THE EFFECT OF SEX, ETHNIC GROUP AND THE ENDORSEMENT OF MASCULINE/FEMININE PERSONALITY TRAITS ON THE PERCEPTION, USE AND OWNERSHIP OF SELECTED SPORTSWEAR APPAREL

by

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The purpose of this research study was to assess the nonverbal communication of the masculinity/femininity of selected sportswear items to ownership, use, and endorsement of expressive and instrumental personality traits. A total of 240 subjects enrolled in psychology courses at East Carolina University, North Carolina Agricultural and Technical University, and the University of North Carolina at Greensboro participated in the study during the fall semester, 1983. The Personal Attributes Questionnaire (PAQ) was used to assess an individual's endorsement of expressive and instrumental traits. The score from the PAQ classified subjects into one of four groups: sex-typed masculine, sex-typed feminine, androgynous, and undifferentiated. Perception, use and ownership of apparel items were derived from administration of the Andro Clo Instrument. Results from principal axis factor analysis indicated that six factors (Form, Preference, Use, Image, Appearance, and Occasion) are derived to describe sportswear apparel items. Most variables loading on these six factors loaded exclusively on a specific factor for one sex, ethnic or PAQ group. Comparisons of factor analyses for the apparel categories indicated the importance of an Occasion Factor for androgynous apparel items, an Image Factor for masculine apparel items and a combined Preference/Image Factor for feminine apparel items. Chi-square analysis revealed significant differences in the masculine-feminine ratings for at least half of the 18 apparel items by sex, ethnic, and PAQ groups. Significant differences in the use and

ownership occurred in masculine and feminine apparel items but not for androgynous apparel items for sex, ethnic, and PAQ groups.

CHAPTER I

INTRODUCTION

Androgynous (the adjective) and androgyny (the noun) come from the Greek "andros" for man and "gyne" for woman (Olds, 1981, p.19). The terms are being used today to describe an individual, either male or female, who possesses personality traits which in the past were used to describe either males or females, while maintaining his or her biological sexual identity. An individual can utilize instrumental traits, primarily associated with women, without being classified as an effeminate male or a masculine woman. Because these personality traits are considered appropriate for both men and women, they are often spoken of as human traits (Singer, 1976).

Interest in human trait research was generated by the social and sexual revolution of the 1960's, when the youth of the era questioned the viability of the prevalent stereotyped sexual roles of adult society and rejected their adoption. Adults also questioned the roles they had adopted. Many women especially questioned their role in American society. Through various women's movements, women achieved recognition of the need for revision of female stereotypes and created awareness of women's potentials for successful employment in traditionally masculine careers. With the changes in women's role and the broadening of feminine personality traits, men began to analyze their roles and masculine trait characteristics. However, "it is too soon to tell what effects the analysis of masculinity and male roles may have on sex role norms in the

United States ...." (Fein, 1977, p. 198). Even though the direction of changes in sex role norms for both sexes is unknown, one can not discount the possibility of the development of an androgynous society in which each individual would achieve recognition and advancement based upon individual potential and not ascribed because of sex.

A number of psychological researchers (Bem, 1974; Berzins, Welling & Wetter, 1978; Heilbrun, 1976; Spence, Helmreich & Strapp, 1975) studied sex role stereotyping in western society. Each of these researchers developed an instrument designed to evaluate the subject's self-rating of a number of personality traits believed to be masculine or feminine. The resulting scores enable researchers to classify subjects into one of four groups: high masculine/high feminine (androgynous), high masculine/low feminine (masculine typed); low masculine/high feminine (feminine typed), and low masculine/low feminine (undifferentiated or indeterminate) (Berzins et al., 1978). Research studies utilizing these instruments have been concerned with completing sex-appropriate tasks, mental health assessments, and socialization processes.

Personality traits have been assessed by others through the use of nonverbal communication. Appearance has been used in the assessment of personality traits and as such is one of the strongest forms of nonverbal communication. Clothing is a critical factor of appearance. Clothing often communicates age, sex, status and occupational roles. It has also been used to interpret personality traits, moods, attitudes, interests, values, group memberships and social affiliations. Personality trait research has often been used to identify the relationship of clothing design preferences to general personality constructs, extroversion and

conservatism. Very little has been done to investigate the relationship of masculine-feminine personality constructs to selection, usage, and classification of clothing items.

Every society has identified apparel items that it considers to be appropriate for males and for females. Civilized societies frequently use clothing as a means to "accentuate rather than conceal the differences between the sexes"(Eicher, 1924, p. 503). Thus, clothing expresses gender differences even though fashion changes in clothing may exist in that society. Style changes "are supposed to stay within the bounds of gender propriety. Men remain 'truly masculine' and women 'truly feminine' as the terms masculinity and femininity are defined by that society at that point in time" (Lauer & Lauer, 1981, p. 110). Sex differentiation in apparel can be achieved through the use of ornamental details, even though basic styles and silhouettes are the same (Langner, 1959, p. 70).

Fashion influence on apparel for males and females indicated that at times the distinction in apparel for the sexes is very minimal, while other periods show a clear distinction between the two. In the 1960's and early 1970's fashion for young people showed a number of "unisex" looks. Many males and females dressed identically. Although less prevalent today, there is available for use a number of "look-alike" fashions for individuals to stress their affilation with one another. Current fashion also reflects the influence of the "unisex" look. Women have adopted more typically male clothing items to perform activities which have become socially acceptable for females. Men's clothing styles show increased variety and brighter colors, as well as the use of colors

and fabric textures previously associated with women's fashions and items of apparel. In the 1980's the idea of investment dressing and career apparel contributed to the concept of certain apparel styles, fabric textures and colors being used by both males and females.

Winick (1975) stated that sexual roles, as defined by masculinity and femininity traits, are becoming blurred, resulting in the neutering of individual roles, especially in middle class American life. This process can be documented through leisure activities, clothing items and accessory items used by the sexes. Men and women engage in the same sports activities, cultural activities and hobbies. More and more clothing styles and jewelry items are being used by both sexes. For example, in tennis

> husband and wife wear a similar shirt, often the Perry with a tiny green wreath applique, or the Lacoste, with a small green alligator applique. Both sexes sport identical white sneakers and socks and are likely to wear a similar white cable stitch pullover or cardigan for going to and from the court and warming up. (Winick, 1968, p.130)

Sproles (1979) also supported this idea when he stated there is "an increasing degree of similarity in the basic styles chosen by men and women" (p. 62). However, he also indicated that "clear differences in dress remain" (p. 62).

Sex-appropriate attire thus contributed to the

> view of sex roles as a symbolic system which has a concrete reality outside the individual in the same sense that language does. Individuals encounter these symbol systems and in internalizing them and displaying them to others, contribute to their propogation. While individuals use and alter these symbol systems in idiosyncratic ways the symbol systems persist, evolving at their own slower rate. (Pleck, 1975, pp. 171-176)

Hamid (1969) reported that clothing, a symbolic system, affects sex

stereotypes associated with activities and actions of individuals. "Changes in dress, especially since easily redefined by varying clothes worn, appear to be of considerable significance as determinants of sex stereotype change" (p. 194).

If researchers are accurate in assessing the masculinity/ femininity dimension of individuals, one should see a reflection of an individual's sex role identity in nonverbal communication methods. As apparel is one aspect of nonverbal communication, the use and ownership of apparel items which convey a consistent sex role identity should reflect an individual's sex role identity. To determine the masculine/feminine identity of clothing items, one must consider the style of the item, its fabric texture and pattern, and its color.

This research project examined the relationship between an individual's self-reported endorsement of instrumental and expressive personality traits and the perception of the masculine/feminine identity of selected clothing items, and the ownership and use of selected clothing items.

Purposes of Study

1. To identify the masculine/feminine identity of selected clothing items as perceived by college students.

2. To investigate the relationship between perception, use and ownership of selected clothing items and the expression of masculine, feminine, or androgynous personality traits as determinine by the Personal Attributes Questionnaire.

Definition of Terms

Androgyny, androgynous: the endorsement of masculine and feminine personality traits and behaviors by an individual regardless of biolgical sex.

Apparel: classification term used to distinguish clothing or garments from accessory items.

Clothes, clothing: "general terms for pieces of attire worn by men and women" (Wilcox, 1969, p. 76)

Femininity: "the quality or state of being a woman; the collective characteristics of women" (Wolman, 1973, p. 144).

Garment: "any piece of body wearing apparel" (Wilcox, 1969, p. 147).

Gender identity: "a sense of maleness or femaleness resulting from a combination of biologic and psychic influences, involving environmental effects of family and cultural attitudes" (Goldenson, 1984, p. 312).

Masculinity: "the extent to which an individual manifests the behavior patterns, interests, attitudes and personality traits considered typical of the male sex in a given culture" (Eysenck & Arnold, 1972, p. 232).

Personality trait: "any respect in which one person differs from another", primarily "psychological characteristics of a person" (Wolman, 1973, pp. 274-276).

Sex differences: "innate or acquired, organic and/or behavioral differences between the two sexes" (Wolman, 1973, p. 346).

Sex roles: "the behavior and attitudinal patterns characteristically associated with masculinity and femininity as defined in a given

society" (Goldenson, 1984, p. 675.); "behavioral patterns expected from an individual by his social group believed to be typical of his sex" (Wolman, 1973, p. 346).

Sex role stereotypes: "fixed, simplified concepts of the traits and behavior patterns believed to be typical of each sex" (Goldenson, 1984, p. 675); "social definitions of what is proper or 'natural' for men and women to look like, wear, talk about, be interested in, work at and play at" (Encyclopedia of Sociology, 1974, p. 258).

Sex-role trait, sex-typed trait: "a trait identified as either masculine or feminine" (Wolman, 1973, p. 346)

Sex-typed: "denoting the labeling process whereby certain characteristics or responses are characterized as masculine or feminine in accordance with prevailing sex-role stereotypes" (Goldenson, 1984, p. 675).

Sex-typing: "any form of behavior or any attitude that results from social programming regarding appropriate male and female behavior" (Goldenson, 1984, p.675).

Sexual identity: "individual's biologically determined sexual state, the internal sense of maleness or femaleness" (Goldenson, 1984, p. 676).

Sportswear: clothing designed for either active participation in athletic activities or spectator participation; can be any clothing item not considered formal wear or sleepwear.

Stereotype: "a folk belief. Group accepted image or idea, usually verbalized and charged with emotion. Simplified even caricaturized conception of a character, personality, aspect of social structure

or social program which stands in the place of accurate images in our minds" (Fairchild, 1944, p. 308).

Trait: "an inherited or acquired characteristic which is consistent, persistent and stable" (Wolman, 1973, p. 389).

Assumptions

The researcher made the following assumptions in the development of this research project:

1. Psychological androgyny is a viable conceptualization of one aspect of sexual personality trait development and can be measured by the Personal Attributes Questionnaire.

2. Clothing items are perceived by individuals as appropriate apparel for males, for females, or for both males and females.

3. Aesthetic and structural factors of apparel are used by individuals in assessing the nonverbal communication of the sexual identity of clothing items.

4. Perception, use, and ownership of apparel is related to an individual's endorsement of the personality traits measured by the Personal Attributes Questionnaire.

CHAPTER II

REVIEW OF RELATED LITERATURE

The review of literature was selected for its direct bearing on the development of this research study. The selected review discusses (1) the concept of androgyny in relation to the recognition and socialization of an individual's biological sex and his or her culturally perceived role, (2) the theoretical basis for research relating to androgyny with emphasis on sex-role stereotyping and masculinity-femininity personality traits, and (3) nonverbal communication of sex roles with emphasis on the perception of the masculinity-femininity aspects of apparel.

The Concept of Androgyny

Travis (1977) and Jones, Chernovetz and Hansson (1978) summarized the concept of androgyny as follows:

> The concept of androgyny (from andro, male, and gyne, female) maintains that the traits we define as good, such as independence, gentleness, competence, strength, and sensitivity should be as desirable for one sex as for the other, and the traits we do not admire, such as sneakiness, passivity, vanity, should be equally disparaged in both sexes. (Travis, 1977, p. 185)

> The concept of androgyny denotes a person who is flexible, socially competent, able to respond to shifting situational demands, and more complete and actualized in the sense of developing and maximizing potential. (Jones, et al., 1978, p.298)

The precepts or assumptions quoted above on the concept of androgyny are held by various researchers. The set of assumptions implemented in the formulation of sex roles incorporating androgyny included

> (a) an orthogonal two-dimensional model of masculinity-femininity; (b) a socio-cultural definition of sex roles; (c) the sampling of positive, socially valued but sex-typed characteristics; and (d) a "response repertoire" model of sex role style. (Kelley & Worell, 1977, p. 1102)

In the previously stated set of assumptions, masculine and feminine traits are measured as separate entities because they can occur in both sexes in varying degrees. Androgyny can then be interpreted as a relative balance between masculine and feminine characteristics. Masculinity and femininity are perceived in terms of socially desirable instrumental-expressive or agentic-communal behaviors and characteristics for both males and females. The response repertoire model implied by Bem indicates that "the highly sex-typed person is seen to have available a limited number of effective behavior options to deal with situations" (Kelly & Worrell, 1977, p. 1102). The androgynous person has a wider response repertoire due to the balance of masculine- and feminine-typed characteristics and thus has greater" behavioral flexibility from this array of options" (p. 1102).

Critics of androgyny, such as Locksley and Colten (1979), maintain that an individual cannot escape his or her biological sex. According to them, the socialization process "elicits sexual stereotypes in others" (p. 1028) which influences their behavior, perceptions, and expectations. In addition, they question

> (a) the feasiblity of using inventories developed to tap general perceptions of aggregate differences as measures of individual differences and (b) the appropriateness of traditional individual differences approach to the phenomenon of sex roles, sex differences in personality or behavior, and sex identity. (p. 1018)

Jones et al. (1978) found that masculinity and not androgyny was a better

predictor of adjustment and flexibility for both males and females.

The Development of a Sex Role Identity

> The formation of sex roles has occurred over the centuries. The expectations of what it means to be masculine and what it means to be feminine have been molded, changed and redefined, as men and women have dealt with new settings, new environments, and new cultures. Although sex roles are dynamic, they have beome institutionalized in each culture and are thus difficult to change. (Forisha, 1978, p. 20)

Forisha identified the following factors as being associated with sex roles: 1) they are culturally determined; 2) they are socially modified with slow changes; and 3) core definitions of masculinity and femininty are established, which although modified externally, may take several generations to become internalized. The perpetuation of established cultural sex roles and behaviors enables one to predict the behavior of others and to anticipate the way one should behave by following established cultural guidelines. The socialization process for over 95% of the population acknowledges that the development of psychological sexual attributes is consistent with biological sex. "Anxiety is ... evident in the presence of adults whose gender category appears ambiguous because of dress or behavior" (Katz, 1979, p. 3). "Gender is an integral part of who we are, how we think about ourselves, and how others respond to us" (p. 4).

The traditional male and female roles are typically defined by either masculine or feminine personality traits associated with one biological sex more than another.

> The dichotomous assignment of personality characteristics to male and female sex roles represents a deeply ingrained social norm in our culture and, as such, influences not only our individual behavior but also our sense of self-esteem and self-evaluation of our adequacy as men, women and persons. Our

> assumptions of what consititutes masculinity and femininity affect what we accept and reject in personality development, as well as what is socially reinforced by the environment and socializing agents, teachers, peers, and the media. (Olds, 1981, p. 7-8)

These traits have formed the core for most psychological instruments used to distinguish males from females and homosexuals from heterosexuals. Males are described in such terms as "physically strong, courageous, objective, ... unswayed by emotions other than anger; ... independent" (Josselyn, 1970, p. 86). Terms such as "helpless ..., swayed by feelings (emotional) and incapable of thinking objectively .... frightened .... passive, submissive ..." (Josselyn, p. 88) are used in the personality descriptions of females.

The literature has indicated that sex role stereotypes are formed when beliefs about the personality traits of the biological sexes are perpetuated. For example, Boverman (1972) concluded that 1) sex, age, religion, marital status and education level influence the characteristics or traits associated with men and women within a group varying on these factors; 2) characteristics ascribed to men are valued more positively than are those assigned to women, 3) sex role definitions are incorporated into self-concepts of both men and women; 4) self-concepts include both positive and negative traits of the appropriate stereotype for men and women; and 5) concepts of the ideal man and the ideal woman closely parallel the sex-role stereotype for male and female regardless of the biological sex of the subject.

The formulation of the instruments to test for the masculinity or femininity of an individual is derived from cultural stereotypes (Constantinople, 1973). Males as a group were expected to endorse

certain traits and react in the same way to stimuli, while females as a group would endorse different, often complementary traits and react differently to the same stimuli. The resulting masculiniity or femininity rating was used to determine the degree to which an individual met the established sexual norm or deviated from it. Thus, individuals were classified as masculine sex-typed, if male and conforming to and endorsing masculine personality traits; feminine sex-typed, if female and conforming to and endorsing female personality traits; and sex-deviant if not in either sex-typed group (Berzins et al., 1978). This trend has ignored the possibility that the assumptions of traditional roles (cultural stereotypes) on a high level by the sex-typed individual may not be desirable (Bem, 1976). Maccoby reported that "boys and girls who are more sex-typed have been found to have lower overall intelligence, lower spatial ability and lower creativity" (Bem, 1976, p. 50). Another facet of this trend is the disregarding of the investigation of traits shared by both sexes and the possibility that an individual may possess both masculine and feminine traits and not be a sexual deviant.

Cultural stereotypes change slowly. Sherriffs and McKee (1957) indicated that males and females use adjectives from sex-appropriate stereotypes when describing themselves. Researchers developing androgyny instruments found respondents using adjectives prevalent in current cultural stereotypes to describe perceptions of the ideal male and female. By 1972 Thompson stated that changes in the female stereotype involve the incorporation of traits previously considered masculine and that the traits remaining as feminine were "based on anatomies and physiological facts" (p. 82). Traits previously associated with men and

now adopted by women include educated, politically active, and career oriented. Additional traits recognized as exclusively female traits because of physiology include maternal (due to birth function) and desiring to be sexually attractive.

Since the middle 1970's the perpetuation of traditional sex role stereotypes has been questioned by researchers investigating psychological androgyny. Bem and her associates supported the idea that androgynous individuals are more psychologically secure and adaptive in a variety of situations, while the sex-typed individual will be secure in handling only sex-appropriate situations. The personality traits perceived to be associated with androgynous individuals are valued as positive masculine and positive feminine traits. Some researchers of androgyny label these traits as human rather than masculine or feminine, as they feel all individuals should accept them to be psychologically and socially adaptive (Singer, 1976). Major, Carnevale and Deaux (1981) reported androgynous individuals, regardless of gender, were liked best and perceived as more adjusted; androgynous and feminine sex-type individuals were perceived as being more expressive than masculine sex-typed individuals; and feminine individuals were viewed as more popular and interesting, but less attractive than masculine persons. Further implications of the influence of the concept of androgyny on sex role stereotypes were reported by Wakefield, Sasek, Friedman and Bowden (1976). Summarizing information by Bem, they stated that males must "overcome pressures to conform to the masculine stereotype to become androgynous, whereas females must overcome pressures toward femininity to become androgynous" (p. 770). Thus, the androgynous individual must

modify the cultural stereotype and socialization process for his or her biological sex in order to develope a balanced androgynous personality.

Pleck (1975) summarized the relationship of sex stereotyping and personality development.

