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CHILDREN'S DETERMINATION OF GENDER  
APPROPRIATENESS OF CLOTHING

by

Malihe Attaran

A thesis submitted in partial fulfillment of  
the requirements for the degree

of

MASTER OF SCIENCE

in

Family and Human Development

4

Approved:

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UTAH STATE UNIVERSITY  
Logan, Utah

1991

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## DEFINITIONS

- Androgynous:** An androgynous person integrates both masculine and feminine personality traits or combines both masculine and feminine qualities (Block, 1973).
- Gender:** One can define gender as a social construct that refers to cultural interpretations of sex among males and females (Oakley, 1972). Sex differences are physical, while gender differences are social and cultural variations typically attributed to the sexes (Hess & Ferree, 1987).
- Gender-Identity:** Money and Ehrhardt (1972) describe gender identity as a person's core perception of self as a male or female. It refers to the way a person sees herself or himself in a broad social and cultural context. Gender identity, rather than biological sex or genetic sex determines many components of sex-role behaviors and attitudes that agree with gender identity (Money & Ehrhardt, 1972). It is gender identity that influences the allocation of status and determines how others act and perceive a person in various roles (Hess & Ferree, 1987).
- Identity:** Identity is an individual's gender, body image, self-esteem, self-concept, skills, weaknesses, and sex role combined, and it creates a sense of the self as unique and separate from others (Brooks-Gunn & Mathews, 1979).
- Sexism:** Sexism refers to those attitudes or actions "that discriminate against men or women purely on grounds of their gender" (Abercrombie, Hill, & Turner, 1988, p. 219). These attitudes and actions may either be explicit or implicit, with more subtle, pervasive effect (Frieze, Parsons, Johnson, Ruble, & Zellman, 1978).
- Sex-Role:** Block (1973) defines sex role as a "constellation of qualities an individual understands to characterize males and females in his (or her) culture" (Block, 1973, p. 512).
- Sex-Role Identity:** Sex-role identity is one aspect of an individual's total self-identity. It is not the same as gender identity. They differ from each other in the same way that male differs from

masculine (Brooks-Gunn & Matthews, 1979). Being male or female refers to one's sex, whereas being feminine or masculine refers to one's sex role.

A boy having a male gender identity, does not necessarily have a masculine sex-role identity; he can be either "masculine," "feminine," or "androgynous" (i.e., a combination of both). A woman, having a female gender identity, does not necessarily have a feminine sex-role identity (Brooks-Gunn & Matthews, 1979, p. 7).

**Sex Typing or Sex-Role Development:** The term sex typing or sex-role development refers to the acquisition by individuals of activities, behaviors, attitudes and motives that are culturally defined as appropriate for their sex (Hetherington, 1967; Mischel, 1970).

**Stereotypes:** Stereotypes (gender stereotypes and sex-role stereotypes) are consensual beliefs about traits and behaviors that are typical for each of the sexes (Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972; Emmerich & Shepard, 1984).

ABSTRACT

Children's Determination of Gender  
Appropriateness of Clothing

by

Malihe Attaran, Master of Science  
Utah State University, 1991

Major Professor: Shelley L. K. Lindauer, Ph.D.  
Department: Family and Human Development

The purpose of this study was to investigate gender distinctions made by children based on clothing styles in order to better understand gender-role development. Four objectives were addressed: (a) Do children, regardless of sex, differ in their determination of the gender appropriateness of clothing options? (b) Are there gender differences between children in determining the gender appropriateness of these clothing options? (c) In what ways does children's awareness of gender stereotypes relate to their determination of the gender appropriateness of clothing? and (d) How do children's sex and their determination of the gender appropriateness of clothing interact with their awareness of gender stereotypes?

Chi-square and ANOVA statistical techniques were used to analyze children's responses on the Gender Apparel Test

and the Sex Role Learning Index and to analyze the interaction of sex of subject and GAT responses with respect to children's SERLI scores. Significant differences emerged in the children's determination of the gender appropriateness of Shirts and Pants. The results also indicated that males and females differed when determining the gender appropriateness of Footwear for girls.

Findings also revealed that two SERLI scores, the Opposite Sex-Role Discrimination and the Adult Sex-Role Preference, had no relevance for children's determination of the gender appropriateness of clothing. The results, however, indicated that the Own Sex-Role Discrimination and the Child Sex-Role Preference scores showed a significant effect when children determined appropriateness of Footwear for girls. The implications of current findings for parents, educators, and researchers are discussed.

(124 pages)

CHAPTER I  
INTRODUCTION

Some fascinating questions emerge when researchers try to explore the complex mechanisms involved in the formation of gender concepts. How does a child learn to be a girl or a boy? How do children determine gender appropriateness from external cues? How do children learn to become "masculine" or "feminine"? According to Intons-Peterson (1988), these questions, among others, are not only intriguing, but also are central to human development because they "address the child's emerging knowledge of gender roles and sexuality, as well as the child's developing sense of self, both as an individual and as a member of her or his culture" (p. 1).

A number of investigators (e.g., Levin, Balistrieri, & Schukit, 1972; Tryon, 1980) also suggest that further exploration of sex role and gender identity acquisition is needed in order to better understand the development of sex-typing. According to Hargreaves (1986), current research interest in sex-role stereotypes among children is fundamental to an understanding of sex-typing in order to discover why sexism occurs and to provide practical solutions to the problem. Such research, however, involves strategies that incorporate both the cognitive level of functioning of children, their learning history, and the environmental factors affecting their lives (Serbin &

Sprafkin, 1986). To do this type of research, investigators need to rely on readily available attributes, since children respond to cues such as physical characteristics, activities, and apparel (Huston, 1983; Intons-Peterson, 1988; Levin et al., 1972).

Clothing plays an important role in the way society labels gender and is believed to provide important clues about a person's gender (Kaiser, 1990). Research indicates that children as young as 2 years use clothing to classify people as male and female by utilizing their understanding of social norms and rules of gender dichotomy (Thompson, 1975; Weinraub, Clemens, Sockloff, Ethridge, Gracely & Myers, 1984). While a number of studies have used external cues such as clothing styles in the study of sex-typing, clothing has typically either been sex-typed (Intons-Peterson, 1988; Kaiser, Rudy & Byfield, 1985); combined with another major cue, such as hairstyle (Haley & Hendrickson, 1974; Intons-Peterson, 1988); or adopted from adult styles (Wenige, 1979). It is important to investigate any existing differences among choices children make regarding appropriateness of clothing for boys and girls by using only androgynous options of children's clothing as variables.

This study examined what particular articles of gender neutral clothing are regarded as being more appropriate for girls, for boys, or either for girls or boys, while holding constant all other external variables such as clothing color

and hairstyle. It also investigated how girls and boys differed in their determination of gender appropriateness of such clothing for the same sex and opposite sex characters. Specifically, it investigated what kind of gender distinctions children make when they are confronted with having to choose between androgynous clothing options. Four objectives were addressed: (a) Do children, regardless of sex, differ in their determination of the gender appropriateness of clothing options? (b) Are there gender differences between children in determining the gender appropriateness of these clothing options? (c) In what ways do children's awareness of gender stereotypes related to their determination of the gender appropriateness of clothing? and (d) How do children's sex and their determination of the gender appropriateness of clothing interact with their awareness of gender stereotypes.

The information provided by this and similar studies on the development of stereotypic sex-role learning will be useful to researchers, parents, and teachers who wish to more fully understand the processes by which children use external cues in determining a person's gender (Tryon, 1980). As teachers and parents, adults usually make assumptions about what children see as external cues and try to respond and stimulate children's lives based on those assumptions. The results of this study will provide helpful information to ascertain what children see as external cues



in determining gender. It is hoped that as educators and mentors of our young we will be more fully equipped with the information that will enhance development and provide an understanding of the mechanisms involved in children's self-conceptions, individuation, and identity development (Kaiser & Phinney, 1983). Because the prevailing gender stratifications are assumed by many (Bem, 1974; Block, 1973; Saario, Jacklin, & Tittle, 1973) to hinder children's flexibility in assuming diverse roles so vital for their success in today's complex world, exploring apparel as an important dominant factor in children's developing conceptions of gender appropriateness will contribute to a better understanding of gender stratifications.

## CHAPTER II

### LITERATURE REVIEW

The sex of a human being is most routinely recognized at birth based on biological factors. Consequently, the subsequent biological role that a person plays, such as the production of sperm for the male and child bearing for the female, is not a subject of much controversy. Rather, the social and cultural interpretations of such capabilities create the gender issues (Brown, 1956; Oakley, 1972).

A quick look at the voluminous literature on gender concepts reveals the importance of clarifying definitions. Gender identity is sometimes called labeling (Eaton & Von Bargen, 1981); temporal gender constancy has been called stability or gender permanence. Gender constancy has also been classified into true and pseudoconstancy (Eaton & Von Bargen, 1981; Emmerich, Goldman, Kirsh, & Sharabany, 1977; Fagot, 1985). Furthermore, in most literature on the development of gender concepts, the terms gender and sex-role are used interchangeably. Since the present study is citing from this literature, these terms (gender and sex-role) will be used as synonyms in the current investigation (see p. viii for definitions of key concepts).

This chapter will present a review of basic tenets of theories that deal with gender development and research findings that pertain to these theories. Also presented

will be a brief mention of the recent history of clothing in the United States followed by a review of the literature on clothing as a gender marker.

### Theories of Gender Identity Development

Historically, three classic theoretical frameworks have attempted to explain the development of gender identity: psychoanalytic theory, behaviorism and cognitive theory (Constantinople, 1979). Most research that has emerged in this area has associated the development of gender identity with cognitive theory (Huston, 1983). For instance, a number of studies have suggested that children between the ages of 2 to 7 demonstrate difficulty on gender constancy tasks (DeVries, 1969; Emmerich, Goldman, Kirsh, & Sharabany, 1977; Kohlberg, 1966). Basically, Kohlberg (1966) posits that the developmental timetable for emerging gender identity corresponds with Piaget's theory of developmental stages. Kohlberg conducted research in 1966 using gender constancy for self and others as a criteria for a stable gender identity. More than 50% of 5 year olds still believed that people could change their gender if they wanted to. DeVries (1969) reached the same conclusion. Kohlberg (1966) argues that children must be able to identify the sex of others correctly, and must have accepted the constancy of gender identity both for themselves and for others before they can use gender as a basic cognitive

organizer. He contends that stable gender identity does not develop until age 5 or 6 and also that cognitive development is the causal process underlying the acquisition of a stable gender identity. Accordingly, a child is able to form stable gender identity only after he or she reaches the period of concrete operations and is aware that certain dimensions of objects remain constant despite peripheral changes in less important dimensions.

Evidence suggests, however, that the emergence of conservation in the physical domain is not a necessary precursor to the emergence of gender as an important stable social category (Etaugh, Collins, & Gerson, 1975; Fagot & Littman, 1975; Fagot, & Patterson, 1969; Money & Ehrhardt, 1972; Money & Tucker, 1975; Parsons, 1976a; Parsons, 1976b). Bem (1989) suggests that such observations might actually be the result of methodological shortcomings rather than being a cornerstone of early childhood years. In fact, a number of investigators (e.g., Carey, 1985; Chi, 1978; Gelman, & Baillargeon, 1983) have questioned the plausibility of cognitive theory's claims regarding the uni-dimensionality of the preoperational child's thinking. In other words, these investigators propose that children fail to perform completely on some Piagetian tasks because they lack appropriate knowledge about the specific domains on which they are being tested. Bem (1989) suggests that previous studies have required children to make distinctions based on

"categories" (e.g., Is the child a boy or a girl given that it has both a penis and long hair?) rather than "property" inferences (e.g., Does the child have a penis or a vagina?)

Despite controversies surrounding each theoretical framework, this review briefly presents the basic tenets of each model (psychoanalytic, behaviorist and cognitive developmental). Also presented will be a brief discussion of social learning theory and the information-processing-schema theory.

### Psychoanalytic Theory

According to this approach, identification can be used to explain the origins of permanent, global personality differences between males and females (Freud, 1925; 1933). Sex differences in behavior are seen as direct, irreversible consequences of perceived and actual anatomical differences. The male child experiences "castration anxiety" and the female "penis envy." Penis envy leads the female child to feel inferior to the male and consequently to assume a submissive role in relation to the male (Huston, 1983). For "appropriate" identities to develop, the first critical phase is the third ("Phallic-Urethral") stage (Mussen, 1969), which lasts from the age of 3 to the age of 6.

Freud's gender identification theory has failed to accumulate scientific support for its contribution to gender identity development. According to Brofenbrenner (1960),

"the evidence for the prevalence or even the sheer existence of these phenomena is extremely sparse" (p. 38). By the same token, there is little evidence in support of the contention that identification is the basis for sex-role development (Frieze, Parsons, Johnson, Ruble, & Zellman, 1978).

### Behaviorism

According to behaviorism, a person learns a certain behavior in any given situation, and that learned behavior tends to be repeated under similar circumstances (Lundin, 1979; Freedman, Sears, & Carlsmith, 1981). In this model, the causes of behavior lie mainly in the past learning history of the individual and reflect events in the external environment, not motives, desires, or other subjective states. Thus, differential reinforcement of some behaviors over others is largely responsible for gender differences in behavior. For example, giving a girl attention or approval for playing with a doll increases the frequency of that play. Punishing a boy, or withholding approval and love for play with a doll, decreases the frequency of that behavior. Consequently, the girl continues to play with doll, and the boy's doll play is extinguished. Through similar scenarios over time, gender identity develops. In sum, gender-typed behavior is learned through reward and punishment emitted

from child's environment based on the child's sex (Bandura & Walters, 1963; Gewirtz, 1969).

