency

Self-consistency theory hypothesizes that the individual's receptivity to information from other people is strongly affected by his or her tendency to create and maintain a consistent state in self-evaluation. Individuals adjust their cognitions and orient their relationships with others in order to keep their evaluations of themselves consistent with others' evaluations of them. But no matter how undesirable a given definition may be from a social standpoint, it is not rejected unless it seems inconsistent from the subject's standpoint. Human beings do not aim at consistency with the demands of society but only at self-consistency (Lecky, 1945).

William James (1893) is among the first to write about the importance of inner consistency of the self. Lewin (1935) views the self as a central and relatively permanent organization that gives consistency to the personality. According to Lecky (1945), the organism needs to maintain a unified organization. Stagner (1951) feels that homeostasis, as a general biological law, applies to some extent to the psychology of personality and that the individual seeks to maintain constancy with regard to the perception of self. The question of change in self, however, presents challenge to the theory of self-consistency.

Gergen (1971) emphasizes that the self is altered by specific other people, and the expressed views of others toward the self in each new situation begins with this alteration. Yinger (1963) agrees with Gergen, but feels that the self-concept had continuity, or internal organization prior to the other person entering the situation. This idea of continuity or direction is expressed more clearly by Sullivan (1953) when he writes, "The self tends very strongly to maintain the direction and characteristics given to it in infancy and childhood" (p. 53). Adler (1927) and Sullivan (1953) hypothesize further that the "self-system" guards the person from anxiety and renders him or her resistant to change.

Phenomenologists say that the self strives from consistency, that the person behaves in ways consistent with the self, and that the self changes as a result of maturation and learning (Rogers, 1951; Festinger, 1957; Allport, 1961; Combs and Snygg, 1959). Bloom (1964) indicates that 40 percent of ego development (development of self) is reached by about the age of seven. Thus, both theory and empirical evidence support the need for study of self-consistency factor as it affects personality development in young children.

### Self-Concept

Self-concept appears to be the key to mental health (Jersild, 1952). Indeed self-esteem, the self-evaluative part of self-concept, is essential to personal happiness and effective functioning, both in the child and the adult (Mussen, Conger and Kagen, 1969, p. 489). Dinkmeyer (1965) states:

A considerable body of evidence indicates that a child with a poor self-concept tends to be more anxious and less adjusted, less effective in groups and in tasks of life, whether they be work, social or sexual (p. 212).

Maslow (1954) feels that from his observations infants and young children are primarily involved with satisfying what he calls the safety needs (security, protection, stability, etc.); their physiological needs are relatively well gratified. In contrast to the healthy adult in our culture

whose safety needs are largely satisfied, the child prefers routine, schedules, a predictable, lawful, orderly world. According to Maslow, the infant or child in our society is not at the stage of wishing to satisfy either the love and belonging needs or the needs of self-actualization.

Epstein (1973) states that no one as yet is succeeding in defining self-concept. Psychoanalysts stress the need for a balance of id, ego, and superego forces for an individual to have positive self-feelings (Jacobson, 1964, p. 22; Kohut, 1971, 1972). Allport (1961) emphasizes the importance of the awareness of self and refers to the ego and the self as synonymous, while modern psychoanalytic theorists say the "self-in-process" can be thought of as the ego. Social psychologists combining sociological and psychological theory, assert that an individual's conception of him or herself is learned from social interaction (James, 1893; Cooley, 1902; Horney, 1937, 1939; Fromm, 1939; Sullivan, 1940, 1947, 1952). In other words, the self-concept reflects the attitudes of others toward the child, attitudes conveyed by the manner in which the "significant other" acts or reacts toward the child. These reflected appraisals form the bulk of the content in a child's self-concept and provide the first and most permanent self-conceptions (Gergen, 1971; Namacheck, 1971; Sullivan, 1953, p. 110). Coming from these appraisals is a child's perception of him or herself as a learner (Farrach,

Milchus, and Reitz, 1975). Perceptual style is just beginning to develop in the young child and acts as a control mechanism for these appraisals (Hamacheck, 1971, pp. 76-78). Perkins (1965) emphasizes the importance of self-perception when he says:

Everyday experiences and the results of research amply demonstrate that it is not merely what a person knows which determines his behavior, it is the way the individual feels and perceives himself in that situation (p. 453).

Behavior takes its direction from self-concept and tends to facilitate the reinforcement of self-concept (Combs and Snyggs, 1959; Symonds, 1951, p. 88). Humans evaluate their own performance and frequently set standards that determine in part the conditions under which they reward or punish themselves. Failure to meet the self-imposed performance standards results in punishment of self, whereas attainment of self-imposed standards leads to reward of self (Mischel, 1966, p. 63). Alker (1959) argues that individuals do not punish or reject themselves in a total sense, since the self-concept consists of dimensions that individuals value differently. Instead individuals have a negative global self-concept if there are more negative dimensions than positive ones.

#### Methodological Problems

Methodological problems are common in the assessment techniques used to evaluate dimensions of self in young

children. Reviews of self-concept research indicate three common problems: 1. The limitation of the instruments, 2. Validity of the results, and 3. The intangible stages involved in the study of constructs such as self-concept (Strong and Feder, 1961; Crowne and Stephens, 1961; McNelly, 1972).

Many diverse instruments are being devised to measure various aspects of the self-concept (Wylie, 1961). Although projective techniques are used to infer unconscious feelings (Gordon, 1966), two of the more common techniques are inferred self-concept observations and self-report instruments.

Inferred Self-Concept Observations. Because of distortions resulting from lack of language development, some researchers feel that it is realistic to infer self-concept in young children by observing their behavior (Combs, Avila, and Purkey, 1971). Inferred, self-concept ratings imply the idea that an observer will rate the individual's behavior in the way that the individual will rate his or her own behavior, honestly and insightfully. These measures rely on the perception and judgement of more or less trained observers, people who are accustomed and experienced in making judgmental ratings of individual behavior. Clinically trained observers who are not acquainted with the children are used extensively in research with children. However highly trained the



observer, only a small amount of the child's behavior is actually seen, and this direct observation is filtered through the trained clinician's abilities and perceptions (Combs and Soper, 1957).

Self-Report Instruments. A number of investigators criticize self-report instruments because denial, social desirability and other unconscious factors distort responses to questions (Brunswick, 1939; Hilgard, 1949; Smith, 1950; Edwards, 1957). In addition, the assumption is made that children have self-concepts like adults; and because of the difficulty children find in expressing themselves, that children's self-reported self-concept is faulty. Maxwell and Wells (1976) suggest that instead of accepting the above premise and trying to eliminate the problem through a mechanical psychometric procedure, the researcher should recognize that development of self-concept may proceed with children's acquisition of linguistic capacities and styles. The self-report method was chosen for this study.

### Summary of Review

A review of the pertinent literature suggests the relationship between self-concept and sex role preference is being studied with inconclusive results. The reason for this may be due to methodological and conceptual problems or a missing variable. People behave in ways that

are consistent with self, hence, Chapter 2 suggests that the missing variable may be self-consistency. The measure of sex role confirmation in the SERLI is a measure of self-consistency. Since the major direction of self is developed during childhood, it would appear to be important to ascertain the influence of self-consistency in determining the effect of sex role preference on self-concept.

### Chapter III

#### PROCEDURES AND METHODOLOGY

Possible behavioral and attitudinal consequences due to sex role stereotypy are concerns in segments of today's society. To know more about the acquisition of sex role preference and its effect on individuals and their self-concept are a major thrust of this study.

The review of literature reveals that differing concepts and instrument limitations, and methodological problems have caused considerable disagreement in the effort to explain the variations in development of sex role preference and self-concept. Self-consistency, a previously unidentified variable, may have played a part in sex role preference and thus affected self-concept. It is this factor--self-consistency--on which this study focused.

First, the difference in sex role preference by age, sex, and socioeconomic status of the child's family in a selected sample was examined. This was followed by identifying the differences in sex role preference of the children after grouping their self-concept scores into low, middle and high categories. Finally, the role that self-consistency plays in the relationship of sex role to self-concept was investigated.

This chapter describes methods used to obtain the scores of sex role preference, sex role confirmation, and

self-concept, while additionally listing the hypotheses tested and describing the statistical tools used. It is divided into six sections: (1) description of the setting; (2) description of the sample; (3) instrumentation; (4) research hypotheses; (5) data collection procedure; and (6) treatment of the data.

### The Setting

The study was conducted in seven cooperating day care centers and preschools in the greater Seattle, Washington area. All of these settings, except one, were under the auspices of the Home and Family Life Department of Renton Vocational Technical Institute and were located in two of the southern suburbs of Seattle, Auburn, and Renton. The additional setting was located in a southern suburb, Kent, Washington. The population of the study, 214 children, were all four and five year old children registered in these cooperating day care centers and preschools.