> The system of sex role differentiation in any culture is a highly symbolic system which groups together different classes of behaviors and activities into broad categories, with certain rules for combining them.... view of sex roles as a symbolic system which has a concrete reality outside the individual in the same sense that language does. Individuals encountered these symbol systems and in internalizing them and displaying them to others, contribute to their propagation. While individuals use and alter these symbol systems in idiosyncratic ways the symbol systems persist, evolving at their own slower rate. (pp. 174,175-176)

Historical Development for the Measurement of Androgyny

"Categorizing people by their gender is one of the most common and most rudimentary processes that occurs in social interaction. Once categorization occurs, gender-based personality attributes often follow" (Tunnell, 1981, p. 1126). Researchers in psychology and sociology have primarily concerned themselves with investigating and stressing the biological, psychological and sociological differences between the sexes. The investigation of personality traits has primarily been conducted on the assumption that these traits occur on "a single bipolar dimension ranging from extreme masculinity at one end to extreme femininity at the other ..." (Constantinople, 1973, p. 30). Traits associated with one sex in a positive light are not appropriate when describing the opposite sex. Psychological instruments used to evaluate the masculinity or femininity of an individual were developed by using items which discriminated males from females and homosexuals from heterosexuals (Spence, Helmreich & Strapp, 1975). Because of this procedure little opportunity was provided

to investigate the possibility that an individual may utilize both male and female traits as part of their social identity. One of the first to question the bipolarity of masculinity and femininity was Constantinople in 1973. She reviewed the method of construction and use of major tests of masculinity and femininity at the time. She concluded that researchers developing the instruments assumed that the masculinity-femininity concept was bipolar by 1) the use of biological sex to determine the appropriateness of item selection, 2) the implication that the opposite of masculine was feminine, and 3) the use of a single score to express a masculinity-femininity relationship. She suggested the possibility that the masculinity-femininity concept comprise two separate dimensions.

Bem was the first psychological researcher to develop a measure which treated masculinity and femininity as separate dimensions. The Bem Sex Role Inventory (BSRI) consists of a total of 60 personality traits--20 masculine, 20 feminine and 20 neutral items. The subject is instructed to rate each item on a 7-point scale indicating the degree to which that item describes that individual. The scale ranges from "never or almost never true" with a rating of one to "always or almost always true" with a rating of seven. From these responses a Masculinity score, a Femininity score, an Androgyny score and a Social Desirability score can be computed for each subject. The degee to which an individual endorses the masculine and feminine personality characteristics on the inventory determines the Masculinity and Femininity scores. The Androgyny score was originally determined by comparing the individual's Masculinity and Femininity scores using a t-ratio. A sex-typed or sex-reversed

individual would have a high androgyny score, while an androgynous individual would have a low androgyny score close to zero (Bem, 1974). Classifications were based on the t-ratio as follows: 1) sex typed--high score on either masculinity or femininity scale and biologically sex appropriate; 2) sex-reversed--high score on either masculinity or femininity scale and biologically sex inappropriate; and 3) androgynous--approximately equal masculinity and femininity scores (Bem, 1974). A revised scoring method now uses a median-split procedure. The four groups are 1) masculine (high masculine-low feminine), 2) feminine (high feminine-low masculine), 3) androgynous (high masculine-high feminine), and 4) undifferentiated (low masculine-low feminine) (Bem, 1977). The 20 neutral items on the scale are used to secure a Social Desirability score. This score indicated the extent to which an individual describes himself or herself in a socially desirable direction (Bem, 1974).

The Personal Attributes Questionnaire (PAQ) was developed from items "originally contained in the Sex Role Stereotype Questionnaire of Rosencrantz, Vogel, Bee, Broverman and Boverman (1968)" (Kelly & Worell, 1977, p. 1104). The PAQ requires respondents to make ratings on 55 bipolar items describing socially desirable personality characteristics. Respondents rate themselves on a 5-point scale with a high score from items on Masculinity (M) and Masculinity-Femininity (M-F) scales indicating an extreme masculine response and a high score on Femininity (F) scale indicating an extreme feminine response. After completing the self-rating, respondents give stereotypic ratings for typical males and females for each attribute which was an abbreviated description of one

pole of the original 55 items. To secure androgyny groupings a median-split procedure is used on the M and F scales for the self-rating responses. The resulting four categories are the same as for the BSRI revised scoring method (Spence et al., 1975). Spence et al. shortened the original 55-item PAQ to a 24-item instrument which contains the 8 items on each scale which " showed the best psychometric properties and that also illustrate instrumental and expressive personality traits" (1979b, p.1034). They described the current PAQ as a "conventional personality test in the self-report mode, consisting of clusters of socially desirable instrumental (masculine) and expressive (feminine) traits" (1979b, p. 1034).

In 1976 Heilbrun reported on the revision of the Masculinity-Femininity Scale derived from the Adjective Check List (ACL) "to extend its potential to the independent measurement of masculinity and femininity" (p. 184). The 28 masculine items and 26 feminine items were derived by establishing two extreme groups based on biological sex and psychological sexual identity. If the adjective discriminated between "college males identified with masculine fathers and college females identified with feminine mothers, "it was included on the Masculinity-"Femininity Scale. For use as an independent measure of masculinity and femininity, the 28-item masculine subscale and the 26-item feminine subscale are treated as independent scales. The differences between feminine and masculine items (F-M) were transformed into t scores based on "independent college norms for males and females" (p. 184). The "Heilbrun inventory appears to mix both desirable and socially undesirable but sex-typed traits" (Kelly & Worell, 1977, p.

1105). All of the other androgyny instruments assess only endorsement of socially desirable traits or characteristics.

Berzins, Welling and Wetter (1978) developed a test for psychological androgyny which uses items from the Personality Research Form (PRF). The resulting instrument is called the PRF ANDRO scale. This instrument requires an individual to score 29 Masculinity items and 27 Femininity items which were selected from the 400 items on the PRF scale. The rationale for selecting items from the PRF was based on the rationale used by Bem in the development of the BSRI. Each item was selected for positive context of sex-typed desirability to be used on separate masculinity and femininity scales. Items which reflected a dominant-instrumental dimension were included on the Masculinity scale and items reflecting a nuturant-expressive dimension were included on the Femininity scale. Respondents ranked each item on a 7-point scale in relation to the desirability of the item for American males or females. Results are analyzed using a median-split procedure in which subjects are categorized using the four classifications of Spence et al. (1979b).

Similarities, differences, and problems associated with the four scales were discussed by Lenney (1979). She indicated that

> all assume that the androgynous person combines both masculine and feminine characteristics; that the androgynous person is likely to have certain "advantages" over the sex-typed person; they all tend currently to categorize individuals by means of a median-split method, thereby defining as androgynous those individuals who possess a high level of both masculinity and femininity, rather than simply a balance between the two independent dimensions. (p. 708)

A major concern giving rise to differences in the scales is the theoretical perception used in the development of the instruments,

implying "that each scale is assessing a somewhat different concept of androgyny" (Lenney, p. 709). Research by Kelly, Furman and Young (1978) strongly supported this statement of Lenney's. Although the masculinity and femininity scales of the four instruments had high correlations, the subjects were classified into different groups when scored by median-split procedures. The median-split procedure most frequently used is to compute a sample median for both masculine and feminine scales and then classify subjects into one of four groups based on their score on each scale in relation to the group median for that scale. If the individual scores above the median on the masculinity scale and above the median on the femininity scale, he or she is classified as androgynous. An individual is classified as masculine when he or she scores above the median on the masculinity scale and below the median on the femininity scale. A person scoring below the median on the masculinity scale but above the median on the femininity scale is classified as feminine. A subject scoring below the median on both the masculinity and the femininity scales is classified as undifferentiated (Spence & Helmreich, 1979). Validity and reliability measures for each instument have been assessed by various methods but vary considerably between instruments. Researchers should not assume that the four scales are interchangeable and that the meaning of androgyny does not always correlate with the instrument used.

Factor analytic studies (Gaa, Liberman & Edwards, 1979; Gross, Battis, Small, & Erdwins, 1979; Pearson, 1980) compared two or more of these instruments and indicated the complexity of testing masculinity-femininity personality traits. In almost every instance more

than one factor is derived for masculine and for feminine scales. Masculinity items frequently provide more factors than do femininity items, perhaps indicating a more complex concept. Pearson concluded that sex roles are multidimensional, thus providing support for not treating masculinity-femininity as polar opposites.

Other researchers (Kelly et al, 1978; Lenney, 1979a; Sedney, 1981; Small et al., 1979) have criticized the androgyny measures on the scoring procedures used. The use of the median-split procedures may cause classification errors with some subjects. One time the individual may be classified as androgynous and at another time as undifferentiated depending on the median of the group for the same instrument. Kelly et al. (1978) reported variations in classification depending on the instrument used, thus supporting the idea that the instruments sample different content domains and thus should not be treated as interchangeable. Results from one instrument should not be generalized to another instrument even though Kelly et al. found moderately high correlations between masculinity and femininity raw scores. Sedney (1981) commented further on the problems inherent in the median-split procedures. She stated that the use of sample median splits limits the use of androgyny scales to groups making it impossible to distinguish subjects who are significantly sex-typed from those who are not and to obtain a score for an individual. In addition, the median-split procedure assumes that each sample contains members of all sex role categories in appropriate proportions. The use of t scores was suggested so one can discuss individual masculinity and femininity scores with a variation of median split (individual low in masculinity and femininity

not labelled androgynous).

Of the instruments developed for testing the androgyny concept, the BSRI has been the most used and subsequently has received the most criticism. The PAQ has the second highest incidence of use. The BSRI has been described by Bem as measuring "global constructs that are closely related to other gender-related variables such as gender identity, gender stereotypes and gender related attitudes and behaviors" (Major, Carneval & Deaux., 1981, p. 990); while the PAQ M and F scales "measure primarily a person's endorsement of instrumental and expressive personality traits" (Major et al., p. 990).

Apparel as an Expression of Sex Role Identity

Clothing communicates a variety of facts about an individual. Flugel (1950) stated the clothes an individual wears will "tell us at once something of his sex, occupation, nationality and social standing ..."(p. 15). In addition Knapp (1972) indicated "age, ..., relation to opposite sex (a function, sometimes, of matched sweaters), socio-economic status, identification with a specific group,... offical status, mood, personality, attitude, interest and values" as "personal attributes which may be communicated by dress ..." (p. 82). The attributes perceived most accurately include "age, sex, nationality, and socio-economic status ..." (Knapp, 1972, p. 82).

"Gender is the first judgment we make on initiating contact because ... it is a prime determinant of the nature of that contact" (Henley, 1977, p. 93). The unisex styles of the 1960's resulted in many complaints because of the difficulty of telling male from female. As

Henley stated "Even those of us who thought we welcomed androgyny found ourselves unwittingly searching for breasts, the sole distinguishing characteristic that remained ... (because) we intend to behave differently to people, depending on their sex" (p. 93).

Most societies "make a clearly visible distinction between male and female clothing, thus permitting ready assignment as to sex" (Keesing, 1958, pp. 202-203). In societies in which fashion change occurs, "the changing styles are supposed to always allow men to be truly masculine and women to be truly feminine (as, of course, masculinity and femininity are currently defined in the society)" (Lauer & Lauer, 1981, p. 110).

Factors which led to the development of clothing for different sexes are expressed in terms of either biologically determined characteristics or social-role differences. Although frequently used to justify apparel for a specific sex, biological characteristics are for the most part identical for the two sexes. Rudofsky (1947) discussed this point in his book Are Clothes Modern? He stated, "There is hardly anything more artifical and more arbitary than the insistence on male and female garments. Reducing clothing to its simplest static terms, it is a body covering carried and upheld by the human figure" (p. 128). The body points of support for male and female are the same - shoulders, head and waist. "Sexual characteristics do not warrant any outspoken dissimilarity of attire. Early epochs were unconcerned with the duality of dress - garments with a distinct sexual quality are typical of later, more complicated society" (p. 128). The general design needs of apparel include a "tube or triangle of sorts" for the trunk and "either trousers or a skirt of sorts" for the lower part of the body" (Renbourn & Rees,

1972, p. 471). If there are differences in apparel needs for male and female, the primary purpose would be to call attention to biological sexual differences. Historically apparel has been developed for this purpose. The sixteenth-century codpiece and the twentieth-century brassiere were developed to enhance biologically determined body features.

Social role differences used to assign specific apparel items to one sex occur through the development of customs and traditions. Clothing worn to perform one role by one sex and not by the other sex for any role becomes appropriate attire for that sex and not the other. In western societies, the lower body garment and apparel fastening direction have traditionally been associated with a particular sex. "Industrial civilization has promoted the skirt as the female garment par excellence, while trousers are held to be the outward expression of manliness" (Rudofsky, 1947, p. 129). As time passses "a complex set of meanings becomes attached to the traditional dress of each sex, and sanctions develop that discourage behavior inconsistent with meanings" (Roach, 1979, p. 416). Pants for women in the 1850's and early twentieth century and short skirts for women in the early and middle twentieth century resulted in social controversies in which the moral character of the wearer was frequently questioned. In the 1980's a male wearing a skirt or desiring to dress in apparel perceived to be feminine is considered to have psychological problems. In addition to the long-lasting masculine and feminine meanings assigned to particular apparel styles or types, specific terms have been associated with apparel and roles for a particular 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 were inactive (their clothes inhibited movement); men were strong (their clothes emphasized broad chests and shoulders), women delicate (their clothing accentuated tiny waists, sloping shoulders, and a soft 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) (Roberts, 1977, p. 555).

For the sex of the individual to be accurately perceived by others through the use of dress, certain qualities and characteristics of the apparel items must be associated with one sex more than another. Factors frequently considered are 1) fit in relation to the body, 2) color, 3) fabrication type and design, 4) style, 5) sexual enhancement of the body and 6) aesthetic elements and principles. Women's clothing has been described by a number of writers as having more variety in style, color and fabrication type and design then men's clothing. Flugel (1950) listed the following characteristics associated with women's apparel of the time: 1) more variety of color, 2) greater variety of fabrics and fabric weights, 3) more variation in materials, cut and style, 4) lighter weight clothing, 5) easier and quicker adaptation of clothing to seasonal changes and environmental changes, 6) ability to expose a greater number of body areas, 7) less constriction to body areas, neck and upper body, and 8) greater ease in packing and transporting. In 1972, Renbourn and Rees indicated that clothing

> used by women are much lighter, lend themselves to easy washing and cleaning, are easier to put on and take off, and allow greater weather and climatic adaptation. Materials used by women also give a much greater variation of colour of a fabric and of infinitely greater variation in design. A woman's garments generally give greater freedom to the neck, arms and legs ... (p. 521).

Alison Lurie, writing in 1981, indicated the following about female apparel.

> Female costume ... was designed to suggest successful maternity. It emphasized rounded contours, rich, soft materials, and tended to center interest on the breast and stomach (p. 215-216).

> In women's clothes by far the most common representational designs are botanical. Flower patterns, especially seem to stand for femininity ....(p. 210).

Winick (1968), who was concerned about the blurring of sexual roles in the 1960's, indicated the preference of warm hues and delicate tints by and for the female. Henley looked at the closeness of fit to the body in the analysis of female clothing. Female clothing was "designed to emphasize their bodily contours" (p. 90) making it impossible for pockets to be used in women's apparel. Henley also indicated that female apparel is used as a showcase for the display of fragile and frail materials such as lace and chiffon.

Little has been written about men's clothing. Lurie indicated that "men's garments ... tend to enlarge the body through the use of strong colors and bulky materials, and to emphasize angularity with rectangular shapes and sharp points" (1981, p. 215). Laver in 1937 described men's clothing as made of "somber material .... inconspicuous ... no strong colours, no patterning of any kind ..." (p. 18). By 1968, Winick identified "paisleys, foulards, and regimental stripes as masculine fabric patterns" (p. 225). Color preference was viewed as the opposite of females; "men traditionally prefer cool hues .... Deep shades tend to be masculine ..." (Winick, 1968, p. 167). According to Rudofsky (1947),

the male garment is heavier than the female garment of the same style.

Thus far the distinction between male and female clothing appears to be a "question of detail rather than structural form" (Renbourn & Rees, 1972, p. 520). The single detail style of a garment affecting sexuality is frequently the fastener direction, type, and style. The "overlap of a garment determines its sex. Buttoning it to the right it becomes suitable for men only. Women button to the left" (Rudofsky, 1971, p. 168). The slide fastener eliminates the overlap, thus giving no clue as to the sex of the garment. Rudofsky indicated the increased use of the slide fastener and decreased use of the button fastener could speed the development of asexual clothing. The use of the zipper in blue jeans was viewed as having an influence on the location of that fastener in women's apparel. Prior to the adoption of blue jeans by females, the zipper was typically located in the side of pants for women. Now it is primarily in the front, often resembling the fly closure of male apparel. On other lower body garments for females the zipper may be located in the front or back and is rarely located in a side seam.

The single most pervasive difference in apparel for the sexes until the twentieth century in western cultures was the exclusive use of the bifurcated garment by males. "So universal was the skirted female shape and the bifurcated male one that a woman in men's clothes was completely disguised" (Hollander, 1974, p. 17). The adoption of traditional components of male apparel by females has not been easy. Women were ridiculed and scorned when attempting to adopt more rational and healthy apparel in the mid-nineteeth century. The apparel in question was comprised of an over skirt with bloomers extending below it. The

shortened skirt did not present the problem. The bifurcated bloomers, although practical, were the culprit. Women were adopting male apparel and, it was felt, would attempt to take over men's roles.

In areas other than bifuracted apparel, "women ... always had great freedom in copying male dress" (Renbourn & Rees, 1972, p. 521). The shirtwaist dress was adopted from a man's shirt, various sweater styles were adopted without changes including the turtle neck sweater, the crew neck sweater, the shetland pullover sweater, and the long and low buttoning cardigan sweaters. The chesterfield, trench and polo coats were also adopted from menswear without modification of style. The adoption of trousers by women resulted in the development of a large variety of styles from short shorts to stretch pants, bell bottom pants, harem trousers, and jumpsuits. Specific features on women's clothing reflecting men's styling include "separate neckband and lack of darts, and buttons on right side", "shirt tails and button down collars" (Winick, 1968, p. 225).

Sportswear is one area of apparel where women can easily adopt and adapt men's clothing and encourage the development of functional design of apparel for a specific sport. In 1937 Laver recognized the impact of the participation of individuals in sports on apparel. He felt that sportswear would influence other apparel styles and would reduce sexism in apparel. Rudofsky supported this view when he stated: "Modern sports dress ... proves convincingly that when climatic conditions are extreme and good physical performance is paramount, distinct sexual outfits are ignored or believed undesirable" (1947, p. 197). Tennis apparel is quite similar for males and females and frequently consists of "a shirt, the

shortest of trousers, and heelless shoes for the protection of the court rather than the feet" (Rudofsky, 1947, p. 197).

Winick (1968) talked of clothing becoming so intersexual that "HIS" and "HERS" labels may be needed to distinguish the two.

> Exactly the same product may be sold to men and women. The sweater-styled Swiss velour shirt with a knitted neck is one style that has been enthusiastically received by both sexes.... Some items of clothing are being adopted by both sexes simultaneously, like bikinis and fur hats.... College students began wearing similar jeans, coats, sweaters and footwear at the same time. (Winick, 1968, p. 269, 270)

These examples of "genderless clothing" and "the existence of a substantial group that wants to wear even more clothes of the opposite sex, at a time when each sex looks like a transvestite parody" was viewed by Winick (1968) as "meeting important contemporary needs" (p. 267). The contemporary needs may reflect changes in sex roles. In time periods when sex roles were greatly differentiated, clothing was also highly differentiated. Today the "preferred shape for both men and women is loose fitting and formless and expresses and reinforces our blurring of maleness and femaleness. Clothing further deepens the internal conflict and confusion of each sex fulfilling its role" (Winick, 1968, p. 264). The confusion between the sexes was viewed by Lynes (1967) as the "female affectation of male styles and not the other way around" (p. 26). "Our culture tends to grant the female the privileges of two sexes; with impunity she can dress like a man; she can at will interchange the 'little boy look' with cloying femininity ..." (Pitcher, 1963, p. 90). Rudofsky (1971) indicated that "female clothes are becoming progressively desexed, if not althogether masculinized" (p. 170). The changes in women's roles brought about by emancipation are reflected in the

following characteristics of women's apparel. It "straightens the lines, takes out the colour and ceases to emphasize the waist; in a word, it decreases the 'femininity' of female attire, it brings it nearer to male attire" (Laver, 1969, p. 179).