Fagot and Leinbach (1989) reported that differential parental responses to a child's sex-typed play behavior can predict the child's ability to label gender. Children who were able to label gender at an early age received more positive and negative attention from their parents regarding their choices of sex-typed toys. Moreover, parents displayed affective differences in their responses to the child's sex-typed choice. It is apparent from this research that parental affect in their responses toward sex-typed behavior will facilitate a child's understanding of gender as an important social marker. Children who were socialized with the gender dichotomy and who applied gender labels at an earlier age displayed more awareness of cultural sex stereotypes at age 4.

### Social Learning Theory

Social learning theory argues that learning occurs through social as well as physiological reinforcements and results in social patterns of behavior as well as specific single behaviors (Bandura & Walters, 1963; Mischel, 1966). Two modes of learning suggested by social learning theorists can be used to explain the acquisition of gender role behaviors--observational learning and imitation--which together produce a behavioral outcome of modeling. In this

theory, it is assumed that children are able to learn from the behavior of others. According to Bandura (1969) and Mischel (1966), modeling occurs when a child imitates or copies the behavior of some model. Children are specially likely to imitate behaviors by an actor of the same sex because they expect to be reinforced for that behavior or see others being rewarded for that behavior (Bandura & Walters, 1963).

Bandura (1969) acknowledges that not all behaviors learned by observation will be imitated. For modeling to occur, a child must observe the behavior to be modeled and must be motivated to imitate that behavior. The socially conveyed importance of behaving "appropriately" for one's sex creates such motivation in the child. So, if parents, peers, teachers, the media, and other influential agents around the child consistently show gender-related differences in behavior, the child's modeling will produce those differences in his or her own behavior (Dweck, 1975; Etaugh et al., 1975; Frueh & McGhee, 1975).

For instance, studies show that parental responses and children's expectations of parental preferences do affect children's sex-role preference (Fauls & Smith, 1956; Hetherington, 1965; Lefkowitz, 1962; Mussen & Rutherford, 1963; Rheingold & Cook, 1975). Rheingold and Cook (1975) reported that parents systematically provided differential toys and room decorations for their sons and daughters based



on the children's sex. They (Rheingold & Cook, 1975) proposed that since parents provide different experiences for their children, "the contents may indeed instruct them in what is proper for their sex" (p. 459).

Other studies looking at the quality of the parent-child relationship, with children's ages ranging from 4 to 11, show that the quality of the parent-child relationship influences children's preference for their own sex role (Hetherington, 1965; Lefkowitz, 1962; Mussen & Rutherford, 1963). Fauls and Smith (1956) suggested that children may prefer appropriate sex-role activities because they perceive that parents prefer such sex-appropriate activity. In addition, inappropriate behaviors have been induced by exposure to older models who perform sex-inappropriate behaviors (Wolf, 1975). Other research indicates that adult reinforcement of "feminine" activities can influence the behavior of 2-year-old boys (Etaugh et al., 1975).

### Cognitive Developmental Theory

The third theoretical framework used to explain gender identity is cognitive developmental theory (CDT). CDT centers on the child's cognitive conception of the world, that is, on how children perceive and classify the objects, events and people around them. Unlike psychoanalytic and social learning theories, CDT assumes that children play an active role in their own development. Children are

motivated by a desire for competency and mastery over their world and therefore seek out information that will improve their interaction with the environment. In the meantime, the child's ability to interact with and interpret the environment is limited by his or her level of cognitive development. The following summarizes the views of three main theorists who have contributed to the development of the cognitive developmental model--namely Piaget, Kohlberg and Block. Aspects of this model will also be discussed.

Piaget. Piaget contends that the young child's thinking is self-centered, irreversible and perception-bound. Because of these properties of thought, the child cannot solve simple conservation problems. The child can only center on one perceptual cue at a time (Flavell, 1977). Kohlberg argues (1966, 1969) that this process influences children's conceptions of gender. Children may think that changes in peripheral cues, like hair length or style, will produce changes in gender. This state dominates children's cognitive ability between the ages of 2 to 7 years (the preoperational stage). It is only during the concrete operational period that children acquire the cognitive skill necessary for conservation and classification in a concrete form. (Detailed discussions of Piaget's theory are presented in Flavell, 1977; Piaget, 1970).

Kohlberg. According to Kohlberg (1966, 1969) children pass through three major cognitive steps in the process of

acquiring sex-role behaviors. In the first stage, gender identity and stability, they discover that people come in two sexes, and that they themselves belong in one of these categories. In other words, children, Kohlberg argues, come to know their own gender and start to categorize others as either female or male (gender identity). As children grow cognitively, they come to understand that one's gender is stable and does not change (gender constancy). Thompson (1973) has shown that children are able to classify their own sex consistently and accurately by age 3. Research also indicates that in some cases children are already playing somewhat different sex roles as early as 2 years of age (Etaugh et al., 1975; Fagot & Littman, 1975; Fagot & Patterson, 1969).

In the second stage, stereotyping, through the process of understanding the constancy of gender identity, children also begin to categorize behaviors and objects as appropriate for one gender or the other, and they use gender to provide structural categories for their social environment. In other words, as gender becomes stable, the child learns about stereotypes by observing the world in which he or she lives (Constantinople, 1979). For example, a child might say, "Mommies go to school while daddies go to work," (Frieze et al., 1978, p. 127) if the mother is a student and the father holds a job outside the home. By using the behavior patterns of parents, this child forms

schema of what it is to be male or female in his or her social surroundings.

According to Kohlberg (1966; 1969), all children form these schemata, in order to develop the categories that will provide a framework for predicting future behaviors and also to help them interpret what they see. Based on these categories, children develop expectations regarding human behavior and assimilate new information through these schemata. While Kohlberg acknowledges that this process of cognitive development of gender identity is influenced by a variety of outside forces, the emphasis for him is on the internal process of cognitive development.

Research findings on gender stereotyping is quiet extensive (Brown, 1956; Fein, Johnson, Stork, & Wasserman, 1975; Nadelman, 1974; Parsons, 1976b; Tryon, 1980; Weinraub et al., 1984). Weinraub et al. (1984) studied the age of onset of sex-role knowledge by looking at children's ability to categorize pictures of men and women and by exploring children's awareness of sex-role differences in adult activities and possessions and children's toys. The relationships between sex-typed toy preferences and children's sex role knowledge were also examined within the cognitive and information-processing models. Seventy-one children between the ages of 2 and 3 years participated in this study. The children were divided into three groups with mean age 26, 31 and 36 months. Since the research

strategy involved sorting pictures, criterion tasks were administered to familiarize the subjects with sorting and also to assess sorting abilities. Children's gender knowledge was assessed by having the children sort pictures of men and women and boys and girls into appropriate boxes. Also, children's play with sex-typed toys was observed and the amount of time a child touched a toy was recorded. Gender labeling, sex-role sorting, and toy preferences yielded continuous scores that were analyzed using ANOVAs with age and sex as independent measures.

Weinraub et al. (1984) observed both verbal and nonverbal gender labeling in a significant number of children as young as 26 months. A majority of 36 month olds were able to sort pictures of males and females correctly. Overall results showed that sex-role stereotypes were reliably present among 26 month olds; and that 3 year olds were aware that some actions were more commonly associated with one sex than another. For example, as young as 26 months, some children were aware that men and women wear different clothing and use different things--such as men wear suits, and shirts and women wear dresses and blouses. Moreover, some of these children have already formed stereotypes regarding engagement in certain tasks by members of either sex; they associate cooking, washing, ironing, and cleaning with females and truck driving, fire fighting, and car repairing with males.

The third stage is the emergence of sex-role preference. According to Kohlberg (1966), children, due to the egocentrism that rules their thought processes during the preschool years, develop a preference for their own sex. At this age a child believes that his or her sex is the standard and the right one and judges the opposite sex as not as good and as deviant. Kohlberg (1966) also contends that a child must develop a preference for, and an awareness of, the role associated with his or her gender in order to completely acquire appropriate sex-role behavior. After the development of a sex-role preference, children model sex-appropriate behaviors and respond differentially to rewards for sex-appropriate behavior.

Research also suggests that preschool children are well aware of cultural stereotypes regarding sex differences by age 4 and use these stereotypes to predict behavior. When children are asked to predict the behavior or preference of someone else, sex-role stereotypes emerge as a key organizing factor for children over age 4 (Brown, 1956; Nadelman, 1974; Schell & Silber, 1968).

A number of studies provide support not only for the existence of strong male and female stereotypic beliefs, but for sex-role preference and the differential value that these traits hold among young children (Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970; Broverman et al., 1972). Stereotypic male traits are regarded more

highly than stereotypic female traits, and boys and girls exhibit stereotypic gender preferences consistent with these findings. Investigators also report that boys show more awareness of sex roles than girls do (Fagot, 1973; Kohlberg, 1966; Thompson, 1975; Weinraub et al., 1984). For instance, Brown (1956) reported that

A clear majority of boys reveal a decided preference for the masculine role. Thus one of the most striking findings in the present study is the comparatively greater preference that boys show for the masculine role than girls show for the feminine role (Brown, 1956, p. 9).

Despite the fact that most children develop a preference for their own sex, some girls show some ambivalence toward their own sex. Abel and Sahinkaya (1962) reported that when asked what sex they would prefer, the majority of children as young as 3 years old preferred their own sex. But they reported that more girls expressed a desire to be boys than boys to be girls. A similar pattern emerges in assessments of children's sex roles. Girls prefer their feminine roles much less strongly than little boys; boys show much stronger preference for their masculine roles than do girls for feminine roles (Hartup & Zook, 1960; Kohlberg & Zigler, 1967; Rabban, 1950). Likewise, Weinraub and colleagues (1984) reported that boys showed more awareness of sex roles than girls. This apparent condescending view of the female role by some children could stem from their awareness of the inequality of the sexes and

of the greater amount of social value and privilege given to the male. In contemporary American culture, more power, competence, prestige, strength, and greater size are attributed to the male (Frieze et al., 1978), the same dimensions along which children form their first stereotypes (Kohlberg, 1966; Rosaldo, 1974).

In sum, a variety of studies provide support for the cognitive-developmental viewpoint that children's behaviors are influenced by their value system and sex-role orientation (Hartup, Moore, & Sager, 1963; Kohlberg & Zigler, 1967; Liebert, McCall, & Hanratty, 1971; Montemayor, 1974; Parsons, 1976a; Ross & Ross, 1972; Thompson, 1973). According to the cognitive developmental model, children are both influenced by the culture and by their own active participation in the context of their environment.

Block. Block (1973) proposed a somewhat different theory to explain gender identity development. According to Block (1973), very young children are "agentic," at first, exhibiting behaviors that are associated with assertiveness and individualism. They like to be independent from their parents' restrictions. The next stage is the one in which children conform to rules and roles. This is a critical period for both boys and girls since boys are encouraged, through socialization pressure, to suppress their tender feelings; girls are encouraged to suppress their assertiveness and aggression. The last stage is the one



during which understanding and self-consciousness become possible for both male and female. This is the stage at which gender identity is maintained (Block, 1973). Ideally, the result of these developmental stages is what Block calls androgyny, the integration of masculinity and femininity in the self.

### Information-Processing Schema Theories

Critics argue that social forces shape the way the child sees the world and affect how the child forms his or her cognitive responses to it. Bem (1981) and Martin and Halverson (1981) propose two models based on information-processing schema. Both models use "schema" as their primary concept. Schema are cognitive structures consisting of a network of associations and expectations that shape one's perceptions. A schema guides the individual to receive information consistent with the schema. Information inconsistent with the schema is either ignored or transformed (Martin & Halverson, 1981). These authors argue that of all schema children learn, the gender stereotype is primary. This schema works at two levels. On the first level, the child evaluates the incoming information as appropriate or inappropriate for his/her gender. On the second level, the child judges and selects the appropriate information. Bem (1981) argues that gender schemata focus on process, that is the extent to which the individual codes

new information in terms of gender roles. Bem suggests that the power of an individual's gender schema derives from "society's ubiquitous insistence on the functional importance of the gender dichotomy" (Bem, 1981, p. 354).

Bem (1989) believes that gender traditionalism does not have to be an essential aspect of early childhood years. Children, she restates, use cultural cues, such as hair and clothing style, "simply because they have picked-up an implicit--if somewhat erroneous--cultural metamessage about what sex is" (Bem, 1989, p. 661). By allowing children to learn a different kind of message with regard to the lack of importance of sex outside the domain of reproduction, she maintains, we might be able to lessen the degree of gender stereotyping among children.

#### Gender Distinctions in Clothing in America:

##### Recent History

According to costume historians, gender distinctions in adult clothing among fashionable individuals were not strong before the nineteenth century (Laver, 1937). In the eighteenth century, both men and women of aristocracy wore what we know today as effeminate symbols of appearance--lace and velvets, hats, wigs, elaborate footwear, and cosmetics, including powders and rouges (Kaiser, 1990). With urbanization in western societies, the advent of industrialization and strong desires for economic

advancement, modernization and the birth of Protestant work ethic (Weber, 1947; Davis, 1988), changes in appearance were made to accommodate changes in society at large. Women remained relatively isolated from these domains (Kaiser, 1990), and the adult middleclass male became the centerpiece of modern society and had to go through drastic appearance changes to match the seemingly serious, hard-working role he assumed (Davis, 1988).

