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THESIS

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THE RELATIONSHIPS BETWEEN THE SEX ROLE IDENTITIES AND  
SELF-ESTEEM OF COLLEGE MEN AND THEIR PARENTS, AND  
COLLEGE MEN'S PERCEPTIONS OF THEIR PARENTS'  
SEX ROLE IDENTITIES, SELF-ESTEEM, AND THE  
QUALITY OF THE PARENT-SON RELATIONSHIP  
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Dale Gordon Monroe-Cook

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SEX ROLE IDENTITIES, SELF-ESTEEM, AND THE  
QUALITY OF THE PARENT-SON RELATIONSHIP

By

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## ABSTRACT

### THE RELATIONSHIPS BETWEEN THE SEX ROLE IDENTITIES AND SELF-ESTEEM OF COLLEGE MEN AND THEIR PARENTS, AND COLLEGE MEN'S PERCEPTIONS OF THEIR PARENTS' SEX ROLE IDENTITIES, SELF-ESTEEM, AND THE QUALITY OF THE PARENT-SON RELATIONSHIP

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The study was designed to examine the relationships between the sex role identity, self-esteem, and undesirable sex-typed characteristics of college men and their parents, and college men's perceptions of their parents' sex role identity, self-esteem, socially undesirable sex-typed characteristics, warmth-versus-rejection, cognitive involvement, and control. The research was based on a dualistic approach to masculinity and femininity, that is, masculinity and femininity as separate dimensions which can vary independently.

A sample of 200 undergraduate males volunteered to participate in the study. The sample was divided into two equal subgroups for the purpose of cross-validating the research results. Each college male subject completed a questionnaire in which he was asked to describe himself, his mother, and his father on the Bem Sex Role Inventory (BSRI), the Rosenberg Self-Esteem Inventory (RSEI), and a set of socially undesirable sex-typed characteristics. In addition, each student subject described his mother and father on the Parent Behavior Form (PBF) and completed a Family Information Questionnaire about his attitudes toward his parents.

A sample of 100 sets of parents was then selected from the parents of the college men subjects. The parents were mailed questionnaires which included measures of sex role identity (BSRI) and self-esteem (RSEI). A total of 86.5% of the sample (89 mothers and 84 fathers) returned completed questionnaires.

The masculine and feminine BSRI scales, scored by the median-split technique, were used to place each subject into one of four sex role categories: Androgynous, Masculine-typed, Feminine-typed, or Undifferentiated.

The research hypotheses for the study were divided into three groups: reports of college men, reports of parents, and the relationship between the reports of college men and their parents. Pearson's product-moment correlation statistic, the chi-square statistic, and one-way analysis of variance followed by t tests were used to analyze the data. An alpha level of .05 was established for the study. Only results which were significant for both the validation and cross-validation samples were emphasized.

Androgynous college men, fathers, and mothers reported higher levels of self-esteem than the other three sex role groups, and Undifferentiated college men, fathers, and mothers reported lower levels of self-esteem than the other three sex role groups. Masculine fathers reported higher levels of self-esteem than Feminine fathers. A positive relationship was found between the self-esteem of college men and their perceptions about their mothers' self-esteem.

A negative relationship was found between the self-esteem of college men and the number of socially undesirable masculine and

feminine characteristics which they endorsed. In addition, Androgynous college men endorsed fewer socially undesirable masculine characteristics than the other three sex role groups. Androgynous college men also perceived their fathers to be Androgynous more frequently than Masculine, Feminine, or Undifferentiated college men. Undifferentiated college men reported at least one Androgynous parent less frequently than Masculine, Feminine, and Androgynous college men. No relationships were found to exist between the sex role identity of college men and their perceptions of their parents' warmth-versus-rejection, cognitive involvement, or control.

Finally, when parent self-reports were compared with college men's reports of their parents, a positive relationship was found between the self-reports of fathers and reports of college men about their fathers for both masculine and feminine characteristics. A positive relationship between self-reports of mothers and college men's descriptions of their mothers existed only for masculine characteristics. No relationship was found between the sex role identity of college men and the sex role identity of their mothers or fathers.

**To Liz**

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## CHAPTER I

### THE PROBLEM

From its inception, the feminist movement has directly challenged traditional conceptions of the feminine role. More recently, the desirability of the masculine role in our society has also been questioned. Recent research in the area of sex role socialization has reflected these social developments, and new formulations of the nature of masculinity and femininity have emerged. The present study will use these new formulations in an examination of the personality and parental behavioral correlates of sex role identity in college males.

#### Need for the Study

For many years, research designed to examine the personality and parental behavior correlates of sex roles was based on the assumption that masculinity and femininity were mutually exclusive, opposite poles of a continuum. Recently, however, the traditional assumptions about the nature of masculinity and femininity have been reexamined, and questions have been raised about the findings of these earlier studies. Of particular importance in a growing number of theoretical and empirical studies in which masculinity and femininity are conceptualized as two independent dimensions. Research such as the present study, in which these new formulations of sex roles and their correlates are examined, is needed to help clarify the complex nature of sex role development.

A review of the literature revealed only one empirical study in which these new formulations of sex role were used in an investigation of the parent behavior correlates of masculinity and femininity. In that study, information about the parents was obtained only from college students. In the present study, parent behavior correlates of sex roles were again examined; however, the parents of the college male subjects were also requested to complete questionnaires. The lack of empirical studies of this nature underscores the need for further research in the area.

Finally, it is hoped that an increased understanding of the relationships between sex role identity, self-esteem, and parent behaviors will assist both the individual college student and the mental health professional working to change old, and develop new, behaviors.

#### Purpose of the Study

The purpose of this study was to examine the relationships between the sex role identity and self-esteem of college men and their parents, and college men's perceptions of their parents' sex role, self-esteem and behavior toward them.

#### Hypotheses

The hypotheses tested for this study are stated in general research form in the following sections. Each of these hypotheses will be stated in a testable form in Chapter III.



### Sex Role Identity and Self-Esteem

Subjects reporting high levels of both socially desirable masculine and socially desirable feminine sex role characteristics will report high levels of self-esteem.

Subjects reporting low levels of both socially desirable masculine and socially desirable feminine sex role characteristics will report low levels of self-esteem.

Male subjects who only report high levels of socially desirable masculine sex role characteristics will report higher levels of self-esteem than male subjects reporting only high levels of socially desirable feminine sex role characteristics.

### Self-Esteem of College Men and Perceived Parental Self-Esteem

There will be a positive relationship between college males' reports of self-esteem and their perceptions of self-esteem for their mothers and their fathers.

### Self-Esteem and Socially Undesirable Sex Role Characteristics

There will be a negative relationship between subjects' reports of self-esteem and their endorsement of socially undesirable sex-typed characteristics.

### Sex Role Identity and Socially Undesirable Sex Role Characteristics

Subjects reporting high levels of both socially desirable masculine and socially desirable feminine sex role characteristics will endorse the smallest number of socially undesirable sex-typed characteristics.

Subjects reporting low levels of both socially desirable masculine and socially desirable feminine sex role characteristics will endorse the largest number of socially undesirable sex-typed characteristics.

Subjects reporting only high levels of socially desirable masculine sex role characteristics will endorse high levels of socially undesirable masculine-typed characteristics.

Subjects reporting only high levels of socially desirable feminine sex role characteristics will endorse high levels of socially undesirable feminine-typed characteristics.

#### Perceived Parental Sex Role and Socially Undesirable Sex-Typed Characteristics

College male subjects who perceive their fathers as endorsing high levels of both socially desirable masculine and socially desirable feminine sex role characteristics will also perceive their fathers as endorsing a low number of socially undesirable sex-typed characteristics.

College male subjects who perceive their fathers as endorsing low levels of both socially desirable masculine and socially desirable feminine sex role characteristics will also perceive their fathers as endorsing a low number of socially undesirable sex-typed characteristics.

These same hypotheses were applied to college males' perceptions of their mothers.

#### Sex Role Identity of College Men and Perceived Parental Behavior

College male subjects reporting high levels of both socially desirable masculine and socially desirable feminine sex role characteristics will report that each of their parent's behavior toward them was characterized with high levels of warmth, cognitive involvement, and control.

College male subjects reporting low levels of both socially desirable feminine sex role characteristics will report that each of their parent's behavior toward them was characterized by low levels of warmth, cognitive involvement, and control.

Sex Role Identity of College Males  
and Perceived Sex Role of Parents

College male subjects reporting high levels of both socially desirable masculine and socially desirable feminine sex role characteristics will perceive each of their parents as endorsing high levels of both socially desirable masculine and socially desirable feminine sex role characteristics.

College male subjects reporting low levels of both socially desirable masculine and socially desirable feminine sex role characteristics will perceive each of their parents as endorsing low levels of both socially desirable masculine and socially desirable feminine sex role characteristics.

College male subjects reporting only high levels of socially desirable masculine sex role characteristics will perceive each of their parents as endorsing only high levels of socially desirable masculine sex role characteristics.

College male subjects reporting only high levels of socially desirable feminine sex role characteristics will perceive each of their parents as endorsing only high levels of socially desirable feminine sex role characteristics.

College male subjects reporting high levels of both socially desirable masculine and socially desirable feminine sex role characteristics will frequently describe at least one of their parents as

endorsing high levels of both socially desirable masculine and socially desirable feminine sex role characteristics.

College male subjects reporting low levels of both socially desirable masculine and socially desirable feminine sex role characteristics will infrequently describe at least one of their parents as endorsing high levels of both socially desirable masculine and socially desirable feminine sex role characteristics.

#### Sex Role Identity of College Males and Sex Role Identity of Parents

There will be no relationship between the sex role identity of college male subjects and the sex role identity of parents of those subjects.

#### College Males' Reports of Parents and Self-Reports of Parents

There will be a positive relationship between reports of college males about their parents and the self-reports of parents about the endorsement of socially desirable masculine and socially desirable feminine sex role characteristics.

#### Definitions

Research in the area of sex roles has often been complicated by a variety of confusing terms. In the present study, the terms sex roles and sex role identity were of particular importance. Sex roles were defined as the societal expectations for the behavior of men and women. Sex roles thus include all the shared cultural beliefs about the different behaviors which people think should be associated with members of each sex (Donelson & Gullahorn, 1977). The term gender role is sometimes used interchangeably with sex role.

Sex role identity refers to an individual's evaluation of self as masculine or feminine according to societal norms (Lynn, 1974). The term sex role orientation is sometimes used interchangeably with sex role identity. This term should not be confused with sexual identity, which is used to describe an individual's view of self as heterosexual, homosexual or bisexual.

Two additional terms, sex role preference and sex role adoption, are also distinct from sex role identity. Sex role preference refers to an individual's desire to adhere to cultural prescriptions of the masculine or feminine role. Sex role adoption refers to how masculine or feminine an individual's characteristics are viewed to be by others in society (Biller & Borstelman, 1967).

#### Theories of Sex Role Development

According to Lynn (1974), individual sex role development appears to be influenced by an interaction of three variables:

1. biologically based potentials that predispose an individual toward particular behaviors,
2. parent-child relationships that predispose individuals toward prescribed roles, and
3. cultural reinforcements of traditional masculine and feminine roles.

The biological and cultural determinants of masculine and feminine sex roles were beyond the scope of the present study, however, the influence of parent-child relationship variables in sex role development was examined.

Each of the theories discussed in the following sections are attempts to explain the processes underlying the development of sex role identity. Psychoanalytic, social learning, and cognitive developmental theories will be presented, followed by a discussion of their relationship to the present study.

### Psychoanalytic Theory

Psychoanalytic theory emphasizes the importance of internal motivation and identification with the same-sex parent in the development of sex role. Freud proposed that the first important relationship for both boys and girls is with their mother, a relationship which is initially one of total dependence. Fearing a loss of mother's love, the child identifies with her. This form of identification, based on a fear of the loss of love, is called anaclitic identification.

Somewhere between the ages of 3 and 5 years, the process for boys begins to differ from that of girls. For the boy, the identification with his mother becomes complicated by his awareness of anatomical differences between the sexes, and the recognition of his father as a rival for his mother's affection. Fearing castration, the boy represses his desire for his mother and identifies with his father. This form of identification, based on a fear of punishment, is called defensive identification or identification with the aggressor. This shift in identification acts as a crucial element in the boy's sex role development, leading to a breakdown of the mother-son bond and facilitating the acquisition of characteristics similar to the father. The son tries to be like his father, incorporating his rules, values, and sex role behavior.

For the girl, the similarity of her mother's anatomy with her own, and the realization that she cannot replace her mother in her father's affections, leads her to continue the anaclitic identification with her mother.

In psychoanalytic theory, an individual's sex role is assumed to be well established early in life (generally prior to the age of five), and once established it is considered to be highly resistant to change.

### Social Learning Theory

The application of social learning theory to sex role development has emphasized the same learning principles used to explain the acquisition and performance of any other aspect of an individual's behavior. Two of the most central of these principles are modeling (observational learning and imitation) and reinforcement (rewards and non-rewards). The social learning theorists assume that a child can learn new behavior simply by observing the behavior of others. This observed behavior can then be copied or imitated. When the imitated behavior is reinforced there is an increased likelihood that the behavior will recur. When the behavior is punished, the likelihood of its recurrence is decreased. By definition, sex-typed behaviors are those behaviors that typically elicit different rewards for one sex than for the other (Mischel, 1966).

Early in development, a child will imitate to varying degrees the behaviors of many models, both live and symbolic. The attentiveness of the child to the model determines in part the extent and accuracy of the imitation. Although sex of the model sometimes

influences imitation, children also tend to imitate models who are perceived as possessing power, dominance, or warmth (Hetherington, 1965), and models who are rewarded for particular behaviors (Bandura & Walters, 1963). Given an adequate exposure to models of each sex, boys and girls will learn many behaviors of both sexes. In addition to learning how to perform the behavior, however, the child also learns the appropriateness of the behavior for each of the sexes. Individuals in the child's environment, particularly parents, deliberately and inadvertently administer rewards and punishments which begin to shape the child's behavior. Boys are presumably directed toward the masculine role by significant persons who selectively reinforce masculine behavior and punish feminine behavior. These external reinforcements for sex-typed behavior eventually become internalized self-reinforcements which maintain the behavior.

Within this framework, mothers are assumed to facilitate their sons' sex role development through direct shaping. Fathers, on the other hand, are assumed to be models for appropriate sex role behavior. In addition, the father is generally viewed as most punitive, and therefore most effective in the inhibition of behavior (Lamb, 1976).

In social learning theory, an individual's sex role learning takes place relatively early in life. This learning is not permanent, however, and therefore it can be altered and shaped throughout life.

#### Cognitive-Developmental Theory

The cognitive-developmental theory of sex role socialization (Kohlberg, 1966) is based on the work of Jean Piaget. Piaget has



documented the development of thought patterns and logic in children, and he contends that as children mature, so do their capacities to cognitively organize the physical world around them. Kohlberg has extended this cognitive-developmental framework to explain the process of sex role socialization. Table 1.1 is a summary of the cognitive-developmental stages as proposed by Piaget and the sex role development as conceived by Kohlberg.

Kohlberg contends that the basic organizer of all sex role attitudes is gender identity. Gender identity is established early in a child's development, usually by the age of two. It is, however, initially very unstable. This instability is due to the fact that during the next four to five years (the preoperative period) the child is not aware of the stability of physical objects. Changes in the periphery of an object (e.g., hair length or dress) are assumed by the child to change the identity of the object (e.g., gender). During these years a child's sex role can be influenced by the environment, particularly the parents' attitudes. It is not until the child reaches the next stage of cognitive development, the concrete operational period, that he views himself as having an unchangeable gender identity. According to Piaget, this is the time during which children develop the conception of the invariable identity of physical objects.