Roach (1979) and Sproles (1979) discussed the relationship of fashion and masculine-feminine roles. Both writers indicate that current fashion reflects changes occurring in role structure.

> Currently some changes in men's and women's fashions suggest that accommodations to a changing role structure are being made. Thus trends to what has been dubbed "unisex" dress, or for men to engage in display in dress as much as women, may be clues indicating that some roles, once assigned exclusively to either males or females, are becoming mutually shared, or what may be called human roles.... If, indeed, more social roles are being seen as human roles, dress may be perceived more as dress for human beings rather than as a means of symbolically placing males or females in superior-inferior relationships. (Roach, 1979, p. 422)

> The changing roles of men and women have influenced modern fashion. First, there has been a recent trend toward desexualization of dress. Most obvious is the fashion trend of pants and pants suits in women's dress.... Also in the 1960's, many fashion designers and analysts mentioned unisex dress, or similarity of dress worn by the sexes, as important. Though clear sex differences in dress remain, there is also an increasing degree of similarity in the basic styles chosen by men and women. (Sproles, 1979, p. 62)

The current changes in the men's-wear industry may be indicative of the permanency of these changes.

> Men's dress, traditionally more conservative than women's, is also becoming increasingly oriented to fashion. Moreover, some specific influences on men's fashions have come from women's wear.
>
> 1. Women's fashion designers such as Pierrre Cardin have taken a substantial role in innovative design of men's fashions.
> 2. Similar to women's wear, men's wear is becoming a "quick turnover business," with a number of seasonal changes each year.
> 3. Men are now accepting "coordinates," or combinations of

> matched apparel items which have long been an established pattern of consumer behavior in women's wear.
>
> 4. Knitted fabrics have become important for men's wear, whereas knit fabrics have long been established in women's fashions. (Sproles, 1979, p. 62)

Edmunds (1972) investigated the relationship between similarity of bifurcated clothing styles and changes in sex role in three time periods. She found that in the period of widespread use of pants (1963-1971), the "percentage of use indicated greater similarity between bifurcated styles for the two sexes ..." (p. 56). Male garments had a straighter silhouette than female garments but the variety of styles for both sexes increased in number. During this period activities and occupations indicated less differentiation. Males and females were employed in similar occupations and were sharing some household tasks. In summarizing the relationship between clothing styles and sex roles, Edmunds concluded: "As sex roles are becoming less differentiated the clothing for men and women also becomes less differentiated" (p. 76).

In 1969 Hamid had subjects rate four different conditions of dress for male and female stimulus persons on 10 concepts. He found that subjects made more extreme ratings for the opposite sex and that concept ratings were more extreme when the stimulus person was female regardless of the rater's sex. He concluded that the affects of dress were

> not independent of sex stereotypes which adds weight to the view that dress is one of the most salient cues in sex stereotyping. The determining effect of dress found is so marked that sex stereotyping origins may be a result of the predominance of dress as a cue in early socialization.... changes in dress, especially since easily redefined by varying the clothes worn, appear to be of considerable significance of sex stereotype change. (Hamid, 1969, pp. 193-194)

The perception of sexuality of clothing items has been investigated in two separate studies by Herrin (1976) and Wenige (1976). Both studies used preschool children and were concerned with children's ability to recognize the sex appropriateness of selected apparel. The Herrin study (1976) used actual clothing items and found that female apparel was identified most accurately by the disadvantaged preschoolers. Neuter clothing items resulted in the most perceptual errors. Clothing items used in this study consisted of both outerwear and undergarments for both sexes. Outerwear garments consisted of sportswear items, work clothes, nightwear, and shoes.

Wenige (1976) compared the parental classification of 16 line drawings of clothing items and related these classifications to parental sex role conceptions. Results indicated that parental "agreement with an androgynous concept role was related to parents' classification of clothing as unisex" (p. 209). Parents who endorsed traditional sex roles wore classic and casual fashions while parents who accepted androgynous role concepts adopted "contemporary and unisex attire" (p. 210). Although there was little correlation between children's classification and parental classification of clothing items, results indicated that most children and adults tended to view clothing as being appropriate for a particular sex. "Clothing with a strong unisex design (was not) accepted as appropriate for both sexes" (Wenige, 1976, p. 86).

This tendency to view clothing items as appropriate for a particular sex may be related to advertising strategy. Stuteville (1971) pointed out that a number of consumer products are introduced with either a masculine or feminine cathexis. Observation of the promotion of most

apparel products indicates a tendency for apparel to be shown as appropriate for either males or females, even though some sportswear items are shown for both sexes.

The perception of the sexuality of clothing items may be linked to the sex of the respondent. Forte, Mandato, and Kayson (1981) found that sex influenced the details recalled from gender-stereotyped magazine ads. Males recalled more about male advertisements while females recalled an equal number of details from ads depicting either males or females in stereotypic roles. The researchers indicated that males "may be slower to give up their gender-stereotypes since this would result in a lowering of status" (p. 621).

Masculine and feminine personality trait research and its relation to clothing preferences was investigated by Davis (1965). Her sample of 98 sorority members who scored high on masculine personality traits indicated a preference for selecting and wearing bifurcated garments more than did high femininity scorers. Masculine styling in bifurcated garments was also related to masculine personality traits.

Richards (1962) investigated the relationship of male graduate students' attitudes toward sex roles and the type and color of apparel for males and females. The interview process involved responses to line drawings of 27 male apparel items, 27 female apparel items, and 32 responses on color preferences. The clothing items shown included outerwear apparel for a variety of occasions and accessory items. Results indicated that men like to see more variety in color and garment type in women's apparel than in men's apparel. Hues and warm colors were preferred for women's apparel while neutrals and dark colors were more

preferred for men's clothing. Light and cool colors were often liked for both men's and women's apparel. Garment type influenced color preference for women's apparel. Light, warm colors were more acceptable for dresses and blouses while subdued colors were preferred for suits and skirts. Garments classified as traditional apparel for women were preferred more than nontraditional women's apparel. Men with a "balanced preference for both traditional and non-traditional aspects of men's sex-role preferred traditional color types in men's clothing" (pp. 137-138) and had a tendency to prefer traditional styling in men's apparel. No significant relationship was found between preference for traditional sex role for men or women and preference for traditional male and female garments.

To summarize, sex differentiation in apparel exists in most societies. Perception of the sexuality of clothing items is important in that it is used to determine the sex of an individual and accordingly affects interpersonal relationships and role expectations. The sexuality of a garment is subtle and is frequently concerned with details of a garment rather than specific biological design needs. Clothing reflects changes in social role structures which can be seen in the mutual sharing of some apparel styles and aesthetic components of apparel design. Even though some apparel styles are used by both sexes, individuals will tend to assign a masculine or feminine label to most apparel items. In addition, endorsement of sex role concepts affects perception of the sexuality of apparel items.

such as the Bem Sex Role Inventory (1974), The Personal Attributes Questionnaire (1974, 1974), the Adjective Checklist (1976), and the Personal Research Form-Androgyny Scale (1978). Each instrument measures an individual's endorsement of stereotypic masculine (instrumental, agentic) traits and stereotypic feminine (expressive, communal) traits. The Bem Sex Role Inventory (BSRI) and the Personal Attributes Questionnaire (PAQ) have been used more frequently in research studies relating the concept of androgyny to individual behavior and personality characteristics than the Personal Research Form-Androgyny Scale (PRO ANDRO) and the Adjective Checklist (ACL). Most of the research using these instruments has compared androgyny to self-esteem (Spence et al., 1975), nonverbal communication cues (Cary & Rudeck-Davis, 1979; Deaux & Major, 1977; La France & Carmen, 1980), mental health (Lubinski, Tellegen & Butch, 1981; Ireland, 1981), and sex role behaviors (Bem, 1975; Bem & Lenney, 1976).

To select an instrument to measure psychological androgyny the researcher reviewed the instruments in the order of their development and selected the Personal Attributes Questionnaire for the following reasons:

1. The selection of items for the PAQ is related to the endorsement of masculine and feminine traits. Clothing use and ownership may reflect endorsement of behavioral and psychological preferences which are consistent with psychological endorsement of sex role characteristics.

2. Hinrichsen and Stone (1978) have indicated that it is possible to fake the responses to the BSRI which affects its reliability as an instrument to use for comparison of the perception of the sexual identity of clothing items to an individual's sexual classification.

3. The ACL and PRO ANDRO have received limited use; therefore, it is difficult to assess the validity and reliability of these instruments as measures of androgyny.

4. The PAQ, although used less than the BSRI, has had fewer inconsistencies in data results.

5. Factor analysis studies for the PAQ (Gross, Batlis, Small & Erdwins, 1979; Gaa, Liberman, & Edwards 1979; Spence & Helmreich, 1979a) have generally extracted factors which identify instrumental or masculine traits and expressive or feminine traits. These results indicate that the PAQ instrument contains personality traits which are associated with masculinity or femininity.

Measurement of Clothing Perception, Use, and Ownership

A literature search revealed no instrument available to test the perception of the masculinity-femininity dimension of apparel items with college students. Therefore, this researcher developed the Andro-Clo Instrument for this purpose. To develop the instrument, approximately 100 slides were taken of sportswear apparel offered for sale in two retail department stores in Greenville, North Carolina in the spring of 1983. The clothing items were photographed on a hanger and included items sold as appropriate attire for men, for women, or for both men and women. A small size range was selected for male items while clothing in a woman's mediulm size was photographed. Clothing was photographed using color slide film. Apparel items were placed on a hanger to remove the influence of body shape on the perception of the appropriate sexual use of the apparel item. The selection of apparel items within a similar size range was also an attempt to control for the use of size as

determining factor in perception of the sexual identity of clothing items. The slides were reduced in number by a pilot study in which 174 subjects enrolled in three North Carolina universities rated each slide as a clothing item typically used by men, typically used by women, or typically used by both men and women. As a result of this preliminary study a total of 18 slides were selected for further analysis. These included the six slides in each apparel category perceived by the largest number of subjects as being used most by males, by females, or by both males and females.

In addition to the 18 slides, the Andro-Clo Instrument contains a 35-item semantic differential (Table 1). The bipolar adjectives were selected from a list of adjectives used by DeLong and Larntz (1980) to measure visual response to clothed body forms. The adjective list was reduced in number and modified to include ownership and use of clothing items. Respondents indicated the way they viewed each clothing item by placing an "X" on the 7-point scale at the point they felt best described the item. Subjects had approximately four minutes to rate each clothing item on the bipolar adjective list.

The Sample

Subjects were selected from students enrolled in psychology courses in three University of North Carolina schools: East Carolina University in Greenville, North Carolina Agricultural and Technical University in Greensboro, and the University of North Carolina at Greensboro. A total of 240 male and female, black and white student volunteers participated in the study during fall semester 1983.

Table 1

Bipolar Adjectives for Andro Clo Instrument

soft-crisp	versatile-unchangeable
light-dark	straight lines-curved lines
colorful-neutral	seasonal-transitional
tailored-draped	revealing-concealing
fitted-loose	design liked-design disliked
immodest-modest	practical-impractical
stiff-flowing	fashionable-unfashionable
shiny-dull	comfortable-uncomfortable
angular-rounded	functional-nonfunctional
simple-complex	would wear-would not wear
own-do not own	expensive-inexpensive
sheer-opaque	colors liked-colors disliked
flat-textured	structured-unstructured
sporty-dressy	inconspicuous-conspicuous
unusual-usual	masculine-feminine
bright-dull	pleasure-business
subtle-bold	horizontal-vertical
casual-formal	

Data Collection

The PAQ and the Andro-Clo Instrument were administered to volunteer subjects enrolled in psychology courses in the fall of 1983 on the three campuses of the University of North Carolina. Instruments were administered using counterbalancing procedures to groups of 20-30 subjects. The slides used in the Andro-Clo Instrument were randomly arranged for each administration of the instrument. Subjects evaluated each slide using the 35-item semantic differential and completed the short form of the Personal Attributes Questionnaire (Spence et al., 1975).

Hypotheses

Based on review of the literature, the following hypotheses were formulated.

1. There is no significant difference in the classification of apparel items as feminine, masculine, or androgynous by ethnic group.
   a. The following feminine apparel items are not classified differently by black and white subjects
      (1) culotte skirt.
      (2) skirt.
      (3) plaid blouse.
      (4) sleeveless top.
      (5) fifties blouse.
      (6) halter top.
   b. The following masculine apparel items are not classified differently by black and white subjects
      (1) bermuda shorts.
      (2) madras sport coat.
      (3) blazer.
      (4) plaid sport coat.
      (5) plaid shirt.
      (6) striped polo shirt.
   c. The following androgynous apparel items are not classified differently by black and white subjects
      (1) sweat pants.
      (2) blue jeans.
      (3) running shorts.
      (4) sweat jacket.
      (5) rain slicker.

(6) T-shirt.

2. There is no significant difference in classification of apparel items as feminine, masculine, or andgrogynous by sex of respondents.

a. The following feminine apparel items are not classified differently by males and females

(1) culotte skirt.
(2) skirt.
(3) plaid blouse.
(4) sleeveless top.
(5) fifties blouse.
(6) halter blouse.

b. The following masculine apparel items are not classified differently by males and females

(1) bermuda shorts.
(2) madras sport coat.
(3) blazer.
(4) plaid sport coat.
(5) plaid shirt.
(6) striped polo shirt.

c. The following androgynous apparel items are not classified differently by males and females

(1) sweat pants.
(2) blue jeans.
(3) running shorts.
(4) sweat jacket.
(5) rain slicker.
(6) T-shirt.

3. There is no significant difference in classification of apparel items as feminine, masculine, or androgynous by PAQ group classification.

a. The following feminine apparel items are not classified differently by the Androgynous, Feminine, Masculine, or Undifferentiated PAQ groups

(1) culotte skirt.
(2) skirt.
(3) plaid blouse.
(4) sleeveless top.
(5) fifties blouse.
(6) halter blouse.

b. The following masculine apparel items are not classified differently by the Androgynous, Feminine, Masculine, or Undifferentiated PAQ groups

(1) bermuda shorts.
(2) madras sport coat.
(3) blazer.
(4) plaid sport coat.
(5) plaid shirt.
(6) striped polo shirt.

c. The following androgynous apparel items are not classified differently by the Androgynous, Feminine, Masculine, or Undifferentiated PAQ groups

(1) sweat pants.
(2) blue jeans.
(3) running shorts.
(4) sweat jacket.
(5) rain slicker.
(6) T-shirt.

4. There is no significant difference in the use of apparel items categorized as feminine, masculine, or androgynous by ethnic group.

a. The following feminine apparel items are not used differently by black and white subjects
(1) culotte skirt.
(2) skirt.
(3) plaid blouse.
(4) sleeveless top.
(5) fifties blouse.
(6) halter top.

b. The following masculine apparel items are not used differently by black and white subjects
(1) bermuda shorts.
(2) madras sport coat.
(3) blazer.
(4) plaid sport coat.
(5) plaid shirt.
(6) striped polo shirt.

c. The following androgynous apparel items are not used differently by black and white subjects
(1) sweat pants.
(2) blue jeans.
(3) running shorts.
(4) sweat jacket.
(5) rain slicker.
(6) T-shirt.

5. There is no difference in use of apparel items categorized as feminine, masculine, or androgynous by sex of respondent.

a. The following feminine apparel items are not used differently by males and females
(1) culotte skirt.
(2) skirt.
(3) plaid blouse.
(4) sleeveless top.
(5) fifties blouse.
(6) halter top.

b. The following masculine apparel items are not used differently by males and females
(1) bermuda shorts.
(2) madras sport coat.
(3) blazer.
(4) plaid sport coat.
(5) plaid shirt.
(6) striped polo shirt.

c. The following androgynous apparel items are not used

differently by males and females

(1) sweat pants.
(2) blue jeans.
(3) running shorts.
(4) sweat jacket.
(5) rain slicker.
(6) T-shirt.

6. There is no significant difference in the use of apparel items categorized as feminine, masculine, or androgynous by PAQ group classification.

a. The following feminine apparel items are not used differently by Androgynous, Feminine, Masculine, or Undifferentiated PAQ group

(1) culotte skirt.
(2) skirt.
(3) plaid blouse.
(4) sleeveless top.
(5) fifties blouse.
(6) halter top.

b. The following masculine apparel items are not used differently by Androgynous, Feminine, Masculine, or Undifferentiated PAQ group

(1) bermuda shorts.
(2) madras sport coat.
(3) blazer.
(4) plaid sport coat.
(5) plaid shirt.
(6) striped polo shirt.

c. The following androgynous apparel items are not used differently by Androgynous, Feminine, Masculine, or Undifferentiated PAQ group

(1) sweat pants.
(2) blue jeans.
(3) running shorts.
(4) sweat jacket.
(5) rain slicker.
(6) T-shirt.

7. There is no significant difference in ownership of apparel items categorized as feminine, masculine, or androgynous by ethnic group.

a. The following feminine apparel items are not owned differently by black and white subjects

(1) culotte skirt.
(2) skirt.
(3) plaid blouse.
(4) sleeveless top.
(5) fifties blouse.
(6) halter top.

b. The following masculine apparel items are not owned differently by black and white subjects

(1) bermuda shorts.
(2) madras sport coat.

(3) blazer.
(4) plaid sport coat.
(5) plaid shirt.
(6) striped polo shirt.

c. The following androgynous apparel items are not owned differently by black and white subjects
(1) sweat pants.
(2) blue jeans.
(3) running shorts.
(4) sweat jacket.
(5) rain slicker.
(6) T-shirt.

8. There is no significant difference in ownership of apparel items categorized as feminine, masculine, or androgynous by sex of respondent.

a. The following feminine apparel items are not owned differently by males and females
(1) culotte skirt.
(2) skirt.
(3) plaid blouse.
(4) sleeveless top.
(5) fifties blouse.
(6) halter top.

b. The following masculine apparel items are not owned differently by males and females
(1) bermuda shorts.
(2) madras sport coat.
(3) blazer.
(4) plaid sport coat.
(5) plaid shirt.
(6) striped polo shirt.

c. The following androgynous apparel items are not owned differently by males and females
(1) sweat pants.
(2) blue jeans.
(3) running shorts.
(4) sweat jacket.
(5) rain slicker.
(6) T-shirt.

9. There is no significant difference in ownership of the apparel items categorized as feminine, masculine, or androgynous by PAQ groups classification.

a. The following feminine apparel items are not owned differently by Androgynous, Feminine, Masculine, or Undifferentiated PAQ groups
(1) culotte skirt.
(2) skirt.
(3) plaid blouse.
(4) sleeveless top.
(5) fifties blouse.
(6) halter top.

b. The following masculine apparel items are not owned

differently by Androgyous, Feminine, Masculine, or Undifferentiated PAQ groups

(1) bermuda shorts.
(2) madras sport coat.
(3) blazer.
(4) plaid sport coat.
(5) plaid shirt.
(6) striped polo shirt.

c. The following androgynous apparel items are not owned differently by Androgynous, Feminine, Masculine, or Undifferentited PAQ groups

(1) sweat pants.
(2) blue jeans.
(3) running shorts.
(4) sweat jacket.
(5) rain slicker.
(6) T-shirt.

Data Analysis

Subjects were classified into four groups based on the mean of the median scores derived for each sex from the PAQ masculine (M) and feminine (F) scales. Individuals scoring above the mean of the medians on the M scale but below the mean of the medians on the F scale were classified as sex-typed masculine. Individuals scoring below the mean of the medians on the M scale and above the mean of the medians on the F scale were classified as sex-typed feminine. An androgynous classification resulted when an individual scored above the mean of the medians on both M and F scales; while an undifferentiated classification resulted for individuals scoring below the mean of the medians on both scales.