According to Helene Roberts (1977) men and women's clothes became increasingly distinct:

More than identifying each sex, clothing defined the role of each sex. Men were serious (they wore dark colors and little ornamentation), women were frivolous (they wore light pastel colors, ribbons, lace, and bows); men were active (their clothes allowed them movement), women inactive (their clothes inhibited movement); men were strong (their clothes emphasized broad shoulders and chests), women delicate (their clothing accentuated tiny waists, sloping shoulders, and a softly rounded silhouette); men were aggressive (their clothing had sharp definite lines and a clearly defined silhouette), women were submissive (their silhouette was indefinite, their clothing constricting (p. 555).

By the late 1800s, the business suit was considered acceptable attire for the businessman, born out of the conservative utilitarian belief that "time had commercial value" and therefore men needed a simple, easy to coordinate suit (Banner, 1983, p. 234). Parallel to this, feminine male attire started to become a subject of ridicule by cartoonists, who depicted such men as "unattractive, unmanly, or effeminate" (Kaiser, 1990, p. 79). By the

1920s, while women's styles had become progressively more androgynous, men's costume had become even more conservatively masculine. Evidence from social-psychological research indicates that today's men are also afraid of ridicule when wearing feminine styles of clothing (Kaiser, 1987). Similarly, evidence suggests that boys receive significantly more peer criticism when they dress up in feminine-preferred styles (Fagot, 1977). Although these developments came about out of assigning more value to men, their time cost and role in the industrial society, they set the stage for confining men's desire for expressing themselves by restricting their mode of dressing (Kaiser, 1990).

#### Children's Clothing

Until World War I, little boys were dressed in skirts and had long hair. Throughout most of the nineteenth century, gender distinctions in clothing did not begin at infancy but were delayed until several years later. Infants of both sexes wore long white dresses until they began to walk. Toddler boys and girls wore short, loose-fitting dresses until the age of 2 or 3. From then until the age of 5 or 6, all children wore dresses or suits with short skirts, but differences in color, material, and trim were used to distinguish boys and girls. A child's maturation was noted by the gradual adoption of adult dress, a process

usually regarded as marking an important milestone in her or his development. These stages became more distinct and more celebrated for boys than for girls after age of 5. Boys became men through a transition from dependency to mastery, while girls were said to "wear forever the baby petticoat with all its royal powers and privileges" ("Boys and Girls," 1876). Boys acquired gender-distinct adult dress in two stages. At some point between the ages of 5 and 7 years, boys made the important change from short trousers to long pants and received their first short haircut. The mother was the one who decided on the proper timing of this important event. Girls' clothing changed little between infancy and adolescence. The only change came about by lengthening the skirt.

Sexual "color coding" in the form of pink or blue clothing for infants was not common in this country until the 1920s; before that time male and female infants were dressed in identical white dresses. Between 1890 and 1920 the clothing of infants and preschoolers became more sex-typed, while women's clothing was beginning to look more androgynous.

The practice of putting a little boy in a skirt until he was considered old enough for trousers has not been fully explained. Paoletti (1987) suggests that it was easier to sew and fit dresses than to make miniature suits. Also, the

dresses could easily be reused for younger siblings regardless of sex.

Paoletti (1987) researched 71 housekeeping manuals and mothers' guides, as well as advice columns and articles in several periodicals. The consensus was that clothing needed to be "neat, clean, modest and appropriate to the child's activities" (p. 142). Sexual distinctions in clothing were advised to be postponed until the time child entered school:

The most conspicuous evil here is in the premature and unnatural differentiation in sex in the dress of little children ... a little child should never be forced to think of this distinction. It does not exist in the child's consciousness. It is in no way called for in natural activities, but is forced into a vivid prominence by our attitude (Gilman, 1910, p. 24).

Gilman's contention does not reflect the reality of children's fashion at the turn of the century. Gender-distinctive styles in children's clothing were becoming more popular for boys and girls of younger age among Americans (Kaiser, 1990).

In 1890, men and women dressed completely differently, but little boys and girls were dressed very much alike. However, in the latter part of the decade clothing styles for children changed in several important ways. The same factors that altered adult dress--dress reform, sports, and increasingly casual lifestyles--encouraged the adoption of more practical and comfortable children's clothing. For

girls this often meant adopting men's styles--shirts and knickers instead of dresses and bloomers.

Research on gender-specific clothing in the twentieth century suggests that by the 1920s the modern "tradition" of dressing infant boys in blue and girls in pink had just begun to be popular (Paoletti & Thompson, 1987). A number of questions arise as one wonders about the changes that came about: What was the role of industry in the defeminization of boys' apparel? How did the post-World-War-II emphasis on sharp distinctions between masculinity and femininity interact with the industry (Paoletti, 1987)? Providing an answer to these questions is not within the scope of this research, but according to Paoletti (1987), "it seems clear that some of our seemingly unshakable traditions were adopted in the course of a single generation--not so long ago" (Paoletti, 1987, p. 143).

#### Environmental Cues as Gender Markers

Investigations have repeatedly suggested that clothing is a salient factor in children's determination of gender (Constantinople, 1979; Kaiser & Phinney, 1983; Kaiser et al., 1985; Katcher, 1955). According to Scarlett, Prewss, and Crockett (1971), descriptions of individuals given by children under the age of 6, rarely go beyond the constructs of physical characteristics. Gender is usually associated with dress, hair length, facial hair, body build, height,

other secondary sex characteristics and the form of the genitals (e.g. Katcher, 1955; Thompson & Bentler, 1971). A child can use any one of these physical cues or any combination of these cues in judging gender. Young children demonstrate a tendency to classify people on the basis of cues such as hair and type of clothing because these are concrete concepts (Constantinople, 1979; Kaiser & Phinney, 1983; Kohlberg, 1966). Since clothing is often the most readily available construct, it is used by the child as an index of sex and age (Serbin & Sprafkin, 1986).

In a study by Levin et al. (1972), discrimination of sexual differences was examined as a function of age and sex, and the relative dominance of external cues was explored. Two hundred and sixty-two children from Milwaukee and Detroit participated in the study, ranging in age from 4 to 11 years (108 were Caucasian and 154 were African-American boys and girls). The experiment was conducted in a room at a local hospital where children were awaiting routine physical examinations. Two types of stimuli were used, made of drawings of white boys and girls mounted on cardboard. The single-cue stimulus depicted only the head, clothed body or nude body of a girl or a boy (9 portrayed boys and 9 portrayed girls). The nude body stimuli were painted and the genitalia were visible. The second type of stimuli depicted inconsistent cues (e.g., girls' genitalia combined with boys' hair), containing 24 inconsistent cue



cards. For instance one card had the head of one sex over the nude body of the opposite sex. In all, there were three sets of inconsistent cue cards, each set having eight cards. In any one set of cards (eight cards), there were equal number of each cue-sex combination; that is, four cards had girls' genitalia and boys' hair and four cards had girls' hair with boys' genitalia.

Once in the room where the experiment took place, the child was shown a small cardboard statue of a doctor and was told the doctor wants to look at young children; the child was then asked to pretend that he or she is the doctor and needs to tell the experimenter whether each of these pictures is a boy or a girl. At this point, the 18 single-cue cards were shown randomly, followed by the presentation of the 24 inconsistent-cue cards, and children were asked to indicate the sex of the figure. Analyses of the single-cue stimuli showed that if hair and dress were the only clues given, all ages were able to successfully discriminate between the sexes. The results also revealed that only half of the children, with a mean age of about 7 years, were able to discriminate on the basis of the genital differences between the sexes.

Katcher (1955) examined children's abilities to recognize masculine and feminine characteristics. Hair, genitals, breasts, and clothes were altered in order to determine which masculine and feminine cues had priority

among children in determining a person's sex. Clothes were found to be the most important clue. But contrary to Katcher's (1955) findings, in Thompson and Bentler's (1971) study hair length emerged as the primary cue for sex discrimination. Nevertheless, when children were asked to sort doll clothes, only rarely were the pants and sports shirts put in the feminine pile. Adults in the study had a more difficult time sorting the clothes, indicating that the children are much less affected by the nondifferentiation in the clothing styles.

The extent to which clothing is used depends upon the clarity of the stereotype associated with the type of dress. In a study that associated clothing with types of play activities, Kaiser and Phinney (1983) found that children affiliated masculine activities with pants and feminine activities with skirts. Also, the girl in the pants was associated with a more aggressive activity (kicking) and a stereotypical masculine activity (role playing as a fire fighter). The investigators suggest that the Skirt is a powerful symbol of femininity, whereas the Pant is a more ambiguous symbol, concluding that "the implications of ambiguous sex-role symbols such as pants for stereotyping processes remain unclear" (p. 117).

Kaiser and others (1985) also used both skirts versus pants as stimuli. Both (Kaiser & Phinney (1983); Kaiser et al., 1985) report that dresses and skirts are more

frequently associated with feminine activities and pants with masculine activities. These investigators postulated that the association between clothing and sex-role attitudes was due to the child assigning meaning to the dress type based on social experiences. They reported that the overall girls' behavior did not significantly vary when they wore pants as opposed to skirts or other styles of clothing. However, they reported a significant positive relationship between non-stereotypic play behavior, the proportion of time pants were worn, and the tendency to engage in nonstereotypic behavior. Pants, they assert, "are both more egalitarian with respect to sex roles and more practical for a range of activities" (Kaiser et al., 1985, p. 90). They suggest that if a girl is used to wearing pants, on the occasion of wearing a dress she is more likely to ignore the situationality of the apparel for different play activities. Clothing, they contend, plays an important role in defining situations for individuals. Nevertheless, in a well-defined situation, clothing might play an implicit role, unless it is in sharp contrast with the norm. Moreover, these authors suggest that this might be indicative of children internalizing meanings of clothing symbols and sex roles (Kaiser et al., 1985).

According to Constantinople (1979), the distinctions in clothing might be reinforced by parents. In a study by Shakin, Shakin, & Sternglanz (1985), observers were to guess

the sex of an infant based on its type of clothing. It was found that parents were more apt to dress girls in ruffles, puffed sleeves, and lace; boy infants were dressed in pants and shirts.

Intons-Peterson (1988) examined the salience of hair and clothing options among a group of preschoolers. She used various clothing styles, both sex-typed (dresses or trousers and shirts) and unisex (shorts and T-shirts in combination with hairstyle). The study involved 18 preschoolers (8 girls and 10 boys) age 3 to 6 years, with a mean age of 4 1/2 years. She varied the hair length, color, and style, and the clothing of children in picture stimuli in order to examine the contribution of single and multiple cues. The subjects were shown pictures of children wearing a variety of hair lengths, hair color and clothing styles and were asked how they knew the children in the pictures were girls or boys. She reports that clothes alone were not very important in determining gender, when compared with hair. Rather, clothing played a key role only when combined with hair style: when two masculine hair cues (short with either straight or black hair) were combined with a feminine cue (color or style), clothes became important. Under such experimental conditions, trousers emerged as masculine and dresses emerged as feminine. When the hair was long, the figure was called a girl, regardless of the other hair or clothing cues. Also, when the hair was short, black, and

straight, the figure was called a boy, regardless of clothing cues. Figures in unisex clothing were called boys and girls almost equally.

Wenige (1979) used adult clothing design to determine stereotypic sex-role discrimination among 5 year olds. The subjects, 153 preschoolers (82 boys, 71 girls) and parents, were asked to classify 16 black-and-white line drawings of clothing as appropriate for male, female and both. Parents completed a questionnaire which inquired about the mode of dress (classic, casual, contemporary, or unisex) worn for seven activities by the parent and child. Family characteristics and the Dempewolff Feminism Scale of attitudes toward gender roles were also obtained. Wenige (1979) provide support for the existence of association between clothing and sex-role attitudes and of stereotyping by preschoolers.

Haley and Hendrickson (1974) examined how children form an impression of others, and whether clothing style, hairstyle, and global appearance influence children's preference for persons. Their study was also intended to determine whether there were significant differences in clothing and hairstyle preferences of boys and girls in their judgment of girls' stimulus figures. A wide range of clothing, including Dress, Skirt, and Pants, were included among the variables.

In this study (Haley & Hendrickson, 1974), the Person Preference Test developed to measure children's preferences for images of girls varying in types of hair and clothing styles was utilized. Also, a panel of judges consisting of five specialists in the field of clothing (to select clothing types) and five specialists in the field of child development (to choose hairstyle variables) were employed. Twenty variables were sorted into two categories--those expected to be worn by second-grade girls and those not expected to be worn. The sorted pictures were then ranked from 1 to 20 (1 was most expected and 20 was least expected). The pictures were also ranked on a feminine-masculine dimension. The twenty drawings were finally classified into four groups most expected feminine, least expected feminine, most expected masculine, and least expected masculine. The drawings were mounted on 8 1/2 by 3 1/2 inch cards and were shown to the subjects.

The subjects were 37 middleclass, white, second-grade children in Tallahassee, Florida. They were asked to rate the drawings according to their liking from 1 to 4 (score 1 represented liked best). The results of this investigation showed that sex-differences in sex-typed clothing emerged when investigators controlled for hairstyle variables. Boys were less decisive regarding feminine- and masculine-type clothing choices, but girls unanimously preferred feminine-type clothing choices. Nevertheless, the preference of the

entire sample was frequently significant, and at no time was masculine-type clothing significantly preferred over feminine choices for any of the groups throughout the investigation. Interestingly, it was also found that children's categorization of clothing and hairstyle did not match the adults' categorization. This is another important reason why more studies are needed that focus on the influence of cues as perceived by children. According to Haley and Hendrickson (1974), "perceptions and preferences of adults have been measured more often than those of children" (p. 178).