Once established, this gender identity acts as a basic organizer of information (a schemata in Piaget's terms), providing structure in the child's environment and shaping the child's stereotypes of sex roles. Based on egocentric thought patterns, a child begins to value things that are consistent with self, eventually identifying with same-sex figures, especially a parent. A male child, for example,

TABLE 1.1  
A COMPARISON OF PIAGET'S THEORY OF COGNITIVE DEVELOPMENT AND  
KOHLEBERG'S THEORY OF SEX ROLE DEVELOPMENT

AGE OF CHILD (YEARS)	DEVELOPMENTAL STAGE (PIAGET)	BASIS FOR BEHAVIOR	COGNITIVE SKILLS DEVELOPED	SEX ROLE DEVELOPMENT (KOHLEBERG)
0 - 2	Sensorimotor	1. Sensory (taste, touch, sight, smell) 2. Motor actions	1. Object permanence 2. Constancy of size and shape 3. Simple cause and effect	Formation of gender identity (Late in this stage)
2 - 7	Preoperational	1. Symbolic play 2. Language	1. Egocentric thinking 2. Variability of identity in physical objects due to peripheral changes	1. Instability of gender identity 2. Basic sex role stereotypes 3. Masculine and feminine values
7 - 11	Concrete operations	Attempts to use some form of logic or reasoning	1. Conservation of physical properties of objects 2. Classification of objects 3. Invariable identity of physical objects	1. Stability of gender identity 2. Identification with same- sex parent 3. Attachment to same-sex parent
11 - ADULT	Formal operations	1. Highest form of logic 2. Problem-solving abilities	1. Abstract reasoning 2. Symbolic reasoning	1. Consolidation of sex roles 2. Flexible use of masculine and feminine roles*

\*Ullian, 1976

first establishes the fact that he is a male. He then develops stereotypes about how males and females behave, assimilating information which reflects the differences in the sex assignment of social roles. Motivated by a desire for competence and a positive self-image, and assuming that things consistent with himself are valuable, he begins to value masculine things, identifying with his father and consolidating his sex role.

Although Kohlberg does stress the importance of observational learning, he also points out that:

. . . this learning is cognitive in the sense that it is selective and internally organized by relational schemata rather than directly reflecting associations of events in the outer world. In regard to sex-role these schemata that bind events together include concepts of body, the physical and social world, and general categories of relationship. . . . (p. 83)

Kohlberg also summarizes the role of parents in the child's sex role development by stating:

It would appear that the clearest influences of parental practice are negative, not positive; i.e., certain parent attitudes may create specific anxieties and conflicts inhibiting the development of appropriate sex role attitudes, but it is not at all clear whether certain parent attitudes can create appropriate sex role attitudes. (p. 165)

In general, the cognitive-developmental model of sex role socialization assumes that the individual's sex role learning takes place during the first 18 - 20 years of life, however, the years between 6 and 8 are especially crucial because it is at that time that a child develops a stable gender identity.

#### Extensions of Cognitive- Developmental Theory

Hefner, Rebecca, and Oleshansky (1975) have used cognitive developmental theory as the basis for a model of sex role socialization

in which the individual progresses through stages of development. The initial stage, "undifferentiated," is characterized by globalness and a lack of awareness of social restrictions on behavior according to gender. In the second stage, "polarized," the child learns to accept traditional sex roles in accordance with gender assignment, and actively rejects behavior associated with the opposite gender. This polarization of gender roles assists individuals attempting to organize the world around them, and is supported by the socialization methods used by parents, schools, and society in general. For most of our society, this stage is generally viewed as the ultimate adult goal with regard to sex role behavior. The third stage, sex role "transcendence," represents a reorganization of the polarized components of the previous stage. In this stage of development, the individual becomes free to behave and feel genuinely and effectively in each situation, without the restrictions of gender appropriateness. Individual response would then be based on the full range of human behavior. Although similar to the concept of psychological androgyny as presented by Bem (1974), Heilbrun (1964), and Singer (1976), the concept of sex role transcendence encompasses the notion of personal flexibility as well as situational flexibility.

#### The Construct of Psychological Androgyny

Recent formulations of the relationship between masculinity and femininity have challenged the traditional assumptions that psychologically adjusted men should be masculine and psychologically healthy women should be feminine. Based on the current formulation of masculinity and femininity as independent dimensions, some researchers

(Heilbrun, 1976; Bem, 1974; Spence, Helmreich, and Stapp, 1975) have suggested that the individual who develops both masculine and feminine characteristics, the "psychologically androgynous" individual, may have greater behavioral and psychological flexibility, and therefore, be better able to respond effectively in a variety of situations.

The concept of androgyny (From the Greek: andro, meaning male; gyn, meaning female) has been used to describe the individual who has developed both masculine and feminine sex role characteristics. Heilbrun (1964) simply defined androgyny as "Woman-in-man, man-in-woman." Bem (1975) places a greater emphasis on the behavioral aspects of androgyny, stating that the androgynous person can be "both instrumental and expressive, both assertive and yielding, both masculine and feminine -- depending upon the situational appropriateness of these various behaviors" (p. 634).

Much of the research designed to behaviorally validate the construct of androgyny has been based on the assumption that the non-androgynous sex role orientations restrict the range of behavior available to an individual, while an androgynous orientation allows the individual to choose from a wide range of behavior, both instrumental (masculine) and expressive (feminine). According to Kagan (1964), the sex-typed individual attempts to behave in ways consistent with an internal sex role standard. Presumably, masculine-typed persons would exhibit behaviors associated with an instrumental orientation, while feminine-typed persons would exhibit behaviors associated with an expressive orientation, regardless of the situation. The androgynous person, however, would behave in ways that are situationally appropriate,

reflecting the ability to choose either instrumental or expressive behavior, or some combination of the two (Bem, 1975).

Because of their research, Bem and her associates suggest that androgynous persons are behaviorally more flexible than non-androgynous individuals. Bem (1975) used the Bem Sex Role Inventory (BSRI; a complete description of this instrument will be presented in Chapter IV) to measure sex role identity in college students. She found that androgynous subjects were able to be independent (masculine) when experiencing pressure to conform, and playful (feminine) when interacting with a kitten. On the other hand, non-androgynous subjects were unable to adapt behaviorally in one or both of the situations. For college men, the feminine-typed males did not express independence and the masculine-typed males did not behave with playfulness. Results of two additional studies (Bem, Martyna & Watson, 1976; Bem & Lenney, 1976) indicated that sex-typed individuals are more likely to prefer sex-appropriate activity when compared to androgynous or sex-reversed individuals.

Bem (1975) concluded that:

. . . there exists a distinct class of people who can appropriately be termed androgynous, whose sex role adaptability enables them to engage in situationally effective behavior without regard for its stereotype as masculine or feminine. (p. 643)

### Discussion of the Theory

The psychoanalytic, social learning, and cognitive-developmental theories of sex role acquisition were especially important in the formulation of hypotheses about the relationship between the sex role identity of college males and their perceptions of the sex role identity of each of their parents. Because none of the theoretical formulations directly

describe the process whereby an individual can develop both masculine and feminine sex role characteristics, the development of psychological androgyny had to be inferred from the basic theoretical formulations.

In psychoanalytic theory, it is assumed that an individual's sex role is the consequence of identification with the same-sex parent. The development of androgyny could be explained within the psychoanalytic framework if it were agreed that a child could ultimately form an identification with both of his parents, rather than only with the same-sex parent. Although a boy is assumed to first form an anaclitic identification with his mother and then a defensive identification with his father, these identifications are sequential, not simultaneous, and the identification with the father requires a repression of the identification with the mother. The development of androgynous characteristics could also be explained within the framework of psychoanalytic theory if the child's same-sex parent possessed both masculine and feminine characteristics. In that case, identification with the same-sex parent would theoretically result in the development of androgynous characteristics by the child.

In social learning theory, an individual's sex role is the consequence of observational learning, imitation, and reinforcement. The social learning theorist might propose that the androgynous individual could develop in an environment in which the same sex models (or models of either sex who are perceived as possessing power, dominance, or warmth) were exhibiting both masculine and feminine behaviors. These behaviors would then be observed and imitated. In addition, the environment of the child would then need to reinforce both masculine and feminine behaviors.

In contrast to social learning theory and psychoanalytic theory, cognitive-developmental theory is based on the assumption that a child first establishes a sex-typed identity (gender identity), and then the child uses the cue of gender identity to process available information about appropriate sex role behavior. Once gender identity is established, the child identifies with, and attaches to, the same-sex parent. Although cognitive-developmental theorists stress the importance of observational learning and reinforcement, they assume that the child's cognitive organization (schemata) is the crucial element in the development of the child's sex role characteristics. Some theorists have applied the principles of cognitive-developmental theory to the development of psychological androgyny, stating that androgynous sex role attitudes are most likely to develop during adolescence (Hefner, Rebecca & Oleshansky, 1976; Ullian, 1976). The exposure to alternative role models during adolescence is assumed to lead to the development of new schemata which support the development of both cross-sex and same-sex characteristics.

#### Application of Theory to the Research Hypotheses

In the present study, the research hypotheses about the relationship between the sex role identity of college males and their perceptions of the sex role identity of their fathers are most consistent with the psychoanalytic and social learning theories. For each hypothesis, it was assumed that the sex role identity of the son would be the same as the perceived sex role identity of the father. Although cognitive-developmental theory would not necessarily contradict these hypotheses, at least one of the sex role categories used in the study, Androgynous, is assumed by some cognitive-developmental theorists to be partially the result of the adolescent's contact with alternative role



models in the culture. Therefore, for some sex role categories, the cognitive-developmental theorists would not expect to find as direct a relationship between the sex role identity of the son and the sex role identity of the father.

In general, none of the theories suggest a direct relationship between the son's sex role identity and the mother's sex role identity. To the extent that the mother is viewed by her son as a dominant, powerful, and warm individual, it might be assumed in social learning theory that the mother provides an additional model of effective behavior which would then be imitated by her son. Hypotheses about the relationship between the sex role identity of college males and their perceptions of their mothers' sex role identity, however, were largely exploratory.

In the present study, a positive relationship between androgyny and psychological health was suggested in several hypotheses. It was posited that androgynous individuals would report higher levels of self-esteem and endorse fewer socially undesirable characteristics than non-androgynous individuals. These hypotheses are consistent with the formulations of psychological androgyny presented by Bem (1974), and Spence, Helmreich, and Stapp (1975).

#### Overview of the Thesis

In Chapter II, a review of the literature relevant to the study will be presented. New formulations of sex roles will be discussed and research in the area of personality and parent behavior correlates of sex role identity will be examined.

In Chapter III, the overall methodology of the research will be discussed, including a description of the samples of college men and their parents, an outline of the process of data collection, and an overview of the major design features of the study. In addition, the research hypotheses will be stated and the statistical procedures used for the analysis of data will be reviewed.

The three major instruments used in the study will be described in Chapter IV. Detailed information about the modifications and reliabilities of each inventory will be presented.

In Chapter V, the analysis of the results will be presented. Throughout the chapter, each hypothesis will be stated in testable form, the results of the analysis of the data will be reported, and a statement will be made about whether each hypothesis was accepted or rejected.

The results of the research will be integrated in Chapter VI, and conclusions will be drawn. Implications of the findings and recommendations for future research will also be discussed.

## CHAPTER II

### REVIEW OF THE LITERATURE

In the following chapter the literature relevant to the current study is reviewed. Initially, a discussion of the concepts of masculinity and femininity as bipolar and independent constructs are presented and sex role inventories consistent with each of these theoretical positions are reviewed.

Research in which the concepts of masculinity and femininity were viewed as independent dimensions are reviewed. In particular, research in the area of personality and parent behavior correlates of sex roles are examined. Finally, the relevance of these studies to the present research are discussed.

#### Masculinity and Femininity

The constructs of masculinity and femininity have been viewed from two divergent theoretical positions. Each of these positions will be discussed in the following section and sex role inventories consistent with each of these positions will be examined.

#### Masculinity and Femininity as Bipolar Constructs

Most of the traditional views of sex role behavior have assumed that the constructs of masculinity and femininity are opposite ends of a single dimension (see Figure 2.1). Inherent in this assumption is the notion that these two constructs are negatively correlated.

The bipolar conceptualization of masculinity and femininity is prevalent throughout the theoretical and empirical literature regarding sex role behavior.

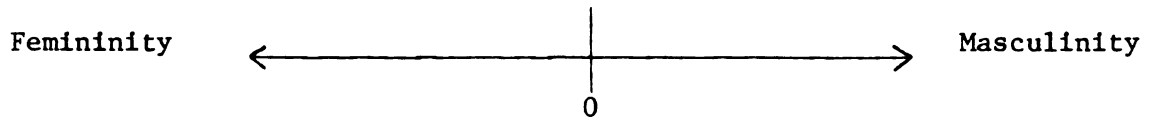


Figure 2.1

### Bipolar Conceptualization of Masculinity and Femininity

Many psychologists have also assumed that biological gender is highly correlated with masculine and feminine sex role behavior, a relationship sometimes called biopsychological equivalence. Men are expected to be masculine (e.g., aggressive and independent) and women are expected to be feminine (e.g., passive and dependent). A high degree of sex-typing is considered desirable and cross-sex behavior is often considered pathological.

Each of these assumptions is reflected in Talcott Parsons' theory of sex role behavior. Parsons believes that in order for the family system to function successfully, it must differentiate between two functions, the "instrumental" and the "expressive" (Parsons and Bales, 1955). The instrumental function is seen as achievement-focused and goal-oriented, and is primarily the role of the father. He serves as the link between the family and society and in that capacity, he introduces the child to the sex role prescriptions of the larger social system. The expressive function is viewed as nurturant, facilitating harmony and understanding, and is primarily the role of the mother. She regulates the internal affairs of the family and encourages family

solidarity. This functional dichotomy not only reflects parent roles within the family, but also represents sex role differences within the culture. The masculine orientation is described as "instrumental," while the feminine orientation is viewed as "expressive." In Parsons' theory the assumption is made that a dichotomous, although complementary, relationship exists between expressive and instrumental behaviors, and that biological gender is correlated with these constructs.

In the bipolar approach, individuals are considered "healthy" if they conform to societal expectations of appropriate behavior for men and women, a viewpoint which has been maintained despite evidence indicating that individuals appear better adjusted on some personality dimensions if they have developed some cross-sex behaviors. Intellectual performance, for example, was found to be associated with masculinity in girls and femininity in boys (Maccoby, 1966). Kohlberg (1966) also challenged the notion that a high level of appropriate sex role development reflected a high level of personality adjustment. He argued that highly sex-typed individuals may need to behave in ways which are consistent with a rigid, internalized standard, which would require the continual monitoring of the appropriateness of behaviors.

Despite these and other challenges, the assumptions of bipolarity and biopsychological equivalence have been the basis for the construction and interpretation of most sex role inventories.

#### Overview: Bipolar Sex Role Inventories

Traditional sex role inventories have been based on the assumptions discussed in the previous section. In her critique of masculinity-femininity scales, Constantinople (1973) indicated that the assumption

of bipolarity is consistently evident in the construction of masculinity-femininity tests. She indicates that most scales use:

1. one set of test items to measure both masculinity and femininity, implying that the opposite of a feminine response is necessarily masculine and vice versa,
2. items selected primarily on their ability to discriminate the biological sexes, and
3. a single score, the algebraic summation of masculine and feminine responses, to place an individual along a single continuum.