A principal axis factor analysis with varimax rotation contained in the SPSSX statistical package was performed on the 35 bipolar adjectives for each apparel item to determine the characteristics associated with the apparel item. An additional factor analysis was performed on the

means of the bipolar adjectives for the six masculine slides, the six feminine slides, and the six androgynous slides to determine the characteristics of apparel which are associated with masculine, feminine, or androgynous clothing items. To obtain valid results for comparison of subject responses by sex, ethnic, and PAQ groups, the variables list was reduced using a two-step process. The first stage involved the removal of seven or eight variables which failed to load at the .50 criterion level on each of the individual apparel items for a particular category and the grouped factor analysis for the appropriate apparel category (see Table 2). As invalid results were being obtained for part of the subgroup analyses, the variables list for each grouped apparel category was reduced a second time by removing variables which had not loaded at the .50 criterion level on the inital group factor and on the reduced group factor (Table 2).

Individual items from the semantic differential were selected for additional analysis. The Masculine/Feminine adjective pair, the Do not own/Own adjective pair, and the Would wear/Would not wear adjective pair were chosen for further analysis. Chi-square analysis was done to assess the relationships between the adjective pairs and expectations for selections. Where initial Chi-square analysis resulted in cells with expected values less than 5.0, the number of cells were reduced. Ratings were collapsed to eliminate cells with expected values less than 5.0 as long as the resuting categories could be considered masculine, feminine, or androgynous for Masculine/Feminine adjective pair and reflect appropriate groupings for ownership and use of apparel items. Levels of

significance at the .05 and .01 levels were established for the evaluation of the hypotheses.

Table 2

Variables Removed in a Two-stage Process from Andro Clo Instrument for Feminine, Masculine, and Androgynous Apparel Categories Factor Analysis by Sex, Ethnic, and PAQ Groups

VARIABLE	APPAREL CATEGORY		
	Feminine	Masculine	Androgynous
Flat/Textured	X[a]	-	X
Versatile/Unchangeable	X[a]	X	X[a]
Horizontal/Vertical	X[a]	X[a]	X[a]
Soft/Crisp	X[a]	X[a]	X
Immodest/Modest	-	X[a]	X[a]
Inconspicuous/Conspicuous	X[a]	X[a]	X[a]
Expensive/Inexpensive	X	X[a]	X[a]
Seasonal/Transitional	X	X[a]	X[a]
Stiff/Flowing	X[a]	X	X[a]
Subtle/Bold	X	-	-
Revealing/Concealing	-	X[a]	X
Masculine/Feminine	-	X[a]	X
Comfortable/Uncomfortable	X[a]	X	-
Simple/Complex	-	-	X
Unusual/Usual	X	-	-
Sheer/Opaque	-	X	-
Total	11	12	12

[a]Removed in first stage reduction

CHAPTER IV

RESULTS AND DISCUSSION

The following chapter presents the results of the data analysis and the discussion of the results.

The Sample

The sample consisted of 240 subjects enrolled in psychology courses at three universities in the North Carolina system. East Carolina University is a regional coeducational college located in the eastern part of the state, while the University of North Carolina at Greensboro and North Carolina Agricultural and Technical University are located in the Piedmont region of the state in the city of Greensboro. Both are coeducational schools. North Carolina Agricultural and Technical University is predominately black. The number of subjects who participated from each school ranged from 57 at the University of North Carolina at Greensboro to 120 at East Carolina University. The subjects ranged in age from 17-40 years with a mean age of 19.9 years. The majority of the sample (91.7%) was between 17 and 22 years of age, the normal college age. Approximately two-thirds (67.5%) of the sample were freshmen or sophomores in college with the remainder of the sample juniors or seniors in college. Various ethnic groups were represented with approximately one-third (32.1%) of the sample being black and approximately two-thirds (65.8%) being white.

Chi-Square Analysis

Three variables from the Andro Clo Instrument were selected for

analysis to assess differences in the classification, use, and ownership of selected clothing items by sex, ethnic group, and PAQ group. The Masculine/Feminine adjective pair was used to determine differences in the classification of items while the Would wear/Would not wear and the Do not own/Own adjective pairs were used to determine use and ownership differences. Levels of significance at the .05 and .01 levels were established for evaluating significant differences in the classification, ownership, and use of the selected apparel items by sex of respondent, ethnic group, and PAQ group.

Differences in the classification of apparel items on the Masculine/Feminine rating scale were found to be significant for 10 of the 18 apparel items by sex, 10 of the 18 apparel items by ethnic group and 7 of the 18 apparel items by PAQ group (Table 3). The category of apparel which had the highest number of clothing items with significant differences in perception by sex was the androgynous apparel. All androgynous apparel items and half of the male apparel items were found to be significant. Differences in the classification of apparel items by black and white subjects were found to be more prevealent in items classified as feminine (five out of six items) then either androgynous or masculine (two out of six items). Three out of six apparel items classified as either masculine or feminine indicated significant differences in perception by the four PAQ groups, while only one of the androgynous items was perceived differently at a significant level. Table 4 indicates that significant differences in the perception of the T-shirt (an androgynous apparel item) and the plaid shirt (a masculine apparel item) occurred for all three group comparisons - sex, ethnic, and

Table 3

Number of Clothing Items Found to be Significant for Sex, Ethnic and PAQ Group for Each Apparel Category by Sexual Identity Perception

Apparel Category	Sex	Group Ethnic	PAQ
Feminine (n=6)	1	6	3
Masculine (n=6)	3	2	3
Androgynous (n=6)	6	2	1
Total (N=18)	10	10	7

Table 4

Levels of Significance of Apparel Items by Sex, Ethnic, and PAQ Groups for Apparel Classified as Masculine, Feminine, or Androgynous

APPAREL ITEM	CLASSIFICATION	CHI-SQUARE GROUP			TOTAL
		Sex	Ethnic	PAQ	
Bermuda Shorts	Masculine	**	-	*	2
Madras Sport Coat	Masculine	-	-	-	0
Blazer	Masculine	*	-	-	1
Plaid Sport Coat	Masculine	-	-	-	0
Plaid Shirt	Masculine	*	**	**	3
Striped Polo Shirt	Masculine	-	**	**	2
Culotte Skirt	Feminine	-	*	-	1
Skirt	Feminine	-	**	**	2
Plaid Blouse	Feminine	-	*	*	2
Sleeveless Top	Feminine	-	**	**	2
Fifties Blouse	Feminine	-	**	-	1
Halter Top	Feminine	*	*	-	2
Sweat Pants	Androgynous	**	**	-	2
Blue Jeans	Androgynous	**	-	-	1
Running Shorts	Androgynous	**	-	-	1
Sweat Pants	Androgynous	*	-	-	1
Sweat Jacket	Androgynous	*	-	-	1
Rain Slicker	Androgynous	*	-	-	1
T-shirt	Androgynous	**	*	*	3

* p = greater than .05
** p = greater than .01

PAQ. Two masculine clothing items, the plaid sport coat and the madras sport coat, were the only apparel items in which no significant differences in perception occured for sex, ethnic, and PAQ groups.

Differences in male and female perceptions of masculine/feminine ratings for the rain slicker, sweat jacket, plaid shirt and halter top were significant at the .05 level. Clothing items in which differences in perception between males and females were significant at the .01 level included running shorts, blazer, T-shirt, sweat pants, blue jeans and bermuda shorts (Table 4). Males used the feminine category for classifying the rain slicker when not using the masculine or androgynous categories, while females used the masculine categories for classifying this item. Sweat pants, blue jeans, T-shirt, and sweat jacket were considered by males to be more appropriate for males when not classified as androgynous apparel. Females tended to classify the items as androgynous, although a few subjects used the slightly masculine category in classifying the apparel items. Males classified the plaid shirt using masculine categories, while the female subjects used the androgynous category when not using the extreme masculine categories to classify the shirt. The bermuda shorts were considered to be a feminine garment by some males while females considered it to be appropriate for males only.

Perceptual differences in masculine/feminine ratings were observed in black and white responses for ten clothing items. Differences in perception for the T-shirt, culotte skirt, halter top, plaid shirt, and plaid blouse were significant at the .05 level, while sweat pants, skirt, sleeveless top, fifties blouse, and striped polo shirt were significant at the .01 level (Table 4). Some black subjects classified all the

feminine apparel items using categories other than the feminine categories, while white subjects used only the feminine categories. White subjects used the extreme masculine categories to classify the stripe polo shirt; black subjects used androgynous as well as extreme masculine categories in classifying this item. The plaid shirt and the sweat pants were considered to be a feminine apparel items by more black subjects than white subjects. Near masculine and slightly masculine categories were used by white subjects more than black subjects when classifying the madras sport coat.

Chi-square analysis of PAQ groups for the masculine/feminine ratings of apparel items was significant at the .05 level for the T-shirt and the plaid blouse (Table 4). The differences in perception of the skirt, sleeveless top, plaid sport shirt, and the striped polo shirt were significant at the .01 level for the four PAQ groups. The Masculine and Undifferentiated groups classified the T-shirt as masculine, and the Androgynous group classified it as feminine. Part of the Undifferentiated group considered the striped polo shirt and the plaid shirt as feminine garments. The Masculine group considered the stripe polo shirt and the bermuda shorts to be androgynous apparel items. Approximately 20% of the masculine group classified the bermuda shorts using feminine categories. Some of the masculine group also classified the plaid shirt as feminine. The Undifferentiated group classified the feminine apparel items (skirt, plaid blouse, sleeveless top) as masculine, feminine, and androgynous. The plaid blouse was classified as feminine or androgynous by the masculine group.

Additional Chi-square analyses for sex, ethnic, and PAQ groups were

performed to assess differences in use and ownership of apparel items. Results indicated no significant differences in the use or ownership of clothing items classified as androgynous for sex or PAQ group. Blue jeans were the only androgynous clothing item found to be highly significant at .01 level in use and ownership for black and white responses (Table 5). More black than white subjects indicated they would not wear (15%) and did not own (20%) this particular blue jean style. The majority of both ethnic groups indicated both use and ownership of this garment style.

Significant differences in male and female responses were found in the use (.01) and ownership (.05) of all of the feminine clothing items. Four of the six masculine clothing items resulted in significant differences at .01 level in use and ownership for males and females (Table 5). The use and ownership of sex-typed apprel items was closely linked to the sex of the individuals. Males would use masculine items and females would use feminine items.

Comparison of black and white responses resulted in significant differences in the use of the culotte skirt (.05) and sleeveless top (.01); and one masculine apparel item, plaid sport coat (.01) (Table 5). More black than white subjects would use the culotte skirt and sleeveless top. The plaid sport coat was used by more white than black subjects. The ownership of all feminine items was significantly different by ethnic group. The culotte skirt, white skirt, fifties blouse, halter top, and the plaid blouse were significantly different at the .01 level, the sleeveless top was significantly different at the .05 level (Table 5). White subjects owned the halter top, fifties blouse, plaid blouse, and

Table 5

Levels of Significance for Ownership and Use of Apparel Items by Sex, Ethnic and PAQ Groups for Apparel Classified as Masculine, Feminine or Androgynous

APPAREL ITEM	CLASSIFICATION	OWNERSHIP			USE		
		Sex	Ethnic	PAQ	Sex	Ethnic	PAQ
Bermuda Shorts	Masculine	-	-	-	-	-	-
Madras Sport Coat	Masculine	-	-	*	-	-	**
Blazer	Masculine	**	-	-	**	-	-
Plaid Sport Coat	Masculine	**	-	-	**	**	-
Plaid Shirt	Masculine	**	-	**	**	-	**
Stripe Polo Shirt	Masculine	**	-	-	**	-	-
Culotte Skirt	Feminine	**	**	-	**	*	-
Skirt	Feminine	**	**	**	**	-	**
Plaid Blouse	Feminine	**	**	-	**	-	*
Sleeveless Top	Feminine	*	*	-	**	**	-
Fifties Blouse	Feminine	**	**	-	**	-	-
Halter Top	Feminine	**	**	-	**	-	*
Sweat Pants	Androgynous	-	-	-	-	-	-
Blue Jeans	Androgynous	-	**	-	-	**	-
Running Shorts	Androgynous	-	-	-	-	-	-
Sweat Jacket	Androgynous	-	-	-	-	-	-
Rain Slicker	Androgynous	-	-	-	-	-	-
T-Shirt	Androgynous	-	-	-	-	-	-

* p = greater than .05
** P = greater than .01

white skirt more than black subjects; while the culotte skirt and the sleeveless top were owned by more black than white subjects.

Results for Chi-square analysis indicated that three feminine items and two masculine items were significant at the .05 level for the four PAQ groups (Table 5). The use of apparel items in the masculine and feminine categories was associated with the sex-typed PAQ groups. The Feminine group used the feminine apparel items and the Masculine group used the masculine apparel items more than the other PAQ groups. Ownership for one feminine item and two masculine items were found to be significant for the PAQ groups--(skirt (.01), madras sport coat (.05), and plaid shirt (.01) for PAQ groups (Table 5). The masculine apparel items were owned by the Masculine PAQ group, and the feminine apparel items were owned by the Feminine PAQ group.

Of the 18 apparel items 10 were significant in use and ownership by males and females. All six of the female items and four of the male items were used and owned on the basis of differences in sex of the respondent. Ethnic group comparisons indicate that four apparel items are used differently by blacks and whites, while eight apparel items had significant differences in ownership by ethnic group. The use of five apparel items was found to be significantly different for the PAQ groups. All five apparel items were classified as more appropriate for one sex than for the other. Three female apparel items and two masculine apparel items were significantly different in their use by the PAQ groups. Only three apparel items--skirt, madras sport coat and plaid shirt--were significant for ownership by PAQ groups.

Factor Analysis

The 35-item bipolar adjective list of the Andro Clo Instrument for each apparel item was subjected to a principle-axis factor analysis with varimax rotation. Interpretation of all factors was based on variables loading highest on each factor at the .50 level or higher and having a common variance of 4.5% or more. Additional principal axis factor analysis with varimax rotation was carried out on the mean of five or more apparel items for each of the 35 bipolar adjectives of the Andro Clo Instrument by category of apparel. Comparisons for sex, ethnic, and PAQ responses to the Andro Clo Instrument were made through principal axis factor analysis with varimax rotation of a reduced variable list. Variables which failed to load at the .50 level on the individual apparel factors and on the mean of the apparel factors were removed; 11 variables were removed for the feminine apparel category, while 12 variables were removed for the masculine and androgynous apparel categories (Table 2). For most apparel items and the three apparel categories, factors which were derived could be described by a single word. However a few factors were composed of variables which were described by more than one word, thus forming a combination factor.

Factor Analysis of Masculine Perceived Apparel Items

The six apparel items classified as masculine apparel included one pair of plaid bermuda shorts, a madras plaid patchwork sport coat, a dark green wool blazer, a soft muted plaid sport coat, a short-sleeved plaid sport shirt and a horizontal-striped polo shirt (Figure 2). Factor analysis for four of the six apparel items provided four interpretable factors which explained approximately 30% of the common variance (Table

FIG. 2 MASCULINE APPAREL ITEMS

Blazer

Bermuda Shorts

Stripe Polo Shirt

Plaid Sport Coat

Madras Sport Coat

Plaid Shirt

6). Factors relating to Preference, Use, Appearance, Image, and Form were associated with the majority of the masculine apparel items. The percentage of variance explained by a specific factor varied with the apparel item being analyzed. All apparel items had one factor which related to the use of the apparel item. An Appearance or Image Factor was also one of the factors extracted for each apparel item.

Variables forming Preference Factors, Use Factors, and Preference/Use Factors are fairly consistent across various apparel items (Table 7). The Preference/Use Factor included variables which also loaded on the separate Preference Factor and Use Factor. These variables were Would wear/Would not wear and Do not own/Own items which loaded on a Use Factor when not loading on the Preference/Use Factor. Design liked/Design disliked and Colors liked/Colors disliked variables loaded on a Preference Factor when not loading on the Preference/Use Factor. In addition to the design and color preference adjective pairs, a Fashionable/Unfashionable variable also loaded on the Preference Factor for the two apparel items which had separate Preference and Use Factors. The Occasion Factor occurred on three of the six clothing items--shorts, blazer and polo shirt--indicating its importance for a variety of male apparel items. Consistent variables which loaded on this factor for all three clothing items included Pleasure/Business and Sporty/Dressy. Comfortable/Uncomfortable and Casual/Formal variables loaded on this factor for two of the three apparel items. A Practical/Impractical variable loaded on the Occasion Factor for only one of the apparel items.

Factor Analysis for Mean of Masculine Apparel Items for 35 Bipolar Adjectives

Table 6

Factors and Percentage of Variance of Factors Extracted for Masculine Apparel Items

APPAREL ITEM	FACTOR 1 %	FACTOR 2 %	FACTOR 3 %	FACTOR 4 %	TOTAL VARIANCE
Bermuda Shorts	Preference/Use 11.3	Appearance 8.6	Image 5.8	Occasion 5.4	31.4
Madras Sport Coat	Preference/Use 12.3	Image 7.0	Form 4.7		24.0
Blazer	Image 11.3	Use 7.6	Occasion 5.6	Prefernce 4.5	29.0
Plaid Sport Coat	Image 12.3	Appearance 6.3	Use 5.7	Form 4.8	29.1
Plaid Shirt	Preference 12.1	Appearance I 8.3	Use 6.0	Appearance II 4.7	31.1
Stripe Polo Shirt	Occasion 11.1	Appearance 9.4	Preference/Use 5.1		25.6

Table 7

Factor Analysis of 35 Bipolar Adjectives for Masculine Clothing Items

GARMENT	FACTOR 1 Variables	Loading	FACTOR 2 Variables	Loading	FACTOR 3 Variables	Loading	FACTOR 4 Variables	Loading
Plaid Shirt	(Preference)		(Appearance)		(Use)		(Appearance II)	
	Design liked/Design disliked	.77738	Shiny/Dull	.64282	Would wear/Would not wear	.74243	Colorful/Neutral	.56679
	Colors liked/Colors disliked	.70925	Light/Dark	.61670	Do not own/Own	-.70421		
	Fashionable/Unfashionable	.60422						
Stripe Polo Shirt	(Occasion)		(Appearance)		(Preference/Use)			
	Pleasure/Business	.74527	Bright/Dull	.72094	Would wear/Would not wear	.83303		
	Casual/Formal	.62941	Shiny/Dull	.59145	Do not own/Own	-.66854		
	Comfortable/Uncomfortable	.61970	Colorful/Neutral	.58344	Design liked/Design disliked	.59471		
	Sporty/Dressy	.55640	Colors liked/Colors disliked	.57707				
	Practical/Impractical	.54460						
Bermuda Shorts	(Preference/Use)		(Appearance)		(Image)		(Occasion)	
	Would wear/Would not wear	.85045	Bright/Dull	.73651	Functional/Nonfunctional	.62619	Pleasure/Business	.72024
	Design liked/Design disliked	.65192	Shiny/Dull	.72308	Practical/Impractical	.61852	Sporty/Dressy	.56570
	Do not own/Own	-.64036	Colorful/Neutral	.61401	Unusual/Usual	-.56473	Comfortable/Uncomfortable	.54990
	Colors liked/Colors disliked	.51458			Inconspicuous/Conspicuous	.51967		
Madras Sport Coat	(Preference/Use)		(Image) 7		(Form)			
	Do not own/Own	-.77623	Functional/Nonfunctional	.68511	Structured/Unstructured	.61743		
	Would wear/Would not wear	.65525	Practical/Impractical	.66376	Tailored/Draped	.52285		
	Colors liked/Colors disliked	.59025	Fashionable/Unfashionable	.53666	Fitted/Loose	.50343		
	Design liked/Design disliked	.53503						
Plaid Sport Coat	(Image)		(Appearance)		(Use)		(Form)	
	Practical/Impractical	.65654	Colorful/Neutral	.74674	Would wear/Would not wear	.81112	Straight lines/Curved lines	.63828
	Unusual/Usual	-.64762	Bright/Dull	.63833	Do not own/Own	-.61538	Tailored/Draped	.59806
	Fashionable/Unfashionable	.62986	Subtle/Bold	-.54142				
	Functional/Nonfunctional	.62853						
	Design liked/Design disliked	.50447						
Blazer	(Image)		(Use)		(Occasion)		(Preference)	
	Functional/Nonfunctional	.70522	Would wear/Would not wear	.88191	Sporty/Dressy	.61864	Design liked/Design disliked	.74730
	Unusual/Usual	-.55722	Do not own/Own	-.85728	Casual/Formal	.60123	Colors liked/Colors disliked	.66206
					Pleasure/Business	.57326	Fashionable/Unfashionable	.54380