#### Summary

A number of studies have used external cues such as clothing and hairstyle in order to study the mechanisms of gender development. However, research findings are not conclusive on the importance or lack of importance of clothing as a gender marker. For example, Intons-Peterson's (1988) findings are not consistent with the findings of Katcher (1955). The research strategies employed so far using clothing options as key variables have not been systematic. Some researchers have used clothing in combination with other variables, such as hairstyle (Intons-Peterson, 1988; Haley & Hendrickson, 1974), or have used sex-typed clothing options (Kaiser et al., 1985), or have

adopted adult clothing styles to determine sex-role discrimination among children (Wenige, 1979).

The present study used androgynous clothing options in an effort to look at particular articles of clothing isolated from other variables that might affect children's determination of gender. This was necessary in order to provide much needed information on the mechanisms involved in the formation of gender concepts and on the patterns children might follow when determining the appropriateness of clothing as a gender marker.

#### Statement of the Problem

It is well recognized that clothing serves as a powerful cue for an individual in identifying another person's gender. Little research to date, however, has examined the subtle nuances of particular articles of clothing in determining children's gender distinctions. This study sought to investigate the gender distinctions that children make on the basis of clothing styles leading to a better understanding of gender-role development among children. This will provide information about how children respond to external cues provided by androgynous options of clothing.



## Objectives of the Study

The current study sought to investigate the gender distinctions that children make on the basis of clothing styles by addressing the following questions as determined by a specific measure, the Gender Apparel Test (GAT) (Lindauer & Attaran, 1988) (see Appendix A) (see Chapter III, Instruments and Procedures). First, do children, regardless of their sex, differ in their determination of the gender appropriateness of androgynous options of clothing (shirts, pants and footwear)? Second, are there any gender differences between children in determining gender appropriateness of these clothing options? Furthermore, how are children's awareness of gender stereotypes, as measured by the Sex-Role Learning Index (SERLI) (Edelbrock & Sugawara, 1978) related to their determination of the gender appropriateness of clothing? And finally, how do children's sex and their determination of the gender appropriateness of clothing interact with regard to their awareness of gender stereotypes?

## Hypotheses

### The Gender Apparel Test (GAT)

Hypothesis 1. There are no significant differences in children's determination of gender appropriateness of

1. Shirts

2. Pants

3. Footwear

Hypothesis 2. There are no significant differences between girls and boys in their determination of gender appropriateness of shirts for

1. Girl

2. Boy

3. Either boy or girl

Hypothesis 3. There are no significant differences between males and females in their determination of gender appropriateness of pants for

1. Girl

2. Boy

3. Either boy or girl

Hypothesis 4. There are no significant differences between girls and boys in their determination of gender appropriateness of footwear for

1. Girl

2. Boy

3. Either boy or girl

### The Sex-Role Learning

#### Index (SERLI)

The following hypotheses were tested with regard to Own and Opposite Sex-Role Discrimination.

Hypothesis 5. There are no significant differences in children's determination of gender appropriateness of clothing with respect to their Own Sex-Role Discrimination SERLI score (OSRD).

Hypothesis 6. There are no significant differences in males' and females' determination of gender appropriateness of clothing in relation to their Own Sex-Role Discrimination SERLI score (OSRD).

Hypothesis 7. There are no significant differences in children's determination of gender appropriateness of clothing with regard to their Opposite Sex-Role Discrimination SERLI score (OPSRD).

Hypothesis 8. There are no significant differences in males' and females' determination of gender appropriateness of clothing with respect to their Opposite Sex-Role Discrimination SERLI score (OPSRD).

The following hypotheses were tested with regard to Child and Adult Sex-Role Preference:

Hypothesis 9. There are no significant differences in children's determination of gender appropriateness of clothing with regard to their Child Sex-Role Preference SERLI score (CSRP).

Hypothesis 10. There are no significant differences in males' and females' determination of gender appropriateness of clothing with regard to their Child Sex-Role Preference SERLI score (CSRP).

Hypothesis 11. There are no significant differences in children's determination of gender appropriateness of clothing with respect to their Adult Sex-Role Preference SERLI score (ASRP).

Hypothesis 12. There are no significant differences in males' and females' determination of gender appropriateness of clothing with regard to their Adult Sex-Role Preference SERLI score (ASRP).

## CHAPTER III

## METHODOLOGY

## Participants

Participants in this study were 97 preschool children (51 male, 46 female) ranging in age from 48 months to 71 months. Overall mean age was 59.26 months ( $\bar{X}$  age for males, 59.6 months; ( $\bar{X}$  age for females, 58.89 months). The sample was obtained by requesting participation from parents of 150 preschoolers enrolled at the Utah State University Child Development Laboratory and Utah State University's Children's House (see Appendix B). One hundred and twenty families responded affirmatively to this request. Because of the nature of data collection, only those children who spoke English as a first language and who fell between 48 and 71 months of age were tested. This resulted in usable data for 97 participants.

The subjects came from primarily married, white, middleclass backgrounds with scores on Hollingshead's Four Factor Index of Social Position (Hollingshead, 1975) ranging from 20 to 66. These included group A (major business and professional, 43.9 percent), group B (medium business, minor professional, technical, 25.5 percent), group C (skilled craftsmen, clerical, sales workers, 12.2 percent), and group D (machine operators, semiskilled workers, 11.2 percent).

No respondents were rated as group E (unskilled laborers, menial service workers).

Mean Hollingshead score was 50 with a standard deviation of 14 points. About 52% of the SES scores fell below 53, which indicates that the majority of the families came from middle and lower middleclass families. Sixteen percent of the families scored in the highest SES category. The variability in the SES scores reflects the fact that the population of the university is composed mainly of students with some staff and faculty. Also apparent from the data is the fact that the campus population, although receiving a lower ranking on the employment status (as derived from the Hollingshead occupational scale), has a high rate of college graduates. For instance, among the mothers 17% had a graduate degree and 50% had a BS/BA degree. Of the fathers, 45% had graduate degrees and 36% had BS/BA degrees.

#### Instruments and Procedures

Two instruments were used for data collection in this investigation: The Gender Apparel Test (GAT) (Lindauer & Attaran, 1988) and The Sex-Role Learning Index (SERLI) (Edelbrock & Sugawara, 1978). In addition to the two instruments, questionnaires were utilized with parents to collect demographic information. Parents were asked to indicate their education, occupational status, marital status, age and the child's sibling status. Prior to the

testing, each record form was coded by a number as well as by the sex of the child. The code number was solely for purposes of analyses and to protect anonymity and confidentiality of the parents and subjects.

#### The Gender Apparel Test (GAT)

The GAT was developed specifically for this study and is designed to measure children's determination of gender appropriateness of clothing styles. An artist was hired to draw and cut out a flannel-board figure and a total of nine unisex clothing options (three tops, three bottoms, and three pieces of footwear). The tops either have long sleeves, short sleeves, or no sleeves. The pants are either long, medium length, or short. The footwear consists of one pair of shoes with long socks, a pair of shoes with short socks, and a plain pair of shoes (no socks). The one-dimensional figure itself represents a child portrayed from the back. The artist was given specific instructions to make all external characteristics, such as hair, body shape, and feet and fingers, androgynous (see Appendix A).

Specifically, in the GAT, children are asked to dress the flannel-board figure in clothes that they determine to be appropriate for girls, for boys, or either for boys or girls. In all, there are three possible responses to each question. For each question "dress the figure like a girl," "dress the figure like a boy" and finally "dress the figure

like a girl or a boy," the child chooses one piece of clothing from the shirts, one piece from the pants, and one piece from the footwear.

To ensure understandability and validity of the GAT, the experimenter conducted a series of pilots at the USU Child Development Laboratory. These were done in three stages. In Stage I, three drawings of a child portrayed from the back (drawings number 1, 2, and 3) were piloted with three groups of 100 children (there were 100 children in each group; a total of three hundred children participated in this stage).

Children were shown the drawing and presented with three boxes. A box for a boy, a box for a girl, and a box for either a boy or girl. (The order of these boxes and accompanying question was alternated between children). They were then told,

If you think this is a picture of a boy, put it in the boy box (point to box). If you think this is a picture of a girl, put it in the girl box (point to box). If you think this could be a picture of either a boy or a girl, put it in the boy or girl box (point to box).

Once a child placed a picture in box, the experimenter repeated the child's choice: "You think this is a picture of a \_\_\_\_\_, is that right?" Ninety-five percent of children determined that drawing number 3 could be either a boy or a girl (as opposed to 65% for drawing 1 and 73% for drawing



2). This resulted in the adoption of drawing number 3 for the instrument (see Appendix A).

In Stage II, the instrument was piloted with a group of 30 children enrolled at the USU Child Development Laboratory, where test-retest reliability was established over a three-week period. Children were presented with nine pieces of clothing (three shirts: no sleeves, short sleeves, and long sleeves; three pants: short pants, medium pants, and long pants; and three types of footwear: shoes only--no socks, short socks, and long socks). There were a total of 270 times the children selected the pieces (30 children chose 9 pieces each). When these children were again tested after three weeks, 260 identical pieces of clothing were again chosen by the same children. This established the test-retest reliability score at ninety six percent (96%).

Finally, in Stage III, inter-rater reliability was established by looking at the possible impact that the tester might have upon the children's responses. Procedure Analyses of Variance were performed. The ANOVA procedures revealed no significant differences in the results of tests administered by testers.

The GAT test was administered using the latin-square method of randomization, where six alternate choices were sequenced and presented. For instance, subject number one was first asked to dress the figure as a girl, and then as a

boy and the third choice was either a girl or a boy. Subject number two was asked to dress the figure first as a boy, then as either a girl or a boy and third as a girl. Subject number three was asked to dress the figure first as either a girl or a boy, then as a girl and third as a boy. This sequencing allowed each set (i.e., dress like a girl) to have an equal chance of being asked first during the testing procedure.

The GAT responses were recorded on a GAT record form (see Appendix C). Each piece of clothing was assigned an arbitrary number (i.e., 1 for short pants, 2 for medium pants, and 3 for long pants). Children's responses were simply marked as the testing proceeded. For instance, when the child was asked to dress the figure like a boy, the arbitrary number assigned to each piece of clothing that the child chose was marked down on the record sheet. After the completion of each question, the tester scrambled the nine pieces of apparel for the next question. The administration of the GAT took approximately 7 to 8 minutes. The GAT was administered at least two days before the SERLI in order to eliminate the possibility that the gender-specific characteristics of clothing in the SERLI might influence children's perception of the androgynous GAT figure and subsequent clothing choices.

### The Sex-Role Learning Index (SERLI)

The SERLI is a picture-choice instrument designed to measure sex-role acquisition in young children. Specifically, it measures Sex-Role Discrimination (SRD), Sex-Role Preference (SRP), and Sex-Role Confirmation (SRC). Administration of the SERLI involves the children sorting pictures of children and adults performing different tasks into boxes. Possible Sex-Role Discrimination scores range from 0-100, with a higher score indicating a greater awareness of sex-role stereotypes for the same sex and the opposite sex. Sex-Role Preference scores range from 20-80, higher scores indicate preference for one's own sex-role. The Sex-Role Confirmation score may range from 20-80, with higher scores indicating greater adherence to one's conceptions of sex-role appropriateness.

It took approximately twenty minutes to administer the SERLI. The SERLI test results were also recorded on the SERLI record form and were later scored following the scoring procedures described in the test manual. Each child had six SERLI scores, four of which were used in the analyses. For a discussion of reliability and validity of the SERLI, see Edelbrock and Sugawara (1978).

### The Testing Situation

A total of five testers (including the investigator) participated in data collection. The testers were graduate

and/or undergraduate students who were currently involved with or had prior involvement with the USU Child Development Laboratory. The investigator trained the students for the testing and also monitored the initial testing sessions. Testing took place in a room in the child's school (usually a room adjacent to the child's classroom). Prior to the testing session, each tester spent some time in the classroom in order to get acquainted with the children. The testers worked closely with the child's teacher in order to assure a smooth transition of the children from classroom into the testing setting.

Each time a tester was present in the child's classroom, the teacher introduced the tester during the large group time and mentioned that "\_\_\_\_\_ (tester's name) is here to play a game with some of you." The teacher then proceeded, "When I call your name, she will go with you to play the game." If the child was playing or was at a learning center, the teacher accompanied the tester to where the child was. He or she then spoke to the child and if the child was willing to go, the tester accompanied the child to the testing room.

If a child showed any signs of distress, the teacher or one of the teacher aids accompanied the child to the testing room. In the event that the child refused to go, and/or if the presence of teacher did not alleviate the child's distress, the child was not tested and was not included in

the study. In a similar fashion, if the child was uncooperative during the testing session, the testing was stopped and the teacher or the tester accompanied the child back to the classroom. The child's name was then deleted from the list of subjects.

## CHAPTER IV

## RESULTS

A number of statistical procedures were employed to analyze the children's responses on the Gender Apparel Test (GAT) and the Sex-Role Learning Index (SERLI) and the interaction of gender of subject and GAT responses with respect to their SERLI scores. Chi-Square, Analysis of Variance and Kruskal-Wallis One-Way ANOVA were run utilizing SPSSPC (Norusis, 1990). The results will be reported in order of the hypotheses presented.

## The Gender Apparel Test

Hypothesis 1

There are no significant differences in children's determination of gender appropriateness of clothing:

Hypothesis 1.a. There are no significant differences between children in their determination of appropriate shirts (no sleeves versus short sleeves versus long sleeves) for girls, for boys, or for either girls or boys. Table 1 summarized the findings for this hypothesis.