### Sample

Thirty-six children were randomly selected from a population stratified according to the socioeconomic status of each child's family. Classification of this same population was based on additional independent variables of age and sex. After the stratification process, any child falling outside the average (90 to 109) and bright

(110-119) range according to Slosson's (1963) adaptation of the Stanford Binet was excluded. This was done to maintain maximum validity in the use of The Sex Role Learning Index (SERLI) which was normed using children who scored in the average or bright range of intelligence. Only one child in the sample fell outside this range and was not included. Table II shows the stratified and classified sample of children.

Table II. SAMPLE MATRIX.

	Age			
	4 year olds		5 year olds	
	Boys	Girls	Boys	Girls
Low Socioeconomic Group	3	3	3	3
Middle Socioeconomic Group	3	3	3	3
High Socioeconomic Group	3	3	3	3

### Measuring Instruments

#### Sex Role Learning Index (SERLI)

The Sex Role Learning Index (SERLI) was used to gather the sex role preference and sex role confirmation scores from each child included in the study's sample. Edelbrock (1976) specifically developed the SERLI to overcome some reported conceptual and methodological problems of previous instruments. Selection of the SERLI for this research was made because of Edelbrock's goals and because the SERLI not only measures sex role discrimination, and sex role

preference, but sex role confirmation (i.e. adherence to self-identified sex role) as well. Separate pictures were used for boys and girls, with the thirty black and white line drawings being organized into three sections: (1) the Objects Section; (2) the Child Figures Section; and (3) the Adult Figures Section. A listing of these drawings is provided (see Appendix A for list).

In administering the SERLI, the child was instructed by the examiner in using simple Q-sort techniques to gain free- and forced-classification of the objects into sex role categories. For sex role preference (SRP), the sex appropriate items were defined by societal sex roles, while for sex role confirmation (SRC), the sex appropriate items were defined by the child. Scoring for sex role preference (SRP) and sex role confirmation (SRC) was based on the order of choices of the objects that the child designated as being appropriate for the child's sex when ranking the pictures of the child and adult figures. A rank of these figures was then scored using equidistant interval scale data sensitive to the order of the sex appropriate items. Scores ranged from 20 to 80 with an increasing score representing an increased adherence to the sex-appropriate items as viewed by society in SRP or as viewed by the child in SRC. By providing an examiner of the same sex as the child during administration of the inventories, this study controlled the questionable reliability of the scores.

Reliability and validity scores for the SERLI are shown in Tables III and IV.

Table III. . . . TEST-RETEST RELIABILITY OF THE SERLI.<sup>a</sup>

Examiner	Adult Figures		Child Figures	
	SRP	SRC	SRP	SRC
Same-sexed	.84***	.51*	.90***	.69**
Opposite-sexed	.57*	-.17	.43	.09

Table IV. . . . VALIDITY CORRELATIONS OF THE SERLI.<sup>a</sup>

	Adult Figures		Child Figures	
	SRP	SRC	SRP	SRC
Boys	.38**	.14*	.45	.56
Girls	.21	.12	.49	.45

<sup>a</sup>This data is taken from Edelbrock (1976).

\*p < .05

\*\*p < .01

\*\*\*p < .001

### The Self-Concept and Motivation Inventory (SCAMIN)

The Self-Concept and Motivation Inventory (SCAMIN) was published in 1968 by Person-O-Metrics of Dearborn Heights, Michigan (see Appendix B for SCAMIN example). Constructed at a later date, the Preschool-Kindergarten form consists of 24 self-descriptive items which the child uses to describe him or herself. Farrach, et al. (1975) developed this inventory to focus attention on the development of positive academic self-concepts in students. When using the Preschool-Kindergarten form, educational labels given in the

directions such as "Kindergarten" may be changed to match the research sample. In this study labels were changed to either "day care" or "preschool." The SCAMIN was selected because it allowed label changes and agreed, by definition, with the facets of role expectation and self-adequacy. These facets as a measure of academic self-concept most nearly assessed self-concept as defined in this study.

The SCAMIN items were read to small groups of children or, as in this study, to each child individually. The child reacted on a separate answer sheet by marking one of the noses of the three faces which illustrated his or her feeling in response to the statement (see Appendix B for answer sheet example). Two main factors were assessed: (1) motivation made up of achievement needs items and achievement investment items; and (2) self-concept made up of role expectation items and self-adequacy items. For the purposes of this study, only the self-concept scores were used.

The sum of role expectation items and self-adequacy items was said to measure self-concept (Farrach, et al., 1975). Hence, self-concept was purported to be measured by the combination of role expectations, defined as the positive acceptance of aspirations and demands that the child thought significant others expected of him or herself (i.e. external influences). Self-adequacy was defined as the positive regard with which a child viewed his or her



present and future probabilities of success (i.e. internal motivations). This use of the constructs was congruent with the operational definitions selected for this study.

Possible scores on the SCAMIN ranged from the low of 12 to the high of 36. Scores of 33 to 35 were considered to be high; scores of 28 to 32 were considered to be moderate (average); scores of 13-27 were considered to be low. A field test using the SCAMIN contrasted significantly with the scores of a tightly supervised teacher rating study. This cross-validation study indicated the SCAMIN Preschool/Kindergarten Form to be significantly different at the .05 level for self-concept with an  $n = 27$  (Milchus, 1977). Reliability on the self-concept score was reported at .79 using the Spearman-Brown formula.

### Research Hypotheses

During the course of this study, the following research hypotheses were examined at the .05 level of significance:

#### Hypotheses:

1. There is no significant age effect on sex role preference.
2. There is no significant sex effect on sex role preference.
3. There is no significant socioeconomic effect on sex role preference.

4. There is no significant interaction between age and sex on sex role preference.
5. There is no significant interaction between age and socioeconomic status of the child's family on sex role preference.
6. There is no significant interaction between sex and socioeconomic status of the child's family on sex role preference.
7. There is no significant interaction among age, sex, and socioeconomic status of the child's family on sex role preference.
8. There is no significant self-concept as a learner effect on sex role preference.
9. There is no significant relationship between self-concept as a learner and sex role preference.
10. There is no significant relationship between self-concept as a learner and sex role confirmation.

#### Data Collection Procedure

After initially contacting each of the cooperating preschools and centers through the Director of the Home and Family Life Department, Renton Vocational Technical-Institute, Renton, Washington and the director of the additional center, a follow-up letter was sent which explained the goal of the study and the data collection procedure (see Appendix C for letter). The preliminary data

age, sex, and socioeconomic status of the child's family (Hollingshead, 1975) were collected on all four and five year old children in the cooperating settings, with no identifying data supplied at that time. After this information was received on the population of 214 children, the necessary division into stratified groups was made prior to the drawing of the sample.

### Stage I - Formation of the Stratified Groups

Using the preliminary data, the children were divided into three groups according to low, middle, and high socioeconomic status of the child's family. The desirability of dividing the population into these socioeconomic groups for study became apparent during the preliminary review of literature because of the paucity of studies involving socioeconomic class and sex role preference.

The Hollingshead (1975) categorization of social class into five descriptive social strata was useful in dividing the sample. The high group of the study were children whose families made up social strata I (computed scores of 66-55) of major business and professionals. The middle group were social strata II (computed scores of 54-40) and III (computed scores of 39-30) including medium business, minor professional, technical workers, skilled craftworkers, clerical, and sales workers. Machine operators, semiskilled

workers, unskilled laborers and menial service workers were included in strata IV (computed scores of 29-20) and V (computed scores of 19-8), the low socioeconomic group for this study. The development of these social strata by Hollingshead (1975) was dependent upon detailed knowledge of the social structure, and of procedures social scientists have used to delineate class position. The premises of the Four Factor Index of Social Status were based upon three assumptions: (1) there was an existence of status structure in the society; (2) there were positions in this structure determined mainly by a few commonly accepted symbolic characteristics; and (3) there were characteristic symbols of status that may be scaled and used in statistical procedures. Weighted values of marital status, sex, years of education, and occupation keyed to the occupational titles of the United States Census in 1970 (Green, Preiave and Morrison, 1969), were used to categorize people into socioeconomic groups. Additional factors which the Four Factor Index of Social Status took into consideration are today's preponderance of single parent families and families in which both parents are employed. Since almost half of the children in the sample came from single parent families and of the remaining families employment of both parents was common rather than unusual, this factor may have had an effect on the study and should be examined in a similar study at another time.

Once the population had been stratified into the three socioeconomic groups, these groups were classified by age of the child, thereby producing six groups of children. Finally, the six groups were classified by sex, thus producing twelve groups. By applying the table of random numbers to each of these groups, nine children were selected. The first three children were used in the sample with the additional six children making up two groups of alternates.

#### Stage II - Consent Procedure

A letter and two copies of the consent forms were given by the director or teacher at each site to the parents of each child (see Appendix C for the letter and consent form). Careful wording of the letter to appropriately represent the study without threat to the parents or others involved, produced a high percentage of response. Signed consent forms were received on all children except three who had moved between the initial collection of data, and the receipt of the consent forms. Of the parents still in the area, not one refused to sign the consent forms. Three parents of children on the first alternates' list signed consent forms on request. An additional consent form was requested and signed for a fourth child from the alternates' list to replace the child not scoring in the

normal or bright range on the intelligence tests. After one signed copy of the consent form was returned, arrangements were made for an examiner of the same sex to test the child.