The mean of the bipolar adjectives for the six masculine apparel items was subjected to factor analysis. A four factor solution for the grouped masculine apparel items appeared most meaningful and accounted for 36.6% of the common variance (Table 8). Factor 1 (13.9% of common variance) can be identified as an Image Factor with four variables loading at .50 or higher. The four variables and their loadings were the following:

Unusual/Usual	-.70730
Practical/Impractical	.63768
Functional/Nonfunctional	.60802
Fashionable/Unfashionable	.52263

Factor 2 (11.2% of common variance) is a Use Factor which consisted of two variables:

Do not own/Own	-.85252
Would wear/Would not wear	.83313

A Form Factor can be identified from Factor 3 (6.7% of common variance) variable loadings. The two variables which loaded on the Form Factor were:

Straight lines/Curved lines	.71916
Angular/Rounded	.71049

The last factor (4.8% of common variance) can be identified as an Appearance Factor. Four variables loaded on this factor:

Bright/Dull	.67859
Light/Dark	.67687
Shiny/Dull	.57899
Colorful/Neutral	.51310

Comparison of the Image Factor for the grouped masculine apparel category with the individual masculine apparel items indicated that one of the four variables, Functional/Nonfunctional, was contained on all the individual apparel item Image Factors (Table 9). Three of the four

Table 8

Factors and Percentage of Variance for Factors Extracted for the Mean of the Bipolar Adjectives for Apparel Categorized as Masculine, Feminine or Androgynous

FACTOR NUMBER	APPAREL CATEGORY		
	Masculine	Feminine	Androgynous
Factor 1 %	Image 13.9%	Preference/Image 12.4%	Occasion 14.9%
Factor 2 %	Use 11.2%	Occasion 10.2%	Preference/Use 6.8%
Factor 3 %	Form 6.7%	Form 6.3%	Form 5.2%
Factor 4 %	Appearance 4.8%	Use 6.0%	Appearance 4.6%
Total Variance	36.6%	33.9%	33.5%

Table 9

Factor Analysis of 35 Bipolar Adjectives for Apparel Categorized as Masculine, Feminine, or Androgynous

Factor Number	APPAREL CATEGORY					
	Feminine		Masculine		Androgynous	
	Variable	Loading	Variable	Loading	Variable	Loading
Factor 1	(Preference/Image)		(Image)		(Occasion)	
	Design liked/Design disliked	.74573	Unusual/Usual	-.70730	Casual/Formal	.79696
	Fashionable/Unfashionable	.68895	Practical/Impractical	.63768	Pleasure/Business	.76899
	Colors liked/Colors disliked	.65754	Functional/Nonfunctional	.60802	Comfortable/Uncomfortable	.64046
	Practical/Impractical	.63490	Fashionable/Unfasnionable	.52263	Sporty/Dressy	.52521
	Functional/Nonfunctional	.51637				
Factor 2	(Occasion)		(Use)		(Preference/Use)	
	Casual/Formal	.79359	Do not own/Own	-.85252	Design liked/Design disliked	.83101
	Pleasure/Business	.78102	Would wear/Would not wear	.83313	Do not own/Own	-.71337
	Simple/Complex	.54355			Would wear/Would not wear	.71324
	Sporty/Dressy	.52521			Colors liked/Colors disliked	.59649
Factor 3	(Form)		(Form)		(Form)	
	Tailored/Draped	.77334	Straight lines/ Curved lines	.71916	Fitted/Loose	.85611
	Fitted/Loose	.68787	Angular/Rounded	.71049	Tailored/Draped	.74249
	Structured/Unstructured	.59041			Structured/Unstructured	.57436
Factor 4	(Use)		(Appearance)		(Appearance)	
	Do not own/Own	-.90409	Bright/Dull	.67859	Bright/Dull	.67270
	Would wear/Would not wear	.85609	Light/Dark	.67687	Colorful/Neutral	.63987
			Shiny/Dull	.57899	Subtle/Bold	-.56302
			Colorful/Neutral	.51310		

individual apparel item factors containing an Image Factor also contained the Unusual/Usual and Practical/Impractical variables found on the grouped Image Factor. The Use Factor is composed of the identical variables for the grouped factor and for the individual apparel item factors. As with the Image Factor, the group Appearance Factor contained variables which loaded highly on individual apparel item Appearance Factors. Only one variable, Colorful/Neutral, is present on all individual apparel item Appearance Factors and the group Appearance Factor. However, the remaining three variables loaded on two of the four individual apparel Appearance Factors. The group Form Factor contained only one variable, Straight lines/Curved lines, which loaded on one individual apparel item Form Factor. The other variable which loaded on the group Form Factor, Angular/Rounded, did not load on the Form Factors for any of the masculine apparel items.

Factor Analysis of Feminine Perceived Apparel Items

The six apparel items classified as feminine apparel items included a chevron striped knit halter top, a white dirndle skirt, a green plaid puff-sleeved blouse, a blue knit sleeveless top, a green culotte skirt, and a short-sleeved 50's inspired blouse (Figure 1). At least three interpretable factors were extracted for each of the six apparel items which accounted for approximately 25% of the common variance (Table 10).

The only factor present on five of the six feminine apparel items was the Occasion Factor which was Factor 1 for two apparel items, Factor 2 for one apparel item, and Factor 3 for two apparel items. Preference, Preference/Use, and Use Factors were present on five of the six apparel items. Appearance or Image Factors were also present on five of the six

FIG.1 FEMININE APPAREL ITEMS

Fifties Blouse

Skirt

Sleeveless Top

Plaid Blouse

Culotte Skirt

Halter Top

Table 10

Factors and Percentage of Variance of Factors Extracted for Feminine Apparel Items

APPAREL ITEM	FACTOR 1 %	FACTOR 2 %	FACTOR 3 %	FACTOR 4 %	TOTAL VARIANCE
Culotte Skirt	Occasion 10.6	Preference 6.5	Image 5.5		22.6
Skirt	Preference 10.2	Use 8.6	Occasion 6.6		25.4
Plaid Shirt	Preference/Use 13.2	Occasion 8.0	Appearance 4.7		25.9
Sleeveless Top	Occasion 9.5	Form 9.2	Function 6.4		25.1
Fifties Blouse	Preference/Use 12.6	Function 8.0	Form 6.8		27.4
Halter Top	Image 10.3	Appearance 8.7	Occasion 4.9	Use 4.5	28.4

apparel items. The Occasion Factor generally included variables relating to Pleasure/Business, Casual/Formal and Sporty/Dressy regardless of apparel item (Table 11). The Use Factor which loaded on apparel items contained the Do not own/Own and Would wear/Would not wear variables. Design liked/Design disliked, Colors liked/Colors disliked and Fashionable/Unfashionable generally loaded on a Preference or Preference/Use Factor regardless of clothing item.

Factor Analysis for Mean of Feminine Apparel Items for 35 Bipolar Adjectives

The mean of the bipolar adjectives for the six feminine apparel items was subjected to factor analysis. A four factor solution appeared the most meaningful for the grouped feminine apparel items and accounted for 33.9% of the common variance (Table 8). The four factors were identified as a Preference/Image Factor (12.4% of common variance), an Occasion Factor (10.2% of common variance), a Form Factor (6.3% of common variance), and a Use Factor (6.0% of common variance). Factor 1 or the Preference/Image Factor consisted of the following five variables and their loadings:

Design liked/Design disliked	.74573
Fashionable/Unfashionable	.68895
Colors liked/Colors disliked	.65754
Practical/Impractical	.63490
Functional/Nonfunctional	.51637

The Occasion Factor, Factor 2, consisted of the following four variables and their loadings:

Casual/Formal	.79359
Pleasure/Business	.78102
Simple/Complex	.54355
Sporty/Dressy	.52421

Table 11

Factor Analysis of 35 Bipolar Adjectives for Feminine Clothing Items

GARMENT	FACTOR 1 Variables	Loading	FACTOR 2 Variables	Loading	FACTOR 3 Variables	Loading	FACTOR 4 Variables	Loading
Fifties Blouse	(Preference/Use)		(Image)		(Form)		(Occasion)	
	Would wear/Would not wear	.85260	Unusual/Usual	-.65121	Tailored/Draped	.68043	Casual/Formal	.66610
	Do not own/Own	-.67496	Practical/Impractical	.53899	Fitted/Loose	.63764	Pleasure/Business	.58954
	Design liked/Design disliked	.52168			Structured/Unstructured	.63088		
Halter Top	(Image)		(Appearance)		(Occasion)		(Use)	
	Practical/Impractical	.65524	Colorful/Neutral	.61930	Pleasure/Business	.64530	Would wear/Would not wear	.84645
	Functional/Nonfunctional	.59924	Bright/Dull	.58438	Casual/Formal	.61191	Do not own/Own	-.81009
	Design liked/Design disliked	.55007						
Plaid Blouse	(Preference/Use)		(Occasion)		(Appearance)			
	Design liked/Design disliked	.74675	Pleasure/Business	.67551	Sheer/Opaque	.79027		
	Fashionable/Unfashionable	.72956	Casual/Formal	.61645	Shiny/Dull	.59458		
	Would wear/Would not wear	.65928	Sporty/Dressy	.55423	Light/Dark	.51285		
	Colors liked/Colors disliked	.65276						
	Practical/Impractical	.51024						
Sleeveless Top	(Occasion)		(Form)		(Image)			
	Pleasure/Business	.65934	Tailored/Draped	.68097	Practical/Impractical	.68612		
	Sporty/Dressy	.62691	Fitted/Loose	.65523	Unusual/Usual	-.57082		
	Casual/Formal	.58440	Structured/Unstructured	.53108				
Culotte Skirt	(Occasion)		(Preference)		(Image)			
	Pleasure/Business	.76565	Design liked/Design disliked	.77536	Subtle/Bold	.50327		
	Casual/Formal	.73366	Fashionable/Unfashionable	.65582				
	Sporty/Dressy	.53338						
	Seasonal/Transitional	.51549						
Skirt	(Preference)		(Use)		(Occasion)			
	Design liked/Design disliked	.81333	Do not own/Own	-.88739	Casual/Formal	.66030		
	Colors liked/Colors disliked	.63101	Would wear/Would not wear	.80133	Sporty/Dressy	.53487		
	Fashionable/Unfashionable	.62455						
	Practical/Impractical	.53574						

The three variables listed below loaded on the Form Factor or Factor 3:

Tailored/Draped	.77334
Fitted/Loose	.68787
Structured/Unstructured	.59041

Factor 4 or the Use Factor consisted of two variables:

Do not own/Own	-.90409
Would wear/Would not wear	.85609

Comparison of the Occasion Factor for the group feminine apparel items and individual feminine apparel items indicated that the adjective pair Casual/Formal was present on all individual apparel Occasion Factors, as well as on the group Occasion Factor (Tables 8 and 11). Pleasure/Business and Sporty/Dressy variables loaded on four of the six feminine apparel item Occasion Factors and the group Occasion Factor. The Simple/Complex variable which loaded on the group Occasion Factor did not load on any of the individual apparel item Occasion Factors. The Preference/Image Group Factor contained items which loaded on the majority of the individual apparel item factors for Preference, Image or Preference/Use Factors. Although the Form Factor was present on only two apparel items at the criterion level established, inspection of the data indicated that two apparel items had a Form Factor contributing less than 4.5% of common variance and that variables loading on individual apparel items for the Form Factor were consistent with variables and loadings of the group Form Factor. The Use Factor for group and individual apparel items consisted of the same two variables with factor loadings higher and in the same direction.

Factor Analysis for Androgynous Clothing Items

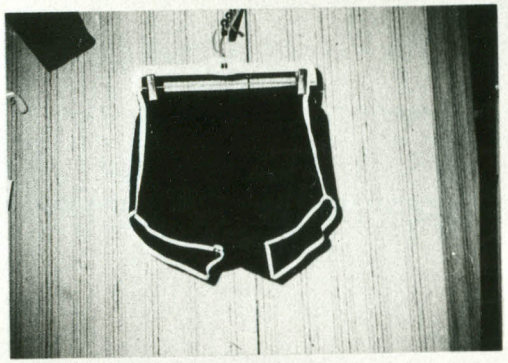
The six apparel items classified as androgynous included a pair of

maroon sweat pants, a pair of blue jeans, a pair of black jogging shorts, a maroon sweat jacket, a yellow rain slicker, and an OP T-shirt (Figure 3). Principal axis factor analysis provided three interpretable factors for each apparel item which accounted for approximately 25% of the common variance (Table 12). An Appearance Factor occurred on six apparel items. Factors relating to Preference/Use, Occasion, and Form were associated with at least half of the apparel items.

Appearance, Form, Occasion, and Preference/Use Factors were consistent across androgynous apparel items. The Appearance Factor which appeared on all apparel items generally contained Bright/Dull, Shiny/Dull, and Light/Dark variables (Table 13). The Colorful/Neutral variable loaded on this factor for half of the apparel items. The Form Factor for all apparel items contained Tailored/Draped and Fitted/Loose variables. For two of the three apparel items the Structured/Unstructured variable loaded on this factor. The Occasion Factor occurred on three of the six apparel items. The maroon sweat pants and coordinating sweat jacket contained this factor. Two variables, Comfortable/Uncomfortable and Casual/Formal, loaded on this factor for both apparel items. A Pleasure/Business (jacket) or a Seasonal/Transitional (pants) was the third variable which loaded on these two apparel items. For the third apparel item with an Occasion Factor, the Pleasure/Business and Comfortable/Uncomfortable variables were similiar to the variable loadings of the sweat pants and jacket. Preference/Use Factors for all androgynous apparel items loaded with the same three variables with the exception of the black running shorts which included a fourth variable, Colors liked/Colors disliked.

FIG.3 ANDROGYNOUS APPAREL ITEMS

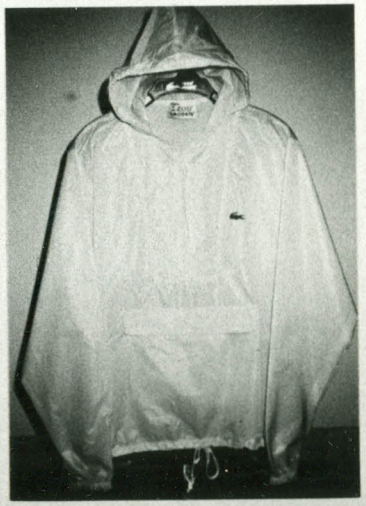
T-shirt



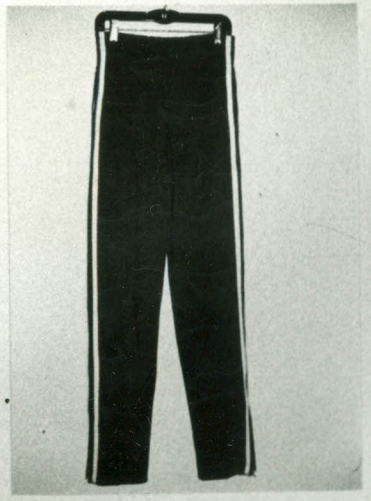
Running Shorts

Sweat Jacket

Blue Jeans



Rain Slicker



Sweat Pants

Table 12

Factors and Percentage of Variance of Factors Extracted for Androgynous Apparel Items

APPAREL ITEMS	FACTOR 1 %	FACTOR 2 %	FACTOR 3 %	TOTAL VARIANCE
Sweat Pants	Occasion 10.7	Preference/Use 8.6	Appearance 4.5	23.8
Blue Jeans	Appearance 12.2	Image/Use 5.7	Image 5.0	27.7
Running Shorts	Preference/Use 10.6	Appearance 8.4	Occasion 4.6	23.6
Sweat Jacket	Occasion 10.2	Form 9.1	Appearance 5.4	24.7
Rain Slicker	Appearance 12.8	Preference/Use 6.0	Form 5.0	23.8
T-shirt	Appearance 11.3	Form 9.1	Preference/Use 4.6	25.0

Table 13

Factor Analysis of 35 Bipolar Adjectives for Androgynous Clothing Items

GARMENT	FACTOR 1 Variables	Loading	FACTOR 2 Variables	Loading	FACTOR 3 Variables	Loading
Running Shorts	(Preference/Use)		(Appearance)		(Occasion)	
	Would wear/Would not wear	.81574	Shiny/Dull	.64467	Pleasure/Business	.72912
	Do not own/Own	-.74965	Sheer/Opaque	.61725	Comfortable/Uncomfortable	.61547
	Design liked/Design disliked	.55542			Simple/Complex	.55596
	Colors liked/Colors disliked	.50504				
Blue Jeans	(Appearance)		(Image/Use)		(Image)	
	Bright/Dull	.68674	Unusual/Usual	.61629	Fashionable/Unfashionable	.68840
	Shiny/Dull	.65602	Do not own/Own	.57759	Functional/Nonfunctional	.54308
	Light/Dark	.54532				
T-shirt	(Appearance)		(Form)		(Preference/Use)	
	Shiny/Dull	.69220	Tailored/Draped	.64715	Would wear/Would not wear	.71267
	Bright/Dull	.67973	Fitted/Loose	.59549	Do not own/Own	-.66705
	Colorful/Neutral	.59468	Angular/Rounded	.56330	Design liked/Design disliked	.57661
	Light/Dark	.52700				
Sweat Jacket	(Occasion)		(Form)		(Appearance)	
	Casual/Formal	.68572	Fitted/Loose	.73299	Bright/Dull	.66740
	Comfortable/Uncomfortable	.56896	Tailored/Draped	.72918	Light/Dark	.59975
	Pleasure/Business	.50695	Structured/Unstructured	.61094		
Sweat Pants	(Occasion)		(Preference/Use)		(Appearance)	
	Comfortable/Uncomfortable	.66684	Design liked/Design disliked	.80169	Bright/Dull	.67195
	Pleasure/Business	.53753	Would wear/Would not wear	.77390	Shiny/Dull	.64269
	Casual/Formal	.50848	Do not own/Own	-.55764	Colorful/Neutral	.50572
			Colors liked/Colors disliked	.53170		
Rain Slicker	(Appearance)		(Preference/Use)		(Form)	
	Shiny/Dull	.77258	Would wear/Would not wear	.78180	Tailored/Draped	.78211
	Light/Dark	.63608	Do not own/Own	-.55680	Fitted/Loose	.55764
	Bright/Dull	.60224	Design liked/Design disliked	.50093	Structured/Unstructured	.55641
	Colorful/Neutral	.56565				

Factor Analysis for Mean of Androgynous Clothing Items for 35 Bipolar Adjectives

The mean of the bipolar adjectives for the six androgynous clothing items was subjected to factor analysis.. A four-factor solution appeared most meaningful for androgynous apparel items and accounted for 33.5% of the common variance (Table 8). The four factors were identified as an Occasion Factor (14.9% of common variance), a Preference/Use Factor (8.8% of common variance), a Form Factor (5.2% of common variance) and an Appearance Factor (4.6% of common variance). Factor 1, the Occasion Factor, contained the following four variables and their factor loadings

Casual/Formal	.79696
Pleasure/Business	.76899
Comfortable/Uncomfortable	.64046
Sporty/Dressy	.63879

Factor 2 can be identified as a Preference/Use Factor and included the following four variables and their factor loadings:

Design liked/Design disliked	.83101
Do not own/Own	-.71337
Would wear/Would not wear	.71324
Colors liked/Colors disliked	.58649

The remaining two factors had three variables to load on them. Factor 3, the Form Factor, contained the following variables:

Fitted/Loose	.85611
Tailored/Draped	.74249
Structured/Unstructured	.57436

while the following variables were loading on Factor 4, the Appearance Factor:

Bright/Dull	.67270
Colorful/Neutral	.63987
Subtle/Bold	-.56302

Comparison of the group factors with the individual apparel item

factors revealed that although the Appearance Factor appeared on all apparel items, it was only the fourth factor in the group factor analysis accounting for only 4.6% of the common variance. The variables which loaded consistently on the individual apparel item factors and the group factor were Bright/Dull (five out of six apparel items) and Colorful/Neutral (three out of six apparel items). The variables which loaded on the group factors for the Form Factor and the Preference/Use Factor were consistent with variables loading on individual apparel item factors for those factors. Three of the four variables which loaded on the group Occasion Factor loaded on at least two of the three Occasion Factors for individual apparel items.