This hypothesis was rejected (see Table 1); significant differences emerged in the children's determination of appropriate shirt/sleeve length for girls ( $\chi^2_{(4)} = 25.417$ ,  $p = .00004$ ). Children more frequently chose Long Sleeves for

boys (56.7%) and Short Sleeves for girls (40.2%). No specific style was preferred when determining appropriate Shirt for either boys or girls. All three styles of Shirts were almost equally selected by all subjects: 32 chose No Sleeves, 30 chose Short Sleeves, and 35 chose Long Sleeves.

Table 1

Frequency of Shirts Determined Appropriate for Girls, for Boys, and for Either Boys or Girls (N=97)

Shirt	No Sleeves	Short Sleeves	Long Sleeves	$\chi^2_{(4)}$	P
Girl Shirt				25.41	0.0000
Frequency	39	36	22		
%	40.2	37.1	22.7		
Boy Shirt					
Frequency	17	25	55		
%	17.5	25.8	56.7		
Boy/Girl Shirt					
Frequency	32	30	35		
%	33.0	30.9	36.1		

Hypothesis 1.b. There are no significant differences between children in their determination of appropriate pants (short pants versus medium pants versus long pants) for girls, for boys, or for either boys or girls. Table 2 summarizes the findings for this hypothesis.

This hypothesis was also rejected ( $\chi^2_{(4)} = 30.44$ ,  $p = .00000$ ). Long Pants were selected most often for boys

(62.9%) and Short Pants were selected most often for girls (41.2%). Interestingly, once again, Long Pants (39.2%) emerged as more appropriate for either boys or girls.

Table 2

Frequency of Pants Determined Appropriate for Girls, for Boys, and for Either Boys or Girls (N=97)

Pants	Short Pants	Medium Pants	Long Pants	$\chi^2_{(4)}$	P
Girl Pants				30.44	0.0000
Frequency	40	32	25		
%	41.2	33.0	25.8		
Boy Pants					
Frequency	21	15	61		
%	21.6	15.5	62.9		
Boy/Girl Pants					
Frequency	26	33	38		
%	26.8	34.0	39.2		

Hypothesis 1.c. There are no significant differences between children in their determination of appropriate footwear (shoes only--no socks--versus short socks versus long socks) for girls, for boys, or for either boys or girls. Table 3 summarizes the findings for this hypothesis.

This hypothesis was not rejected (see Table 3) ( $\chi^2_{(4)} = .544$ ,  $p = .969$ ). No significant differences were found. Children, it was revealed, expressed no specific preference in footwear for girls, for boys, or for either boys or girls.



Table 3

Frequency of Footwear Determined Appropriate for Girls,  
for Boys, and for Either Boys or Girls (N=97)

Footwear	No Socks	Short Socks	Long Socks	$\chi^2_{(4)}$	P
Girl Footwear				0.544	0.969
Frequency	22	38	37		
%	22.7	39.2	38.1		
Boy Footwear					
Frequency	21	37	39		
%	21.6	38.1	40.2		
Boy/Girl Footwear					
Frequency	20	35	42		
%	20.6	36.1	43.3		

### Hypothesis 2

There are no significant differences between males and females in their determination of gender appropriateness of Shirts (no sleeves versus short sleeves versus long sleeves). Table 4 summarizes the findings for hypotheses 2.a through 2.c.

Hypothesis 2.a. There are no significant differences between males and females in their determination of gender appropriateness of Shirts for girls.

This hypothesis was not rejected (see Table 4); no significant differences emerged between males and females in their determination of appropriate Sleeve Length for girls ( $\chi^2_{(4)} = .06$ ,  $p = .969$ ). Children of either sex agreed that

the No Sleeves shirt is more appropriate for girls. They also agreed that Long Sleeves are less appropriate for girls (23.5% of males and 21.7% of females chose Long Sleeves, whereas 41.3% of females and 39.2% of males chose No Sleeves). These results indicate that subjects agreed on what shirts were gender appropriate for girls.

Table 4

Frequency of Males and Females Determining Appropriate Shirts for Girls, for Boys, and for Either Boys or Girls (N=97)

Shirts	No Sleeves	Short Sleeves	Long Sleeves	$\chi^2_{(2)}$	P
Girl Shirt (Male)				0.06	0.969
Frequency	20	19	12		
%	39.2	37.0	23.5		
(Female)					
Frequency	19	17	10		
%	41.3	37.0	21.7		
Boy Shirt (Male)				0.821	0.663
Frequency	9	15	27		
%	17.3	28.8	53.8		
(Female)					
Frequency	8	10	28		
%	17.4	21.7	60.9		
Boy/Girl Shirt (Male)				5.35	0.069
Frequency	12	16	23		
%	23.5	31.4	45.1		
(Female)					
Frequency	20	14	12		
%	43.5	30.4	26.1		
Male	$n = (51)$				
Female	$n = (46)$				

Hypothesis 2.b. There are no significant differences between males and females in their determination of appropriateness of Shirts for boys.

This hypothesis was not rejected (see Table 4). No significant differences emerged between males and females in their determination of appropriate sleeves length for boys. ( $\chi^2_{(2)} = .82, p = .66$ ). Once again, the results revealed that both males and females unanimously determined that a No Sleeves shirt is less appropriate for boys, whereas a majority of the children agreed that the Long Sleeves shirt is more appropriate for boys (53.8% of males and 60.9% of females chose Long Sleeves, whereas only 17.3% males and 17.4% females chose No Sleeves shirts).

Hypothesis 2.c. There are no significant differences between males and females in their determination of the appropriateness of Shirts for either boys or girls.

While this hypothesis was not rejected (see Table 4), it did approach the .05 significance level ( $\chi^2_{(2)} = 5.35, p = .06$ ). There appeared to be more disagreement among children when deciding about the appropriateness of Shirts for either boys or girls choice. It appears that when choosing for either a boy or a girl, children might be selecting what they think is more appropriate for their own sex; 43.5% of females chose No Sleeves for either boys or girls and 45.1% of males chose Long Sleeves for either boys or girls. Short Sleeves appeared in the middle (31.4% of

males and 30.4% of females chose Short Sleeves for either boys or girls).

### Hypothesis 3

There are no significant differences between males and females in their determination of gender appropriateness of Pants (short pants versus medium pants versus long pants). Table 5 summarizes the findings for hypotheses 3.a through 3.c.

Table 5

#### Frequency of Males and Females Determining Appropriate Pants for Girls, for Boys, and for Either Boys or Girls (N=97)

Pants	Short Pants	Medium Pants	Long Pants	$\chi^2_{(2)}$	P
Girl Pant (Male)				5.12	0.077
Frequency	18	15	18		
%	35.3	29.4	35.3		
(Female)					
Frequency	22	17	7		
%	47.8	37.0	15.2		
Boy Pant (Male)				3.09	0.212
Frequency	14	9	28		
%	27.5	7.6	54.9		
(Female)					
Frequency	7	6	33		
%	15.2	13.0	71.7		
Boy/Girl Pant				9.85	0.007 (Male)
Frequency	7	19	25		
%	13.7	37.3	49.0		
(Female)					
Frequency	19	14	13		
%	41.3	30.4	28.3		
Male	$n = (51)$				
Female	$n = (46)$				

Hypothesis 3.a. There are no significant differences between males and females in their determination of the gender appropriateness of Pants for girls.

This hypothesis, although it was not rejected, did approach significance (see Table 5) ( $\chi^2_{(2)} = 5.12, p = .077$ ). It is interesting to note that females (47.8%) were more likely than males (35.3%) to decide that Short Pants are more appropriate for girls. However, overall findings suggested that fewer females determined Long Pants to be appropriate for girls (only 15.2% of females chose Long Pants for girls, whereas, 35.3% of males chose Long Pants for girls).

Hypothesis 3.b. There are no significant differences between males and females in their determination of appropriate Pants for boys.

This hypothesis was not rejected (see Table 5). No significant differences emerged between males and females in their determination of appropriate length of Pants for boys ( $\chi^2_{(2)} = 3.09, p = .212$ ). Again, all subjects, regardless of their sex, agreed that Long Pants are more appropriate for boys (54.9% males and 71.7% females chose Long Pants for boys). It appears that the subjects were in less agreement on the appropriateness of Pants for girls (hypothesis 3.a) than Pants for boys (hypothesis 3.b). It is also apparent that females were more likely to choose Long Pants for boys

than Long Pants for girls (from the females, only 15.2% chose Long Pants for girls, as opposed to 71.7% who selected Long Pants for boys).

Hypothesis 3.c. There are no significant differences between males and females in their determination of the gender appropriateness of Pants for either boys or girls.

This hypothesis was rejected (see Table 5).

Significant differences existed between males and females when determining an appropriate length of Pants for either boys or girls ( $\chi^2_{(2)} = 9.85, p = .007$ ). Similar patterns emerged in children's determination of Pants for either boys or girls. The results are similar to when children determined an appropriate sleeve length for either boys or girls. Once again, it appeared that when choosing for either a boy or a girl, children adhered to what they thought was more appropriate for their own sex: 41.3% of females chose Short Pants for either boys or girls and 49.0% of males chose Long Pants for either boys or girls. Medium pants appeared in the middle (37.3% of males and 30.4% of females chose Medium Pants for either boys or girls).

#### Hypothesis 4

There are no significant differences between males and females in their determination of the gender appropriateness

of footwear (shoes only--no socks--versus short socks versus long socks). Table 6 summarizes the findings for hypotheses 4.a through 4.c.

Hypothesis 4.a. There are no significant differences between males and females in their determination of the gender appropriateness of Footwear for girls.

This hypothesis was rejected (see Table 6); significant differences emerged between males and females in their determination of the appropriate Footwear for girls ( $\chi^2_{(2)} = 6.62$ ,  $p = .036$ ). There was less consensus on the appropriateness of Footwear for girls. Only 15.2% females as opposed to 29.4% males chose No Socks for girls. With respect to appropriateness of Footwear, females (52.2%) showed the strongest preference in Short Socks for girls.

Hypothesis 4.b: There are no significant differences between males and females in their determination of appropriate Footwear for boys.

This hypothesis was not rejected; no significant differences emerged between males and females in their determination of appropriate Footwear for boys ( $\chi^2_{(2)} = 2.627$ ,  $p = .268$ ). Apparently, there was more grounds for agreement on the inappropriateness of No Socks for boys; a smaller percentage of children (21.6% males and 21.7% females) chose Short Socks for boys. Although the results failed to reject this hypothesis, the percentages

Table 6

Frequency of Males and Females Determining Appropriate Footwear for Girls, for Boys, and for Either Boys or Girls (N=97)

Footwear	No Socks	Short Socks	Long Socks	$\chi^2_{(2)}$	P
Girl Footwear				6.62	0.036
(Male)					
Frequency	15	14	22		
%	29.4	27.5	43.1		
(Female)					
Frequency	7	24	15		
%	15.2	52.2	32.6		
Boy Footwear				2.627	0.268
(Male)					
Frequency	11	23	17		
%	21.6	45.1	33.3		
(Female)					
Frequency	10	14	22		
%	21.7	30.4	47.8		
Boy/Girl Footwear				0.953	0.09
(Male)					
Frequency	10	19	22		
%	19.6	37.3	43.1		
(Female)					
Frequency	10	16	20		
%	21.7	34.8	43.5		
Male	$n = (51)$				
Female	$n = (46)$				

revealed some interesting results. Children, apparently, disagreed on the appropriateness of Short Socks versus Long Socks for boys. Males (45.1%) thought that Short Socks were more appropriate for boys, whereas females thought Long Socks (47.8%) were more appropriate for boys.

Hypothesis 4.c. There are no significant differences between males and females in their determination of the gender appropriateness of Footwear for either boys or girls.



This hypothesis was not rejected. No significant differences were apparent between males and females when determining appropriate Footwear for either boys or girls ( $\chi^2_{(4)} = 0.953, p = .09$ ). There was strong agreement between children (19.6% males and 21.7% females) that No Socks were less appropriate for either boys or girls. Long Socks emerged as appropriate for either boys or girls (43.1% males and 43.5% females).

#### The Sex-Role Learning Index

For hypotheses number 5 through 12, ANOVA tests were employed to see if all children, regardless of their sex, differed in their determination of the gender appropriateness of clothing with respect to their SERLI scores. Also, ANOVA tests were utilized to examine the interaction of sex of the child and the GAT responses with regard to SERLI scores. A total of eight null hypotheses were tested for this section. Table 7 summarizes the findings for the following two hypotheses (5 and 6) pertaining to Own Sex-Role Discrimination scores.

#### Hypothesis 5

There are no significant differences in children's determination of the gender appropriateness of clothing with respect to their Own Sex-Role Discrimination SERLI score (OSRD).

### Hypothesis 6

There are no significant differences in males' and females' determination of the gender appropriateness of clothing in relation to their Own Sex-Role Discrimination (OSRD) SERLI score.

Table 7

ANOVA Summary Differences in Children's Determination of Gender Appropriateness of Clothing With Respect to Own Sex-Role Discrimination (OSRD) SERLI Scores and Sex Interaction (N = 97).