Examples of scales constructed with the assumption of bipolarity include the Strong Vocational Interest Blank MF scale (Strong, 1936), the Minnesota Multiphasic Personality Inventory Mf scale (Hathaway & McKinley, 1943), the California Personality Inventory Fe scale (Gough, 1964), and the Guilford-Zimmerman Temperament Survey Masculinity (M) scale (Guilford & Zimmerman, 1949). Each of these scales allows an individual to be characterized as either masculine or feminine, but not both. Individuals scoring within a range typical for their gender are considered appropriately sex-typed, a reflection of psychological adjustment. Individuals scoring outside of a range typical for their gender are considered maladjusted or sex role confused.

In her summary of a review of the major tests of masculinity and femininity in use at that time, Constantinople (1973) concludes that:

Current tests are judged to be largely inadequate for a variety of reasons: a) available data clearly point to multidimensionality . . . b) all of the tests are built on an assumed bipolarity in the M-F dimension . . . and c) the use of sex differences in response as the sole criterion for an M-F indicator is open to question. (p. 405)

### Masculinity and Femininity as Independent Constructs

Although the bipolar conception of masculinity and femininity has been the basis for most psychological research about sex roles, dualistic conceptions of these constructs have also been proposed, most notably in the theories of Carl Jung and David Bakan. In each of these theories, masculinity and femininity are viewed as independent dimensions, both of which are possessed to some degree by each individual.

Jung (1971) proposed that all human beings are both masculine and feminine. He used the term anima to describe the internal feminine quality in men and the term animus to describe the internal masculine quality in women. He further stated that animus corresponds to the paternal Logos, the masculine principle, and that anima corresponds to the maternal Eros, the feminine principle. The relationship between Logos and Eros, however, is different for men and women. Jung states:

I use Eros and Logos merely as conceptual aids to describe the fact that woman's consciousness is characterized more by the connective quality of Eros than by the discrimination cognition associated with Logos. In men, Eros, the function of relationship, is usually less developed than Logos. (p. 152)

Jung felt that central to an individual's development is the growing awareness of both sides of self, the Logos and the Eros. As these two dimension are integrated, the individual moves toward wholeness. In Jung's words:

Just as the anima becomes through integration, the Eros of consciousness, so the animus becomes a Logos; and in the same way that the anima gives relationship and relatedness to the man, the animus gives to woman's consciousness a capacity for reflection, deliberation and self-knowledge. (p. 154)

In several respects, Jung's theory of the relationship between masculinity and femininity is similar to that of Bakan. Bakan (1966)

proposed that two fundamental modalities underlie all of human existence, agency and communion. Agency reflects a concern for oneself as an individual, and is manifested in self-assertion, self-protection, and self-expansion, attitudes which are more typically masculine. Communion reflects a concern with others and a sense of the individual's place in relationship with others, attitudes which are more typically feminine.

Although agency is more dominant in men, and communion is more dominant in women, Bakan suggests that both are essential to the survival of the individual and the society. As totally separate entities, both agency and communion are destructive. Through interaction, however, each is enhanced by the other. The integration of agency and communion--i.e., masculinity and femininity--is a basic developmental task, and maintenance of a balance between them is crucial.

The dualistic approach to masculinity and femininity differs from the bipolar approach in several significant respects. In the dualistic approach, masculinity and femininity are viewed as separate dimensions that can vary independently of one another. These dimensions coexist to some degree in each individual, and psychological adjustment is reflected in their integration. In the bipolar approach, masculinity and femininity are viewed as opposite ends of the same dimension. Because the two constructs are negatively correlated, the quantity of one limits the quantity of the other. The individual is expected to develop only the sex-appropriate dimension and psychological adjustment is defined as the acquisition of only same-sex characteristics.



In the present study, a sex role inventory was chosen which reflected the dualistic approach to masculinity and femininity.

#### Overview: Orthogonal Sex Role Inventories

The dualistic approach to masculinity and femininity has led to the development of four instruments in which these constructs are viewed as independent: the Bem Sex Role Inventory (Bem, 1974), the Personal Attributes Questionnaire (Spence, Helmreich, & Stapp, 1974), the Adjective Check List M and F scales (Heilbrun, 1976), and the Personality Research Form - ANDRO (Berzins, Welling, & Wetter, 1978). These instruments reflect some of the issues inherent in the measurement of sex roles, and each will be reviewed in the following section.

#### Bem Sex Role Inventory

The Bem Sex Role Inventory (BSRI) developed by Sandra Bem (1974) was the first of the new measures. Beginning with a pool of 400 personality characteristics which appeared to be positive in value, and masculine or feminine in tone, Bem asked 100 college student judges (half male, half female) to evaluate the desirability of each characteristic for either a man or a woman in American society. Only those characteristics which were judged to be significantly more desirable for males than for females were included in the masculinity scale of the BSRI, and only those characteristics judged to be significantly more desirable for females than for males were included in the femininity scale. Characteristics which were not judged as significantly more desirable for one sex or the other, but were positively valued by both sexes, were included in the neutral, social desirability scale.

In its present form the BSRI is a 60-item instrument consisting of three scales: a 20-item positively valued masculine scale, a 20-item positively-valued feminine scale, and a 20-item social desirability scale. Respondents are asked to indicate on a scale from 1 ("never or almost never true") to 7 ("always or almost always true") the degree to which each characteristic describes themselves.

Initially, Bem recommended the use of three scores: a masculinity score, a femininity score, and an androgyny score. Bem used a scoring system which defined sex role categories in terms of a Student's *t* ratio for the difference between an individual's masculine and feminine self-endorsements. Subjects endorsing significantly more characteristics on the masculine scale than on the feminine scale were categorized as "Masculine." Subjects endorsing significantly more feminine than masculine characteristics were categorized as "Feminine." Those subjects endorsing relatively equal numbers of both masculine and feminine characteristics were classified as "Androgynous." Several researchers criticized this method of scoring, pointing out that this procedure ignores the absolute number of items endorsed, emphasizing instead only the relatively equal endorsement of masculinity and femininity (Spence, Helmreich, & Stapp, 1975; Strahan, 1975; Baucom, 1976). Bem (1977) later revised her scoring procedure using the median-split technique recommended by Spence, Helmreich, and Stapp (1975). The revised scoring procedure now allows for four categories of subjects (see Figure 2.2): Masculine-typed (high masculine, low feminine), Feminine-typed (high feminine, low masculine), Androgynous (high masculine, high feminine), and Undifferentiated (low masculine, low feminine). The revised scoring procedure appears to be more consistent with the notion that the

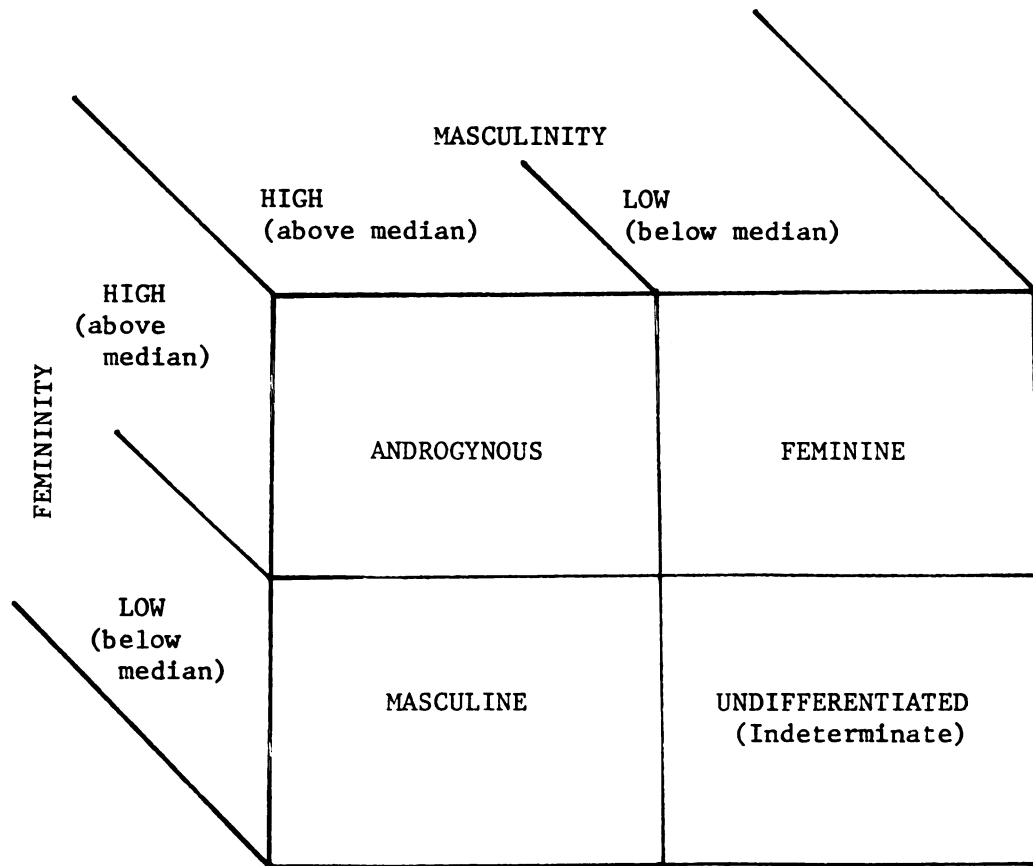


Figure 2.2

Scoring Categories for the Bem Sex Role Inventory  
Using the Median Split Technique

"Androgynous" individual possesses greater behavioral flexibility. Individuals in the new category, "Undifferentiated," are likely to have few positively-valued behavioral alternatives.

Measurements of the internal consistency of the BSRI have shown all three scales to be highly reliable (Masculinity,  $\alpha = .86$ ; Femininity,  $\alpha = .80$ ; Social Desirability,  $\alpha = .70$ ). As well as being logically independent the Masculinity and Femininity scales were empirically independent (males,  $r = .11$ ; females,  $r = -.14$ ). Test-retest reliability (four week interval) demonstrated that all scores were highly reliable over the tested interval (Masculinity,  $r = .90$ ; Femininity,  $r = .90$ ; Social Desirability,  $r = .89$ ).

#### Personal Attributes Questionnaire

The Personal Attributes Questionnaire (PAQ) developed by Spence, Helmreich, and Stapp (1974, 1975) also measured masculinity and femininity independently. The full version of the PAQ contains 55 items which comprise three scales; a Masculinity (M) scale, a Femininity (F) scale, and a Masculinity-Femininity (M-F) scale. The 23-item Masculinity scale contains items that were socially desirable for both sexes but that males are believed to possess to a greater degree than females. The 18-item Feminine scale contains items that were socially desirable for both sexes but were believed to be possessed to a greater degree by females than males. The M-F scale (14 items) contains items that were socially desirable for one sex but not for the other. For each item, respondents rate themselves on a continuum between two contradictory characteristics (e.g., not at all aggressive - very aggressive). Five letters (A, B, C, D, E) form the scale between

the two extremes and respondents are asked to choose the letter which describes where they fall on the scale.

#### Adjective Check List M-F Scale Revision

The most recently developed sex role inventory designed to assess masculinity and femininity as independent dimensions was designed by Heilbrun (1976). His independent Masculinity and Femininity scales were adapted from the Masculinity-Femininity (M-F) scale of the Adjective Check List (Gough & Heilbrun, 1965). The original M-F scale was "derived by identifying those adjectives that discriminated between college males identified with masculine fathers and college females identified with feminine mothers" (Heilbrun, 1976). These items include both socially desirable and socially undesirable characteristics. Therefore, the ACL differs from the BSRI and the PAQ in two major ways:

1. the process of item selection, and
2. the social desirability of some items.

Kelly and Worell (1977) raise the possibility that the Heilbrun inventory assesses masculinity and femininity as bipolar constructs rather than independent dimensions, citing the fact that "gender differences in frequency of adjective endorsement was a criterion for item inclusion" and the fact that the relationships between the two scales are relatively high negative correlations (males,  $r = -.42$ ; females,  $r = -.24$ ).

#### Personality Research Form ANDRO

The PRF ANDRO (Berzins, Welling & Wetter, 1978) was developed using items from the Jackson Personality Research Form (1967). This

56-item inventory contains two subscales: Masculinity (29 items) and Femininity (27 items). Items were selected for inclusion on these scales on a "rational-intuitive" basis, using the rationale that Bem used to develop the BSRI. In addition, items were selected which were consistent with the theoretical definitions of masculinity and femininity as derived from the BSRI. The Masculine scale was viewed as depicting a dominant-instrumental content, and the Feminine scale reflected a nurturant-expressive content. These scales were subsequently validated statistically. Items are rated as true or false by respondents and the instrument can be scored in the same way as the BSRI and the PAQ, thus yielding four sex role categories.

The primary advantage of the PRF ANDRO is that previously collected Personality Research Form data can now be reanalyzed in terms of independent masculine and feminine dimensions.

#### Conclusion: Orthogonal Sex Role Inventories

In their review of the four instruments just described, Kelly and Worell (1977) question the interchangeability of the various sex role measures. They state that:

Item selection for the sex role scales under consideration was based on characteristics judged to be more desirable in members of one gender than another (Bem, 1974), ideal in members of both genders but more typical of one (Spence et al, 1975), conceptually consistent with masculine or feminine content themes (Berzins et al, Note 1), or characteristics that differentiated 'father-identified' males from 'mother-identified' females (Heilbrun, 1976). Moreover, specific items are alternately obtained empirically through self-ratings or other ratings or conceptually by means of rational-intuitive assignment. . . . Each of these separate approaches may lead to different outcomes. (p. 1106)

Therefore, comparison of the results of the various studies in which these instruments were used should be done cautiously.

The Bem Sex Role Inventory was selected for use in the present study because the scale reliabilities for the BSRI were high, the correlation between scales was low, and the development of the BSRI was based on the dualistic approach to masculinity and femininity.

### Personality Correlates of Sex Role Identity

In the present study, the relationship between sex role identity and the personality variables of self-esteem and undesirable sex role characteristics were examined. Recent research about the relationships between these personality variables and the independent constructs of masculinity and femininity will be discussed in the following sections.

#### Sex Role Identity and Self-Esteem

During the past few years, two studies have been conducted in which the relationship between sex role identity and self-esteem have been examined. In one of these studies Spence, Helmreich, and Stapp (1975) asked 530 college students (248 males and 282 females) to complete the Personal Attributes Questionnaire (PAQ) and the Texas Social Behavior Inventory (TSBI), a self-report scale designed to measure social competence and self-esteem. They found that positive correlations existed between the masculine (M) scale of the PAQ and self-esteem for both sexes. Although not as highly significant, positive correlations also existed between the feminine (F) scale and self-esteem for both sexes. Using the median-split technique they then divided their sample into the four sex role categories described earlier. For both sexes, the Androgynous subjects (high masculine and high feminine) reported the highest levels of self-esteem, while the lowest levels of self-esteem were reported by the individuals categorized as Undifferentiated

(low masculine and low feminine). The Masculine-typed subjects of both sexes reported higher levels of self-esteem than the Feminine-typed subjects. They concluded that masculinity and femininity may combine additively to determine self-esteem, offering support for the notion that both agency and communion contribute to personal and social effectiveness.

Bem (1977) obtained somewhat different results in a study in which she used the Bem Sex Role Inventory and the Texas Social Behavior Inventory. For women the Masculine-typed and Feminine-typed subjects reported similar levels of self-esteem, while the Undifferentiated women were lowest in self-esteem and the Androgynous women were highest in self-esteem. For men, however, self-esteem was significantly related to masculinity but not to femininity. The Androgynous and Masculine-typed men reported similar levels of self-esteem, and the Feminine-typed men reported levels of self-esteem similar to those of the Undifferentiated men. In addition, the Androgynous and Masculine-typed groups were higher in self-esteem than the Undifferentiated and Feminine-typed groups.