Comparison of Group Apparel Item Factor Analysis By Apparel Category

Six different factors were extracted for the group apparel item for androgynous, feminine, or masculine categories (Table 9). Of the six factors the Form Factor was extracted as Factor 3 for the three classification categories. Identical variables--Fitted/Loose, Tailored/Draped, and Structured/Unstructured--loaded on this factor for androgynous and feminine apparel items. The Form Factor for masculine apparel items consisted of Straight lines/Curved lines and Angular/Rounded variables. The three categories contained a Use Factor or a Preference/Use Factor. The variables Do no own/Own and Would wear/Would not wear loaded on each category and in the same direction. Respondents who owned apparel items in the apparel category used or would wear the apparel items. Androgynous and feminine apparel items had factors containing preference variables. Design liked/Design disliked and Colors liked/Colors disliked loaded on both factors. Apparel items

in androgynous and feminine categories also contained an Occasion Factor. Variables on this factor were identical with the exception of Comfortable/Uncomfortable which loaded on the androgynous apparel category Occasion Factor and Simple/Complex which loaded on the feminine apparel category Occasion Factor. Feminine apparel items were also described by an Image Factor which was part of the Preference Factor or Factor 1. An Image Factor was also Factor 1 for the masculine apparel items. All variables on the Image Factor were identical for the two categories except for the Unusual/Usual variable which loaded exclusively on the masculine apparel category. Appearance Factor loaded on androgynous and masculine apparel category factors. The androgynous apparel category was described in terms of Subtle/Bold, while the masculine apparel category was described in terms of Light/Dark and Shiny/Dull.

Reduced Variable Factor Analysis

The reduced variable factor analysis extracted identical factors to the initial 35 variable factor analysis for all apparel categories except Factor 1 for the masculine category (Table 14). For the reduced variable factor a Preference/Image factor was extracted while an Image Factor was extracted for the 35 variable factor analysis. The factors which loaded on the initial factor analysis for Image Factor loaded on the reduced variable factor analysis in a different order. Color and design preference variables loaded on the reduced variable Preference/Image Factor and did not load on any factor in the initial factor analysis for the masculine apparel category. A Preference/Image Factor was also extracted for the feminine apparel category. For both sex-typed apparel

Table 14

Factor Analysis of Reduced Bipolar Adjectives for Apparel Categorized as Masculine, Feminine or Androgynous

Factor Number	APPAREL CATEGORY					
	Feminine Variable	Loading	Masculine Variable	Loading	Androgynous Variable	Loading
Factor 1	(Preference/Image)		(Preference/Image)		(Occasion)	
	Design liked/Design disliked	.74273	Practical/Impractical	.70299	Casual/Formal	.81577
	Fashionable/Unfashionable	.68218	Fashionable/Unfashionable	.63531	Pleasure/Business	.77770
	Practical/Impractical	.66514	Functional/Nonfunctional	.59266	Comfortable/Uncomfortable	.65555
	Colors liked/Colors disliked	.63032	Unusual/Usual	-.55473	Sporty/Dressy	.63886
			Colors liked/Colors disliked	.52206		
			Design liked/Design disliked	.52087		
Factor 2	(Occasion)		(Appearance)		(Preference/Use)	
	Casual/Formal	.80316	Bright/Dull	.76342	Design liked/Design disliked	.80248
	Pleasure/Business	.75754	Colorful/Neutral	.66249	Would wear/Would not wear	.78324
	Simple/Complex	.55356	Shiny/Dull	.58076	Do not own/Own	-.63657
	Sporty/Casual	.51456	Light/Dark	.52074	Colors liked/Colors disliked	.53160
Factor 3	(Use)		(Use)		(Form)	
	Would wear/Would not wear	.88416	Would wear/Would not wear	.95085	Fitted/Loose	.89274
	Do not own/Own	-.84393	Do not own/Own	-.73763	Tailored/Draped	.72534
					Structured/Unstructured	.54194
Factor 4	(Form)		(Form)		(Appearance)	
	Tailored/Draped	.77217	Tailored/Draped	.84151	Bright/Dull	.71827
	Fitted/Loose	.69205	Fitted/Loose	.60609	Colorful/Neutral	.62906
	Structured/Unstructured	.58274	Structured/Unstructured	.51841	Subtle/Bold	-.54019
					Shiny/Dull	.51642

categories, the practicality and fashionableness of the apparel items were important descriptors for this sample. Appearance Factors were used to describe androgynous and masculine apparel categories. Sportswear apparel in these categories was considered bright, colorful and shiny. The androgynous apparel category was bold, while the masculine sportswear in this study was considered light in color. Preference and use of all apparel items was important for the three apparel categories. Colors liked/Colors disliked, Design liked/Design disliked, Do not own/Own, and Would wear/Would not wear loaded on factors identified as Preference/Image, Use or Preference/Use. The Form Factors for the three apparel categories contained the same variables as the Form Factors extracted for the 35 variable factor analysis, thus strengthening the description of all sportswear as tailored, fitted, and structured.

Factor Analysis of Reduced Variables by Sex

Differences in factor analysis for male and female subjects were evident in the number of adjectives loading on factors and the type and number of factors derived for each apparel category (Tables 15 and 16). Male responses loaded more variables (18) on feminine and androgynous categories than female responses (13, 15). Both male and female responses loaded an equal number of variables on masculine apparel categories. Five factors were derived from male responses for the feminine apparel category while only four factors were devived for female responses. Conversely, female responses derived five factors for the male apparel category, while male responses derived four factors. Male factors for the feminine apparel category were single category factors which included Occasion, Preference, Use, Form, and Appearance. Three of

Table 15

Factor Analysis of Reduced Bipolar Adjectives for Apparel Categorized as Masculine, Feminine or Androgynous by Female Subjects

Factor Number	APPAREL CATEGORY					
	Feminine Variable	Loading	Masculine Variable	Loading	Androgynous Variable	Loading
Factor 1	(Preference/Use/Image)		(Image)		(Occasion)	
	Would wear/Would not wear	.88541	Unusual/Usual	-.73927	Casual/Formal	.77654
	Design liked/Design disliked	.86446	Practical/Impractical	.70675	Pleasure/Business	.76656
	Do not own/Own	-.68354	Functional/Nonfunctional	.59810	Sporty/Dressy	.68499
	Fashionable/Unfashionable	.65207	Fashionable/Unfashionable	.59735	Comfortable/Uncomfortable	.52490
	Practical/Impractical	.55681				
	Colors liked/Colors disliked	.54646				
	Functional/Nonfunctional	.50271				
Factor 2	(Occasion)		(Occasion)		(Form)	
	Casual/Formal	.78253	Casual/Formal	.83043	Fitted/Loose	.80470
	Pleasure/Business	.60629	Sporty/Dressy	.67706	Tailored/Draped	.70460
	Simple/Complex	.60195	Pleasure/Business	.65215	Structured/Unstructured	.60930
	Sporty/Dressy	.53346				
Factor 3	(Appearance)		(Use)		(Use)	
	Bright/Dull	.74034	Would wear/Would not wear	.88701	Would wear/Would not wear	.83745
	Colorful/Neutral	.73526	Do not own/Own	-.80294	Do not own/Own	-.74047
Factor 4	(Form)		(Form)		(Appearance)	
	Fitted/Loose	.71309	Straight lines/Curved lines	.81063	Bright/Dull	.75374
	Tailored/Draped	.59345	Angular/Rounded	.68228	Colorful/Neutral	.60353
			Tailored/Draped	.51512	Subtle/Bold	-.57101
Factor 5			(Appearance)		(Image)	
			Bright/Dull	.71229	Practical/Impractical	.56855
			Colorful/Neutral	.67898		

Table 16

Factor Analysis of Reduced Bipolar Adjectives for Apparel Categorized as Masculine, Feminine or Androgynous by Male Subjects

Factor Number	APPAREL CATEGORY					
	Feminine Variable	Loading	Masculine Variable	Loading	Androgynous Variable	Loading
Factor 1	(Occasion)		(Preference/Use)		(Occasion/Image)	
	Pleasure/Business	.77027	Would wear/Would not wear	.82595	Casual/Formal	.80066
	Casual/Formal	.76488	Design liked/Design disliked	.81242	Comfortable/Uncomfortable	.78387
	Practical/Impractical	.63630	Colors liked/Colors disliked	.70635	Pleasure/Business	.75647
	Simple/Complex	.55133	Do not own/Own	-.65299	Sporty/Dressy	.59381
	Sporty/Dressy	.50535	Fashionable/Unfashionable	.63402	Practical/Impractical	.59232
					Functional/Nonfunctional	.56350
Factor 2	(Preference)		(Image)		(Preference/Use)	
	Colors liked/Colors disliked	.82519	Practical/Impractical	.84788	Would wear/Would not wear	.75563
	Design liked/Design disliked	.78154	Functional/Nonfunctional	.60967	Design liked/Design disliked	.74374
	Fashionable/Unfashionable	.70189			Do not own/Own	-.66397
					Colors liked/Colors disliked	.63690
Factor 3	(Use)		(Appearance)		(Appearance)	
	Do not own/Own	-.83798	Bright/Dull	.73742	Shiny/Dull	.72852
	Would wear/Would not wear	.81407	Colorful/Neutral	.68646	Bright/Dull	.67393
	Masculine/Feminine	.64328	Shiny/Dull	.55887	Colorful/Neutral	.57151
			Light/Dark	.54331		
	(Form)		(Form)			
Factor 4	Tailored/Draped	.85414	Fitted/Loose	.73778	(Form I)	
	Fitted/Loose	.72674	Tailored/Draped	.70780	Fitted/Loose	.89131
	Structured/Unstructured	.70558	Structured/Unstructured	.55137	Tailored/Draped	.73570
					Structured/Unstructured	.56465
	(Appearance)					
Factor 5	Light/Dark	.69405			(Form II)	
	Bright/Dull	.58628			Straight lines/Curved lines	.74132
	Shiny/Dull	.52309			Angular/Rounded	.61501
	Colorful/Neutral	.50675				

the factors--Occasion, Appearance, and Form--were single category factors for female responses. Factor 1, however, had three different categories incorporated in it for female responses. The Preference variables--Design liked/Design disliked, Colors liked/Colors disliked, and Fashionable/Unfashionabl--loaded on Factor 1; as did the use variables, Would wear/Would not wear and Do not own/Own. Two image variables, Practical/Impractical and Functional/Nonfunctional, also loaded on Factor 1 for female responses. Factor 1 then can be considered a Preference/Use/Image Factor. The importance of this combination in describing the feminine apparel category by females was evident by the 19.5% common variance of Factor 1 (Table 17). All four factors extracted for female responses to the feminine apparel category contributed 40.3% of the variance in variables. Differences in variables which loaded on specific factors on the feminine apparel category were observed for five variables. At least one more variable loaded on the Appearance and the Use Factors for male responses than for female responses. The adjective pairs Light/Dark and Shiny/Dull were used by males more than females to describe appearance of the feminine apparel category. Male respondents also used a Structured/Unstructured adjective pair to define form of apparel item. The Masculine/Feminine adjective pair loaded on the Use Factor for the feminine apparel category with male responses. The direction of the loading indicated that ownership and use of the feminine apparel category was related to the perception of the masculinity of the item. Four of the differences in adjective descriptors were derived from male responses on the feminine category. Only one variable loaded on a factor derived from female responses which was not present on the male

Table 17

Factors and Percentage of Variance for Factors Extracted for the Reduced Variable Factor Analysis of Masculine, Feminine or Androgynous Apparel Categories by Sex

SEX	APPAREL CATEGORY	FACTOR 1 %	FACTOR 2 %	FACTOR 3 %	FACTOR 4 %	FACTOR %	TOTAL VARIANCE
Male	Masculine	Preference/Use 19.9	Image 11.7	Appearance 8.9	Form 6.2		46.7
	Feminine	Occasion 16.0	Preference 11.2	Use 9.9	Form 8.4	Appearance 5.7	51.3
	Androgynous	Occasion/Image 21.8	Preference/Use 10.4	Appearance 7.5	Form I 6.8	Form II 5.0	51.6
Female	Masculine	Image 19.5	Occasion 9.1	Use 7.3	Form 7.1	Appearance 5.0	48.1
	Feminine	Preference/Use/ Image 19.5	Occasion 8.3	Appearance 6.8	Form 5.7		40.3
	Androgynous	Occasion 14.9	Form 13.9	Use 6.2	Appearance 6.1	Image 4.6	45.7

response factors. The variable, Functional/Nonfunctional, loaded on the Preference/Use/Image Factor for the feminine category.

The male apparel category factor analysis provided five single category factors for female responses but only three single factor categories for male responses. One compound factor, Preference/Use, was extracted for male response to the male apparel category. Use and Appearance Factors contained variables which appeared on corresponding factors for both male and female responses. Male response for the Appearance Factor contained two more variables, Shiny/Dull and Light/Dark, than the Appearance Factor for female responses. Although a Form Factor was present for both male and female responses, Tailored/Draped was the only variable which loaded on the factor for both sets of responses. Fitted/Loose and Structured/Unstructured loaded on the male responses, while Straight lines/Curved lines and Angular/Rounded loaded on the Form Factor for female responses. Female responses loaded Unusual/Usual and Fashionable/Unfashionable on an Image Factor on the masculine apparel category. The Occasion Factor loaded as Factor 2 for masculine sportswear apparel with female respondents but did not load at criterion levels for male respondents.

Androgynous apparel category had similar factor categories for both male and female responses. Male respondents defined two Form Factors where as only one was defined for female responses. The first Form Factor extracted for male responses was identical in variables and variable loading position to female responses. The second Form Factor for male responses loaded variables Straight lines/Curved lines and Angular/Rounded. Male responses provided a Preference Factor not

provided by female responses. The Subtle/Bold variable loaded on an Appearance Factor for androgynous apparel category for female responses with Shiny/Dull loading on this factor for males responses.

Factor Analysis of Reduced Variables by Ethnic Group

The reduced variable list was subjected to factor analysis on the basis of responses from black and white subjects. The amount of variance explained by the factors for apparel categories was approximately 50%. Black responses extracted more factors for androgynous and masculine categories (5) than white responses (4) (Tables 18 and 19). Except for an image component in Factor 1 for androgynous and feminine apparel categories for white repsonses and the preference component to the Preference/Image Factor and a Use Factor for the masculine apparel category for black responses,the factor categories were similar for black and white responses to each apparel category. Differences were observed in variable loadings on similar factors for each apparel category based on ethnic group.

White responses to the feminine apparel category loaded Sporty/Dressy on Factor 2, an Occasion Factor. Black responses for this factor loaded Simple/Complex and placed the factor in the first position with 14.8% of common variance (Table 20). Other differences in black and white responses for the feminine apparel category were observed in the Appearance Factor, Factor 3 for black responses and Factor 5 for white responses. Of the two variables which loaded on this factor, only the Bright/Dull variable loaded on the factor for both ethnic groups. A Colorful/Neutral variable loaded on the Appearance Factor for white responses, while a Light/Dark variable loaded on this factor for black

Table 18

Factor Analysis of Reduced Bipolar Adjectives for Apparel Categorized as Masculine, Feminine or Androgynous by White Subjects

Factor Number	APPAREL CATEGORY					
	Feminine		Masculine		Androgynous	
	Variable	Loading	Variable	Loading	Variable	Loading
Factor 1	(Preference/Image)		(Appearance)		(Occasion/Image)	
	Practical/Impractical	.75474	Colorful/Neutral	.80892	Casual/Formal	.81208
	Fashionable/Unfashionable	.75028	Bright/Dull	.68520	Pleasure/Business	.78549
	Design liked/Design disliked	.72502	Shiny/Dull	.58363	Comfortable/Uncomfortable	.70828
	Colors liked/Colors disliked	.63300	Light/Dark	.56709	Sporty/Dressy	.67682
	Functional/Nonfunctional	.62042			Unusual/Usual	-.66623
					Practical/Impractical	.57982
					Functional/Nonfunctional	.53514
Factor 2	(Occasion)		(Image)		(Preference/Use)	
	Casual/Formal	.86195	Functional/Nonfunctional	.76238	Would wear/Would not wear	.87699
	Pleasure/Business	.76499	Practical/Impractical	.63885	Do not own/Own	-.73735
	Sporty/Dressy	.58632	Unusual/Usual	-.54339	Design liked/Design disliked	.66596
			Fashionable/Unfashionable	.53679		
Factor 3	(Use)		(Occasion)		(Appearance)	
	Do not own/Own	-.91118	Casual/Formal	.86230	Bright/Dull	.71288
	Would wear/Would not wear	.86569	Pleasure/Business	.70441	Colorful/Neutral	.66474
			Sporty/Dressy	.57607	Shiny/Dull	.61769
					Subtle/Bold	-.52513
Factor 4	(Form)		(Form)		(Form)	
	Tailored/Draped	.83845	Angular/Rounded	.81087	Tailored/Draped	.83511
	Fitted/Loose	.70769	Straight lines/Curved lines	.65652	Fitted/Loose	.80888
	Structured/Unstructured	.57891				
Factor 5	(Appearance)					
	Bright/Dull	.76562				
	Colorful/Neutral	.61176				

Table 19

Factor Analysis of Reduced Bipolar Adjectives for Apparel Categorized as Masculine, Feminine, or Androgynous by Black Subjects

Factor Number	APPAREL CATEGORY					
	Feminine Variable	Loading	Masculine Variable	Loading	Androgynous Variable	Loading
Factor 1	(Occasion)		(Preference/Image)		(Occasion)	
	Casual/Formal	.76167	Colors liked/Colors disliked	.73914	Pleasure/Business	.87049
	Simple/Complex	.75341	Fashionable/Unfashionable	.72205	Casual/Formal	.84505
	Pleasure/Business	.61398	Practical/Impractical	.65704	Comfortable/Uncomfortable	.69364
			Unusual/Usual	-.60598	Sporty/Dressy	.69262
			Design liked/Design disliked	.56483		
			Functional/Nonfunctional	.55588		
Factor 2	(Preference)		(Use)		(Appearance)	
	Fashionable/Unfashionable	.69149	Do not own/Own	-.86749	Bright/Dull	.71758
	Design liked/Design disliked	.60155	Would wear/Would not wear	.86332	Shiny/Dull	.68373
	Colors liked/Colors disliked	.50314			Sheer/Opaque	.60756
					Light/Dark	.52675
Factor 3	(Appearance)		(Appearance)		(Form)	
	Bright/Dull	.63672	Bright/Dull	.74243	Fitted/Loose	.87883
	Light/Dark	.59831	Shiny/Dull	.59788	Tailored/Draped	.64493
					Structured/Unstructured	.55359
			(Form)		(Use)	
			Straight lines/Curved lines	.88727	Would wear/Would not wear	.87483
Factor 4	(Use)		Angular/Rounded	.66076	Do not own/Own	-.70753
	Do not own/Own	-.89862				
	Would wear/Would not wear	.76538	(Occasion)		(Preference)	
			Casual/Formal	.69986	Design liked/Design disliked	.66515
Factor 5	(Form)		Pleasure/Business	.60045	Colors liked/Colors disliked	.64171
	Fitted/Loose	.78452	Sporty/Dressy	.56664		
	Tailored/Draped	.66638				
	Structured/Unstructured	.55678				

Table 20

Factors and Percentage of Variance for Factors Extracted for the Reduced Variable Factor Analysis of Masculine, Feminine or Androgynous Apparel Categories by Ethnic Group

ETHNIC GROUP	APPAREL CATEGORY	FACTOR 1 %	FACTOR 2 %	FACTOR 3 %	FACTOR 4 %	FACTOR 5 %	TOTAL VARIANCE
Black	Masculine	Preference/ Image 17.5	Use 9.5	Appearance 9.1	Form 6.9	Occasion 5.3	48.3
	Feminine	Occasion 14.8	Preference 10.4	Appearance 8.1	Use 6.8	Form 5.9	45.9
	Androgynous	Occasion 17.5	Appearance 10.4	Form 8.2	Use 6.2	Preference 5.6	47.9
White	Masculine	Appearance 20.1	Image 14.5	Occasion 7.6	Form 6.1		48.3
	Feminine	Preference/ Image 17.0	Occasion 12.2	Use 9.2	Form 7.9	Appearance 4.6	50.9
	Androgynous	Occasion/Image 21.8	Preference/Use 13.0	Appearance 8.0	Form 6.0		48.8

responses. Factor analysis extracted an Image Factor for the feminine apparel category from white responses but no corresponding factor was extracted for black responses.