Variables	F(2,1)	D. F.	P.
<u>Shirt</u>			
Girl Shirt	.23	2	.795
Sex	3.73	1	.057
Sex by Girl Shirt	.49	2	.612
Boy Shirt	.01	2	.990
Sex	4.86	1	.030
Sex by Boy Shirt	2.36	2	.100
Girl/Boy Shirt	1.78	2	.174
Sex	1.96	1	.165
Sex by Girl/Boy Shirt	.61	2	.545
<u>Pants</u>			
Girl Pants	.31	2	.736
Sex	2.16	1	.145
Sex by Girl Pants	.78	2	.463
Boy Pants	.16	2	.852
Sex	1.60	1	.210
Sex by Boy Pants	.24	2	.788
Girl/Boy Pants	3.42	2	.037*
Sex	5.32	1	.023
Sex by Girl/Boy Pants	.26	2	.769
<u>Footwear</u>			
Girl Footwear	3.67	2	.029**
Sex	1.98	1	.163
Sex by Girl Footwear	1.24	2	.295
Boy Footwear	.11	2	.893
Sex	3.63	1	.060
Sex by Boy Footwear	.40	2	.674
Girl/Boy Footwear	1.19	2	.310
Sex	3.76	1	.056
Sex by Girl/Boy Footwear	1.98	2	.144

\*Cochrans  $C_{(15,6)} = .399$ ,  $p = .002$

\*\*Cochrans  $C_{(15,6)} = .303$ ,  $p = .086$

On the Own Sex-Role Discrimination score, only two GAT hypotheses were rejected; the girl/boy Pants ( $F_{(2,1)} = 3.42$ ,  $p = .037$ ) and the girl Footwear ( $F_{(2,1)} = 3.67$ ,  $p = .029$ ). Mean Own Sex-Role Discrimination scores for either boy or girl Pants is reported in Table 8.

Table 8

Mean Own Sex-Role Discrimination (OSRD) SERLI Score of Males and Females Choosing Pants for Either Boys or Girls (N = 94)

Variable	Mean OSRD	N	STD	P
<u>Either Boy or girl pants</u>				0.037
short pants (1)				
male	98.333	6	4.082	
female	94.737	19	6.967	
medium pants (2)				
male	91.667	18	14.246	
female	82.857	14	18.985	
long pants (3)				
male	95.200	25	8.718	
female	88.333	12	14.035	
Total sample	91.915	94	12.723	

As compared to females, males scored higher on the OSRD when selecting Pants for either boys or girls on all three styles of pants (Short Pants versus Medium Pants versus Long

Pants). As indicated in Table 8, males who selected Short Pants for girls had the highest Mean Own Sex-Role Discrimination score ( $\bar{X}' = 98.33$ ). Also, among the females, those with highest Mean Own Sex-Role Discrimination score ( $\bar{X}' = 94.737$ ) chose Short Pants for girls. Although these differences existed, it was necessary to look beyond the ANOVA test and the Mean OSRD scores reported here due to observed significance of the test of homogeneity of variance (Cochran  $C_{(15,6)} = .399$ ,  $p = .002$ ). This revealed the violation of the general linear assumption of homogeneity-of-variance. The nonparametric test Kruskal-Wallis One-Way ANOVA was then employed to test the hypothesis again. This time the result was not significant ( $\chi^2_{(2)} = 2.4018$ ,  $p = .3009$ ) (Table 9). The significant differences observed in the girl/boy Pants test proved to be an erroneous observation.

Table 9

Kruskal-Wallis One-Way ANOVA Own Sex-Role Discrimination  
(OSRD) SERLI Scores by Pants for Either Boys or Girls  
( N = 97 )

Variable	Mean Rank	N	Corrected For Ties Chi-Square ( $\chi^2_{(2)}$ )	p.
Pants for Either Boy or Girl			2.4018	0.3009
short pants (1)	51.92	25		
medium pants (2)	42.41	32		
long pants (3)	48.92	37		
Total N		94		

Mean Own Sex-Role Discrimination scores for girl footwear is reported in Table 10. Compared to females, males scored higher on the Own Sex-Role Discrimination score (OSRD) with regard to selecting footwear for girls (Short Socks versus Long Socks): Males who selected Long Socks for girls had the lowest Mean Own Sex-Role Discrimination score ( $\bar{X}' = 91.429$ ). Also, among the females, those with the lowest Mean Own Sex-Role Discrimination score

Table 10

Mean of Own Sex-Role Discrimination (OSRD) SERLI Scores of Males and Females Choosing Footwear for Girls (N = 97)

Variable	Mean OSRD	N	STD	P
Girl Footwear				0:029
no socks (1)				
male	95.714	14	9.376	
female	98.571	7	3.780	
short socks (2)				
male	97.143	14	8.254	
female	89.565	23	15.219	
long socks (3)				
male	91.429	21	12.762	
female	84.667	15	14.075	
Total sample	91.915	94	12.723	

( $X' = 84.667$ ) chose Long Socks for girls. Among the females, those with the highest Mean Own Sex-Role Discrimination ( $X' = 98.571$ ) chose No Socks for girls.

The following hypotheses (7 and 8) were tested with respect to Opposite Sex-Role Discrimination score. Table 11 summarizes the findings for hypotheses 7 and 8.

#### Hypothesis 7

There are no significant differences in children's determination of gender appropriateness of clothing with regard to their Opposite Sex-role Discrimination SERLI score (OPSRD).

#### Hypothesis 8

There are no significant differences in males' and females' determination of gender appropriateness of clothing with respect to their Opposite Sex-role Discrimination SERLI score (OPSRD).

None of Gender Apparel Test scores and the sex of the child were related to the SERLI scores on the Opposite Sex-Role Discrimination (OPSRD).

Table 11

ANOVA Summary Differences in Children's Determination of  
Gender Appropriateness of Clothing With Respect to Opposite  
Sex-Role Discrimination (OPSRD) SERLI Scores and Sex  
Interaction (N = 97)

Variables	$F_{(2,1)}$	D. F.	P.
<u>Shirt</u>			
Girl Shirt	.61	2	.544
Sex	.32	1	.572
Sex by Girl Shirt	.59	2	.554
Boy Shirt	.46	2	.631
Sex	.01	1	.924
Sex by Boy Shirt	.59	2	.559
Girl/Boy Shirt	.05	2	.954
Sex	.18	1	.669
Sex by Girl/Boy Shirt	.22	2	.804
<u>Pants</u>			
Girl Pants	1.82	2	.169
Sex	.85	1	.358
Sex by Girl Pants	.07	2	.929
Boy Pants	.45	2	.636
Sex	.02	1	.885
Sex by Boy Pants	1.65	2	.198
Girl/Boy Pants	.10	2	.904
Sex	.26	1	.613
Sex by Girl/Boy Pants	.50	2	.609
<u>Footwear</u>			
Girl Footwear	1.04	2	.359
Sex	.22	1	.644
Sex by Girl Footwear	.45	2	.642
Boy Footwear	.32	2	.724
Sex	.65	1	.421
Sex by Boy Footwear	1.42	2	.248
Girl/Boy Footwear	.19	2	.827
Sex	.16	1	.688
Sex by Girl/Boy Footwear	.43	2	.649

The following hypotheses (9 AND 10) were tested with regard to Child Sex-Role Preference. Table 12 summarizes the findings for hypotheses 9 and 10.

Table 12

ANOVA Summary Differences in Children's Determination of  
Gender Appropriateness of Clothing With Respect to Child  
Figure Sex-Role Preference (CSRP) SERLI Scores and Sex  
Interaction (N = 97)

Variables	$F_{(2,1)}$	D. F.	P.
<u>Shirt</u>			
Girl Shirt	.10	2	.909
Sex	7.52	1	.007
Sex by Girl Shirt	.65	2	.525
Boy Shirt	2.69	2	.073
Sex	11.39	1	.001
Sex by Boy Shirt	1.86	2	.161
Girl/Boy Shirt	.70	2	.498
Sex	8.03	1	.006
Sex by Girl/Boy Shirt	1.77	2	.176
<u>Pants</u>			
Girl Pants	.46	2	.633
Sex	7.76	1	.007
Sex by Girl Pants	.03	2	.969
Boy Pants	2.20	2	.117
Sex	4.86	1	.030
Sex by Boy Pants	.08	2	.921
Girl/Boy Pants	.65	2	.526
Sex	7.93	1	.006
Sex by Girl/Boy Pants	1.09	2	.341
<u>Footwear</u>			
Girl Footwear	.92	2	.402
Sex	13.73	1	.000
Sex by Girl Footwear	3.02	2	.054*
Boy Footwear	.18	2	.834
Sex	9.92	1	.002
Sex by Boy Footwear	.60	2	.551
Girl/Boy Footwear	.34	2	.716
Sex	8.85	1	.004
Sex by Boy/girl Footwear	1.39	2	.254

\*Cochran  $C_{(15,6)} = .211, p = 1.000$

### Hypothesis 9

There are no significant differences in children's determination of gender appropriateness of clothing with



regard to their Child Sex-Role Preference SERLI score (CSRP).

#### Hypothesis 10

There are no significant differences in males' and females' determination of gender appropriateness of clothing in relation to their Child Sex-Role Preference SERLI score (CSRP).

On the SERLI Child Figure Sex-Role Preference (CSRP) score, one hypothesis testing GAT and sex of the child interaction was rejected: sex by girl footwear ( $F_{(2,1)} = 3.02$ ,  $p = .054$ ). Mean Child Sex-Role Preference (CSRP) scores for girl footwear and its interaction with sex are reported in Table 13. With respect to selecting footwear for girls, males scored higher on CSRP as compared to females. Also, males who selected Long Socks for girls had the lowest Mean Child Sex-role Preference score ( $X' = 56.524$ ) as opposed to those who selected No Socks ( $X' = 67.071$ ) and those who chose Medium Socks ( $X' = 60.500$ ).

The following hypotheses (11 and 12) were tested with regard to Adult Sex-Role Preference. Table 14 summarizes the findings for hypotheses 11 and 12.

#### Hypothesis 11

There are no significant differences in children's determination of gender appropriateness of clothing with

respect to their Adult Sex-Role Preference SERLI score (ASRP).

Table 13

Mean of Child Sex-Role Preference (CSRP) SERLI Scores of Males and Females Choosing Girl Footwear

Variable	Mean CSRP	N	STD	P.
<u>Sex by Girl Footwear</u>				.054
no socks (1)				
male	67.071	14	11.378	
female	47.857	7	13.297	
short socks (2)				
male	60.500	14	13.166	
female	55.522	23	10.361	
long socks (3)				
male	56.524	21	11.197	
female	52.400	15	11.089	
Total sample	57.138	94	12.328	

Hypothesis 12

There are no significant differences in males' and females' determination of gender appropriateness of clothing with regard to their Adult Sex-role Preference SERLI score (ASRP).

None of the Gender Apparel Test and the sex of the child were related with the SERLI scores on Adult Sex-role Preference (ASRP).

Table 14

ANOVA Summary Differences in Children's Determination of  
Gender Appropriateness of Clothing With Respect to Adult  
Figure Sex-Role Preference (ASRP) SERLI Scores and Sex  
Interaction

Variables	$F(2,1)$	D. F.	P.
<u>Shirt</u>			
Girl Shirt	1.37	2	2.59
Sex	.22	1	.644
Sex by Girl Shirt	.25	2	.777
Boy Shirt	.49	2	.616
Sex	.23	1	.630
Sex by Boy Shirt	2.24	2	.113
Girl/Boy Shirt	.29	2	.748
Sex	.03	1	.871
Sex by Girl/Boy Shirt	.42	2	.655
<u>Pants</u>			
Girl Pants	.69	2	.504
Sex	.36	1	.552
Sex by Girl Pants	.09	2	.917
Boy Pants	.04	2	.957
Sex	.45	1	.505
Sex by Boy Pants	1.78	2	.174
Girl/Boy Pants	1.24	2	.294
Sex	.27	1	.605
Sex by Girl/Boy Pants	.70	2	.498
<u>Footwear</u>			
Girl Footwear	1.86	2	.161
Sex	.03	1	.869
Sex by Girl Footwear	.28	2	.760
Boy Footwear	.10	2	.901
Sex	.25	1	.618
Sex by Boy Footwear	.37	2	.689
Girl/Boy Footwear	1.47	2	.235
Sex	.03	1	.867
Sex by Girl/Boy Footwear	.21	2	.811

### Summary Results

Subjects demonstrated that they made gender distinctions when deciding about shirts and pants. It was determined that Long Sleeves are more appropriate for boys and No Sleeves are more appropriate for girls. Also, Long Pants are more appropriate for boys and Short Pants are more appropriate for girls. Further analyses also revealed that male and female subjects were in agreement with each other when making such distinctions pertaining to boys and girls. It was found that when determining for either a boy or a girl, males and females disagreed, choosing what they thought was appropriate for their own sex. Males chose Long Sleeves for either a boy or a girl and females chose No Sleeves for either a boy or a girl; also males chose Long Pants for either a boy or a girl and females chose Short Pants for either a boy or a girl.

Determining appropriate Footwear for girls generated more diversity in the findings. Initially, it was revealed that children did not make gender distinctions when determining the gender appropriateness of Footwear. Further analyses, however, revealed that children disagree when determining appropriate Footwear for girls both on the measure of the Gender Apparel Test (GAT) alone, and also when determining this with respect to two of their SERLI scores (Own Sex-Role Discrimination [OSRD] and Child Sex-

Role Preference [CSRP]) and also when the sex of subject is added as a variable: First, males preferred No Socks and females preferred Short Socks for girls. Second, with respect to OSRD, both males and females who selected Long Socks for girls had the lowest mean OSRD scores and females who chose No Socks had the highest OSRD scores. And, finally, with respect to CSRP scores, an interaction of sex by Footwear for girls was apparent: males scored higher on CSRP as compared to females. However, males who selected Long Socks for girls had the lowest mean CSRP scores as opposed to those who selected No Socks and Medium Socks.