### Stage III - Testing Procedure

At each group care facility, a small, quiet room, with limited stimuli was requested for use during the administration of the inventories. Staffs of the cooperating group care facilities responded well to this request. The rooms provided were free from noise, and minor adjustments were made to reduce visual and auditory stimuli. For example, at one site the small table and chairs were placed facing a blank wall in the well lit room, and the shade of the window was drawn, blocking out the view of the playground. Both examiners were careful to establish and maintain rapport with activities by such efforts as smiling, touching, and verbally supporting the individual child throughout the examining period. Care was taken to appeal to these children without changing the directions given in each inventory. The Slosson Intelligence Tests has adapted many items from the Stanford-Binet, Form L-M (Terman and Merrill, 1960) and has the high reliability coefficient of .97. The Slosson was accepted as a consistent screening instrument for children four and five years of age based on the reliability study mentioned above

(Slosson, 1963). After administering this intelligence test, if the child scored in the average (90 to 109) or bright (110-119) range (Slosson, 1963) testing continued with either the SCAMIN or SERLI being administered.

Upon completion of one of the inventories, a three or four minute break was taken and then testing continued. The order of administration of the inventories was rotated from one child to the next, with the entire testing period lasting between 22 and 28 minutes.

#### Treatment of the Data

Responses from each of the inventories were recorded on their own examining sheet. The responses were then scored and these scores were analyzed with the appropriate statistical tools for testing the hypotheses. The first seven hypotheses were subjected to two, three-way analyses of variance (see Appendix D, Table A for model) with sex role preference scores from the twelve stratified groups. This analysis was used to determine if any significant difference existed at the .05 level between the main effect of age, sex, and socioeconomic status of the child's family and their interactions with sex role preference.

The eighth contrast hypothesis was subjected to two, one-way analyses of variance after both "present" and "future" sex role preference scores had been ranked and divided by three groups of low, average, and high self-

concept (see Appendix D, Table B for model of one-way analysis of variance). This was done to see if there were any significant differences at the .05 level in sex role preference and self-concept scores of the children.

The Pearson Product Moment Correlation statistical tool was used twice to measure the relationships of the descriptive Hypotheses Nine and Ten. The relationships of sex role preference to self-concept and sex role confirmation to self-concept were interpreted in terms of the direction of relationships, strength of the relationship, and the percentage of the commonality of the relationships.

#### Summary of Chapter

The individual examination method was used to focus on variance in acquisition of sex role preference and sex role preference's effect on self-concept. This individualized testing was done by using randomly selected four and five year old male and female children from a stratified and classified population of seven group care facilities. Stratification was according to levels of socioeconomic status of the child's family using Hollingshead Four Factor Index of Social Status. Classification was by the child's age and sex. Differences in sex role preference by age, sex, and socioeconomic status of the child's family, differences in sex role preference and self-concept, and the relationship between sex role preference and self-



concept, and the relationship between sex role preference and self-concept were the foci of this study. For a child to have been included in the sample, his or her scores from the intelligence test must have fallen in the average or bright range. After administering both a sex role learning inventory and self-concept inventory, the scores were subjected to two, three-way analyses of variance and two, one-way analyses of variance with the significance level being set at the .05 level. Finally, a Pearson Product Moment correlational statistical tool was used to further test the results.

## Chapter IV

### PRESENTATION AND ANALYSIS OF THE DATA

This study conducted for the purpose of investigating the acquisition of sex role learning and its effect on self-concept had as its stated purpose to examine differences in sex role socioeconomic strata. An additional purpose was to examine the influence of self-consistency in determining the effect of sex role stereotypy on self-concept as a learner. The children for the study were selected at random from the population of seven group care facilities, and each child was examined individually using the Sex Role Learning Index and the Self-Concept and Motivation Inventory (see Appendix A for content of the SERLI and Appendix B for examples from the SCAMIN).

This chapter presents the analysis of the data obtained through the statistical procedures followed. Each of the ten hypotheses is considered separately. Presentation of the analysis will be by order of the statistical methods used; (1) the three-way analysis of variance for Hypotheses One through Seven; (2) the one-way analysis for Hypothesis Eight; and (3) the Pearson Product Moment Correlation Coefficient for Hypotheses Nine and Ten. After examining the last two hypotheses, the data were subjected to further exploration using a multiple linear regression analysis.

For the purpose of statistical analysis, Hypotheses One through Ten were stated in the null form. In testing Hypotheses One through Nine, two different dependent variables "present" sex role preference (i.e. the scores representing adherence to everyday sex role behavior through the child's ranking of child figures) and "future" sex role preference (i.e. the scores representing adherence to adult sex role behavior through the child's ranking of adult figures), were used. These scores purport to measure a child's adherence to sex role stereotypy after the forced classification of items on The Sex Role Learning Index (SERLI). Hypothesis Ten also used the child's ranking of child and adult figures; however, the scores of "present" and "future" sex role confirmation (SRC) were achieved after the free classification (i.e. without forced classification between male and female stereotypes) of the objects.

#### Correlates of Sex Role Learning

Two, three-way analyses of variance using age, sex, and socioeconomic status of the child's family as independent variables and "present" SRP and "future" SRP as the dependent variables were utilized in analysing the data relative to the first seven hypotheses. Being a multi-factor procedure, the three-way analysis of variance tests for the presence of primary effects was used to indicate

the significance of the interaction effected while testing for the differences between means (Courtney and Sedgwick, 1972c). Since the factors studied were arbitrarily set, a fixed model of a three-way analysis of variance was used (see Appendix D, Table A for fixed model).

Hypothesis One. There is no significant age effect. The evidence from both "present" and "future" scores was insufficient to reject the null hypothesis. Tables V and VI show the computed and tabular values of Hypothesis One. The results of the analysis of the "present" SRP scores were not significant,  $F(1,34) = .89$   $p < .05$ . Also not significant were the "future" SRP scores,  $F(1,34) = .00$ ,  $p < .05$ . The mean of the "present" sex role preference (SRP) scores for the four year olds was 55.00, and for the five year olds the mean was 59.00. The mean of the "future" sex role preference (SRP) scores for the four year olds was 56.11, and for the five year olds the mean was 55.94.

Hypothesis Two. There is no significant sex effect. The evidence from the "present" SRP scores was sufficient to reject the null hypothesis, while the evidence from the "future" SRP scores was insufficient to reject the null hypothesis. Tables V and VI show the computed and tabular values for Hypothesis Two. The results of the analysis of the "present" scores were significant,  $F(1,34) = 6.48$ ,  $p < .05$ . The "future" scores, however, were not significant,

Table V. HYPOTHESES DECISION MATRIX FOR "PRESENT" SEX ROLE PREFERENCE.

Hypotheses	Computed <u>F</u> values	<u>df</u>	Tabular <u>F</u> values $\alpha = .05$	Hypotheses Decision
H <sub>1</sub>	.89	1,34	4.12	N.S.
H <sub>2</sub>	6.48	1,34	4.13	.05
H <sub>3</sub>	2.44	1,34	3.28	N.S.
H <sub>4</sub>	1.52	1,34	4.13	N.S.
H <sub>5</sub>	.62	2,34	3.28	N.S.
H <sub>6</sub>	.91	2,34	3.28	N.S.
H <sub>7</sub>	.04	2,34	3.28	N.S.

Table VI. HYPOTHESES DECISION MATRIX FOR "FUTURE" SEX ROLE PREFERENCE.

Hypotheses	Computed <u>F</u> values	<u>df</u>	Tabular <u>F</u> values $\alpha = .05$	Hypotheses Decision
H <sub>1</sub>	.00	1,34	4.13	N.S.
H <sub>2</sub>	1.68	1,34	4.13	N.S.
H <sub>3</sub>	.10	2,34	3.28	N.S.
H <sub>4</sub>	1.37	1,34	4.13	N.S.
H <sub>5</sub>	.56	2,34	3.28	N.S.
H <sub>6</sub>	.45	2,34	3.28	N.S.
H <sub>7</sub>	.56	2,34	3.28	N.S.

$F(1,34) = 1.68, p < .05$ . Hence, the "present" scores were significant while the "future" scores were not. The means of the "present" sex role preference were 62.38 for the males and 51.61 for the females. The means for "future" sex role preference was 58.89 for the males and 53.17 for the females.

Hypothesis Three. There is no significant socioeconomic effect. The evidence from both "present" and "future" sex role preference scores was insufficient to reject the null hypothesis. Tables V and VI show the computed and tabular values for Hypothesis Three. The results of the analysis of "present" SRP scores were not significant,  $F(1,34) = 2.44, p < .05$ . The future scores,  $F(1,34) = .01, p < .05$ , were also not significant. The means for "present" sex role preference were 50.50 for the low socioeconomic group, 61.33 for the middle socioeconomic group, and 59.17 for the high socioeconomic group. The means for "future" sex role preference were 47.17 for the low socioeconomic group, 56.25 for the middle socioeconomic group, and 54.67 for the high socioeconomic group.