Comparison of black and white responses to the masculine apparel category indicated identical variables loaded on the Form and Occasion Factors for both ethnic groups. The image component of the Preference/Image Factor for black responses contained the same variables which loaded on the separate Image Factor for white responses. Two more variables, Colorful/Neutral and Light/Dark, loaded on the Appearance Factor for white responses than on the Appearance Factor for black responses.

Factors for the androgynous apparel category were similar for black and white responses. Inspection of the data indicated that one more variable loaded on the Form and Preference Factors for black responses than for white responses. An Appearance Factor was extracted for both ethnic groups with an equal number of variables loaded on the factor. Only two variables, Bright/Dull and Shiny/Dull, loaded on the Appearance Factors for both groups. Sheer/Opaque and Light/Dark variables loaded on the black response factors, while Colorful/Neutral and Subtle/Bold variables loaded for the white responses. The image component of the Occasion/Image Factor was extracted as part of Factor 1 for white responses.

Factor Analysis of Reduced Variables by PAQ Group

Subjects were divided into four groups on the basis of scores from the Personal Attributes Questionnaire. Factor analysis of responses for the subjects in each group extracted six factors for each apparel

category for Group 1, the Androgynous classification. Five factors were obtained for each apparel category for the Feminine classification or Group 2. The Masculine classification and the Undifferentiated classifications had five factors extracted for androgynous and feminine apparel categories and four factors for the masculine apparel categories (Table 21). Approximately 50% of variance was explained by the factors extracted for each apparel category by PAQ group. Six different factors were represented on the apparel categories. Four of the six factors were present on the factors extracted for each PAQ group for the androgynous apparel category. A Use Factor was extracted for the Androgynous and Undifferentiated groups but not for the sex-typed groups. An image component was part of an Appearance/Image Factor for the Feminine PAQ group and part of a Preference/Image Factor for the Undifferentiated PAQ for the feminine apparel category. Preference, Appearance, Form, Use and Occasion Factors were extracted for each PAQ group for the feminine apparel category. For the masculine apparel category, Form, Use, Appearance, Preference and Image Factors were extracted for each PAQ group. An Occasion Factor was obtained for all PAQ groups except the Undifferentiated classification. For the Androgynous apparel category, 23 variables were subjected to analysis. A total of 18 variables loaded on factors extracted from the Masculine group responses, while only 15 variables loaded on factors extracted from Feminine group responses. Seventeen variables loaded on factors extracted from Androgynous and Undifferentiated groups.

A Form Factor was extracted for the feminine apparel category for all PAQ groups. For Undifferentiated and Feminine groups,

Table 21

Factors and Percentage of Variance for Factors Extracted for the Reduced Variable Factor Analysis of Masculine, Feminine or Androgynous Apparel by PAQ Group Classification

PAQ GROUP	APPAREL CATEGORY	FACTOR 1 %	FACTOR 2 %	FACTOR 3 %	FACTOR 4 %	FACTOR 5 %	FACTOR 6 %	TOTAL VARIANCE
Androgynous	Masculine	Form 18.6	Use 14.6	Appearance 8.5	Preference 6.1	Occasion 5.7	Image 4.6	58.0
Feminine	Masculine	Image 18.6	Occasion 12.6	Preference/Use 7.2	Form 6.8	Appearance 5.2		50.3
Masculine	Masculine	Preference/Use Appearance 23.8	Occasion/Image 14.9	Form I 10.0	Form II 6.4	Form II 6.4		55.1
Undifferentiated	Masculine	Preference/Image 18.9	Appearance 11.1	Form 9.7	Use 8.0			47.7
Androgynous	Feminine	Preference/Image 16.8	Appearance 9.2	Form I 8.3	Use 6.3	Occasion 5.0	Form II 4.5	50.1
Feminine	Feminine	Appearance/Image 16.5	Preference/Image 12.6	Occasion 8.6	Use 7.5	Form F 5.3		50.5
Masculine	Feminine	Occasion 17.3	Form/Appearance 14.5	Preference 13.5	Use 7.1	Form 4.7		57.2
Undifferentiated	Feminine	Occasion 18.3	Preference/Image 10.1	Form 9.7	Use 7.3	Appearance 5.4		50.8
Androgynous	Androgynous	Occasion 19.2	Preference/Use 12.0	Form I 9.2	Appearance I 7.8	Form II 5.9	Appearance II 4.5	58.7
Feminine	Androgynous	Preference 15.7	Appearance 14.0	Occasion 9.1	Form I 6.3	Form II 4.6		49.7
Masculine	Androgynous	Occasion/Image 22.1	Preference/Use 12.9	Form I 7.1	Appearance 6.4	Form II 4.8		53.3
Undifferentiated	Androgynous	Preference/Image 18.6	Occasion 15.6	Appearance 9.3	Form 6.4	Use 5.0		55.0

Tailored/Draped and Fitted/Loose variables loaded on the factor (Table 22). Two Form Factors were extracted for Androgynous and Masculine groups. The first Form Factor included Straight lines/Curved lines and Angular/Rounded variables, while the second Form Factor included variables which loaded on the Form Factors for Feminine and Undifferentiated categories. The Use Factor was extracted as Factor 4 for all PAQ groups and included the same variables. The Preference Factor was extracted for all groups as well, but the variables loading on it were not identical. The Colors liked/Colors disliked variable did not load on the Preference/Image Factor for the Feminine group. The Preference Factor was combined with image variables, forming a Preference/Image Factor for three of the PAQ groups--Androgynous, Feminine, and Undifferentiated. The Fashionable/Unfashionable variable loaded on this factor for the three groups. Functional/Nonfunctional or Practical/Impractical was the other variable which loaded for the groups on the Preference/Image factor. For the Feminine group a second Image Factor was extracted. This factor was combined with appearance variables. The Immodest/Modest and Sheer/Opaque variables loaded on this factor and were used only by this group in describing the feminine apparel category. The Revealing/Concealing variable was also used by the Androgynous group to describe the feminine apparel category but it loaded on the first Form Factor for that group. The Appearance Factor which appeared as a separate factor for the Androgynous Group and a compound, Form/Appearance, for the Masculine group contained Bright/Dull and Colorful/Neutral variables. The Androgynous group also used the Light/Dark variable to define the Appearance Factor. Of the 24 variables

Table 22

Factor Analysis of Reduced Bipolar Adjectives for the Feminine Apparel Category by PAQ Group

Factor Number	PERSONAL ATTRIBUTES QUESTIONNAIRE GROUP							
	Androgynous Group		Feminine Group		Masculine Group		Undifferentiated Group	
	Variable	Loading	Variable	Loading	Variable	Loading	Variables	Loading
Factor 1	(Preference/Image)		(Appearance/Image)		(Occasion)		(Occasion)	
	Fashionable/Unfashionable	.75255	Sheer/Opaque	.78316	Casual/Formal	.86940	Casual/Formal	.66735
	Design liked/Design disliked	.70570	Revealing/Concealing	.73017	Pleasure/Business	.68736	Pleasure/Business	.64718
	Colors liked/Colors disliked	.64060	Immodest/Modest	.62465	Sporty/Dressy	.61159	Sporty/Dressy	.59389
	Functional/Nonfunctional	.61004	Simple/Complex	-.61523	Simple Complex	.51365	Simple/Complex	.59366
							Angular/Rounded	.52731
Factor 2	(Appearance)		(Preference/Image)		(Form/Appearance)		(Preference/Image)	
	Bright/Dull	.68676	Design liked/Design disliked	.81807	Straight lines/Curved lines	.77987	Colors liked/Colors disliked	.86328
	Colorful/Neutral	.62220	Practical/Impractical	.75356	Angular/Rounded	.63958	Design liked/Design disliked	.74521
	Light/Dark	.50341	Fashionable/Unfashionable	.57619	Bright/Dull	.58869	Fashionable/Unfashionable	.64334
					Colorful/Neutral	.50258	Practical/Impractical	.61525
Factor 3	(Form I)		(Occasion)		(Preference)		(Form)	
	Straight lines/Curved lines	.77355	Casual/Formal	.84911	Fashionable/Unfashionable	.76515	Structured/Unstructured	.80976
	Angular/Rounded	.68593	Sporty/Dressy	.76032	Design liked/Design disliked	.72399	Tailored/Draped	.71365
	Revealing/Concealing	-.51405	Pleasure/Business	.54035	Colors liked/Colors disliked	.66456	Fitted/Loose	.63472
Factor 4	(Use)		(Use)		(Use)		(Use)	
	Do not own/Own	-.86021	Do not own/Own	-.88440	Do not own/Own	.84516	Would wear/Would not wear	.95321
	Would wear/Would not wear	.72648	Would wear/Would not wear	.81228	Would wear/Would not wear	-.81905	Do not own/Own	-.79628
Factor 5	(Occasion)		(Form)		(Form)		(Appearance)	
	Casual/Formal	.78737	Tailored/Draped	.86383	Structured/Unstructured	.78640	Colorful/Neutral	.67046
	Simple/Complex	.63545	Fitted/Loose	.70830	Fitted/Loose	.69929	Shiny/Dull	.57342
	Pleasure/Business	.63199			Tailored/Draped	.58391	Bright/Dull	.56909
							Light/Dark	.55442
Factor 6	(Form II)							
	Fitted/Loose	.71873						
	Tailored/Draped	.55839						

subjected to factor analysis for the feminine apparel category, a total of 18 loaded on the factors for the Undiferentiated group, while only 14 loaded on factor for the Feminine group. Seventeen variables loaded on factors for the Androgynous group and 16 variables loaded on factors from Masculine group responses.

Six factors--Form, Use, Appearance, Preference, Occasion, and Image--were extracted for the masculine apparel category from Androgynous group responses (Table 23). While only four or five factors were extracted for the masculine apparel category for the remaining three PAQ groups, at least one factor for each group was a combination factor. The Occasion Factor was the only factor which was not extracted for all PAQ groups. A Form Factor was derived for all groups but the variables which loaded on it varied. Tailored/Draped was the only variable to load on all Form Factors. Fitted/Loose and/or Structured/Unstructured variables loaded on the Form Factors for each group. Two Form Factors were extracted for the Masculine group while only one Form Factor was extracted for the other PAQ groups. The additional Form Factor contained the variables, Straight lines/Curved lines and Angular/Rounded, which also loaded on the Form Factor for the Androgynous group. Preference and Use Factors for the groups were similar. Only the Feminine group Preference/Use Factor did not load the Colors liked/Colors disliked variable. The Pleasure/Business variable did not load on the Masculine group's Occasion/Image Factor but was present on the Occasion Factors for the Androgynous and Feminine groups. The Image Factor was similar for all groups even though it formed combination factors for the Masculine group (Occasion/Image Factor) and the Undifferentiated group

(Preference/Image Factor). Colorful/Neutral and Bright/Dull variables loaded on the Appearance Factors for all PAQ groups. For the Androgynous and Undifferentiated groups, the Light/Dark variable loaded on the Appearance Factor. The Shiny/Dull variable loaded on Appearance Factors for Masculine and Undifferentiated groups. The Appearance Factor for the Masculine groups was a combination factor, Preference/Use/Appearance. Of the 23 variables subjected to factor analysis for the masculine apparel category, 20 loaded on factors for Androgynous and Masculine groups. Only 13 variables loaded on factors for the Feminine group in this apparel category. A total of 15 variables loaded on factors extracted from Undifferentiated responses.

Comparisons of variable loadings and factors extracted for the PAQ groups on the androgynous apparel category indicated the extraction of two Form Factors for all but the Undifferentiated group (Table 24). The overall shape of the garment was identified by the variables: Fitted/Loose, Tailored/Draped and Structured/Unstructured and was extracted as the first Form Factor. Androgynous, Masculine and Feminine groups further defined the form of the androgynous apparel category by identifying it as angular and composed of straight lines. The Undifferentiated PAQ group defined form through two variables: Fitted/Loose and Tailored/Draped. All PAQ groups loaded the following variables on an Appearance Factor: Shiny/Dull, Subtle/Bold, and Colorful/Neutral. The Bright/Dull variable loaded on an Appearance Factor for Undifferentiated, Androgynous, and Feminine groups. In addition the Feminine group loaded a Sheer/Opaque variable and the Androgynous group loaded a Light/Dark variable on Appearance Factors.

Table 23

Factor Analysis of Reduced Bipolar Adjectives for the Masculine Apparel Category by PAQ Group

Factor Number	PERSONAL ATTRIBUTES QUESTIONNAIRE GROUP							
	Androgynous Group Variable	Loading	Feminine Group Variable	Loading	Masculine Group Variable	Loading	Undifferentiated Group Variable	Loading
Factor 1	(Form)		(Image)		(Preference/Use/Appearance)		(Preference/Image)	
	Angular/Rounded	.85626	Unusual/Usual	-.72841	Colors liked/Colors disliked	.77046	Practical/Impractical	.77072
	Structured/Unstructured	.70209	Practical/Impractical	.64647	Design liked/Design disliked	.76932	Functional/Nonfunctional	.74080
	Straight lines/Curved lines	.69589	Fashionable/Unfashionable	.54516	Bright/Dull	.75224	Fashionable/Unfashionable	.68843
	Tailored/Draped	.56265			Shiny/Dull	.74109	Colors liked/Colors disliked	.66713
	Subtle/Bold	.52872			Colorful/Neutral	.73269	Design liked/Design disliked	.61697
					Would wear/Would not wear	.68938	Unusual/Usual	.50546
					Fashionable/Unfashionable	.58749		
					Do not own/Own	-.51677		
Factor 2	(Use)		(Occasion)		(Occasion/Image)		(Appearance)	
	Do not own/Own	-.87551	Casual/Formal	.84101	Unusual/Usual	-.68345	Bright/Dull	.87929
	Would wear/Would not wear	.86043	Sporty/Dressy	.82483	Practical/Impractical	.65010	Light/Dark	.69288
			Pleasure/Business	.68862	Casual/Formal	.64282	Colorful/Neutral	.64205
					Functional/Nonfunctional	.62858	Shiny/Dull	.57096
					Subtle/Bold	.62536		
					Sporty/Dressy	.54401		
Factor 3	(Appearance)		(Preference/Use)		(Form I)		(Form)	
	Bright/Dull	.75833	Would wear/Would not wear	.98365	Straight lines/Curved lines	.80827	Tailored/Draped	.84832
	Light/Dark	.63299	Do not own/Own	-.72812	Angular/Rounded	.80266	Fitted/Loose	.66927
	Colorful/Neutral	.59450	Design liked/Design disliked	.64684	Tailored/Draped	.53256	Structured/Unstructured	.65336
Factor 4	(Preference)		(Form)		(Form II)		(Use)	
	Colors liked/Colors disliked	.80828	Tailored/Draped	.91332	Simple/Complex	-.70502	Do not own/Own	-.83180
	Design liked/Design disliked	.78081	Fitted/Loose	.59708	Structured/Unstructured	.63391	Would wear/Would not wear	.74754
	Fashionable/Unfashionable	.51979			Fitted/Loose	.62627		
Factor 5	(Occasion)		(Appearance)					
	Sporty/Dressy	.77577	Bright/Dull	.67526				
	Pleasure/Business	.64245	Colorful/Neutral	.65775				
	Casual/Formal	.62483						
Factor 6	(Image)							
	Functional/Nonfunctional	.72011						
	Practical/Impractical	.70322						
	Unusual/Usual	-.63676						

Occasion, Preference and Use Factors contained similar variables for the PAQ groups. For Masculine and Undifferentiated groups, the Occasion or Preference Factor formed a combination factor with Image. With the exception of the Functional/Nonfunctional variable, the variables describing Image were consistent for the groups.

Hypothesis

The .05 and .01 significance levels from Chi-square analyses were used in evaluating the hypotheses formulated for this study.

Hypothesis 1: There is no significant difference in the classification of apparel items as masculine, feminine or androgynous, by ethnic group.

a. The following masculine apparel items are not classified diffferently by black and white subjects:

(1) bermuda shorts
(2) madras sport coat
(3) blazer
(4) plaid sport coat
(5) plaid shirt
(6) striped polo shirt

Two of the six masculine apparel items were classified differently by black and white subjects. Differences in the perception of the plaid shirt and the striped polo shirt were significant at the .01 level. The remaining four apparel items (bermuda shorts, madras sport coat, blazer, and plaid shirt) were rated similarily by black and white subjects.

b. The following feminine apparel items are not classified differently by black and white subjects:

(1) culotte skirt
(2) skirt
(3) plaid blouse
(4) sleeveless top
(5) fifties blouse
(6) halter top

Significant differences were obtained for all of the feminine

apparel items by black and white subjects. The culotte skirt, plaid blouse, and halter top were significant at the .05 level, while the skirt, sleeveless top, and fifties blouse were significant at the .01 level.

c. The following androgynous apparel items are not classified differently by black and white subjects:
(1) sweat pants
(2) blue jeans
(3) running shorts
(4) sweat jacket
(5) rain slicker
(6) T-shirt

Significant differences were found in the classification of the T-shirt (.05) and the sweat pants (.01) by ethnic group. The rain slicker, sweat jacket, running shorts, and blue jeans were not rated differently by black and white subjects.

Hypothesis 2: There is no significant difference in the classification of apparel items as masculine, feminine, or androgynous by sex of respondent.

a. The following masculine apparel items are not classified differently by males and females:
(1) bermuda shorts
(2) madras sport coat
(3) blazer
(4) plaid sport coat
(5) plaid shirt
(6) striped polo shirt

Three masculine apparel items were rated differently at significant levels by males and females. Bermuda shorts and blazer were significant at the .01 level, while the plaid shirt was significant at the .05 level. No significant differences were obtained for the masculine-feminine ratings for the madras sport coat, plaid sport coat, or striped polo shirt.

b. The following feminine apparel items are not classified differently by males and females:

(1) culotte skirt
(2) skirt
(3) plaid blouse
(4) sleeveless top
(5) fifties blouse
(6) halter top

The halter top was the only feminine apparel item for which significant differences at the.05 level occurred for males and females.

c. The following androgynous apparel items are not classified differently by males and females:

(1) sweat pants
(2) blue jeans
(3) running shorts
(4) sweat jacket
(5) rain slicker
(6) T-shirt

Significant differences were obtained for the classification of all androgynous apparel items by sex of the respondents. The sweat jacket and the rain slicker were significant at the .05 level, while differences in the perception of the sweat pants, blue jeans, running shorts, and T-shirt were significant at the .01 level.