## CHAPTER V

### DISCUSSION

The purpose of this study was to investigate the gender distinctions that children make on the basis of clothing styles. It sought to examine what children, regardless of their sex, determine to be appropriate for boys, for girls, or for either boys or girls. Furthermore, this study investigated gender differences between males and females in determining gender appropriateness of clothing options. Finally, this study examined how children's awareness of gender stereotypes are related to their determination of gender appropriateness of clothing.

#### The Gender Apparel Test

##### What Styles of Androgynous Clothing Options Do Children Determine to Be Appropriate for Boys, for Girls or for Either Boys or Girls?

It was hypothesized that there would be no significant differences in children's determination of the gender appropriateness of clothing. The results, however, failed to provide full support for this null hypothesis. Significant differences did emerge in the children's determination of gender appropriateness of Shirts and Pants. Long Sleeves were more frequently chosen for boys and Short Sleeves for girls. No specific style was

preferred when determining the appropriate Shirts for either boys or girls.

Similarly, Long Pants were selected most often for boys and Short Pants were selected most often for girls. Interestingly, Long Pants emerged as also being more appropriate for either boys or girls. These findings provide important information about pants as a symbol of masculinity. Kaiser and Phinney (1983) have reported that pants are seen by children as a symbol of masculinity. In their study, however, long pants versus skirts were used. The current study provided more support for the contention that long pants do indeed convey messages of masculinity in the eyes of the children. The findings of the present investigation will attenuate the ambiguity that, according to Kaiser and Phinney (1983), is associated with pants as a powerful symbol. With respect to footwear, however, no significant differences were found in this study with this measurement content. Children, it was revealed, had no specific preference in footwear for girls, for boys or for either boys or girls.

#### Do Males and Females Differ When Determining Gender Appropriateness of Clothing?

It was hypothesized that there would be no significant differences between males and females in their determination of the gender appropriateness of clothing. This hypothesis

was tested separately for appropriateness of Shirts, Pants and Footwear for girls, for boys or for either boys or girls.

#### Determining Gender Appropriateness of Shirts

It was hypothesized that there would be no significant differences between males and females in their determination of the gender appropriateness of Shirts. The results failed to reject this hypothesis as noted in the following.

The hypothesis that there would be no significant differences between males and females in their determination of gender appropriateness of Shirts for girls was not rejected; no significant differences emerged between males and females in their determination of appropriate shirt/sleeve length for girls. In fact children of both sexes agreed that the No Sleeves shirt is more appropriate for girls than for boys. They also agreed that Long Sleeves are less appropriate for girls.

The next hypothesis was that there would be no significant differences between males and females in their determination of appropriateness of Shirts for boys. This hypothesis was not rejected either. Again, no significant differences emerged between males and females in their determination of appropriate shirt/sleeve length for boys. Once again, the results revealed that both males and females unanimously determined that the No Sleeves shirt was less



appropriate for boys, whereas the majority of children, regardless of their sex, agreed that the Long Sleeves shirt was more appropriate for boys.

These findings, are supported by previous evidence (Brown, 1956; Fein et al., 1975; Nadelman, 1974; Weinraub et al., 1984) that children demonstrate gender stereotypes. They also indicate that males and females held similar opinions about these stereotypes, despite overwhelming evidence (Fagot, 1973; Kohlberg, 1966; Thompson, 1975) that boys show more awareness of sex roles (and stereotypic behavior) than girls. This discrepancy might be due to the powerful nature of clothing as a gender marker, which leaves no room for flexibility on the part of girls.

Finally, it was hypothesized that there would be no significant differences between males and females in their determination of the appropriateness of Shirts for either boys or girls, which approached the .05 significance level. There appeared to be more disagreement between males and females when deciding about a Shirt for either boys or girls. It appears that when selecting for either boys or girls, children might be choosing what they think is more appropriate for their own sex; close to half of females chose No Sleeves for either boys or girls and almost half of males selected Long Sleeves for either boys or girls. These findings may indicate that children demonstrate strong sex-

role preference by choosing what they think is more appropriate for their own sex.

Determining Gender  
Appropriateness of Pants

It was hypothesized that there would be no significant differences between males and females in their determination of the gender appropriateness of Pants. The results indicated that children did not differ in determining the appropriateness of Pants for boys or for girls, but that significant differences did emerge when males and females were determining the appropriateness of Pants for either boys or girls as follows.

The hypothesis that there would be no significant differences between males and females in their determination of gender appropriateness of Pants for girls was not rejected; no significant differences emerged between males and females in their determination of the appropriate length of Pants for girls. Interestingly, more females than males decided that Short Pants were more appropriate for girls. Moreover, overall findings suggested that fewer females determined Long Pants to be appropriate for girls.

It was further hypothesized that there would be no significant differences between males and females in their determination of appropriate Pants for boys. This hypothesis was also not rejected. No significant differences emerged between males and females in their

determination of the appropriate length of Pants for boys. Again, males and females agreed that Long Pants are more appropriate for boys. Long Pants emerged as strongly appropriate for boys as determined by all children (over half males and nearly three-quarters female). It seems that the subjects were in less agreement on the appropriateness of Pants for girls as compared with Pants for boys. It is also evident that females are much more in favor of Long Pants for boys (less than a quarter of the females chose Long Pants for girls, whereas more than three quarters of them chose Long Pants for boys). These findings suggest that females resort to more stereotypic choices, which is contrary to some previous research findings (Fagot, 1973; Kohlberg, 1966; Thompson, 1975).

Finally, it was hypothesized that there would be no significant differences between males and females in their determination of the gender appropriateness of Pants for either boys or girls. This hypothesis was rejected. Significant differences existed between males and females when determining the appropriate length of pants for either boys or girls. These results were parallel to when children determined appropriate Shirts for either boys or girls. Once again, it appeared that when choosing Pants for either a boy or a girl, children adhered to what they thought was

more appropriate for their own sex: Almost half of females chose Short Pants and half of males chose Long Pants.

Determining Gender  
Appropriateness of Footwear

It was hypothesized that there would be no significant differences between males and females in their determination of the gender appropriateness of footwear. The results did not provide full support for this hypothesis as follows:

The hypothesis that there would be no significant differences between males and females in their determination of the gender appropriateness of footwear for girls was rejected; significant differences emerged between males and females in their determination of appropriate Footwear for girls. These findings suggest that there was less consensus on the appropriateness of Footwear for girls. Males more frequently chose No Socks for girls; while females most often selected Short Socks for girls.

Additionally, it was hypothesized that there would be no significant differences between males and females in their determination of appropriate "footwear" for boys. This hypothesis was not rejected; no significant differences emerged between males and females in their determination of appropriate Footwear for boys. Footwear choices for girls generated more discrepancy among children than Footwear for boys. There was consensus on the inappropriateness of No Socks for boys; fewer percentages of children chose Short

Socks for boys. Nevertheless, although the results failed to reject this hypothesis, the percentages revealed some interesting figures. Children, apparently, disagreed on the appropriateness of Short Socks versus Long Socks for boys. Almost half of males thought that Short Socks were more appropriate, whereas, half of females thought Long Socks more appropriate for boys.

Finally, it was hypothesized that there would be no significant differences between males and females in their determination of the gender appropriateness of Footwear for either boys or girls. This hypothesis was also not rejected. No significant differences existed between males and females when determining appropriate Footwear for either boys or girls. There was strong agreement between children that No Socks was less appropriate for either a boy or a girl; however, Long Socks emerged as appropriate for either a boy or a girl.

#### The Sex-Role Learning Index

##### Is Children's Awareness of Gender Stereotypes Related to Their Determination of Gender Appropriateness of Clothing?

It was hypothesized that there would be no significant differences in the children's determination of gender appropriateness of clothing with regard to their awareness of gender stereotypes. Hypotheses were tested on measures

of Own and Opposite Sex-Role Discrimination and on Child and Adult Sex-Role Preference SERLI scores. The interactions between the sex of the children and their determination of gender appropriateness of clothing were also tested. According to Edelbrock and Sugawara (1978), an increasing score on the SERLI indicates increasing awareness of sex-role stereotypes. It was hypothesized that the children's awareness of sex-role stereotypes would not be a measure of how they would respond with respect to the gender appropriateness of clothing. The findings of the present investigation failed to reject this null hypothesis. Nevertheless, a limited number of significant results were found in this study in relation to the SERLI scores, as reported in the following.

#### Own and Opposite Sex-Role Discrimination

It was hypothesized that there would be no significant differences in children's (regardless of their sex) determination of the gender appropriateness of clothing with respect to their Own and Opposite Sex-Role Discrimination (OSRD and OPSRD) SERLI score. It was also hypothesized that there would be no significant differences in males' and females' determination of the gender appropriateness of clothing (interaction of sex of child and his/her determination of gender appropriateness of clothing) with

regard to their Own and Opposite Sex-Role Discrimination SERLI score.

The Opposite Sex-Role Discrimination scores appeared to have no bearing on the children's determination of the gender appropriateness of clothing. Also, on the Own Sex-Role Discrimination measure, only two GAT hypotheses were rejected; the either boy or girl Pants and the girl Footwear. Nevertheless, the significant differences observed in the either boy or girl Pants test proved to be an erroneous observation, as revealed by the non-parametric ANOVA test, Kruskal-Wallis.

Mean Own Sex-Role Discrimination scores for girl Footwear revealed some interesting results. Males scored higher on OSRD with regard to selecting girl Footwear (Short Socks versus Long Socks) compared to females. Males who selected Long Socks for girls had the lowest mean Own Sex-Role Discrimination score. Also, among the females, those with the lowest mean Own Sex-Role Discrimination scores chose Long Socks for girls. Among the females, those with highest mean Own Sex-Role Discrimination chose No Socks for girls. These are very interesting findings since they may indicate that the greater the awareness of the child in sex-role stereotypes, the more he/she chooses Exposed styles for girls. They also reveal that the choices of the gender appropriate Footwear for boys is clearcut among children; simply put, No Socks are not appropriate for boys;

rather they are appropriate for girls; and the children who determine so score higher on the Own Sex-Role Discrimination score.

#### Child and Adult Sex-Role Preference

It was hypothesized that there would be no significant differences in the children's (regardless of their sex) determination of the gender appropriateness of clothing with regard to their Child and Adult Sex-Role Preference (CSRP and ASRP) SERLI score. It was also hypothesized that there would be no significant differences in males' and females' determination of the gender appropriateness of clothing (interaction of sex of child and his/her determination of gender appropriateness of clothing) with regard to their Child and Adult Sex-Role Preference SERLI score.

There appeared to be no relationship between Adult Sex-Role Preference scores and children's determination of gender appropriateness of clothing. On the SERLI Child Figure Sex-Role Preference (CSRP) score, one hypothesis testing GAT and sex of the child interaction was rejected; sex by girl Footwear. Overall, males had higher mean scores on CSRP with regard to selecting girl Footwear compared to females. Also, males who selected Long Socks for girls had the lowest mean Child Sex-Role Preference score as opposed to those who selected No Socks and those who chose Medium Socks. These findings substantiate the results of the



preceding ANOVA tests (Own Sex-Role Discrimination and Girl Footwear), that girls footwear are a subject of disagreement among children and also that those who have lower score on Child Sex-Role Preference choose the less appropriate style (as determined by this population) of Footwear (Long Socks) for girls.

### Limitations

One major limitation of the present study was the nature of the sample, which limits a generalization of the findings. Most subjects came from white, middleclass families. There were no representatives from Hollingshead's lower SES groups. Future studies might include a wider range of SES groups, and greater ethnic diversity as well as cross-cultural designs, in order to better generalize the findings.

Young children respond more readily to concrete clues, and it is possible that the line-drawn format of the pieces of clothing and the figure were too abstract and did not appear as objective and concrete to the children. Future studies might include some three-dimensional pieces in order to increase the validity of the findings.

### Implications

Results of this study indicate that children do have sex-role stereotypic tendencies, and that they put these

biases to work. Children make gender distinctions when determining the gender appropriateness of Shirts and Pants. General consensus among all children was that Long Pants and Long Sleeves were determined to be more appropriate for boys, and Short Pants and No Sleeves more appropriate for girls. Also, there was more agreement than disagreement among children in making gender distinctions regarding clothing styles. Interestingly, footwear emerged as an item of controversy, especially when it was being determined for girls. Children demonstrated strong gender-biased tendencies when determining the appropriateness of Footwear for girls.

It is important for parents and teachers to know that such strong gender stereotypes exist among young children, and that subsequent clothing choices parents and children make and teachers recommend can limit the types of physical activities (e.g., rough-and-tumble play), as well as child safety (e.g., during routine activities and also on the playground). It is obvious that how a child is clothed may very well limit or expand his or her opportunities for engaging in physical activities. For instance, wearing long pants might allow girls the opportunity to engage in more stereotypical masculine play such as rough-and-tumble play activities. These types of play are believed to be important precursors to the development of assertive traits

(Hartup, 1976; Kaiser & Phinney, 1983). According to Hartup (1977):

If women are to assume social roles more like those of men, ... opportunities for early exposure to rough-and-tumble play must be as equal for males and for females as opportunities for exposure to other normative behaviors (Hartup, 1977, p. 347).

Finally, the results indicate the importance of "seeing the world through the children's eyes." Most often, educators of young children manage the lives of children solely on the basis of inferences drawn from the adult world. Research findings, such as those in the present study, continue to suggest that these inferences do not apply to the world of children and that investigators must continue to design studies that draw upon the children's way of viewing the world.