A comparison of the findings of the Bem and Spence et al studies is presented in Table 2.1. The differences in the results obtained in each of these studies may be due in part to the use of two different sex role inventories.

In their review of studies of self esteem and sex role identity, Kelly and Worell (1977) state:

. . . the present results suggest that high self-esteem is related mainly to the presence of masculine-typed behavior capabilities and minimally to the presence of feminine-typed characteristics. It is plausible that, in fact, those behaviors characterized as masculine-typed do lead to positive outcomes and higher self-esteem more frequently in our society than feminine-typed behaviors. (p. 1108)



TABLE 2.1  
COMPARISON OF THE STUDIES IN WHICH THE RELATIONSHIP  
BETWEEN SELF-ESTEEM AND SEX ROLE IDENTITY WERE EXAMINED

STUDY	MALES	FEMALES
Spence, et al* (1975)	$SE_A > SE_M > SE_F > SE_U$ (n = 248)	$SE_A > SE_M > SE_F > SE_U$ (n = 282)
Bem** (1977)	$SE_A = SE_M > SE_F = SE_U$ (n = 93)	$SE_A > SE_M = SE_F > SE_U$ (n = 71)

\* Used the Personal Attributes Questionnaire and the Texas Social Behavior Inventory.

\*\*Used the Bem Sex Role Inventory and the Texas Social Behavior Inventory.

NOTE: SE = Self-Esteem; A = Androgynous; M = Masculine; F = Feminine; and U = Undifferentiated.

#### Sex Role Identity and Socially Undesirable Sex-Typed Characteristics

In their review of current sex role inventories, Kelly and Worell (1977) observed that most of these instruments, including the Bem Sex Role Inventory, assessed only positive, socially desirable sex role characteristics. The relationships between sex role identity and socially undesirable sex-typed characteristics has been largely unexplored. Kelly, Caudill, Hathorn, and O'Brien (1977) developed a set of socially undesirable masculine (20 items) characteristics (e.g., arrogant, boastful, cruel) and a set of socially undesirable feminine (20 items) characteristics (e.g., gossipy, helpless, frequently crying)

and studied them in relation to the Bem Sex Role Inventory. Among males, they found that although all four groups endorsed some negative attributes, androgynous males endorsed the fewest socially undesirable masculine and feminine characteristics and undifferentiated males endorsed the most. Among females, the feminine-typed women reported lower quantities of socially undesirable masculine characteristics. They concluded that negatively valued sex-typed characteristics are differentially related to sex role types, and a functional part of some sex role inventories.

The findings of the Kelly et al (1977) study seem to underscore the need for further exploration of the relationships between sex role identity and socially undesirable sex role characteristics. Therefore, a set of negatively valued but sex-typed attributes were included in the instrumentation of the present study.

#### Parent Behavior Correlates of Sex Role Identity

Most of the research designed to explore the relationship between parental traits and male sex role development has been based on the bipolar formulation of masculinity and femininity. Earlier studies about paternal sex role orientation, and parental nurturance, however, are of interest.

Both psychoanalytic and social learning theory would suggest that a masculine father would promote masculinity in his son. Research, however, has frequently failed to support this relationship. Lynn (1974) concluded his review of relevant research by stating that "a positive relationship between masculinity of the father and masculinity of the

son has not been clearly established" (p. 166). Biller (1968) argues that a father must display masculine behaviors in the home environment, not just at work, in order to influence his son's masculinity.

Bandura and Walters (1963) contend that model nurturance will facilitate imitation, therefore, nurturant masculine fathers should have masculine sons. Several studies have confirmed this prediction (Kaplar, 1970; Freedheim, 1961; Mussen and Distler, 1960). Moulton, Burnstein, Liberty and Altucher (1966) found that if the father is the dominant disciplinarian in the family and is also affectionate with his son, the son (college age) is more likely to indicate masculine sex role preferences on a survey.

Lynn (1974) identified a pattern for the sex role development of males:

. . .an association was usually found between father's nurturance and masculinity in the boy from preschool to college age; when father combines nurturance with dominance and high participation in child care, he increases the likelihood of high masculinity in his son. (p. 166)

Because bipolar sex role measures were used in each of these studies, their relationship to investigations in which orthogonal sex role inventories were used is open to question. It is likely that many of the fathers, mothers, and sons sampled in these studies would have received androgynous or undifferentiated scores on orthogonal sex role measures, changes which could dramatically affect the conclusions drawn from earlier studies of sex role development and parent characteristics.

Only one study of the relationships between parent behavior and the sex role identity of the child has been based on the formulation of masculinity and femininity as independent constructs. Kelly and Worell (1976) used the PRF ANDRO Scale (Berzins, Welling, and Wetter, 1978) and the Parent Behavior Form (PBF; Worell and Worell, Note 1). The PBF consists of 135 items describing parent behavior from a child's perspective (see Chapter IV for a more detailed description). A respondent is asked to rate each statement as like, somewhat like or not like their father or mother. The PBF scales measure variables such as Warmth, Punitive Control, and Active Involvement. Three underlying factors were identified through statistical analysis: Parent Warmth versus Rejection, Parent Control, and Parent Cognitive Involvement (Kelly, 1975).

As is shown in Table 2.2, Kelly and Worell found that among males, warmth of reported parental behavior was the primary variable in differentiating sex role categories. Androgynous males reported elevated levels of warmth from both parents, while feminine-typed males reported high levels of maternal warmth and involvement. By contrast, masculine-typed males reported cool relationships with both parents. Indeterminate males, however, reported both cool parental relationships and an absence of parental cognitive involvement. These reports reflect an affective and a cognitive deficit in parental relationships for the indeterminate male.

In general, non-traditional sex role orientation for males appears to be related to elevated levels of reported maternal or paternal warmth. Kelly and Worell speculate that social learning

TABLE 2.2

SUMMARY OF THE SIGNIFICANT RELATIONSHIPS FOUND  
BETWEEN SEX ROLE IDENTITY AND SCALES OF THE  
PARENT BEHAVIOR FORM (KELLY & WORELL, 1976)

SCALE FACTOR	BETWEEN GROUP COMPARISON	
	FATHER	MOTHER
Warmth	A > M**	A > U**
Warmth vs. Rejection	A > U*	A > M**
	F > U*	F > M*
		F > U*
Active Involvement	A > M*	F > M**
Warmth vs. Rejection	A > U*	
Egalitarianism	A > U*	
Warmth vs. Rejection	F > U*	
	M > U*	
Cognitive Independence	A > U*	A > U**
Cognitive Involvement	M > U*	F > U**
	F > U*	
Cognitive Curiosity	A > U*	A > U**
Cognitive Involvement	M > U**	F > U**
	F > U**	
Conformity	A > U*	
Control	A > M**	
	F > M**	

\* p < .01

\*\*p < .05

NOTE: A = Androgynous; M = Masculine; F = Feminine; and  
U = Undifferentiated or Indeterminate.

theory best explains these findings. Assuming that imitative learning is facilitated by warmth on the part of the model (Bandura and Walters, 1963) the indeterminate male is likely to have recieved affection from neither parent, limiting their value as models. Kelly and Worell further state:

. . . the presence of parents who model and reinforce cross-typed characteristics is related to nontraditional roles in children. The likelihood of an androgynous orientation is especially enhanced when the same-sex parent exhibits cross-typed characteristics. (p. 849)

This assertion appears to contradict the tentative statements of Lynn (1974) and Maccoby and Jacklin (1974) that modeling plays a relatively minor role in sex role development.

### Discussion of the Literature

The dualistic approach to masculinity and femininity and the empirical studies based on the two-dimensional model of masculine and feminine characteristics were used in the formulation of several of the research hypotheses. No attempt was made to infer causal relationships between the variables in the study, therefore, the hypotheses only state that correlations exist between the variables.

In the following section the assumptions underlying the general research hypotheses and the empirical support for the assumptions and hypotheses will be presented.

1. The present study is based on the dualistic approach to the concepts of masculinity and femininity, i.e., masculinity and femininity as independent dimensions which all individuals possess to varying degrees. In particular, the theories of Jung and Bakan are relevant to the present research.

2. Individuals can be assigned to one of four sex role groups based on self-reports of levels of masculinity and femininity: Androgynous (high levels of masculine and feminine characteristics), Masculine-typed (high levels of masculine and low levels of feminine characteristics), Feminine-typed (low levels of masculine and high levels of feminine characteristics), and Undifferentiated (low levels of both masculine and feminine characteristics). These four categories of sex role orientation were originally identified in the work of Bem (1974), and Spence, Helmreich, and Stapp (1975).
  
3. Indices of psychological adjustment are differentially correlated with the four sex role orientations. In general, self-reports of Androgynous individuals will reflect the highest levels of psychological adjustment; Undifferentiated individuals will report the lowest levels of psychological adjustment. Masculine-typed and Feminine-typed individuals will report overall levels of psychological adjustment somewhere between those reported by Androgynous and Undifferentiated persons. In the present study, reports of self-esteem and endorsement of socially undesirable sex role characteristics were used as indices of psychological adjustment. The research hypotheses in which the relationships between sex role identity, socially undesirable characteristics, and self-esteem were examined are consistent with the findings of Kelly, Caudill, Hathorn, and O'Brien (1977), Spence, Helmreich, and Stapp (1975), and Bem (1977).

4. The hypotheses about the relationships between the variables of sex role identity, self-esteem, and socially undesirable sex role characteristics for college males' perceptions of their parents were developed from the same research findings as the hypotheses for self-reports of college males. Although none of the studies were designed to examine college men's perceptions of their parents on these personality variables, it was assumed that similar relationships between the variables would exist.
5. Androgynous individuals perceive their relationships with their parents as affectively and cognitively enriching, and Undifferentiated individuals perceive their relationships with their parents as affectively and cognitively impoverished. In the present study, the variables of parent warmth-versus-rejection, parent control, and parent cognitive involvement were used as indices of parent behavior. The hypotheses about the relationship between parent behavior and the sex role identity of college males are consistent with the findings of Kelly and Worell (1976).
6. The relationship between the self-esteem of college males and the self-esteem of their parents is assumed to be reciprocal. In other words, high levels of self-esteem for parents are likely to promote high levels of self-esteem in their sons, and high levels of self-esteem in the son is likely to promote high levels of self-esteem in the parents. Therefore, it was hypothesized that a positive correlation would exist between the



self-esteem of college males and their perceptions of their parents' self-esteem.

7. None of the studies based on the concept of masculinity and femininity as independent dimensions were designed to examine the relationship between an individual's sex role identity and his perceptions of his parents' sex role identity. Therefore, the hypotheses about the relationship between these two variables were based on the theoretical formulations of sex role development which were discussed in Chapter I. In general, it was hypothesized that the sex role identity of college males would be the same as their perception of the sex role identity of each of their parents. Although each theory assumes a different sequence of developmental steps, these hypotheses are consistent with the psychoanalytic, social learning, and cognitive developmental theories of sex role development.

#### Summary

During recent years, research about the correlates of sex role identity have frequently been based on a dualistic approach to masculinity and femininity. Several new measures of sex role orientation have been developed based on the assumption that masculinity and femininity are separate dimensions, which vary independently. The findings of research in which these new measures were used have suggested that psychological adjustment may be related to the development of both masculine and feminine characteristics, the person now described as androgynous.

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Androgynous individuals tend to report higher levels of self-esteem, endorse fewer socially undesirable sex role characteristics, and report higher levels of parent warmth and involvement than their non-androgynous counterparts. The dualistic approach to masculinity and femininity and the findings of recent research projects based on the two-dimensional model of sex role identity were basic to the formulation of hypotheses for the present study.

## CHAPTER III

### DESIGN OF THE STUDY

This study was designed to investigate the relationship between self-esteem, sex role, and parental behaviors as perceived by college men and their parents. The overall methodology of the research is described in the following chapter. In the chapter is included a description of the samples of college men and their parents, an outline of the process of data collection, a discussion of the major design features of the study, a statement of the testable research hypotheses, and a review of the statistical procedures used for the analysis of the data.

#### Sample

There are two populations from which the samples for the research were drawn, the population of college males residing in residence halls at Michigan State University, and the population of the parents of those college men. Each of these samples is described in the following sections.

#### Sample of College Males

The sample of 200 college men used in the study were undergraduate students living in residence halls at Michigan State University during the Fall term of 1978. As is shown in Table 3.1, the subjects ranged in age from 17 to 30 years, however, 99% of the subjects were between 17 and 22 years of age. The mean age was 19.13 years and the modal age was 18 years.

TABLE 3.1  
AGE OF COLLEGE MALE SUBJECTS  
(N = 200)

AGE (YEARS)	f	%
17	2	1.0
18	80	40.0
19	57	28.5
20	35	17.5
21	16	8.0
22	8	4.0
26	1	0.5
30	1	0.5

Table 3.2 is a summary of the academic status of the college male subjects. Freshman students represented 47% of the sample, while 24.5% of the subjects were sophomores, 17% were juniors, and 11.5% were seniors. Many of the subjects were first term freshmen, and therefore had not established a gradepoint average. Among the 138 subjects who did report a GPA, the mean was 2.99 on a 4.00 scale, with a range of 1.70 to 3.90. Appendix A is a summary of the academic majors of the student subjects.

Students were requested to volunteer to participate in the research only if they were raised by two parents, not necessarily their biological parents, until their early teenage years. As a result, 190 subjects (95%) reported their family situations while they were living at home as "Mother and father together, both responsible for care of the children." Seven individuals checked the statement

TABLE 3.2  
ACADEMIC STATUS OF  
COLLEGE MALE SUBJECTS  
(N = 200)

ACADEMIC YEAR	f	%
Freshman	94	47.0
Sophomore	49	24.5
Junior	34	17.0
Senior	23	11.4

"Mother and father divorced, mother remarried, she and stepfather responsible for care of the children," another two who indicated that "Guardians other than parents were responsible for care of the children," and one subject who failed to respond to the question.

As displayed in Table 3.3, 46 of the subjects were the oldest child in their family, 64 subjects were the youngest, and 4 were the only child in their family. The largest group, 85 subjects, reported having both older and younger siblings.

A summary of information regarding the subject's birth position among male siblings is displayed in Table 3.4. Only 33 subjects indicated they had both older and younger male siblings. A total of 55 subjects were the oldest male child in their family, 64 subjects were the youngest male child, and 47 of the subjects were the only male child in their family.

TABLE 3.3  
 BIRTH POSITION AMONG SIBLINGS  
 FOR COLLEGE MALE SUBJECTS  
 (N = 199)

BIRTH POSITION	f	%
Oldest	46	23.1
Middle	85	42.7
Youngest	64	16.1
Only	4	2.0

TABLE 3.4  
 BIRTH POSITION AMONG MALE SIBLINGS  
 FOR COLLEGE MALE SUBJECTS  
 (N = 199)

BIRTH POSITION	f	%
Oldest	55	27.6
Middle	33	16.6
Youngest	64	32.2
Only	47	23.6

Due to the cross-validation design of the study, the college male sample was randomly divided into two groups. As is shown in Table 3.5, the validation and cross-validation groups are very similar in the characteristics of average age, average GPA, and distribution across academic years.

TABLE 3.5

COMPARISON OF CHARACTERISTICS OF  
VALIDATION AND CROSS-VALIDATION  
SAMPLES OF COLLEGE MALE SUBJECTS

SAMPLE	n	MEAN AGE	MEAN GPA*	YEAR IN SCHOOL			
				1	2	3	4
Validation Group	100	18.99	2.984	47	25	17	11
Cross-Validation Group	100	19.26	2.997	47	24	17	12

\* On a 4.00 scale

#### Sample of Parents

The parent sample was selected from the population of parents of the 200 college male subjects described in the previous section. In order to adequately test some of the research hypotheses, questionnaires completed by both the mother and father of a student subject were required. Therefore, prior to the selection of the parent sample, couples were eliminated from the parent population if:

1. the college male subject indicated that either of his parents were no longer living, or
2. no address was available for either of the parents.