Hypothesis 3: There is no significant difference in the classification of apparel items as masculine, feminine, or androgynous by PAQ group classification.

a. The following masculine apparel items are not classified differently by the Androgynous, Feminine, Masculine, and Undifferentiated PAQ groups:

(1) bermuda shorts
(2) madras sport coat
(3) blazer
(4) plaid sport coat
(5) plaid shirt
(6) striped polo shirt

Three of the six apparel items were classified differently by the PAQ groups. The bermuda shorts, plaid shirt and striped polo shirt were

significant at the .01 level. No significant differences were obtained for the classification of the madras sport coat, plaid sport coat and blazer by the four PAQ groups.

b. The following feminine apparel items are not classified differently by the Androgynous, Feminine, Masculine, and Undifferentiated PAQ groups:
(1) culotte skirt
(2) skirt
(3) plaid blouse
(4) sleeveless top
(5) fifties blouse
(6) halter top

Significant differences were found in the classification of the sleeveless top and the skirt at the .01 level for the four PAQ groups. The plaid blouse had significant differences at the .05 level for the four PAQ groups. No significant differences were obtained for the classification of the culotte skirt, sleeveless top, and fifties blouse *by the PAQ classification groups.*

c. The following androgynous apparel items are not classified differently by the Androgynous, Feminine, Masculine, and Undifferentiated PAQ groups:
(1) sweat pants
(2) blue jeans
(3) running shorts
(4) sweat jacket
(5) rain slicker
(6) T-shirt

The T-shirt was the only androgynous apparel items for which significant differences at the .05 level in the masculine-feminine ratings occurred by PAQ groups.

Hypothesis 4: There is no significant difference in the ownership of apparel items classified as masculine, feminine, or androgynous by ethnic group

a. The following masculine apparel items are not owned differently by black and white subjects:

(1) bermuda shorts
(2) madras sport coat
(3) blazer
(4) plaid sport coat
(5) plaid shirt
(6) striped polo shirt

There were no significant differences in the ownership of all the masculine apparel items by ethnic group.

b. The following feminine apparel items are not owned differently by black and white subjects:
(1) culotte skirt
(2) skirt
(3) plaid blouse
(4) sleeveless top
(5) fifties blouse
(6) halter top

Significant differences were obtained for the ownership of all six feminine apparel items by black and white subjects. Differences in the ownership of the sleeveless top were significant at the .05 level. Ownership of the remaining five items (culotte skirt, skirt, plaid blouse, fifties blouse, and halter top) were significant at the .01 level.

c. The following androgynous apparel items are not owned differently by black and white subjects:
(1) sweat pants
(2) blue jeans
(3) running shorts
(4) sweat jacket
(5) rain slicker
(6) T-shirt

Blue jeans were the only androgynous apparel item for which significant differences at the.01 level were found in ownership by ethnic group.

Hypothesis 5: There is no significant difference in the ownership

of apparel items classified as masculine, feminine, or androgynous by sex of respondent.

a. The following masculine apparel items are not owned differently by males and females:

(1) bermuda shorts
(2) madras sport coat
(3) blazer
(4) plaid sport coat
(5) plaid shirt
(6) striped polo shirt

Significant differences were obtained for the ownership of four of the six masculine apparel items by sex of respondent. The ownership of the blazer, plaid sport coat, plaid shirt, and striped polo shirt for males and females resulted in significant differences at the .01 level.

b. The following feminine apparel items are not owned differently by males and females:

(1) culotte skirt
(2) skirt
(3) plaid blouse
(4) sleeveless top
(5) fifties blouse
(6) halter top

Ownership by sex was significantly different for all feminine apparel items. The ownership of the sleeveless top was significant at the .05 level. Significant differences at the .01 level for ownership of apparel by sex of respondent were found for the culotte skirt, skirt, plaid blouse, fifties blouse, and halter top.

c. The following androgynous apparel items are not owned differently by males and females:

(1) sweat pants
(2) blue jean
(3) running shorts
(4) sweat jacket
(5) rain slicker
(6) T-shirt

No significant differences were obtained for the ownership of

androgynous apparel items by males and females.

Hypothesis 6: There is no significant difference in the ownership of apparel items categorized as masculine, feminine, or androgynous by PAQ group classification.

a. The following masculine apparel items are not owned differently by the Androgynous, Feminine, Masculine, or Undifferentiated PAQ groups:

(1) bermuda shorts
(2) madras sport coat
(3) blazer
(4) plaid sport coat
(5) plaid shirt
(6) striped polo shirt

Differences in the ownership for two of the six masculine apparel items were significant for the four PAQ groups. The ownership of the madras sport coat was significant at the .05 level, while the ownership of the plaid shirt was significant at the .01 level.

b. The following feminine apparel items are not owned differently by Androgynous, Feminine, Masculine, or Undifferentiated PAQ groups:

(1) culotte skirt
(2) skirt
(3) plaid blouse
(4) sleeveless top
(5) fifties blouse
(6) halter top

The skirt was the only feminine apparel items for which significant differences (.01) in ownership were obtained from the four PAQ groups.

c. The following androgynous apparel items are not owned differently by Androgynous, Feminine, Masculine, or Undifferentiated PAQ groups:

(1) sweat pants
(2) blue jeans
(3) running shorts
(4) sweat jacket
(5) rain slicker
(6) T-shirt

No significant differences were obtained for ownership of

androgynous apparel items by the four PAQ groups.

Hypothesis 7: There is no significant difference in the use of apparel items classified as masculine, feminine, or androgynous by ethnic group.

a. The following masculine apparel items are not used differently by black and white subjects:
   (1) bermuda shorts
   (2) madras sport coat
   (3) blazer
   (4) plaid sport coat
   (5) plaid shirt
   (6) striped polo shirt

Significant differences in use by black and white subjects were obtained at the .01 level for only one masculine apparel item, the plaid sport coat.

b. The following feminine apparel items are not used differently by black and white subjects:
   (1) culotte skirt
   (2) skirt
   (3) plaid blouse
   (4) sleeveless top
   (5) fifties blouse
   (6) halter top

The use of two of the six feminine apparel items was significantly different for the two ethnic groups. The use of the culotte skirt was significant at the .05 level, while the sleeveless topo was significant at the .01 level.

c. The following androgynous apparel items are not used differently by black and white subjects:
   (1) sweat pants
   (2) blue jeans
   (3) running shorts
   (4) sweat jacket
   (5) rain slicker
   (6) T-shirt

Blue jeans were the only androgynous apparel items for which

significant differences at the .01 level were obtained by ethnic group classification.

Hypothesis 8: There is no significant difference in the use of apparel items classified as masculine, feminine, or androgynous by sex of respondent.

a. The following masculine apparel items are not used differently by males and females:

(1) bermuda shorts
(2) madras sport coat
(3) blazer
(4) plaid sport coat
(5) plaid shirt
(6) striped polo shirt

Significant differences were obtained for the use of four masculine apparel items by males and females. The blazer, plaid sport coat, plaid shirt, and striped polo shirt resulted in significant differences at the .01 level.

b. The following feminine apparel items are not used differently by males and females:

(1) culotte skirt
(2) skirt
(3) plaid blouse
(4) sleeveless top
(5) fifties blouse
(6) halter top

Differences in the use of all six feminine apparel items by males and females were significant at the .01 level.

c. The following androgynous apparel items are not used differently by males and females:

(1) sweat pants
(2) blue jeans
(3) running shorts
(4) sweat jacket
(5) rain slicker
(6) T-shirt

No significant differences were obtained for the use of any

androgynous apparel items by males and females.

Hypothesis 9: There is no significant difference in the use of apparel items classified as masculine, feminine, or androgynous by PAQ group classification.

a. The following masculine apparel items are not used differently by Androgynous, Feminine, Masculine, and Undifferentiated PAQ groups:

(1) bermuda shorts
(2) madras sport coat
(3) blazer
(4) plaid sport coat
(5) plaid shirt
(6) striped polo shirt

Significant difference in use by the four PAQ groups were obtained at the .01 level for the madras sport coat and the plaid shirt. No significant differences in use by the four groups were obtained for the remaining four masculine apparel items.

b. The following feminine apparel items are not used differently by Androgynous, Feminine, Masculine, and Undifferentiate PAQ groups:

(1) culotte skirt
(2) skirt
(3) plaid blouse
(4) sleeveless top
(5) fifties blouse
(6) halter top

The difference in use of three of the six feminime apparel items was significant for the four PAQ groups. The use of the plaid blouse and the halter top was significant at the .05 level, while the use of the skirt was significant at the .01 level.

c. The following androgynous apparel items are not used differently by Androgynous, Feminine, Masculine, and Undifferentiate PAQ groups:

(1) sweat pants
(2) blue jeans
(3) running shorts
(4) sweat jacket
(5) rain slicker

(6) T-shirt

No significant differences in use for the four PAQ groups were obtained for any androgynous apparel items.

Discussion

The clothing one wears is recognized as communicating something about the sex of the individual to others (Flugel, 1950; Knapp, 1972). Keesing (1958) indicated that most societies make clear distinctions between male and female apparel. Results from the present research indicate that many apparel items are classified as either masculine or feminine regardless of sex of respondent, ethnic group, or PAQ group classification. Although some apparel items are recognized as appropriate for both males and females, more subjects used sex-typed categories in rating these items than used tha androgynous category for rating the masculine or feminine apparel items. The use of a sex stereotyping process to evaluate apparel items supported Keesings (1958) and Lauer and Lauer's (1981) belief that societies attempt to maintain sex differences in apparel.

The agreement between both sexes as to what constitutes feminine apparel is indicative of the importance our culture places on males to avoid the use of women's apparel. While individuals generally perceive items associated with their own sex or social group with more accuracy, males must know and recognize what is considered feminine to avoid socialization problems concerning their sexuality. Even though some differences occurred in the classifications of sex-typed apparel categories by ethnic and PAQ groups, the tendency was for a small number

of subjects to use the opposite sex category and not the androgynous category for rating the items. Culturally, our society permits more freedom in styling, fabrication, and design motifs for blacks than for whites. The differences in perception of the masulinity or femininity of apparel items may be attributed to this freedom. Many of the differences in perception of the masculinity or femininity of sex-typed apparel items by PAQ group classification occurred with the Undifferentiated group. The differences in classification of sex-typed apparel by this group may reflect the lower endorsement of masculine and feminine personality traits. Thus, their perception of what the culture defined as masculine or feminine apparel may not be as well developed as the other three PAQ groups.

The perception of the masculinity or femininity of apparel items is only part of the process needed to maintain the cultural stereotypes for distinctive masculine and feminine apparel. The ownership and use of apparel reinforces the nonverbal communicative nature of the apparel item. Results of this research indicated few differences in the ownership and use of androgynous apparel items by sex of respondent, ethnic group, and PAQ classification groups. As the society recognizes these apparel items as appropriate for use by all individuals, it is to be expected that few differences in ownership and use would occur for this category of apparel. The sex-typed apparel categories did demonstrate significant differences in ownership and use of apparel items by sex of respondent, ethnic group, and PAQ classification groups. The differences in ownership and use for sex of respondent and PAQ group classfiations are related to the traditional cultural stereotypes. Males

and the Masculine PAQ group owned and used masculine apparel items, while females and the Feminine PAQ group owned and used feminine apparel items. Differences in ownership and use of sex-typed apparel items by blacks and whites can also be attributed to cultural background. Blacks have been more experimental in their apparel choices and as such may use apparel styles more typically used by the opposite sex.

Flugel (1950), Renbourn and Rees (1972) and Lurie (1981) indicated that certain aesthetic and design qualities of apparel are associcated with apparel for males and for females. The results of this research supported this idea. The group factor analysis for each apparel category indicated that a small number of adjectives are used to describe apparel items based on masculine, feminine or androgynous perception, while a larger number of adjectives are used to describe sportswear apparel in general. It was also found that the adjectives used to describe the sportwear apparel categories are influenced by sex, ethnic and PAQ group classifications.

Sportswear apparel, regardless of masculine, feminine, or androgynous classification, was described as casual, sporty, bright, colorful, tailored, fitted, structured, practical, functional, fashion-oriented, and used for pleasure. Specific adjectives used to describe the androgynous apparel category were comfortable and bold. The masculine apparel category was described as usual, angular, light in color, shiny, and with straight lines. Feminine apparel was only described as simple in addition to the general terms used to describe sportswear. Although fewer specific adjectives were used to describe feminine apparel, there was greater agreement among subjects in the

apparel categories. Males as a sex and the Masculine PAQ group used form and preference adjectives in describing all apparel categories. Image adjectives were used to describe masculine and androgynous apparel while occasion adjectives were important in describing feminine and masculine apparel for the Masculine PAQ group but not for males as a sex. As sex groups have traditioally been associated with specific sex-typed roles, individuals who strongly endorse instrumental or expressive personality traits would tend to identify apparel in terms of sex groups. Comparison of Androgynous and Undifferentiated PAQ groups indicated that both use and appearance adjectives were used in describing all apparel categories. For both of these PAQ groups, the adjectives used to describe apparel are similar to those used either by the Masculine or Feminine PAQ groups. This supported Spence and Helmreich's view that the Androgynous and Undifferentiated groups, although extremes in endorsement of instrumental and expressive traits, use a combination of descriptors used by either males or females to describe apparel categories.

CHAPTER V

SUMMARY AND CONCLUSIONS

Popular writers and fashion publicists have recognized and promoted differences in apparel for males and for females. In traditional societies, the differences in apparel for the two sexes are often very clear and distinctive. Strong social sanctions are enforced for violators of the established customary form of dress. Urban and industrial societies have fewer restrictions on the dress of males and females with the lines of distinction between the two nonexistent during some periods of time such as during the 1960's and early 1970's. This lack of distinction and the promotion by some innovators in the fashion world of unisex apparel has led to the use of selected apparel styles by both males and females without corresponding social sanctions. The major purpose of this research project was to assess the nonverbal communication of the masculinity, femininity, or androgyny of selected sportswear apparel items to ownership, use, and endorsement of instrumental and expressive personality traits.

Summary

Subjects enrolled in psychology courses on three campuses of the University of North Carolina--North Carolina Agricultural and Technical University in Greensboro, East Carolina University in Greenville, and the University of North Carolina at Greensboro--participated in this research study during fall semester 1983. The subjects completed Spence and Helmreich's Personal Attributes Questionnaire (PAQ) and the Andro Clo

Instrument. The score derived from the PAQ was used to classify subjects into one of four groups - sex-typed masculine, sex-typed feminine, androgynous (endorse masculine and feminine traits equally), and undifferentiated (do not endorse masculine and/or feminine traits to any degree). The Andro Clo Instrument was used to compare subjects responses on the (1) classification of selected sportswear apparel items as masculine, feminine, or androgynous; (2) adjective descriptors used with selected apparel items and apparel categories, (3) ownership of selected apparel items, and (4) use of selected apparel items. Data were analyzed by Chi-square analysis and principal axis factor analysis.

The factor analysis indicated that a small number of adjectives were used to describe differences in masculine, feminine, or androgynous apparel items, while a larger number of adjectives were used to describe sportswear apparel in general. All sportswear apparel was described as casual, sporty, bright, colorful, tailored, fitted, structured, practical, functional, fashion-oriented, and used for pleasure. Androgynous apparel was described as comfortable and bold, feminine apparel was described as simple, and masculine apparel was described as usual, angular, light in color, shiny, and with straight lines.

Differences in the adjective descriptors used for the three apparel categories were observed through comparison of sex, ethnic, and PAQ group responses from factor analysis of a reduced number of adjective pairs. The adjectives chosen for the reduced variable factor analysis loaded at the .50 criterion level in the analysis of individual apparel items and the grouped apparel categories. Males used more adjectives than females in describing sportswear apparel. Males used preference, form, and

appearance adjectives, while females used image, occasion, and form adjectives to describe apparel categories. Males included structured and fitted adjectives in their Form Factor, while females used only straight lines and angular when describing the form of the garment.

Black subjects used form, appearance, preference, and use adjectives when describing the three apparel categories. White subjects used image and appearance adjectives in describing the apparel categories. The Appearance Factor for white subjects included colorful, light in color, and bold, while this factor for black subjects included sheer as well as light in color adjectives.

Adjectives used by the two sex-typed groups, Masculine or Feminine, based on PAQ scores were similar to the adjectives used by males and by females. Occasion and image adjectives were used by females and the Feminine PAQ group to describe each apparel category, while appearance adjectives were used by these groups when describing androgynous and feminine apparel categories. All apparel categories were described using form and preference adjectives by males and by the Masculine PAQ group. Image adjectives were used to describe masculine and androgynous apparel, while occasion adjectives were important when describing feminine and masculine apparel for the Masculine PAQ group. Androgynous and Undifferentiated groups used similar adjectives to describe the apparel categories and used adjectives which are similar to those used by either the Masculine or Feminine PAQ group.

Conclusions

College students in the three schools classified items of apparel on

the basis of a masculinity/femininity dimension. The perceptions of the masculinity/femininity of apparel items were affected by sex, ethnic group and PAQ group of the respondents. Males and females perceived the majority of feminine apparel items in the same way, but perceived all androgynous apparel differently. Males classified the androgynous apparel items using feminine or extreme masculine categories and females used primarily the androgynous category. Black subjects classified feminine apparel items by using some masculine categories and used feminine categories when classifying some masculine and androgynous apparel items. Differences in perception of the masculinity/femininity of apparel items for PAQ groups occurred with the Masculine and Undifferentiated groups. Feminine apparel items were classified as androgynous by the Masculine group or as masculine or androgynous by the Undifferentiated group. Masculine apparel items were classified as androgynous or feminine by the two groups.

Significant differences in the ownership and use of masculine and feminine apparel items were observed by sex of respondent, ethnic group, and PAQ group classifications for the masculine and feminine apparel categories. Males owned and used masculine apparel items while females owned and used feminine apparel items. Ethnic group differences occurred primarily with the ownership and use of feminine apparel items. Black subjects indicated ownership and use of the culotte skirt and sleeveless top more than white subjects, while white subjects indicated more ownership of the remaining four feminine apparel items.

Although significant differences occurred in the classification, ownership and use of apparel items in the three apparel categories,

subjects generally indicated adherence to the prevailing cultural stereotypes. Society has promoted the use of some apparel as appropriate for both sexes, as well as sex-typed apparel. Perception, ownership, and use of apparel by the subjects in this sample indicated the success of this type of promotion for sportswear.

In summary, there were more similarities than differences in the responses of the subjects in this sample. A core of bipolar adjectives are used to describe sportswear in general, while recognizing small subtleties in design to define masculine, feminine, and androgynous apparel. Classification of apparel items was influenced by the subjects' ability to perceive these subtleties.

For this particular sample, the design factors associated with the masculine categories were not different from the stereotypic factors identified by social historians and fashion promotion literature. The use of cultural stereotypes in the design and promotion of apparel goods continues to be a viable option for manufacturers and retailers as the consumers in this sample used apparel which reinforces their sex role.

Recommendations for Future Study

Further research relating to this study might be pursued in the following areas

1. Replication of study using a different geographic region, different age group or occupational role.

2. Replication of study using other apparel categories.

3. Isolation of the design characteristics such as color, fabric texture and pattern which may affect the masculinity/femininity dimension of apparel.

4. Further investigate of the perception of apparel items for which disagreement occurs as to categorization of the masculinity/femininity of apparel items.

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