Hypothesis Four. There is no significant interaction between age and sex. The evidence from both "present" and "future" sex role preference scores was insufficient to reject the null hypothesis. Tables V and VI show the computed and tabular values for Hypothesis Four. The results of the analysis of the "present" scores were not significant

$F(1,34) = 1.52, p < .05$ . Also not significant were the "future" scores,  $F(1,34) = 1.37, p < .05$ .

Hypothesis Five. There is no significant interaction between age and socioeconomic status of the child's family. The evidence from both "present" and "future" sex role preference scores was insufficient to reject the null hypothesis. Tables V and VI show the computed and tabular values for Hypothesis Five. The results of the analysis of "present" scores were not significant,  $F(2,34) = .62, p < .05$ . Also not significant were the "future" scores,  $F(2,34) = .56, p < .05$ .

Hypothesis Six. There is no significant interaction between sex and socioeconomic status of the child's family. The evidence from both "present" and "future" sex role preference scores was insufficient to reject the null hypothesis. Tables V and VI show the computed and tabular values for Hypothesis Six. The results of the analysis of the "present" scores were not significant,  $F(2,34) = .91, p < .05$ . Also not significant were the "future" scores,  $F(2,34) = .45, p < .05$ .

Hypothesis Seven. There is no significant interaction among age, sex, and socioeconomic status of the child's family. The evidence from both "present" and "future" sex role preference scores was insufficient to reject the null hypothesis. Tables V and VI show the computed and tabular values of Hypothesis Seven. The results of the analysis of

the "present" scores were not significant,  $F(2,34) = .04$ ,  $p < .05$ . Also not significant were the "future" scores,  $F(2,34) = .56$ ,  $p < .05$ .

Hypotheses One through Seven were all subjected to a three-way analysis of variance using the scores of adherence to societal sex roles in the "present" (present SRP) and a three-way analysis of variance using the scores of adherence to societal sex roles of the future (future SRP). Only the second of these hypotheses was sufficient in significant difference for rejection. This rejection was sufficient only when using the "present" sex role preference scores, not when using the "future" sex role preference scores. More specifically, the effect of the independent variable of sex on "present" adherence to societal sex roles is significant in the development of sex role learning according to these findings. The decision tables indicate the specific findings of these seven hypotheses (see Appendix D, Tables C and D for specific findings).

#### Sex-Role Preference and Self-Concept

Two, one-way analyses of variance using the "present" SRP and "future" SRP scores as the independent variables and the self-concept scores as the dependent variables were utilized in analyzing the data relative to the eighth hypothesis. The one-way analysis of variance dealt with a



single factor while analyzing two or more groups (Courtney and Sedgwick, 1972b). The raw data of the individual children's "present" and "future" sex role preference scores divided into low, average, and high groups by the self-concept scores of the SCAMIN appear in Table VII. Hypothesis Eight was subjected to a one-way analysis of variance using the scores of adherence to societal sex roles in the present and to a one-way analysis of variance using the scores of adherence to societal sex roles in the future (see Appendix D, Table B for model).

Hypothesis Eight. There is no significant self-concept effect. The evidence from both "present" and "future" sex role preference scores was insufficient to reject the null hypothesis. The results of the analysis of the "present" sex role preference (SRP) scores were not significant,  $F(2,33) = 1.63$ ,  $p < .05$ . Also not significant were the "future" sex role preference (SRP) scores,  $F(2,33) = .92$ ,  $p < .05$ . Table VII shows the computed and tabular scores of Hypothesis Eight. The means of "present" sex role preference were 53.00 for the group with low self-concept, 54.91 for the group with average self-concept, and 62.31 for the group with high self-concept. The means of "future" sex role preference were 52.81 for the group with low self-concept, 57.75 for the group with average self-concept, and 58.00 for the group with high self-concept.

Table VII. SEX ROLE PREFERENCE SCORES DIVIDED INTO LOW, AVERAGE, AND HIGH SELF-CONCEPT GROUPS.

Low Self-Concept 14-25 (SCAMIN)			Average Self-Concept 26-28 (SCAMIN)			High Self-Concept 29-34 (SCAMIN)		
Child	"Present"	"Future"	Child	"Present"	"Future"	Child	"Present"	"Future"
1	80	55	12	80	41	24	56	77
2	40	43	13	59	55	25	63	80
3	48	43	14	80	80	26	38	77
4	57	43	15	58	55	27	68	59
5	37	46	16	62	57	28	71	42
6	40	43	17	46	63	29	60	66
7	40	49	18	41	49	30	61	57
8	70	73	19	64	65	31	70	41
9	63	64	20	41	48	32	77	46
10	52	50	21	38	55	33	46	44
11	56	61	22	73	48	34	58	44
			23	42	53	35	64	46
						36	80	73

Table VIII. HYPOTHESIS DECISION MATRIX FOR SELF-CONCEPT AND "PRESENT" AND "FUTURE" SEX ROLE PREFERENCE.

Hypothesis Eight	Computed <u>F</u> value	<u>df</u>	Tabular <u>F</u> value	Hypotheses Decision
Present SRP	1.63	2,33	3.29	N.S.
Future SRP	.92	2,33	3.29	N.S.

Hypothesis Eight was subjected to a one-way analysis of variance using the scores of adherence to societal sex roles in the "present" (present SRP) as stratified by low, average, and high self-concepts. A second one-way analysis of variance using the scores of adherence to societal sex roles in the "future" (future SRP) as stratified by low, average, and high self-concepts was also used. The outcomes of both one-way analyses of variance were insufficient to reject the null hypothesis. In summary, these findings indicate that neither "present" nor "future" sex role preferences significantly effect self-concept. The decision tables indicate the specific findings of this hypothesis (see Appendix D, Tables E and F for specific findings).

Two Pearson Product Moment Correlation Coefficients were utilized to analyze the data relative to Hypotheses Nine and Ten. The relationship between "present" and "future" sex role preference and sex role confirmation scores were each analyzed separately with self-concept. The relationships of these scores were interpreted in terms of

the direction of the relationship and the significance of correlational values.

Hypothesis Nine. There is no significant relationship between self-concept and sex role preference. The evidence from both "present" and "future" sex role preference scores was insufficient to reject the null hypothesis. Table IX shows the computed and tabular scores of Hypothesis Nine.

Table IX. HYPOTHESIS NINE DECISION MATRIX.

Sex Role Preference Scores	Computed $\underline{t}$ values	df	Tabular $\underline{T}$ values	Hypothesis Decision
Present	.95	34	2.03	N.S.
Future	1.44	34	2.03	N.S.

The results of the analysis of the "present" SRP scores were not significant,  $\underline{t}$  (34) = .95,  $\underline{p} < .05$ . Also not significant were the "future" scores,  $\underline{t}$  (34) = 1.44,  $\underline{p} < .05$ . Analysis of the "present" SRP scores revealed a slight, positive relationship of .16 with the "future" SRP scores revealing a low, positive correlation of .24.

Hypothesis Ten. There is no significant relationship between self-concept and sex role confirmation. The evidence from both "present" and "future" sex role preference (SRP) scores were insufficient to reject the null hypothesis. The results of the "present" scores were not significant,  $\underline{t}$  (34) = .52,  $\underline{p} < .05$ . Also not significant were the "future" scores,  $\underline{t}$  (34) = .00,  $\underline{p} < .05$ .

Table X shows the computed and tabular scores of Hypothesis Ten.

Table X. HYPOTHESIS TEN DECISION MATRIX.

Sex Role Confirmation Scores	Computed T values	df	Tabular T values	Hypothesis Decision
Present	.52	34	2.03	N.S.
Future	.00	34	2.03	N.S.

The result of the analysis of the "present" sex role confirmation (SRC) score revealed a slight, almost negligible relationship in the positive direction with a .09 correlational value with the "future" sex role confirmation (SRC) score revealing a negligible relationship with a .01 correlation value.

Hypothesis Nine was subjected to a Pearson Product Moment Correlation using the scores of present and future sex role preference as the independent variables and self-concept as the dependent variable. The same statistic was also used in testing the effect of present and future sex role confirmation on self-concept for Hypothesis Ten. Neither Pearson Product Moment Correlations produced outcomes to sufficiently reject Hypotheses Nine or Ten. Hence, adherence to "present" or "future" societal sex roles (i.e. sex role preference) appeared to have no significant effect on self-concept, although analysis of the scores revealed a slight and low positive relationship

between them. Adherence to "present" or "future" self-identified sex roles (i.e. sex role confirmation) also appeared to have no significant effect on self-concept.