A sample of 100 couples was then randomly selected from the remaining parent population.

Of the 100 sets of parents surveyed, 96 couples were living together and four couples were living separately. A total of 173 mothers and fathers were residents of Michigan, and 27 parents were residing elsewhere in the continental United States.

Completed questionnaires were received from 173 of the parents surveyed (86.5%). Six parents (3%) returned questionnaires indicating they did not wish to participate in the study. No questionnaires were received from the remaining 21 parents (10.5%).

Among the 173 parents who returned completed surveys, 89 were mothers and 84 were fathers. For 83 sets of parents both the mother and the father participated in the study. For six couples, only the mother completed the questionnaire, and for one couple, only the father responded. Neither parent returned the questionnaire for the remaining 10 couples.

The frequency distribution for the age of each of the parent subjects is displayed in Table 3.6. Fathers who participated in the study ( $n = 84$ ) ranged in age from 39 to 61 years, with a mean age of 49.9 years. The mothers in the study ( $n = 89$ ) ranged in age from 38 to 59 years, with a mean age of 46.5 years.

As is shown in Table 3.7, the educational background of parent subjects ranged from less than high school to Ph.D.'s and an M.D. A total of 22 of the fathers and eight of the mothers had received graduate school degrees. An additional 14 fathers and 19 mothers were college graduates. The completion of high school was the highest educational level achieved by 48.3% of the mothers and 30.5% of the fathers in the sample.



TABLE 3.6  
AGE DISTRIBUTION OF PARENT SUBJECTS

AGE (YEARS)	FATHERS* (n = 84)		MOTHERS** (n = 89)	
	f	%	f	%
40 or less	1	1.2	6	6.7
41 to 45	21	25.0	35	39.3
46 to 50	25	29.7	29	32.6
51 to 55	15	17.9	12	13.5
56 to 60	11	13.1	6	6.7
61 or more	2	2.4	0	0.0
[Blank]	9	10.7	1	1.1

\* Mean age = 49.9 years

\*\*Mean age = 46.5 years

TABLE 3.7  
EDUCATIONAL BACKGROUND OF PARENT SUBJECTS

EDUCATION: HIGHEST LEVEL COMPLETED	FATHERS* (n = 82)		MOTHERS (n = 89)	
	f	%	f	%
Less than High School	5	6.1	4	4.5
High School Graduate	25	30.5	43	48.3
College (1-3 years)	16	19.5	15	16.9
College Graduate	14	17.1	19	21.3
Masters Degree	14	17.1	7	7.9
Ed.D.	2	2.4	0	0.0
Ph.D.	5	6.1	1	1.1
M.D.	1	1.2	0	0.0

\*Two father subjects did not respond to this question.

Appendix B contains a summary of the occupations reported by the parent sample.

### Procedures for Collection of Data

#### College Male Subjects

After obtaining approval of the research proposal from the University Committee on Research Involving Human Subjects, permission was given by the Residence Hall Programs Office at Michigan State University to obtain student subjects with the assistance of the residence hall advisory staff. During the Fall term of 1978, resident assistants from seven dormitories were requested by the researcher to volunteer to assist with the study. Each resident assistant then requested male students residing in his living unit to volunteer to participate in the research. The resident assistant distributed the research booklet and written information regarding participation in the study (Appendix C) to each subject. A total of 178 college male subjects participated in the study through this process. An additional 22 subjects volunteered to participate during living unit meetings at which the researcher presented information about participation in the study and distributed the research booklet.

Because subjects answered the questionnaire on their own time, each subject was asked not to discuss the questionnaire with anyone prior to its completion. In addition, subjects were requested to answer the questionnaire during a single sitting. The resident assistants were able to contact the researcher to answer any questions regarding the survey. All research booklets were returned to the researcher via the resident assistants.

### Parent Subjects

As indicated earlier, 100 sets of parents of the college male subjects were mailed questionnaires. Each parent was requested to respond to the mailing in one of three ways: (See Appendix C.)

1. to return the completed questionnaire,
2. to indicate their desire not to participate by checking the appropriate box and returning the questionnaire, or
3. to request additional information prior to participating in the research.

A stamped envelope was provided for the return mailing. Approximately one month after the initial mailing, a follow-up letter (Appendix C) was sent to each parent who had not yet responded, and three weeks after the follow-up letter a telephone contact was made.

Prior to the follow-up letter, 135 of the parent subjects (62.5%) had returned the questionnaire. Prior to the telephone contacts, an additional 32 subjects (16%) had returned the questionnaire, and 12 subjects (6%) returned the survey after the telephone contacts. Only 21 of the parents (10.5%) never responded.

Of the 179 subjects returning questionnaires, only 6 indicated they did not wish to participate in the research. The high return rate of completed questionnaires (86.5%) may, in part, be explained by the fact that questionnaires were only mailed to parents of students who had already volunteered to participate in the study. Student participation may have resulted in the selection of parents who were also likely to volunteer to participate in this type of study. In addition, parents may have been especially interested in the study because they knew that their sons had already participated. It is also worth noting

that 100% of the parents living outside of Michigan ( $n = 27$ ) returned completed questionnaires, while only 84% of the 173 parents residing in Michigan participated in the study.

### Instrumentation

Three previously developed instruments were used in the study: the Bem Sex Role Inventory (BSRI), the Rosenberg Self-Esteem Inventory (RSEI), and the Parent Behavior Form (PBF). For the purposes of this study, however, modifications of each of the measures were made. The Bem Sex Role Inventory was altered to include two sets of socially undesirable sex-typed characteristics (Kelly et al., 1977), the instructions for completion of the Parent Behavior Form were modified, and the scoring of the Rosenberg Self-Esteem Inventory was altered. Because of these changes, extensive work was done to establish the reliabilities of each of the instruments as used in this research. More complete descriptions of these measures and their reliabilities are included in Chapter IV.

Each college male subject was asked to complete the BSRI and RSEI three times, once each to describe himself, his mother, and his father; and the PBF twice, once each for his mother and his father. In addition, college male subjects provided supplemental information on the Family Information Questionnaire (FIQ), a 23-item survey of attitudes toward parents.

Each parent subject completed self-reports on the BSRI and the RSEI.

### Format of the Research Booklets

The research booklets prepared for student subjects differed significantly from the booklets prepared for the parent subjects. The format of each of these booklets is described in the following sections.

#### Research Booklets: College Male Subjects

Student subjects were presented research booklets arranged in the following order:

1. Participant Consent Form (Appendix D)
2. Parent Address Form
3. Participant Request for Research Results
4. Demographic Information Sheet
5. Family Information Questionnaire
6. Rosenberg Self-Esteem Inventory, Self
7. Bem Sex Role Inventory, Self
8. Parent Behavior Form, First Parent
9. Rosenberg Self-Esteem Inventory, First Parent
10. Bem Sex Role Inventory, First Parent
11. Parent Behavior Form, Second Parent
12. Rosenberg Self-Esteem Inventory, Second Parent
13. Bem Sex Role Inventory, Second Parent

The research instruments used in this study contained 563 items. Most subjects required 1 1/2 hours to complete the entire questionnaire. In order to minimize the likelihood that subject fatigue would uniformly affect responses to items, half of the student subjects were presented questionnaires in which reports of mothers were requested first and

reports of fathers second. The second half of the student subjects completed questionnaires in which descriptions of fathers were requested prior to descriptions of mothers. All college male subjects recorded their responses by marking the appropriate space on a computer scoring sheet.

#### Research Booklets: Parent Subjects

Each parent subject was mailed a cover letter with the research booklet. The letter described the study in general terms, and requested the cooperation of each parent. The remainder of the booklet was arranged as follows:

1. Participant Consent Form (Appendix D)
2. Participant Request for Research Results
3. Demographic Information Sheet
4. Bem Sex Role Inventory, Self
5. Rosenberg Self-Esteem Inventory, Self

The parent subjects indicated their response to each item by circling the appropriate number provided on the questionnaire. Each parent surveyed was provided with a self-addressed, stamped envelope to return the questionnaire.

#### Research Design

This research was designed as a descriptive study, an investigation of the relationships between the variables of sex role, self-esteem, and parent behaviors as viewed by college males and their parents. As a descriptive study, only the relationships between these variables as they presently exist were examined, and no attempt was

made to determine "causal" relationships. Data for the study were collected in the form of subjects' responses to questionnaires distributed to college males and their parents.

The design also incorporated the technique of cross-validation. This technique involved the following procedures:

1. The original sample of 200 college male subjects was randomly divided into two subgroups. Because the prenumbered questionnaires were distributed to subjects in a random manner, these subgroups were formed by placing odd-numbered subjects into one group, and even-numbered subjects into the other. As was stated earlier in this chapter (see the section titled "Sample of College Males"), these two samples were similar on the dimensions of average age, average GPA, and academic year.
2. The reliabilities for instruments completed by one of the subgroups, the validation group, were then computed. Using the procedure described in Chapter IV (see the section titled "Cross-Validation and the Refinement of Instruments"), items were deleted from the inventory scales. Reliabilities were computed for the revised instruments and the prediction was made that the instrument reliabilities for the cross-validation sample would be equal to or greater than those for the validation sample.
3. The data for the validation group were analyzed using the refined instruments.
4. Instrument reliabilities were computed for the second subgroup, the cross-validation group, using the refined inventories. These reliabilities were then compared with those of the validation group and the validity of the prediction was assessed.



5. The data for the cross-validation group were also analyzed using the refined instruments. These results were then compared with those of the validation group.

Because of the relatively small number of parents in the research sample, the cross-validation design was only used with the sample of college males.

In addition to providing an opportunity to refine the instruments used in the study, the cross-validation design allowed for the examination of the stability of results over two independent samples, and the potential to reduce the likelihood of a Type I error. If the results of the statistical test of an hypothesis are significant for both samples, the alpha level of one sample can be multiplied by the alpha level of the second sample, thereby reducing the probability that the significant findings are due to chance. In this study, the alpha level for both samples was .05, therefore, if significance was found in both groups, the probability of a Type I error was .0025. Results which were significant for only one sample were assumed to indicate an unstable relationship between the variables, and therefore, must be interpreted with caution.

### Hypotheses

The testable hypotheses developed for this study were divided into three groups, hypotheses about the reports of college men, hypotheses about the reports of parents, and hypotheses concerning the relationship between reports of college men and their parents.

A total of 21 null hypotheses were posited about reports of college males. Each of these hypotheses was examined twice, once for the validation sample and once for the cross-validation sample. Two

null hypotheses were used to examine the self-reports of parents, and seven null hypotheses were posited concerning the relationship between the reports of college men and the reports of their parents. In addition, alternate hypotheses were tested whenever a prediction could be made as to the direction of the relationship between the variables under consideration.

Each of these null and alternate hypotheses are stated in the following section.

#### Hypotheses about the Reports of College Males

##### Sex Role and Self-Esteem: Self-Reports of College Males

- $H_0$ : As reported by college males, there will be no differences among the four groups of subjects established by Bem Sex Role Inventory scores in their scores on the Rosenberg Self-Esteem Inventory.
- $H_{1a}$ : As reported by college males, subjects identified as Androgynous by their scores on the BSRI will report higher levels of self-esteem on the RSEI than subjects identified as Masculine, Feminine, and Undifferentiated.
- $H_{1b}$ : As reported by college males, subjects identified as Undifferentiated by their scores on the BSRI will report lower levels of self-esteem on the RSEI than subjects identified as Androgynous, Masculine, and Feminine.
- $H_{1c}$ : As reported by college males, subjects identified as Masculine by their scores on the BSRI will report higher levels of self-esteem on the RSEI than subjects identified as Feminine.

Self-Esteem and Perceived Parental  
Self-Esteem: Reports of College  
Males

$H_0$ : As reported by college males, there will be no relationship between the subjects' self-esteem scores on the RSEI and the self-esteem scores they report for their fathers on the RSEI.

$H_1$ : As reported by college males, there will be a positive relationship between the subjects' self-esteem scores on the RSEI and the self-esteem scores they report for their fathers on the RSEI.

$H_0$ : As reported by college males, there will be no relationship between the subjects' self-esteem scores on the RSEI and the self-esteem scores they report for their mothers on the RSEI.

$H_1$ : As reported by college males, there will be a positive relationship between the subjects' self-esteem scores on the RSEI and the self-esteem scores they report for their mothers on the RSEI.

Self-Esteem and Undesirable  
Characteristics: Self-Reports of  
College Males

$H_0$ : As reported by college males, there will be no relationship between the subjects' self-esteem scores on the RSEI and their socially undesirable masculine characteristics scores on the BSRI.

$H_1$ : As reported by college males, there will be a negative relationship between the subjects' self-esteem scores on the RSEI and their socially undesirable masculine characteristics scores on the BSRI.

$H_0$ : As reported by college males, there will be no relationship between the subjects' self-esteem scores on the RSEI and their socially undesirable feminine characteristics scores on the BSRI.

$H_1$ : As reported by college males, there will be a negative relationship between the subjects' self-esteem scores on the RSEI and their socially undesirable feminine characteristics scores on the BSRI.

$H_0$ : As reported by college males, there will be no relationship between the subjects' self-esteem scores on the RSEI and their total socially undesirable characteristics scores on the BSRI.

$H_1$ : As reported by college males, there will be a negative relationship between the subjects' self-esteem scores on the RSEI and their total socially undesirable characteristics scores on the BSRI.

Sex Role and Undesirable  
Characteristics: Self-Reports of  
College Males

$H_0$ : As reported by college males, there will be no differences among the four groups of subjects established by their scores on the BSRI in their scores on the socially undesirable masculine characteristics scale of the BSRI.

$H_{1a}$ : As reported by college males, subjects identified as Androgynous by their scores on the BSRI will report lower socially undesirable masculine characteristics scores on the BSRI than subjects identified as Masculine, Feminine, and Undifferentiated.

- $H_{1b}$ : As reported by college males, subjects identified as Undifferentiated by their scores on the BSRI will report higher socially undesirable masculine characteristics scores on the BSRI than subjects identified as Androgynous, Masculine, and Feminine.
- $H_{1c}$ : As reported by college males, subjects identified as Masculine by their scores on the BSRI will report higher socially undesirable masculine characteristics scores on the BSRI than subjects identified as Feminine.
- $H_0$ : As reported by college males, there will be no differences among the four groups of subjects established by their scores on the BSRI in their scores on the socially undesirable feminine characteristics scale of the BSRI.
- $H_{1a}$ : As reported by college males, subjects identified as Androgynous by their scores on the BSRI will report lower socially undesirable feminine characteristics scores on the BSRI than subjects identified as Masculine, Feminine, and Undifferentiated.
- $H_{1b}$ : As reported by college males, subjects identified as Undifferentiated by their scores on the BSRI will report higher socially undesirable feminine characteristics scores on the BSRI than subjects identified as Androgynous, Masculine, and Feminine.
- $H_{1c}$ : As reported by college males, subjects identified as Feminine by their scores on the BSRI will report higher socially undesirable feminine characteristics scores on the BSRI than subjects identified as Masculine.