### Conclusions

The results of this study reveal that children strongly respond to prevalent cultural demands and pressures to conform to gender dichotomy and that they act upon these accordingly. However, the increasing complexity of today's world, in terms of role demands that individual will have to face, dictate otherwise. It is revealing to find out that despite the unisex setting of the schools the subjects attended and the kind of curriculum that was implemented, children still held such strong stereotypic beliefs. This

suggests the far-reaching prevalence of these stereotypes, which go beyond the educational milieu.

It is important that investigators continue searching for strategies to work toward a better understanding of the complex mechanisms involved in the formation of sex-role stereotypes and their impact upon individual. Furthermore, longitudinal studies are needed to explore the developmental processes through which children progress when determining the gender appropriateness of clothing. Future research can also make a contribution in the study of sex-role development by providing answers to such important questions as "What are the positive or negative impacts of sex-role stereotypic beliefs and behaviors?"; "What are the costs and the far-reaching consequences of sex-role stereotypes for the individual and society?"; and finally, "How do the males in the society experience such consequences as opposed to the females?"

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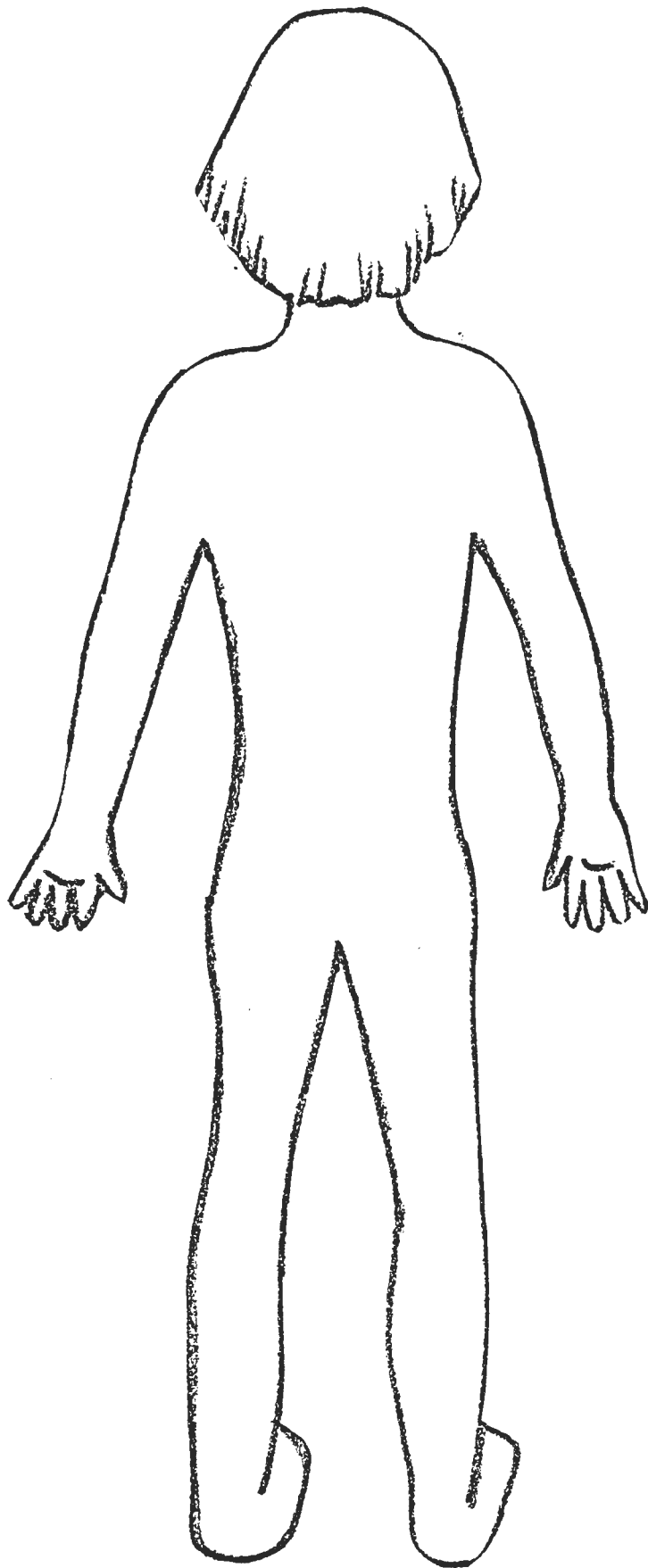
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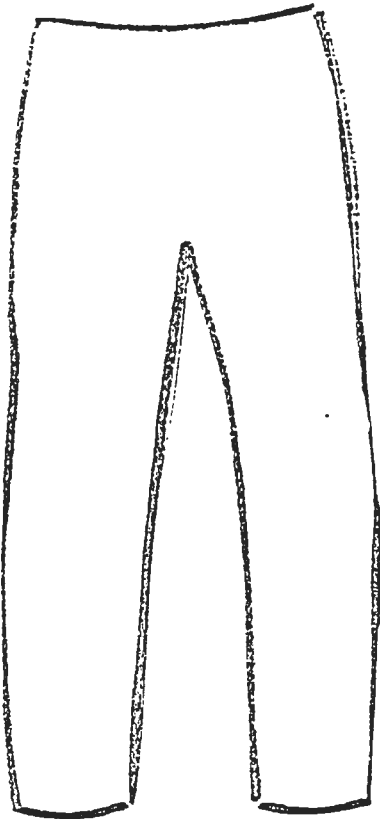
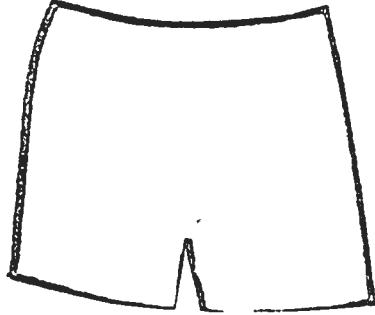
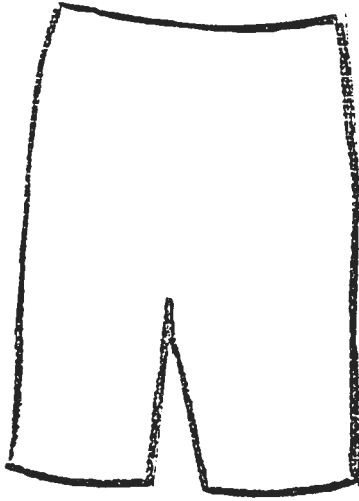


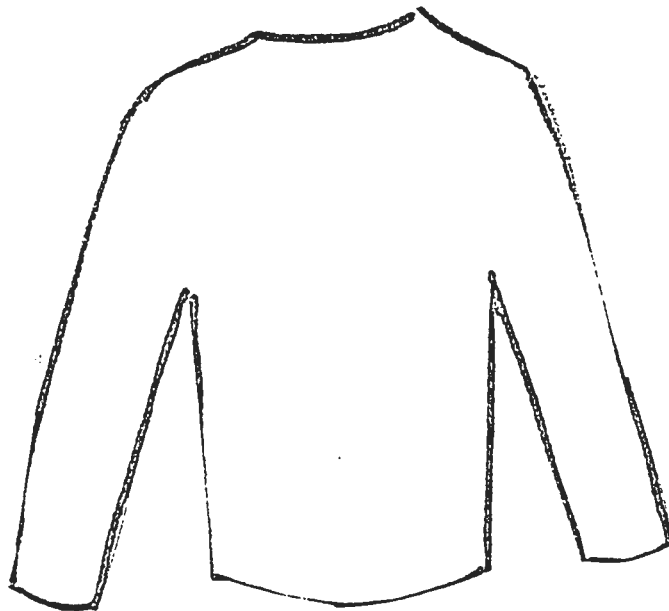
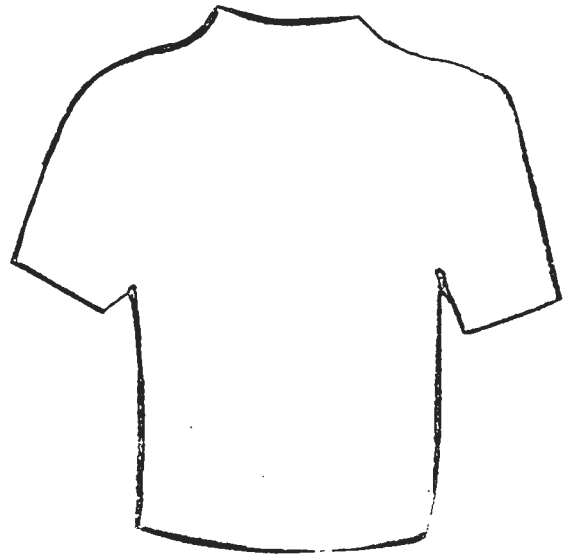
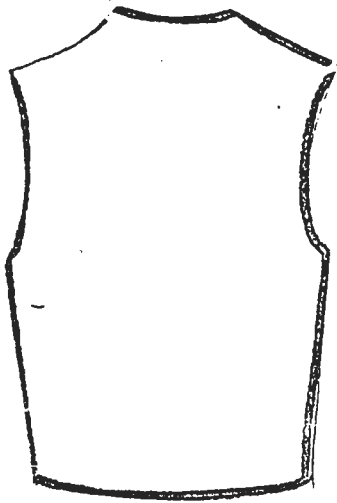
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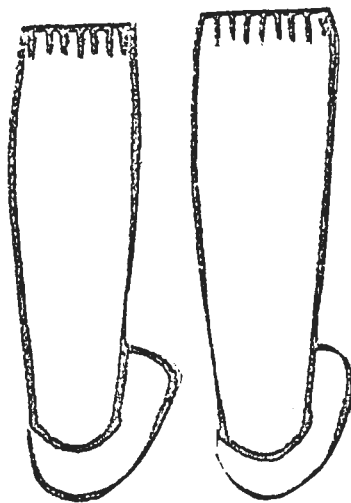
APPENDICES

Appendix A. The Gender Apparel Test









Appendix B. Parent Letter and Consent Form





## UTAH STATE UNIVERSITY CENTENNIAL

DEPARTMENT OF FAMILY AND HUMAN DEVELOPMENT  
College of Family Life  
Logan, Utah 84322-2905

Dear Parents:

It is well recognized that clothing serves as a powerful clue for children in identifying whether a person is male or female. However, little is known about whether specific features of clothing (for instance sleeve length) help children distinguish a person's gender. We are asking permission for your child to participate in this study of children's conceptions of male and female clothing styles.

Children who participate will be tested using two instruments: the Sex Role Learning Index (SERLI), and the Gender Apparel Test (GAT). The SERLI involves children sorting pictures of children and adults performing different tasks into boxes. In the GAT, children dress a flannel board figure in clothes that they determine to be appropriate for girls, appropriate for boys, and appropriate for either a boy or a girl. Each measure takes approximately 10 - 15 minutes to administer, and will be administered on separate days (GAT on one day, the SERLI two day later). Testing will take place within your child's preschool center, in a small room adjacent to the classroom. The SERLI and GAT will be administered by one of two testers. Testers will spend time in the children's classrooms prior to testing so that children can become acquainted with them.

The testing situation is designed to be enjoyable and game-like for your children. It is likely that the children will not even be aware that they are being tested. However, should your child wish to withdraw from the study at any time, or should you wish to withdraw consent for your child's participation, you may do so without negative consequences.

At the test situation, your child will be assigned a code # which will appear on the sheet upon which their responses are recorded. Children's names will at no time be used for recording of data, scoring of tests, analyses, or reporting of results. In this way, your anonymity, and that of your child will be protected.

Should you have further questions regarding this study, please do not hesitate to contact one of us at the numbers below. In addition, if you would like to receive the results of this study, please complete the address form below.

Sincerely,

Shelley L. Knudsen Lindauer, Ph.D.  
Assistant Professor  
750-1532, 1544

Mina Attaran  
Graduate Student  
750-3408

"Launching the Second Century"

Yes, I agree to allow my child \_\_\_\_\_ to participate in this study examining how children use clothing cues to determine gender. I understand that my child will be administered two measures, the Sex Role Learning Index and the Gender Apparel Test, and that all information obtained will be kept strictly confidential. My child may withdraw, or I may choose to withdraw my consent for their participation at any time without negative consequences.

Signature \_\_\_\_\_

Date \_\_\_\_\_

-----

Please send results of this study to

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Appendix C. The Gender Apparel Test Record Form

Subject ID #: \_\_\_\_\_  
 Experimenter: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 School: \_\_\_\_\_  
 Teacher: \_\_\_\_\_

GENDER APPAREL TEST  
 Record Form

Dress Like A Girl

	(1) short	(2) medium	(3) long
PANTS	_____	_____	_____
	(1) sleeveless	(2) short sleeve	(3) long sleeve
SHIRT	_____	_____	_____
	(1) no	(2) short	(3) long
SOCKS	_____	_____	_____

Dress Like A Boy

	(1) short	(2) medium	(3) long
PANTS	_____	_____	_____
	(1) sleeveless	(2) short sleeve	(3) long sleeve
SHIRT	_____	_____	_____
	(1) no	(2) short	(3) long
SOCKS	_____	_____	_____

Dress Like A Boy Or A Girl  
 Dress Like A Girl Or A Boy

	(1) short	(2) medium	(3) long
PANTS	_____	_____	_____
	(1) sleeveless	(2) short sleeve	(3) long sleeve
SHIRT	_____	_____	_____
	(1) no	(2) short	(3) long
SOCKS	_____	_____	_____