### Exploratory Analysis

After examining Hypotheses Nine and Ten, the data were subjected to an exploratory analysis using multiple linear regression. Linear regression analysis is appropriately used in predicting scores on one variable from measures on another variable, or several other variables as in multiple regression analysis (Courtney and Sedgwick, 1972c). The purpose of the exploratory analysis was to respond to possible questions about the slight and low positive relationship found between "present" and "future" sex role preference and self-concept found in Hypothesis Nine, while sex role preference appeared to have no effect on self-concept in Hypothesis Eight. Additional questions were raised when "present" and "future" sex role confirmation were not found to be related to self-concept in Hypothesis Ten.

### Multiple Regression Analysis

The multiple linear regression analysis was used to predict the self-concept score of each child in the sample. The self-concept score of each child was used as the "Y" or dependent variable with sex role preferences and sex role

confirmation scores being used as the independent variables or "X's". The predicted score was then compared to the self-concept score of each child. In comparing the direction of "present" sex role preference with "present" sex role confirmation and self-concept with predicted self-concept, a pattern emerged. This pattern also appeared when comparing "future" sex role preference and "future" sex role confirmation with self-concept. Based on the multiple linear regression analysis, if the sex role preference (i.e. adherence to societally prescribed sex roles) was higher or the same as the sex role confirmation score (i.e. adherence to self-identified sex role) then the self-concept score of the child was higher than the predicted self-concept indicated by the line of regression. This pattern holds in 26 of the children's "present" scores and half, or 18 of the children's "future" scores.

These findings supplied some answers to the questions raised when slight and low positive relationships were found between "present" and "future" sex role preference and self-concept while no similar relationships between either "present" or "future" sex role confirmation and self-concept were found. The pattern that developed using multiple linear regression analysis implied that a child adhering more to societally prescribed sex roles than to self-identified sex roles tends to have a higher measured self-concept.

### Summary of Chapter

The stated purpose of the study was to ascertain whether there is a difference in sex role stereotypy of children at selected ages, between sexes, and among socioeconomic strata. Another purpose was to examine the influence of self-consistency in determining the effect of sex role stereotypy on self-concept as a learner. This chapter presented the findings of the study relative to the ten hypotheses and supplied an exploratory analysis in response to possible questions raised by some of the findings.

The methods used to test the hypotheses were the three-way analysis of variance, the one-way analysis of variance and the Pearson Product Moment Correlational Coefficient. A multiple linear regression analysis was used in the exploratory analysis.

The results of the analysis of the hypotheses were as follows.

1. No significant differences in variances of sex role stereotypy occurred in either age or socioeconomic status of the child's family at the .05 level.
2. A significant difference did occur between male and female children in regard to "present" sex role preference with, the males adhering more to sex role stereotypy than the girls. This did not occur in regard to "future" sex role preference of male and



female children. Both were tested at the .05 level.

3. No significant interaction occurred among age, sex and socioeconomic status of the child's family and sex role preference at the .05 level.
4. No significant difference occurred in sex role preference and the low, average, or high self-concept groups at the .05 level.
5. No significant relationship occurred between self-concept and "present" and "future" sex role preference, although a slight and low positive relationship was seen at the .05 level.
6. No significant relationship occurred between self-concept and sex role confirmation at the .05 level.

Multiple linear regression analysis, used to further explore these results, delineated a pattern in which children who adhered more to sex role preference than sex role confirmation tended to have measurably higher self-concepts.

## Chapter V

### SUMMARY AND DISCUSSION

The results of the statistical procedures used in examining the issues of sex role learning and self-concept were reported in Chapter IV. In this chapter a summary of the study is presented. Findings are discussed and compared to the statements from the review of literature.

#### Summary

Professionals in child development have studied acquisition of sex roles (i.e. roles relating to gender). They are also beginning to study the effect of sex role learning (i.e. acquiring gender related roles).

The stated purpose of this research was to ascertain whether there is a difference in sex role stereotypy of children at selected ages, between sexes, and among socioeconomic strata. An additional purpose was to examine the influence of self-consistency in determining the effect of sex role stereotypy on self-concept as a learner.

In November of 1977, the Home and Family Life Department of Renton Vocational Technical School in Renton, Washington agreed to provide the population of four and five year old children necessary for the study. During January of 1978 the initial data was collected from 183 children making up the population of the study. These

children attended six group care facilities under the auspices of the Home and Family Life Department. An additional day care center located in Kent, Washington provided 31 more children. These 214 children were then classified into groups by age (four and five years) and sex. The groups of children were also stratified by socioeconomic groups (i.e. the children were grouped into low, medium, and high socioeconomic classes using Hollingshead's Four Factor Index by Hollingshead, 1975). The following screening tool and inventories were administered individually to each child of a sample of 36 children randomly selected in March of the same year.

1. The Slosson Intelligence Test (Slosson, 1963), a screening tool, was used. Only those children scoring within the normal or bright range of intelligence were included in the sample.
2. The Sex Role Learning Index (SERLI by Edelbrock, 1976) used in this study was said to measure adherence to societal sex roles (i.e. sex role preference, SRP) and adherence to self-identified sex roles (i.e. sex role confirmation, SRC).
3. The Self-Concept and Motivation Inventory, Preschool and Kindergarten form (SCAMIN by Farrach et al., 1975) used in this study was said to measure self-concept based on the facets of role expectation (an external experience) and self-adequacy (an internal motivator).

The SCAMIN was a self-report instrument that utilizes an answer sheet with choices acknowledged by coloring the nose of either a happy, sad, or neutral face.

Administration of the screening tool and inventories was arranged only after consent was received from each child's parent or parents. In a cover letter the writer included information pertaining to the purposes of the study, the procedure of the study. Also included was a promise to share the group results of the study. This cover letter proved extremely successful since signed consent forms were received from 33 parents out of the 36 parents first contacted. The three parents who did not respond had moved. Consents were also received from the parents of four children listed among the alternates. The fourth consent form was requested when the examiners found one of the boys of the original sample did not score in the average or bright range of intelligence established as a necessary criterion in this study. The seven group care facilities were particularly responsive in providing an excellent testing environment at each site. Special care was taken by the examiners to administer the inventories according to the directions specified by the authors. The order of administering the inventories was rotated with each child. Since more reliable results on the SERLI had been previously achieved by using an examiner of the same sex, a male administered the inventories to the boys, and

a female administered the inventories to the girls.

The statistical tools used were: (1) the three-way analysis of variance; (2) the one-way analysis of variance; and (3) the Pearson Product Moment Correlation. Each of these tools was used twice: (1) in studying adherence to sex roles in everyday activities (measured by "present" scores), and (2) in studying adherence to models of adult sex role behavior (measured by "future" scores). After using each statistical tool, the scores from the children's responses were tested at the .05 level of significance. An effort was made to further illuminate the part self-consistency played in the relationship of self-concept to sex role stereotypy by using multiple linear regression analysis.

Six of the first seven hypotheses dealing with the primary and interactional effects of age, sex, and socioeconomic status on sex role preference were retained. Hypothesis Two, which was concerned with the effect of sex on sex role preference, showed "present" scores of adherence to everyday sex roles to be at a level which allowed for rejection. Adherence to models of adult sex role behaviors measured by "future" scores, however, was not sufficient to reject Hypothesis Two. The testing of Hypotheses Eight, Nine, and Ten did not offer an explanation of the influence of self-consistency in the relationship of sex role stereotypy and self-concept.

Through further exploratory analysis using multiple linear regression, a pattern developed within the scores of the individual children that offered some insight into the influence of self-consistency in the relationship of sex role stereotypy and self-concept. This pattern implied that a child having a higher sex role stereotypic score (measured by SRP) than self-consistency score (measured by SRC) also tended to have a measurably higher self-concept.

### Discussion

#### Correlates of Sex Role Learning

The main purpose of this study was to ascertain whether there is a difference in sex role stereotypy of children at selected ages, between sexes, and among socioeconomic strata. This was done by testing the "present" scores of SRP (Sex Role Preference) adherence to societal sex roles in everyday activities, for primary effects with a three-way analysis of variance. The "future" scores of SRP were also subjected to this statistical tool to further examine whether children responded differently according to societal expectations of the adult sex roles. This process of analyzing both three-way analyses of variance for each hypotheses was followed before rejecting or retaining Hypotheses One through Seven.

The retention of Hypothesis One, there is no significant effect of difference in age on sex role

preference, was an unexpected result. The previous research examined indicated both sexes of preschool age children made significantly different discriminatory choices regarding sex roles. Biller and Borstelmann (1967) used the Modified "It" Scale (a picture test employing a face as the "It") to measure children's own and opposite sex role discrimination between the ages of three and five (a 36 month age span). This age span may have been wide enough for significant differences in choice to have developed. Another possibility is that three year old children may discriminate differently than four year old children. In this study, sample members were four or five years of age (a maximal 24 month difference in the sample's age span). Other research also indicated that boys appeared to increase their preference for the masculine role while the girls appeared to reach their peak in feminine preference at about five years of age and then maintain this level until adolescence (Brown, 1956b; 1957; DeLucia, 1960; Hartup and Zook, 1960).