Mother's Sex Role and Undesirable  
Characteristics: Reports of  
College Males

- $H_0$ : As reported by college males, there will be no differences among the four groups of mothers established by their scores on the BSRI in their scores on the socially undesirable masculine characteristics scale of the BSRI.
- $H_{1a}$ : As reported by college males, mothers identified as Androgynous by their scores on the BSRI will be reported as having lower socially undesirable masculine characteristics scores on the BSRI than mothers identified as Masculine, Feminine, and Undifferentiated.
- $H_{1b}$ : As reported by college males, mothers identified as Undifferentiated by their scores on the BSRI will be reported as having higher socially undesirable masculine characteristics scores on the BSRI than mothers identified as Androgynous, Masculine, and Feminine.
- $H_0$ : As reported by college males, there will be no differences among the four groups of mothers established by their scores on the BSRI in their scores on the socially undesirable feminine characteristics scale of the BSRI.
- $H_{1a}$ : As reported by college males, mothers identified as Androgynous by their scores on the BSRI will be reported as having lower socially undesirable feminine scores on the BSRI than mothers identified as Masculine, Feminine, and Undifferentiated.
- $H_{1b}$ : As reported by college males, mothers identified as Undifferentiated by their scores on the BSRI will be reported as having higher socially undesirable feminine characteristics scores on the BSRI than mothers identified as Androgynous, Masculine, and Feminine.

Father's Sex Role and Undesirable  
Characteristics: Reports of  
College Males

- $H_0$ : As reported by college males, there will be no differences among the four groups of fathers established by their scores on the BSRI in their scores on the socially undesirable masculine characteristics scale of the BSRI.
- $H_{1a}$ : As reported by college males, fathers identified as Androgynous by their scores on the BSRI will be reported as having lower socially undesirable masculine characteristics scores on the BSRI than fathers identified as Masculine, Feminine, and Undifferentiated.
- $H_{1b}$ : As reported by college males, fathers identified as Undifferentiated by their scores on the BSRI will be reported as having higher socially undesirable masculine characteristics scores on the BSRI than fathers identified as Androgynous, Masculine, and Feminine.
- $H_0$ : As reported by college males, there will be no differences among the four groups of fathers established by their scores on the BSRI in their scores on the socially undesirable feminine characteristics scale of the BSRI.
- $H_{1a}$ : As reported by college males, fathers identified as Androgynous by their scores on the BSRI will be reported as having lower socially undesirable feminine characteristics scores on the BSRI than fathers identified as Masculine, Feminine, and Undifferentiated.

$H_{1b}$ : As reported by college males, fathers identified as Undifferentiated by their scores on the BSRI will be reported as having higher socially undesirable feminine characteristics scores on the BSRI than fathers identified as Androgynous, Masculine, and Feminine.

Sex Role and Parental Warmth-versus-Rejection: Reports of College Males

$H_0$ : As reported by college males, there will be no differences among the four groups of college males established by their scores on the BSRI in the scores they report for their mothers on the warmth-versus-rejection factor of the PBF.

$H_{1a}$ : As reported by college males, subjects identified as Masculine by their scores on the BSRI will report higher scores for their mothers on the warmth-versus-rejection factor of the PBF than subjects identified as Androgynous and Feminine.

$H_{1b}$ : As reported by college males, subjects identified as Undifferentiated by their scores on the BSRI will report lower scores for their mothers on the warmth-versus-rejection factor of the PBF than subjects identified as Androgynous and Feminine.

$H_0$ : As reported by college males, there will be no differences among the four groups of college males established by their scores on the BSRI in the scores they report for their fathers on the warmth-versus-rejection factor of the PBF.

$H_{1a}$ : As reported by college males, subjects identified as Androgynous by their scores on the BSRI will report higher scores for their fathers on the warmth-versus-rejection factor of the PBF than subjects identified as Masculine, Feminine, and Undifferentiated.



$H_{1b}$ : As reported by college males, subjects identified as Undifferentiated by their scores on the BSRI will report lower scores for their fathers on the warmth-versus-rejection factor of the PBF than subjects identified as Masculine, Feminine, and Undifferentiated.

Sex Roles and Parental Cognitive  
Involvement: Reports of  
College Males

$H_0$ : As reported by college males, there will be no differences among the four groups of college males established by their scores on the BSRI in the scores they report for their mothers on the cognitive involvement factor of the PBF.

$H_{1a}$ : As reported by college males, subjects identified as Androgynous by their scores on the BSRI will report higher scores for their mothers on the cognitive involvement factor of the PBF than subjects identified as Masculine, Feminine, and Undifferentiated.

$H_{1b}$ : As reported by college males, subjects identified as Undifferentiated by their scores on the BSRI will report lower scores for their mothers on the cognitive involvement factor of the PBF than subjects identified as Androgynous, Masculine, and Feminine.

$H_0$ : As reported by college males, there will be no differences among the four groups of college males established by their scores on the BSRI in the scores they report for their fathers on the cognitive involvement factor of the PBF.

H<sub>1a</sub>: As reported by college males, subjects identified as Androgynous by their scores on the BSRI will report higher scores for their fathers on the cognitive involvement factor of the PBF than subjects identified as Masculine, Feminine, and Undifferentiated.

H<sub>1b</sub>: As reported by college males, subjects identified as Undifferentiated by their scores on the BSRI will report lower scores for their fathers on the cognitive involvement factor of the PBF than subjects identified as Androgynous, Masculine, and Feminine.

Sex Role and Parental Control:  
Reports of College Males

H<sub>0</sub>: As reported by college males, there will be no differences among the four groups of college males established by their scores on the BSRI in the scores they report for their mothers on the control factor of the PBF.

H<sub>1a</sub>: As reported by college males, subjects identified as Androgynous by their scores on the BSRI will report higher scores for their mothers on the control factor of the PBF than subjects identified as Masculine.

H<sub>1b</sub>: As reported by college males, subjects identified as Masculine by their scores on the BSRI will report higher scores for their mothers on the control factor of the PBF than subjects identified as Feminine.

$H_0$ : As reported by college males, there will be no differences among the four groups of college males established by their scores on the BSRI in the scores they report for their fathers on the control factor of the PBF.

$H_{1a}$ : As reported by college males, subjects identified as Androgynous by their scores on the BSRI will report higher scores for their fathers on the control factor of the PBF than subjects identified as Masculine, Feminine, and Undifferentiated.

$H_{1b}$ : As reported by college males, subjects identified as Undifferentiated by their scores on the BSRI will report lower scores for their fathers on the control factor of the PBF than subjects identified as Androgynous and Feminine.

College Male's Sex Role and  
Mother's Sex Role: Reports  
of College Males

$H_0$ : As reported by college males, no relationship will exist between the sex role identified for college males on the BSRI and the sex role identified for their mothers on the BSRI.

$H_{1a}$ : As reported by college males, college males identified as Androgynous by their scores on the BSRI will report mothers identified as Androgynous on the BSRI more frequently than subjects identified as Masculine, Feminine, and Undifferentiated.

$H_{1b}$ : As reported by college males, college males identified as Masculine by their scores on the BSRI will report mothers identified as Masculine on the BSRI more frequently than college males identified as Androgynous, Feminine, and Undifferentiated.

- $H_{1c}$ : As reported by college males, college males identified as Feminine by their scores on the BSRI will report mothers identified as Feminine on the BSRI more frequently than college males identified as Androgynous, Masculine, and Undifferentiated.
- $H_{1d}$ : As reported by college males, college males identified as Undifferentiated by their scores on the BSRI will report mothers identified as Undifferentiated on the BSRI more frequently than college males identified as Androgynous, Masculine, and Feminine.

College Male's Sex Role and  
Father's Sex Role: Reports  
of College Males

- $H_0$ : As reported by college males, no relationship will exist between the sex role identified for college males on the BSRI and the sex role identified for their fathers on the BSRI.
- $H_{1a}$ : As reported by college males, college males identified as Androgynous by their scores on the BSRI will report fathers identified as Androgynous on the BSRI more frequently than college males identified as Masculine, Feminine, and Undifferentiated.
- $H_{1b}$ : As reported by college males, college males identified as Masculine by their scores on the BSRI will report fathers identified as Masculine on the BSRI more frequently than college males identified as Androgynous, Feminine, and Undifferentiated.
- $H_{1c}$ : As reported by college males, college males identified as Feminine by their scores on the BSRI will report fathers identified as Feminine on the BSRI more frequently than college males identified as Androgynous, Masculine, and Undifferentiated.

H<sub>1d</sub>: As reported by college males, college males identified as Undifferentiated by their scores on the BSRI will report fathers identified as Undifferentiated on the BSRI more frequently than college males identified as Androgynous, Masculine, and Feminine.

College Male's Sex Role and  
Parental Androgyny: Reports  
of College Males

H<sub>0</sub>: As reported by college males, there will be no differences among the four groups of college males established by their scores on the BSRI in the frequency with which they report at least one parent identified as Androgynous on the BSRI.

H<sub>1a</sub>: As reported by college males, college males identified as Androgynous by their scores on the BSRI will report at least one parent identified as Androgynous on the BSRI more frequently than college males identified as Masculine, Feminine, and Undifferentiated.

H<sub>1b</sub>: As reported by college males, college males identified as Undifferentiated by their scores on the BSRI will report at least one parent identified as Androgynous on the BSRI less frequently than college males identified as Androgynous, Masculine and Feminine.

Hypotheses about the Reports  
of Parents

Sex Role and Self-Esteem:  
Reports of Fathers

H<sub>0</sub>: As reported by fathers, there will be no differences among the four groups of fathers established by their scores on the BSRI in their scores on the RSEI.

H<sub>1a</sub>: As reported by fathers, fathers identified as Androgynous by their scores on the BSRI will report higher levels of self-esteem on the RSEI than fathers identified as Masculine, Feminine, and Undifferentiated.

H<sub>1b</sub>: As reported by fathers, fathers identified as Undifferentiated by their scores on the BSRI will report lower levels of self-esteem on the RSEI than fathers identified as Androgynous, Masculine, and Feminine.

H<sub>1c</sub>: As reported by fathers, fathers identified as Masculine by their scores on the BSRI will report higher levels of self-esteem on the RSEI than fathers identified as Feminine.

Sex Role and Self-Esteem:  
Reports of Mothers

H<sub>0</sub>: As reported by mothers, there will be no differences among the four groups of mothers established by their scores on the BSRI in their scores on the RSEI.

H<sub>1a</sub>: As reported by mothers, mothers identified as Androgynous by their scores on the BSRI will report higher levels of self-esteem on the RSEI than mothers identified as Masculine, Feminine, and Undifferentiated.

H<sub>1b</sub>: As reported by mothers, mothers identified as Undifferentiated by their scores on the BSRI will report lower levels of self-esteem on the RSEI than mothers identified as Androgynous, Masculine, and Feminine.

H<sub>1c</sub>: As reported by mothers, mothers identified as Masculine by their scores on the BSRI will report higher levels of self-esteem on the RSEI than mothers identified as Feminine.

Hypotheses about the Relationship  
Between Reports of College Males  
and Reports of Parents

College Male's Sex Role and  
Parent's Sex Role: Self-Reports

$H_0$ : No relationship will exist between the sex role identified for college males by their self-reports on the BSRI and the sex role identified for fathers by their self-reports on the BSRI.

$H_0$ : No relationship will exist between the sex role identified for college males by their self-reports on the BSRI and the sex role identified for fathers by their self-reports on the BSRI.

College Males' Reports of Their Parents  
and Parents' Self-Reports

$H_0$ : There will be no relationship between the scores reported by fathers and the scores reported by college males about their fathers on the socially desirable masculine scale of the BSRI.

$H_1$ : There will be a positive relationship between the scores reported by fathers and the scores reported by college males about their fathers on the socially desirable masculine scale of the BSRI.

$H_0$ : There will be no relationship between the scores reported by fathers and the scores reported by college males about their fathers on the socially desirable feminine scale of the BSRI.

$H_1$ : There will be a positive relationship between the scores reported by fathers and the scores reported by college males about their fathers on the socially desirable feminine scale of the BSRI.

$H_0$ : There will be no relationship between the scores reported by mothers and the scores reported by college males about their mothers on the socially desirable masculine scale of the BSRI.

$H_1$ : There will be a positive relationship between the scores reported by mothers and the scores reported by college males about their mothers on the socially desirable masculine scale of the BSRI.

$H_0$ : There will be no relationship between the scores reported by mothers and the scores reported by college males about their mothers on the socially desirable feminine scale of the BSRI.

$H_1$ : There will be a positive relationship between the scores reported by college males about their mothers on the socially desirable feminine scale of the BSRI.

#### Procedures for Data Analysis

Three different statistical procedures were used to test the hypotheses in the study, the Pearson product-moment correlation coefficient, the one-way analysis of variance, and the chi-square test. Each of these statistical tests are described in the following sections.

#### Pearson Product-Moment Correlation

The Pearson product-moment correlation coefficient was used to examine the nature and degree of the relationship between continuous variables in the study. Reports of self-esteem, socially undesirable sex role characteristics, and descriptions of parent behavior on the dimensions of warmth-versus-rejection, cognitive involvement, and control were the continuous variables in the study.



### Chi-Square Test

The chi-square test of significance was used to examine the relationship between discrete variables in the study. Self-reports of sex role and descriptions of parents' sex role were the only discrete variables in the study. It is important to note that in several calculations involving the chi-square statistic the expected cell frequency was less than five, making the test extremely liberal. Therefore, an adjustment to the chi-square test, the Yates correction for continuity, was used whenever appropriate.

### Analysis of Variance

A one-way analysis of variance (ANOVA) was used to test the hypotheses about the relationship between a discrete variable (e.g., sex role category) and a continuous variable (e.g., self-esteem). The analysis of variance was followed by a t test of the comparisons stated in the alternate hypotheses. The assumptions underlying the analysis of variance are:

1. Normality of distribution
2. Equality of variances
3. Independence of observations

According to the Central Limit Theorem, the mean of a sample will have a normal distribution if the sample size is sufficiently large. The sample size in this study ranged from 84 to 100, samples large enough to apply the Central Limit Theorem and meet the assumption of normality.

When the cell size for each of the categories under consideration are equal, the ANOVA is robust to violations of the assumption of equal variances. In the present study, however, the cell sizes were unequal for the four sex role groups, therefore, another procedure was used to infer that there were equal variances for the four groups. When the number of subjects per cell in the analysis of variance is ten times the number of dependent variables, it can be assumed that the variances approach those found in the population. For the present study, each hypothesis tested using an ANOVA contained only one dependent variable, and the smallest cell size was 16. Therefore, it was assumed that the group variances approach those found in the population, and that the assumption of equal variances was not violated.

Because subjects were instructed to complete a questionnaire before discussing it with anyone, it can be assumed that there was independence between subjects. In addition, subjects were placed in only one sex role group, therefore, there was independence between groups. The assumption of independence of observations may have been violated whenever an ANOVA was used to test hypotheses relating reports of subjects on one instrument with the reports of the same subjects on a second instrument. For those hypotheses, observations may have been correlated, a violation of the assumption of independence. Therefore, results obtained for those hypotheses must be interpreted with caution.

### Summary

The present study was designed to investigate the relationships between sex role, self-esteem, and parental behavior as perceived

by college males and their parents. A sample of 200 undergraduate male subjects volunteered to participate in the study. The subjects were divided into two equal subgroups for the purpose of cross-validating the research results. Each college male subject completed a questionnaire which included the Bem Sex Role Inventory, the Rosenberg Self-Esteem Inventory, the Parent Behavior Form, and the Family Information Questionnaire.

A sample of 173 parents of the college male subjects (89 mothers and 84 fathers) also participated in the research. The subjects completed questionnaires which included the Bem Sex Role Inventory and the Rosenberg Self-Esteem Inventory.

Hypotheses about the reports of the subjects were divided into three categories, hypotheses about the reports of college males, hypotheses concerning the reports of parents, and hypotheses about the relationship between reports of college males and their parents.

The Pearson product-moment correlation statistic was used to examine the relationship between two continuous variables, while the chi-square statistic was used to test the relationship between two discrete variables. Hypotheses involving the relationship between a continuous and a discrete variable were tested using a one-way analysis of variance followed by t tests of planned comparisons.

## CHAPTER IV

### INSTRUMENTATION

In Chapter IV, the three major instruments used in the study, the Bem Sex Role Inventory, the Rosenberg Self-Esteem Inventory, and the Parent Behavior Form, are discussed. Each of the instruments was used in a modified form, therefore, extensive work was done to establish the reliabilities of the inventories. Included in the chapter is a description of the process used to delete items from instrument scales a description of each inventory and their modifications, and a review of the reliabilities of each inventory as it was used in the study.

#### Cross-Validation and the Refinement of Instruments

The cross-validation design discussed in Chapter III provided an opportunity to refine the inventories used in the study. In general, it was predicted that scale modifications, i.e., the deletion of some scale items which improved scale reliabilities for the validation group would result in equal or higher scale reliabilities for the cross-validation group.

To examine the prediction about improved reliability, reliabilities for the Bem Sex Role Inventory, the Rosenberg Self-Esteem Inventory, and the Parent Behavior Form were computed for the validation group. No modifications were made in inventory scales with a reliability of .80 or higher. The following criteria were used to delete items from scales with a reliability of less than .80:

1. The overall scale alpha increased if the item was deleted, and
2. The corrected item-total correlation for the item fell below .40.

If more than one scale item met these criteria, only one item was eliminated, the item whose deletion would result in the greatest increase in scale reliability. Using the revised scale, reliabilities were again computed, and the above procedure was repeated until the scale reliabilities reached .80 or until no items met the deletion criteria.

Data collected from mother and father subjects were not included in the cross-validation design, therefore, no revisions were made in the inventories completed by parents.

#### Bem Sex Role Inventory

As indicated in Chapter II, the Bem Sex Role Inventory originally consisted of three 20-item scales, a masculine scale, a feminine scale, and a gender-neutral scale. In this study, only the masculine and feminine scales were used. Items from these scales, however, assess only positive, socially desirable sex-typed characteristics. Therefore, two sets of negatively valued sex-typed characteristics were included in the inventory, a 20-item socially undesirable masculine characteristics scale and a 20-item socially undesirable feminine characteristics scale. The 80 items used in the inventory were presented to subjects in a repeating sequence of socially desirable masculine, socially desirable feminine, socially undesirable masculine, and socially undesirable feminine items. Each college male subject was asked to indicate on a scale from 1 ("never or almost never true") to 7 ("always or almost

always true") the degree to which each characteristic described himself, his mother, and his father. Each parent subject was requested to describe himself or herself using the same 1 to 7 scale. The BSRI as it was presented to college male subjects and parent subjects is contained in Appendix E.

Bem Sex Role Inventory:  
Item Elimination

As indicated earlier, items were only eliminated from BSRI scales with a reliability of less than .80 in the validation group. With the exception of two scales, the validation group reliabilities for the BSRI scales were .80 or higher. Those two scales were college males' descriptions of themselves on the socially desirable feminine characteristics scale and the socially undesirable masculine characteristics scale. Items were then deleted from those scales using the procedure described earlier. (See Appendix I for a summary of BSRI items and their corresponding "alpha if item deleted," and "corrected item-total correlation.") Two items were deleted from the socially desirable feminine characteristics scale, "shy" and "gullible," increasing the validation group scale reliability from .76 to .81. Only one item, "overly loved," was eliminated from the socially undesirable masculine scale, resulting in an increase in the validation group scale reliability from .79 to .80.

All validation group scale reliabilities for college males' reports of each of their parents on the BSRI were .80 or greater, therefore, no items were deleted from those scales. Parents' descriptions of themselves on the BSRI were not included in the cross-validation design, therefore, no modifications were made in those scales.

Bem Sex Role Inventory:  
Scale Reliabilities

Overall, the BSRI scales used in this study were highly reliable for college men's self-reports, and for their description of each of their parents (Table 4.1). With one exception, the socially desirable feminine characteristics scale (college men's self-reports), the BSRI scale reliabilities were .80 or higher in both the validation and cross-validation groups. These reliabilities are consistent with those reported by Bem (1974) for the socially desirable masculine scale ( $\alpha = .86$ ) and the socially desirable feminine scale ( $\alpha = .82$ ).

In general, the scale reliabilities for the cross-validation group were within  $\pm .04$  of the scale reliabilities for the validation group. For the two scales modified by the elimination of items, the prediction that scale reliabilities for the cross-validation group would be equal to or greater than the scale reliabilities for the validation group was supported only for the socially undesirable masculine scale ( $\alpha_V = .82$ ,  $\alpha_{CV} = .83$ ). For the socially desirable feminine scale the reliability in the cross-validation group ( $\alpha_{CV} = .72$ ) was lower than that for the validation group ( $\alpha_V = .81$ ).

For the self-reports of mothers and fathers on the BSRI, all scale reliabilities were .76 or greater (Table 4.2). As stated earlier, these reports were not included in the cross-validation design, therefore, no revisions were made in these inventory scales.

Bem Sex Role Inventory:  
Scale Medians

The sex role category for college men and their parents was determined by the use of the median-split technique discussed in

TABLE 4.1

MEANS, STANDARD DEVIATIONS, AND RELIABILITIES  
FOR THE SCALES OF THE BEM SEX ROLE INVENTORY,  
REPORTS OF COLLEGE MALES

INDIVIDUAL SCALE	VALIDATION GROUP			CROSS-VALIDATION GROUP		
	MEAN	SD	$\alpha$	MEAN	SD	$\alpha$
SELF						
Desirable						
Masculine	103.64	15.61	.90	105.19	11.66	.83
Desirable						
Feminine*	85.92	10.44	.81	87.02	8.56	.72
Undesirable						
Masculine**	46.70	11.76	.82	54.29	12.32	.83
Undesirable						
Feminine	49.68	12.06	.82	51.03	11.71	.80
MOTHER						
Desirable						
Masculine	88.06	16.39	.90	85.23	14.74	.88
Desirable						
Feminine	100.02	13.29	.86	102.06	12.00	.82
Undesirable						
Masculine	43.19	15.85	.93	45.60	15.18	.90
Undesirable						
Feminine	49.85	16.77	.92	52.28	18.01	.92
FATHER						
Desirable						
Masculine	105.66	15.78	.91	105.85	14.59	.89
Desirable						
Feminine	82.57	13.93	.84	82.69	14.59	.87
Undesirable						
Masculine	48.78	13.46	.87	51.42	16.90	.91
Undesirable						
Feminine	39.62	12.92	.89	39.39	12.85	.88

\* Revised scale, 18 items.

\*\* Revised scale, 19 items.



TABLE 4.2

MEANS, STANDARD DEVIATIONS, AND RELIABILITIES  
FOR THE SCALES OF THE BEM SEX ROLE INVENTORY,  
SELF-REPORTS OF PARENTS

SCALE	FATHER*			MOTHER**		
	MEAN	SD	$\alpha$	MEAN	SD	$\alpha$
Desirable Masculine	105.82	14.21	.88	89.95	16.00	.90
Desirable Feminine	91.39	10.90	.78	101.94	10.02	.77
Undesirable Masculine	51.39	12.52	.82	46.12	10.46	.77
Undesirable Feminine	46.31	10.54	.76	51.30	11.29	.80

\* n = 84

\*\* n = 89

Chapter II. According to this procedure, individuals scoring above the median on both the socially desirable masculine and the socially desirable feminine scales of the BSRI were categorized as "Androgynous," and individuals scoring below the median on both scales were identified as "Undifferentiated." Individuals scoring above the median only on the socially desirable masculine scale were categorized as "Masculine," while individuals identified as "Feminine" were those scoring above the median only on the socially desirable feminine scale.

Separate medians were determined for the validation and cross-validation groups. Table 4.3 is a summary of the medians for college men's self-reports, and for their descriptions of each of their parents. The greatest differences between the validation and cross-validation group median scores occurred on the socially desirable feminine scale for college men's reports of their fathers and the socially desirable masculine scale for college men's descriptions of their mothers.

TABLE 4.3  
SCALE MEDIANS FOR THE BEM SEX ROLE INVENTORY,  
REPORTS OF COLLEGE MALES

INDIVIDUAL SCALE	VALIDATION GROUP		CROSS-VALIDATION GROUP	
	MEDIAN	RANGE	MEDIAN	RANGE
SELF				
Desirable Masculine*	104.25	55 - 135	104.25	80 - 132
Desirable Feminine**	85.83	62 - 107	86.88	64 - 107
FATHER				
Desirable Masculine*	106.50	47 - 140	107.33	61 - 138
Desirable Feminine*	82.17	41 - 122	86.50	49 - 115
MOTHER				
Desirable Masculine*	89.50	48 - 120	83.75	49 - 120
Desirable Feminine*	101.30	66 - 124	102.83	77 - 126

\* Minimum score, 20; maximum score, 140.

\*\* Minimum score, 18; maximum score, 126.

Parents who participated in the study were randomly selected from the sample of parents of college men in both the validation and the cross-validation groups. In order to compare parent self-reports with college men's self-reports, and college men's reports of their parents on the BSRI, new medians were computed on the BSRI scales for only those college men whose parents participated in the study. These median scores, along with the median scores for parent self-reports are summarized in Table 4.4. A comparison of BSRI scale medians for parent self-reports with scale medians for descriptions of parents by college men indicates that differences in median scores were greatest on the socially desirable feminine scale for fathers and the socially desirable masculine scale for mothers. The number of subjects assigned to each sex role category for the college men and parent samples is summarized in Appendix L.

TABLE 4.4

SCALE MEDIANS FOR THE BEM SEX ROLE INVENTORY,  
REPORTS OF COLLEGE MALES AND THEIR PARENTS

INDIVIDUAL SCALE	COLLEGE MALES' REPORTS		PARENTS' SELF-REPORTS	
	MEDIAN	RANGE	MEDIAN	RANGE
COLLEGE MALES				
Desirable Masculine	104.75	55 - 135	--	--
Desirable Feminine	85.00	64 - 105	--	--
FATHER				
Desirable Masculine	106.70	47 - 135	106.25	68 - 135
Desirable Feminine	81.50	41 - 112	92.67	62 - 115
MOTHER				
Desirable Masculine	85.90	49 - 118	89.33	47 - 127
Desirable Feminine	100.50	70 - 125	102.50	71 - 126

Rosenberg Self-Esteem Inventory

The Rosenberg Self-Esteem Inventory consists of ten statements, each of which is rated by the respondent on a scale from 1 ("strongly agree") to 4 ("strongly disagree"). Five of the scale items deal with a favorable attitude toward oneself, while five of the items deal with an unfavorable attitude toward oneself. To reduce the effects of response set, "positive" and "negative" statements were interspersed when presented to subjects.

Each college male subject was asked to complete the RSEI for himself, his father, and his mother. Since the RSEI was originally developed for use only for self-reports, the first person pronoun form of each statement was altered so that each item would be appropriate for the person being rated. Each parent subject also completed a

self-report on the RSEI. Appendix F contains the three forms of the RSEI as completed by college male subjects and the RSEI as it was presented to parent subjects.

As originally developed, the RSEI was scored using a Guttman technique in which each item was scored based on its relationship to other items on the scale (Rosenberg, 1965). For this study, however, items were scored individually. Scores on the "negative" items of the scale were recoded so that when they were combined with scores on "positive" items, high scale scores would reflect high self-esteem and low scale scores would reflect low self-esteem.

Rosenberg Self-Esteem Inventory:  
Item Elimination and Scale  
Reliabilities

As used in this study, the Rosenberg Self-Esteem Inventory was highly reliable, as none of the scale reliabilities were below .80. In Table 4.5 is a summary of RSEI reliabilities for the validation and cross-validation groups. Because the validation group reliabilities were .80 or greater for college men's descriptions of themselves and each of their parents, no items were deleted from the scale. Appendix J is a listing of the "alpha if item deleted" and the "corrected item-total correlation" for each of the RSEI scale items.

The reliabilities for the RSEI for self-reports of fathers ( $\alpha = .86$ ) and mothers ( $\alpha = .81$ ) were also high. Table 4.6 is a summary of information about the reliabilities of parent self-reports on the RSEI.

TABLE 4.5

MEANS, STANDARD DEVIATIONS, AND RELIABILITIES  
FOR THE ROSENBERG SELF-ESTEEM INVENTORY FOR  
SELF, MOTHER AND FATHER, VALIDATION  
AND CROSS-VALIDATION GROUPS

SAMPLE INDIVIDUAL	MEAN	SD	RELIABILITY
VALIDATION GROUP			
Self	33.07	4.72	.84
Mother	33.64	4.59	.86
Father	34.39	3.87	.81
CROSS-VALIDATION GROUP			
Self	32.77	4.37	.81
Mother	31.96	4.59	.85
Father	33.84	4.36	.85

TABLE 4.6

MEANS, STANDARD DEVIATIONS, AND RELIABILITIES  
FOR THE ROSENBERG SELF-ESTEEM INVENTORY,  
SELF-REPORTS OF PARENTS

INDIVIDUAL	MEAN	SD	RELIABILITY
Father	34.15	4.30	.86
Mother	34.03	3.63	.81

### Parent Behavior Form

The Parent Behavior Form consists of 135 statements that describe parent behavior from the perspective of the child. The PBF as presented to subjects in this study is contained in Appendix G. Each college male subject was asked to complete the PBF twice, once to describe his mother and once to describe his father. Subjects rated each statement as like, somewhat like, or unlike each of his parents. In earlier studies, respondents were asked to recall what their parents were like when the respondent was 16 years old. In this study, however, each subject was asked to describe how accurately each statement described his parent.

The PBF is composed of 15 nine-item scales, 13 of which were used in this study. Analyses of the PBF scales have revealed three underlying factors: parental warmth-versus-rejection, parental control, and parental cognitive involvement (Kelly, 1975). The 13 scales used in this analysis combine to form each of these factors. The factor of parental warmth-versus-rejection (WVR) was formed by adding the scale scores of warmth (WR), active involvement (AI), egalitarianism (EG), and cognitive independence (CI), and subtracting the scale scores for hostile control (HC), and rejection (RJ). The parental control (CON) factor was formed by adding the scale scores of strict control (SC), punitive control (PC), and conformity (CO), and subtracting the scale score for lax control (LC). The third factor, parental cognitive involvement (COG) was formed by combining the scale scores of cognitive curiosity (CU), cognitive competence (CC), cognitive independence (CI), and achievement control (AC). A summary of these factors and the scales used to form them is contained in Table 4.7.

TABLE 4.7

SUMMARY OF PARENT BEHAVIOR FORM SCALES  
WHICH FORM THE FACTORS USED  
IN THE ANALYSIS OF DATA

FACTOR	WEIGHT	SCALE
Warmth vs Rejection (WVR)	+	Warmth (WR)
	+	Active Involvement (AI)
	+	Egalitarianism (EG)
	+	Cognitive Independence (CI)
	-	Hostile Control (HC)
	-	Rejection (RJ)
Cognitive Involvement (COG)	+	Cognitive Independence (CI)
	+	Cognitive Competence (CC)
	+	Cognitive Curiosity (CU)
	+	Achievement Control (AC)
Control (CON)	+	Strict Control (SC)
	+	Punitive Control (PC)
	+	Conformity (CO)
	-	Lax Control (LC)

Parent Behavior Form:  
Item Elimination

Several items were eliminated from the thirteen scales of the Parent Behavior Form using the process described earlier in this chapter. Appendix K contains a summary of the item analysis used in this process. The changes in scale reliabilities resulting from the deletion of items from PBF scales are summarized in Table 4.8.