Throughout the review of literature the importance of the age factor appeared when studying acquisition of sex roles in young children. For this reason, the writer chose to include a brief selection in Chapter 2 of the "classic" theories of development that postulated sequential development of children over time (Piaget, 1952; Erickson, 1963; Kohlberg, 1969). These "classic" studies saw children of four and five years of age as being at the

stage of initiating fantasy and play activities through symbolic representations. At this age children also tended to make moral decisions on the basis of fear of punishment and moral realism. In this study four and five year old children were not found to be significantly different from one another in adherence to sex role preference. For this reason, it would appear that this study may have affirmed that children of four and five years of age to be at the same developmental stage and perhaps involved in the same or similar developmental tasks. In other words, four and five year old children at this stage appeared to discriminate and to adhere to sex roles in similar ways.

The results of the "present" SRP scores (adherence to societal sex roles in everyday activities) were sufficient to reject Hypothesis Two, while the results from the "future" SRP scores (adherence to society's models of adult sex role behavior) were insufficient to reject this hypothesis. Hypothesis Two states there is no significant effect of differences in response to stimuli presented according to sex role preference. Resulting mean scores for the boys were significantly higher than the mean scores for the girls. These outcomes were consistent with the findings of previous research examined on boys' adherence to sex role stereotypy in their present activities at a higher level than girls (Brown, 1956b, 1957; DeLucia, 1960; and Rabban, 1950). The lack of significant differences



between the "future" scores of the boys and girls was consistent with the postulation by Edelbrock and Sugawara (1978) that sex role acquisition proceeded in opposite directions for boys and girls (i.e. girls adhered more to models of adult sex role behavior, while boys adhered less). The writer found that "future" scores of the girls in this study to be higher than their "present" scores. This apparently indicated a broader adherence to sex roles in play activities in which the girls were currently engaged, yet a narrower adherence to their sex role expectations of the adult female. Contrasting this, boys appeared to conform to prescribed sex roles for the activities in which they were currently engaged, but had a more androgynous expectation for their model of the adult masculine role.

Socioeconomic status was believed to significantly influence sex role behavior or preference (Kinsey et al., 1948; Davis, 1950). This study's retention of Hypothesis Three contradicted this. Although further inspection of the "present" scores for this hypothesis indicated a significance at,  $F(2,34) = 2.44$ ,  $p < .10$ , it was not at the .05 level. Effect of social class on adherence to societally prescribed sex roles appeared highest in the middle socioeconomic class. Lower adherence was observed in the higher and lower classes. This was a directional trend (i.e. though not significant at the .05 level set for this study, the scores did indicate a significance at the

.10 level). At this level of significance, the .10 level, support for the belief by Kinsey et al. (1948) and Davis (1950) is found.

Although Hypothesis Four (there is no significant interaction effect between age and sex in sex role preference) was retained at the .05 level, a significant difference was found at the .25 level. If Hypothesis Four were rejected, this study would agree with the literature reviewed in Chapter 2. According to Hartup and Zook (1960) older boys adhered to everyday play activities prescribed by society's sex roles more than other children did. More specifically, according to Edelbrock and Sugawara (1978) children were expected to show increasing adherence to societally prescribed sex roles in their present everyday activities with the boys leading the way to this adherence. In projecting adherence to adult sex roles later on in life, the girls indicated they would adhere to societally prescribed sex roles, while the boys indicated they would broaden their view of the sex roles. Although not at the prescribed level of .05 the significant directional effect,  $F(1,34) = 1.52, p < .25$  for the "present" scores and  $F(1,34) = 1.37, p < .25$  for the "future" scores would add evidence of change in direction of adherence to sex role preference between the sexes as they view adherence to adult sex role models.

Hypotheses Five, Six, and Seven, testing for interaction effect between age and socioeconomic status, sex and socioeconomic status and among age, sex, and socioeconomic status on sex role preference were also retained. No previous research existed that could be compared with the age group of this sample.

These findings as they relate to the writer's expectations and to the literature are discussed in Chapter 6. Implications of variance in age, sex, and socioeconomic status on sex role preference and the implications of the relationship between sex role learning and self-concept are included.

#### Sex Role Preference and Self-Concept

Prior to the testing and subsequent retention of Hypothesis Eight (there is no significant effect of difference in sex role preference on self-concept), the writer divided the children's self-concept scores into low, average and high groups. The children's scores of adherence to everyday activities prescribed by society's sex roles (present SRP scores) were then subjected to a one-way analysis of variance. The children's scores measuring adherence to societal expectations of the adult sex roles (future SRP scores) were subjected to a second, one-way analysis of variance. Hypothesis Eight was retained for both "present" and "future" scores. A significant

directional effect between sex role preference and self-concept,  $F(1,34) = 1.63$ ,  $p < .25$ , was found after a close look at the "present" scores. Though inconclusive, this appeared to imply a similarity between adherence to sex role stereotypy and self-concept. At this significance level the mean scores indicated "present" sex role preference (SRP) to be the highest in the group of children with high self-concept and to be the lowest in the group with low self-concept. Hence there appeared to be a simultaneous tendency toward a high self-concept and an adherence to societally prescribed sex roles.

A positive relationship between self-concept and sex role preference could not be established, however, after Hypothesis Nine (there is no significant relationship between self-concept and sex role preference) was retained. Through further analysis of Hypothesis Nine, a significant, directional effect,  $t(34) = 1.44$ ,  $p < .25$ , between "future" sex role preference scores and self-concept was found. Although this was not at the study's prescribed .05 level of significance, this finding appeared to establish a firmer disagreement between the findings of this research and the concerns of those expressed in nonsexist child rearing (Hirsch, 1974; Carmichael, 1977) and nonsexist preschool curricula (Sprung, 1975). Because self-concept is a persisting quality, minimal change is often not observable nor measurable. The fact that a significant

positive relationship was found at the .25 level served to further interest the writer.

Because of the significant directional effects found in Hypotheses Eight and Nine and the retention of Hypothesis Ten (there is no significant relationship between self-concept and sex role confirmation), the writer felt that it was necessary to further elucidate the part adherence to the child's selection of sex role played in the relationship of sex role learning and self-concept. For this reason, multiple linear regression analyses were used with both "present" and "future" sex role preference and sex role confirmation scores. The pattern of the "present" scores of individual children with higher sex role preference scores (adherence to societally prescribed sex roles) than self-consistency scores (adherence to self-identified sex roles) also tended to have higher measured self-concepts. Although this pattern was also seen in the individual children's "future" scores, the pattern was not as obvious. With these findings, the writer felt some conclusions or inferences might be drawn. Implications from the conclusions regarding acquisition of correlates of sex role learning and its relationship to self-concept are discussed in Chapter VI.

### Summary of Chapter

Several unexpected results occurred in the analysis of the findings of this study when compared to previous research. Analysis of the hypotheses were set at the .05 level of significance. Directional tendencies were found by using broader significance levels in the search for implications of the study. In this investigation of tendencies, the responses according to socioeconomic class showed adherence to societally prescribed sex roles, with the middle class adhering at the highest level. Another tendency was indicated in the direction of an interactional effect between age and sex on sex role preference. This interaction supported previous research in the area.

Directional tendencies between adherence to sex role stereotypy and higher self-concept in everyday current activities, and a positive relationship between "future" sex role preference scores and self-concept were also part of the findings of this study. According to these findings and to the exploratory analysis, high sex role preference scores, not sex role confirmation scores, were indicators of high self-concept scores in children.

The study appeared to affirm some of the previous research reviewed. Boys adhered to sex role stereotypy at a higher level than girls. A shift appeared to take place in children's adherence to models of adult sex role behavior, with the boys' adherence to sex role stereotypy

decreasing as girls' adherence increased. In affirmation of some of the "classic" theories of development, children of four and five years of age in the sample appeared to respond similarly to tasks of discriminating and adhering to sex roles.

## Chapter VI

### CONCLUSIONS AND RECOMMENDATIONS

This study was undertaken to contribute to further understandings of sex role learning, its variances in acquisition and its effect on self-concept in preschool aged children. Implications may be helpful in stimulating further research, in planning preschool curricula, and in educating parents and children about how sex roles ultimately effect their lifes. The conclusions and recommendations of this study are discussed in this chapter.

#### Conclusions

##### Correlates of Sex Role Learning

The data of this study and literature reviewed conclude that four and five year old boys do adhere to a sex role in terms of current everyday activities at a significantly higher level than girls. These findings are in agreement with social learning theory (Mischel, 1966, 1970; Mussen, 1969; Sears, 1965). It appears that reinforcement of masculine behavior as the boys avoid the female sex role may produce a high level of the stereotyped maled sex role at ages four and five. Avoidance behavior by the boys may be achieved by punishment for feminine



behavior or lack of reinforcement (ergo, producing extinction) of the female sex role. The writer believes this to be true and finds support in behavioral shaping (Krumboltz and Krumboltz, 1972). It would appear to follow that since four and five year old children make moral judgments on the basis of fear of punishment (Kohlberg, 1969) behavioral shaping techniques may be used either knowingly or unknowingly in producing sex roles deemed appropriate by society's standards. Behavioral shaping by rewarding approximations of the wanted behavior, in this case societal prescribed sex role behavior, is an extremely effective measure for changing behavior.

Support for the developmentalist view (i.e. that children make some moral decisions based on what they see), is found in that little boys often have only a limited view of the male sex role. Little boys are often surrounded by mothers, female teachers, and female group care workers and may not have a great deal of exposure time with an adult male. Lack of male role satiation due to limited viewing allows this role to maintain its high saliency level for the boy. In contrast, little girls often seem to have ample time with a model of the same sex and may become satiated with the female sex role.

Findings of Hypotheses Two and Four heighten the supposition of Edelbrock and Sugawara (1978) than the process of sex role acquisition may proceed with boys

initially stereotyping sex roles early in life and then broadening this role while girls may proceed to do the opposite (i.e. have a broad range of current everyday sex role behavior and then stereotyping later on in life). In reflecting on the previously mentioned socio-cultural factors, the writer believes that little girls' satiation with the female sex role in present allows them to act as if, "that role will be for me when I grow up." Little boys, often with less opportunity to share the male role with adults and in combination with the harshness of learning their role through punishment and avoidance for "acting feminine," may learn to believe, "I must behave like a male now and then later maybe I can do other things." Evidence of a shift in acquisition of sex role as four and five year old children become older may be explained as an outcome of a contradiction between the implied message and the actual sex role behavior of the parent. The little boy may be required to act in the traditionally prescribed manner of the male, but may view his father's helping out with the dishes and other traditionally female tasks. The girls may be allowed to act in a "tom-boy fashion" while viewing their mothers' involvement with running the house, etc.

The writer believes that findings of this study which are contradictory to those described in the literature may be explained by the narrow age range of the sample. The sample may have represented a single stage of development.

Previous research on sex role learning has not related the findings to "classic" developmental theories (Piaget, 1952; Erikson, 1963; Kohlberg, 1969). In this study, with the narrow 24 month age span (four and five year old children) the retention of the related hypotheses may affirm the developmental idea that certain tasks may be part of a single developmental stage.

Research available for review regarding socioeconomic status and sex role preference took place almost fifteen years ago and with children who were older than the children in this study. The mean scores of the four and five year old children in the middle socioeconomic group are highest for both "present" and "future" tasks. Lower mean scores are observed in the higher class and then the lower class. The achievement-conscious parent of the middle or high socioeconomic class may guide and reinforce the sex role preference of their children in early childhood. The boys of these classes appear to be supplied with trucks, cars, trains, and other historically male oriented toys and tools. In addition, at an early age these boys are involved in the competitive sports of soccer, Little League Baseball, etc. At the same time, the little girls are driven to ballet, music lessons, and given the current movie star doll with all of the appropriate female trappings. In contrast, many times little boys and girls from the lower socioeconomic class play together without sexual

segregation. They play this way without interference or guidance from adults. The writer believes that this look at present day child rearing practices in suburban communities may explain the findings of this study.

### Sex Role Preference and Self-Concept

Conclusions in regard to the possible effect of sex role stereotypy on self-concept rely heavily on the pattern developed through the use of multiple linear regression analysis in the exploratory analysis of the individual children's scores. In Chapter 2, the supposition is developed from the literature that adherence to one's selection of sex roles, whether correct by society's standards or not, produces self-consistency. Thus, the influence of self-consistency on the relationship between sex role stereotypy and self-concept may cause the contradictory findings reviewed. The results of this study may provide some evidence to dispute this supposition. "Present" sex role preference scores (adherence to societally prescribed sex roles in current everyday activities) appear to be more predictive of self-concept scores than "present" sex role confirmation scores (adherence to self-identified sex roles in current everyday activities) in individual children. In other words, a relationship between high self-concept and adherence to societally prescribed sex roles in choosing everyday play

activities exists in four and five year old children. This same finding is not as obvious between the "future" sex role preference scores (adherence to societally prescribed models of adult sex role behavior) and the "future" sex role confirmation scores (adherence to a self-identified model of adult sex role behavior). Possible reasons for this pattern delineated by exploratory analysis may be examined.

1. Maslow's Hierarchy of Needs (Maslow, 1954) presents a ladder of human needs which, in this writer's opinion, appears to correlate with the developmental theories presented in Chapter 2. In these early theories, many of the early needs are concrete and reality oriented with later needs requiring more abstract thoughts and intangible constructs like love, esteem, and self-actualization. The writer believes that the children in the sample of this study may not be at the level of seeking to satisfy their higher level needs; hence, self-consistency scores are low. Indeed, Maslow (1954) sees young children as wanting security, routine, and structure to encourage them in their efforts. The writer agrees with Maslow and observes that most children in our affluent suburban society do have their physical needs satisfied and turn to satisfaction of their love and security needs. Because of this level of need, external verification would actually be sought

by children of this age group. For this reason, these children may be more open to readily available, societally reinforced, stereotyped sex roles.

2. Developmental theorists (Piaget, 1952; Erikson, 1963) speak of four and five year old children as initiating symbolic mastery of relationship in the concrete world. According to these theories children of this age would probably symbolically relate being female or male to the adult sex role models they can see acted out by the majority of the society.
3. Kohlberg (1969) describes young children as making moral decisions according to what they see and in accordance to societal approval or punishment. What the child would see, be rewarded for, or punished because of, are often the very pervasive sex roles prescribed by society. For example, a small boy might be punished psychologically or corporally for playing with a doll. This would influence the boy to believe that doll play and child care is part of the female role, or at least, not for boys.

The writer believes that because of the very observable stereotyping of sex roles in our society, the child of four and five may find security and comfort in adherence to these clearly defined sex roles. This security and comfort may lend to higher self-esteem, hence higher self-concept in individuals of this age group. Caution must be used in

making inferences such as these without further research.

Relaxation of the parameters surrounding sex roles appears to be a current goal of both formal and informal institutions (family, school, private, and public agencies). Assuming this produces more androgynous adult models, it is interesting to speculate on the resulting behavior of young children as they seek to emulate these models. The writer believes it is too early to conclude that by relaxing the parameters of sex roles, children will have higher self-concept and fulfill their potentials as adults. Instead, it would appear that nonsexist preschool and child care curricula (Sprung, 1975) in addition to nonsexist child rearing methods (Hirsch, 1974; Carmichael, 1977) might more directly affect self-concept in young children by providing daily experiences that enhance human potential, rather than by seeking to reduce sex role stereotypy.

### Summary of Chapter

These conclusions are drawn from a study of four and five year old children, with bright or average intelligence, attending group care facilities in suburban communities of Seattle, Washington.

1. Four year old children do not significantly differ in their "present" or "future" sex role preference (adherence to societally prescribed sex roles) from

five year old children. This finding conflicts with previously cited research.

2. Four and five year old boys adhere to "present" sex role preference at a significantly higher level than four and five year old girls. No difference is found in "future" sex role preference. Difference in "present" sex role preference supports the previous research cited, while no difference in "future" sex role preference does not.
3. Four and five year old children from the three socioeconomic classes do not significantly differ in "present" and "future" sex role preference. Previous research was not discovered in this area.
4. Age and sex do not act together to influence either "present" or "future" sex role preference of four and five year old children. This finding conflicts with previously cited research.
5. Age and socioeconomic status do not act together to influence either "present" or "future" sex role preference of four and five year old boys and girls. Previous research was not discovered in this area.
6. Sex and socioeconomic status do not act together to influence either "present" or "future" sex role preference of four and five year old boys and girls. Previous research was not discovered in this area.



7. Age, sex, and socioeconomic status do not act together to influence either "present" or "future" sex role preference of four and five year old boys and girls. Previous research was not discovered in this area.
8. Four and five year old children with low, middle, and high self-concepts as learners are similar in both "present" and "future" sex role preference. This conflicts with the concerns of nonsexist preschool curricula (Sprung, 1975), affirmative action legislation, and nonsexist child rearing practices (Hirsch, 1974; Carmichael, 1977).
9. Among individual four and five year old children, self-concept as a learner is predicted by sex role preference when equal to or greater than sex role confirmation (adherence to self-identified sex roles). This also conflicts with the concerns of nonsexist preschool curricula (Sprung, 1975), affirmative action legislation, and nonsexist child rearing practices (Hirsch, 1974; Carmichael, 1977).
10. The adherence to sex role confirmation by four and five year old children is not related to "present" or "future" sex role preference. Previous research was not discovered in this area.

### Recommendations

Findings of this study seem to warrant further research in the following areas:

1. Research using both observation and self-report methods are needed when studying both self-concept and sex role learning. This study used self-report methods.
2. Although ethnicity was not controlled in this study, the writer noticed that in the selected sample, only Caucasian children were represented. Replication of this study is needed with other specific groups because they exist in the population at large. These groups can be studied as a homogeneous sample or part of a heterogeneous sample to determine if cross cultural differences occur.
3. Research is needed which controls for classification by one- and two-parent families and/or non, one, or two income families. The present study did not control for this, however, the writer noticed that in the selected sample, a wide variety of family life styles were represented.
4. Research is needed using a large sample with broader stratification of socioeconomic class. The present study used three socioeconomic strata.
5. Replication of this research is needed with a larger sample and randomly assigned examiners of different

sexes. The present study used examiners of the same sex as the child.

6. Research is needed using a broader-based sample of four and five year old children, including non-day care children. Children in this study attended day care or preschool.
7. Research is needed using a broader-based sample of four and five year old children, including a wider range of intelligence. The present study included children from only the average and bright range of intelligence.
8. Research is needed to examine the tendency noticed in this study for adherence to sex role preference to relate to high self-concept as a learner.
9. Research is needed to examine the tendency noticed in this study for the middle socioeconomic strata to adhere to sex role preference at a higher level than either the low or high socioeconomic strata.
10. Research is needed to examine the tendency noticed in this study for a combined effect of age and sex on sex role preference.
11. Research is needed to investigate global self-concept of four and five year old children in relationship to sex role learning. This study examined self-concept as a learner in relationship to sex role learning.
12. Longitudinal, cross sectional research is needed to assess trends in the development of sex role learning

(e.g., examination of acquisition of sex roles in boys and girls in opposite directions).

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## APPENDICES

## APPENDIX A

Contents of the Sex Role  
Learning IndexChild Figures

Masculine Stereotyped		Feminine Stereotyped	
Activity	Object	Activity	Object
Hammering	Hammer/nails	Ironing	Iron
Digging	Shovel	Sewing	Needle/thread
Baseball	Ball/bat	Cooking	Stove
Car play	Car	Dishwashing	Dishes
Boxing	Boxing gloves	Sweeping	Broom

Adult Figures

Sawing	Saw	Feeding baby	Baby bottle
Policeman	Badge	Teacher	Besk/Books
Soldier	Rifle	Serving juice	Pitcher/glasses
Fire fighter	Firehat	Combing hair	Hairbrush/mirror
Doctor	Stethoscope	Making pie	Apples/knife/bowl

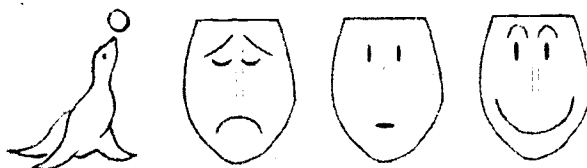
## APPENDIX B

Examples from the Self-Concept and Motivation  
Inventory Preschool and Kindergarten Form

Instructions with matching row from answer sheet:

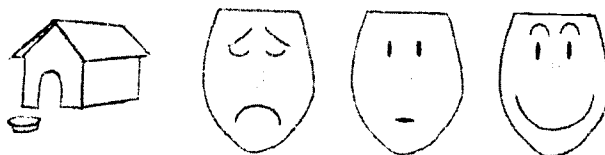
Item 13;  
seal

Turn your page over to the back. At the top is a picture of a seal with a ball. In that top row. . . WHAT FACE WOULD YOU WEAR IF YOUR PARENTS WERE TELLING YOU HOW YOU ARE TRYING IN SCHOOL? [Repeat.]



Item 19;  
dog house

Go back to the top of the page--to the dog house. WHAT FACE WOULD YOU WEAR WHEN YOU'RE THINKING OF HOW MUCH YOU'LL HAVE GROWN UP BY NEXT YEAR? [Repeat.]



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July 24, 1978

Dr. Judith Briscoe-Kleven  
31028 West Lake Morton Drive  
Kent, Washington 98031

Dear Dr. Briscoe-Kleven

Copies of the Self-Concept and Motivation Inventory (SCAMIN) may be included in unpublished doctoral dissertations under the following conditions:

- (1) The following statement must be included on the SCAMIN forms:

Reproduced with special permission of the publisher: Person-o-metrics, Inc., 20504 Williamsburg Road, Dearborn Hts., MI 48127 (date).

- (2) Inclusion must be limited to the unpublished versions of the dissertation. Microfilm and future publication versions of your work may not include copies.
- (3) Quotations from the manuals, illustrative items and a row of "faces" may be included in the narrative and footnotes of your work, and in item analyses.
- (4) The price of inclusion is one copy of the abstract of your dissertation with the complete citation of the title so that we may direct others to your findings.

Congratulations on your attainment. We hope that your interest in affective education and affective outcomes will continue.

Sincerely yours,  
**Redacted for Privacy**

Norman J. Milchus  
President

NJM:wk

## APPENDIX C

Date

Dear

Your child has been selected to participate in a study for the purpose of estimating how children view themselves as boys or girls. To accomplish this I propose to sit down with your child in an informal setting, at two different times for short periods of time (about ten minutes in length). At these times your child will respond to a series of prepared questions or statements.

As you may know, the major emphasis of many day care centers and preschools is to provide the opportunity for positive growth. Past experience has indicated that children most often experience pleasant feelings, increased self-awareness and other positive rewards from the opportunity to work with an adult observer. Other benefits to your child may be that from the results of this study your school or center may have additional information to use in planning your child's experiences.

The group results of these observations will be shared with you in a letter after the observations have been written. Should you have any questions please contact Judith Kleven at 631-3888.

Sincerely,

Judith Kleven

## CONSENT FORM

In signing this paper, I agree for my child to participate in the observations of how children view themselves as boys or girls. My signature indicates that I understand that I do have the right, first, to refuse for my child to participate in the study; that I do have the right to withdraw my child from the study at anytime; and third, that I do have the right to not be deceived during my child's participation in the study.

I also understand that I will receive information of the group results upon the completion of the collecting of information and that my child's identity will be kept anonymous. My signature below indicates that I have read, the description of these plans, and have received my copy.

.....  
\_\_\_\_\_  
(date)

.....  
\_\_\_\_\_  
(Parent's - guardian's  
signature)

.....  
\_\_\_\_\_  
(mailing address)

Please retain the letter and one copy of the consent form for your information. The remaining copy of the consent form should be given to your child's preschool or day care center's director.

## APPENDIX D

Table A. Three Way Analysis of Variance (Fixed Model).

Source of Variation	df	SS	MS	F
Age	1	A	A/1	$MS_{age}/MS_{error}$
Sex	1	B	B/1	$MS_{sex}/MS_{error}$
Socioeconomic status	2	C	C/2	$MS_{sex}/MS_{error}$
Age x Sex	1	D	D/1	$MS_{a \times sex}/MS_{error}$
Age x Socio-economic Status	2	E	E/2	$MS_{a \times ses}/MS_{error}$
Sex x Socio-economic status	2	F	F/2	$MS_{sex \times ses}/MS_{error}$
Age x Sex x socioeconomic status	2	G	G/2	$MS_{a \times sex \times ses}/MS_{error}$
	<u>34</u>	<u>H</u>	H/34	
Total	45	I		

Table B. Model for the One Way Analysis of Variance.

Source of Variation	df	SS	MS	F
Between groups	2	A	A/2	$MS_B/MS_{error}$
Error	<u>33</u>	<u>B</u>	B/32	
Total	35	C		

Table C. Three-way Analysis of Variance Determining Main and Interaction Effects of Specific Variables on Present Sex Role Preference.

	Source of Variation			
	df	SS	MS	F
Age	1, 34	144.00	144.00	.89
Sex	1, 34	1045.00	1045.00	6.48
Socioeconomic Status	2, 34	788.67	394.33	2.44
Age x Sex	1, 34	245.44	245.44	1.52
Age x Socio-economic Status	2, 34	200.67	100.33	.62
Sex x Socio-economic Status	2, 34	294.22	147.11	.91
Age x Sex x Socioeconomic status	2, 34	11.56	5.78	.04
Error	<u>24</u>	<u>3872.00</u>	161.33	
Total	45	123566.00		



Table D. Three-way Analysis of Variance Determining Main and Interaction Effects of Specific Variables on Future Sex Role Preference.

	Source of Variation			
	df	SS	MS	F
Age	1, 34	.25	.25	.00
Sex	1, 34	294.69	294.69	1.68
Socioeconomic Status	2, 34	38.39	19.19	0.11
Age x Sex	1, 34	240.25	240.25	1.37
Age x Socio-economic Status	2, 34	197.17	98.58	.56
Sex x Socio-economic Status	2, 34	152.39	76.19	.45
Age x Sex x Socioeconomic Status	2, 34	198.50	99.25	.56
Error	<u>24</u>	<u>4201.33</u>	175.06	
Total	45	118331.00		

Table E. Analysis of Variance for Low, Average, and High Self-Concept by Present Sex Role Preference.

Source of Variation	df	SS	MS	F
SRP (Present)	2	594.31	297.16	1.63
Error	33	6007.69	182.05	
Total	35	6602.00		

Table F. Analysis of Variance for Low, Average, and High Self-Concept by Future Sex Role Preference.

Source of Variation	df	SS	MS	F
SRP (Future)	2	182.09	140.54	.92
Error	33	5041.89	152.78	
Total	35	5322.97		