For college males' descriptions of their father's behavior on the PBF, items were eliminated from ten of the thirteen scales used in this study. Only the active involvement (AI), cognitive independence (CI), and strict control (SC) scales were retained as nine-item scales.

TABLE 4.8

MEANS, STANDARD DEVIATIONS, AND RELIABILITIES FOR THE  
PARENT BEHAVIOR FORM SCALES, VALIDATION GROUP,  
REPORTS OF COLLEGE MALES

SCALE	FATHER					MOTHER										
	FULL SCALE			REVISED SCALE		FULL SCALE			REVISED SCALE							
	# OF ITEMS	MEAN	SD	REL.	# OF ITEMS	MEAN	SD	REL.	# OF ITEMS	MEAN	SD	REL.				
Warmth	9	21.73	3.74	.83	8	19.42	3.44	.84	9	23.13	3.56	.84	8	20.62	3.24	.85
Active Involvement	9	19.03	4.22	.85	9	19.03	4.22	.85	9	22.21	3.50	.80	9	22.21	3.50	.80
Egalitarianism	9	22.99	2.57	.61	8	20.51	2.41	.61	9	22.98	3.12	.75	9	22.98	3.12	.75
Cognitive Independence	9	23.18	3.23	.79	9	23.18	3.23	.79	9	22.79	3.42	.80	7	17.76	2.88	.81
Hostile Control	9	11.26	2.67	.75	8	10.02	2.51	.75	9	12.01	3.14	.78	7	9.56	2.86	.81
Rejection	9	11.22	2.43	.64	8	9.99	2.29	.65	9	11.18	2.36	.64	4	4.53	1.28	.76
Conformity	9	17.93	3.11	.60	3	5.85	2.07	.77	9	19.73	3.33	.64	8	18.19	3.16	.65
Strict Control	9	12.41	2.87	.73	9	12.41	2.87	.73	9	13.84	3.47	.76	8	12.53	3.28	.77
Punitive Control	9	14.25	3.10	.74	5	8.19	2.38	.79	9	14.60	3.60	.79	8	12.79	3.34	.80
Lax Control	9	16.76	3.77	.79	8	14.43	3.46	.79	9	16.26	3.63	.78	9	16.26	3.63	.78
Cognitive Curiosity	9	20.42	3.84	.76	8	18.22	3.65	.77	9	19.40	4.16	.82	9	19.40	4.16	.82
Cognitive Competence	9	18.31	3.40	.67	7	13.60	3.15	.69	9	19.07	3.56	.70	8	16.64	3.35	.70
Achievement Control	9	15.27	3.23	.61	7	11.42	2.78	.62	9	15.69	3.24	.62	8	14.09	3.04	.62



Among the scales from which items were deleted, the conformity (CO) and punitive control (PC) scales were the only scales from which more than two items were eliminated.

Items were also eliminated from nine of the PBF scales for college males' descriptions of their mother's behavior. The rejection (RJ) scale was the only scale reduced by more than two items, while four scales, active involvement (AI), egalitarianism (EG), lax control (LC) and cognitive curiosity (CU) remained unaltered.

#### Parent Behavior Form: Factor Reliabilities

Because the Parent Behavior Form factors, rather than the separate scales, were used in the data analysis, only the factor reliabilities are reported for both the validation and cross-validation groups. For both groups, the factors of parental warmth-versus-rejection, parental cognitive involvement, and parental control were highly reliable (Table 4.9). Reliabilities for the validation group were .83 or greater, while none of the factor reliabilities for the cross-validation group fell below .86.

As stated earlier in this chapter, it was predicted that the deletion of items on the scales forming the PBF factors would result in cross-validation group factor reliabilities equal to or greater than the factor reliabilities for the validation group. As is shown in Table 4.9, this prediction was supported for each of the PBF factors used in the analysis of data in the study.

#### Conclusions

Overall, the inventories used in the study were highly reliable. No revisions of the Rosenberg Self-Esteem Inventory were made, and only

TABLE 4.9

MEANS, STANDARD DEVIATIONS, AND RELIABILITIES  
FOR THE PARENT BEHAVIOR FORM'S FACTORS,  
VALIDATION AND CROSS-VALIDATION GROUPS,  
COLLEGE MALES' REPORTS

INDIVIDUAL SCALE	# OF ITEMS	VALIDATION			CROSS-VALIDATION		
		MEAN	SD	REL.	MEAN	SD	REL.
MOTHER							
WVRM	44	69.47	13.45	.94	67.82	14.16	.94
CONM	33	27.25	10.08	.88	27.86	10.92	.90
COGM	32	67.88	10.51	.88	66.11	10.70	.88
FATHER							
WVRF	50	62.13	13.87	.93	57.69	19.22	.96
CONF	25	12.02	7.18	.83	13.01	8.15	.86
COGF	31	66.43	9.22	.85	64.39	10.69	.88

minor changes were needed for the Bem Sex Role Inventory. The Parent Behavior Form was the only inventory which was altered significantly. The reliabilities for the factors of the revised PBF, however, were also consistently high. It was therefore concluded that a true relationship between variables in the study was not likely to be concealed by inconsistency of the research instruments.

#### Summary

The cross-validation design of the study provided an opportunity to strengthen the overall research through the modification of the research instruments, the Bem Sex Role Inventory, the Rosenberg

Self-Esteem Inventory, and the Parent Behavior Form. Information obtained in the reliability analysis of each instrument was used to eliminate items from inventory scales. An item was eliminated if:

1. the overall scale reliability was less than .80,
2. the scale alpha increased if the item was deleted, and
3. the corrected item-total correlation was less than .40.

If more than one scale item met these criteria, only the item whose deletion would increase the scale alpha the greatest amount was eliminated. Following the computation of a reliability analysis on the revised scale, the process was repeated until the scale reliability reached .80 or until no items met the required criteria. Parent self-reports were not included in the cross-validation design, therefore these procedures were followed only for data collected from college men.

Each college male subject completed the BSRI for himself, his father, and his mother. In addition, self-reports were obtained from each parent subject on the BSRI. The validation group scale reliabilities were consistently high, therefore items were eliminated from only two BSRI scales. Following these revisions, scale reliabilities on the BSRI for the validation group were all greater than .80. In the cross-validation group, reliabilities of .80 or greater were maintained for all but one scale. Parent self-reports on the BSRI resulted in scale reliabilities ranging from .76 to .90.

Self-reports were obtained from each college male subject and each parent subject on the Rosenberg Self-Esteem Inventory. In addition, each college male described his mother and father on the RSEI. All

RSEI scale reliabilities in the validation group were above .80, therefore, no items were eliminated from the RSEI scales. In the cross-validation group, scale reliabilities were again greater than .80. Self-reports of fathers and mothers resulted in scale reliabilities of .86 and .81 respectively.

Each college male also completed the Parent Behavior Form, once to describe his father, and a second time to describe his mother. Thirteen of the original fifteen PBF scales were used in this study. Items were eliminated from ten of the paternal PBF scales and nine of the maternal PBF scales. The revised scales were then combined to form the factors of parental warmth-versus-rejection, parental cognitive involvement, and parental control. In the validation group, the reliabilities of these PBF factors ranged from .83 to .94, while in the cross-validation group they ranged from .86 to .96.

In general, the scales and factors used to analyze the data in the study had reliabilities of .80 or greater. These reliabilities reflect either the original strength of the instruments, or the improved internal consistency of the inventories which resulted from the deletion of scale items.

## CHAPTER V

### ANALYSIS OF RESULTS

In the following chapter the analysis of the results will be presented. These findings will be reported under three major headings:

1. hypotheses concerning data reported by college men,
2. hypotheses about data reported by parents of college men, and
3. hypotheses concerning the relationship between reports of college men and reports of their mothers and fathers.

Throughout the chapter, each hypothesis will be restated, a symbolic form of the hypothesis will be stated if appropriate, and results of the analysis of the data will be given followed by a statement about whether the hypothesis was accepted or rejected.

#### Sex Role Identity, Self-Esteem, and Perceived Parental Behavior: Reports of College Men

The analysis of results under consideration in this section was based on data collected from college men. Their reports on the Bem Sex Role Inventory (BSRI), the Rosenberg Self-Esteem Inventory (RSEI), and the Parent Behavior Form (PBF) were used in various combinations to test the hypotheses which were stated in Chapter III. A summary of these findings can be found in Table 5.1.

#### Sex Role and Self-Esteem

A series of hypotheses were tested regarding the relationship between college men's sex role category on the Bem Sex Role Inventory

TABLE 5.1

SUMMARY OF RESULTS OF STUDY OF COLLEGE MEN'S  
SEX ROLE IDENTITY, SELF-ESTEEM, AND  
PERCEPTIONS OF THEIR PARENTS

SYMBOLIC HYPOTHESES	RESULTS	
	VALIDATION GROUP	CROSS- VALIDATION GROUP
$H_0$ : $SES_A = SES_M = SES_F = SES_U$	$F = 10.87^*$	$F = 18.38^*$
$H_{1a}$ : $SES_A > SES_M, SES_F, SES_U$	$\underline{t} = 3.35^*$	$\underline{t} = 4.03^*$
$H_{1b}$ : $SES_U < SES_A, SES_M, SES_F$	$\underline{t} = 4.93^*$	$\underline{t} = 5.32^*$
$H_{1c}$ : $SES_M > SES_F$	$\underline{t} = 1.75$	$\underline{t} = 4.11^*$
$H_0$ : No relationship between SES and SEF		
$H_1$ : Positive relationship between SES and SEF	$r = .34^*$	$r = .11$
$H_0$ : No relationship between SES and SEM		
$H_1$ : Positive relationship between SES and SEM	$r = .55^*$	$r = .36^*$
$H_0$ : No relationship between SES and UMAS		
$H_1$ : Negative relationship between SES and UMAS	$r = -.18^*$	$r = .06$
$H_0$ : No relationship between SES and UFES		
$H_1$ : Negative relationship between SES and UFES	$r = -.58^*$	$r = -.45^*$
$H_0$ : No relationship between SES and UTOS		
$H_1$ : Negative relationship between SES and UTOS	$r = -.42^*$	$r = -.27^*$

TABLE 5.1—Continued

SYMBOLIC HYPOTHESES	RESULTS	
	VALIDATION GROUP	CROSS-VALIDATION GROUP
$H_0: UMAS_A = UMAS_M = UMAS_F = UMAS_U$	$F = 3.47^*$	$F = 4.08^*$
$H_{1a}: UMAS_A < UMAS_M, UMAS_F, UMAS_U$	$\underline{t} = 2.92^*$	$\underline{t} = 2.02^*$
$H_{1b}: UMAS_U > UMAS_A, UMAS_M, UMAS_F$	$\underline{t} = 1.42$	$\underline{t} = 0.07$
$H_{1c}: UMAS_M > UMAS_F$	$\underline{t} = 1.18$	$\underline{t} = 2.97^*$
$H_0: UFES_A = UFES_M = UFES_F = UFES_U$	$F = 7.86^*$	$F = 2.33$
$H_{1a}: UFES_A < UFES_M, UFES_F, UFES_U$	$\underline{t} = 3.60^*$	---
$H_{1b}: UFES_U > UFES_A, UFES_M, UFES_F$	$\underline{t} = 2.71^*$	---
$H_{1c}: UFES_F > UFES_M$	$\underline{t} = 2.55^*$	---
$H_0: UMAM_A = UMAM_M = UMAM_F = UMAM_U$	$F = 5.08^*$	$F = 9.02^*$
$H_{1a}: UMAM_A < UMAM_M, UMAM_F, UMAM_U$	$\underline{t} = 2.72^*$	$\underline{t} = 3.68^*$
$H_{1b}: UMAM_U > UMAM_A, UMAM_M, UMAM_F$	$\underline{t} = 1.39$	$\underline{t} = 2.39^*$
$H_0: UFEM_A = UFEM_M = UFEM_F = UFEM_U$	$F = 4.26^*$	$F = 6.97^*$
$H_{1a}: UFEM_A < UFEM_M, UFEM_F, UFEM_U$	$\underline{t} = 3.18^*$	$\underline{t} = 4.36^*$
$H_{1b}: UFEM_U > UFEM_A, UFEM_M, UFEM_F$	$\underline{t} = 2.39^*$	$\underline{t} = 2.78^*$
$H_0: UMAF_A = UMAF_M = UMAF_F = UMAF_U$	$F = 2.74^*$	$F = 2.83^*$
$H_{1a}: UMAF_A < UMAF_M, UMAF_F, UMAF_U$	$\underline{t} = 1.61$	$\underline{t} = 2.52^*$
$H_{1b}: UMAF_U > UMAF_A, UMAF_M, UMAF_F$	$\underline{t} = 1.94$	$\underline{t} = 0.92$
$H_0: UFEF_A = UFEF_M = UFEF_F = UFEF_U$	$F = 2.68^*$	$F = 2.83^*$
$H_{1a}: UFEF_A < UFEF_M, UFEF_F, UFEF_U$	$\underline{t} = 1.51$	$\underline{t} = 2.12^*$
$H_{1b}: UFEF_U > UFEF_A, UFEF_M, UFEF_F$	$\underline{t} = 2.47^*$	$\underline{t} = 2.64^*$

TABLE 5.1--Continued

SYMBOLIC HYPOTHESES	RESULTS	
	VALIDATION GROUP	CROSS-VALIDATION GROUP
$H_0$ : $WVRM_A = WVRM_M = WVRM_F = WVRM_U$	$F = 1.66$	$F = 0.24$
$H_{1a}$ : $WVRM_M > WVRM_A, WVRM_F$	---	---
$H_{1b}$ : $WVRM_U < WVRM_A, WVRM_M, WVRM_F$	---	---
$H_0$ : $WVRF_A = WVRF_M = WVRF_F = WVRF_U$	$F = 2.25$	$F = 0.93$
$H_{1a}$ : $WVRF_A > WVRF_M, WVRF_F, WVRF_U$	---	---
$H_{1b}$ : $WVRF_U < WVRF_A, WVRF_M, WVRF_F$	---	---
$H_0$ : $COGM_A = COGM_M = COGM_F = COGM_U$	$F = 0.95$	$F = 0.11$
$H_{1a}$ : $COGM_A > COGM_M, COGM_F, COGM_U$	---	---
$H_{1b}$ : $COGM_U < COGM_A, COGM_M, COGM_F$	---	---
$H_0$ : $COGF_A = COGF_M = COGF_F = COGF_U$	$F = 1.89$	$F = 1.90$
$H_{1a}$ : $COGF_A > COGF_M, COGF_F, COGF_U$	---	---
$H_{1b}$ : $COGF_U < COGF_A, COGF_M, COGF_F$	---	---
$H_0$ : $CONM_A = CONM_M = CONM_F = CONM_U$	$F = 0.91$	$F = 2.09$
$H_{1a}$ : $CONM_A > CONM_M$	---	---
$H_{1b}$ : $CONM_M > CONM_F$	---	---
$H_0$ : $CONF_A = CONF_M = CONF_F = CONF_U$	$F = 1.57$	$F = 2.98^*$
$H_{1a}$ : $CONF_A > CONF_M, CONF_F, CONF_U$	---	$\underline{t} = 1.63$
$H_{1b}$ : $CONF_U < CONF_A, CONF_F$	---	$\underline{t} = 1.16$
$H_0$ : No relationship between Srole and Mrole	$\chi^2 = 19.29^*$	$\chi^2 = 13.70$
$H_{1a}$ : Androgynous Ss report Androgynous mothers	$\chi^2 = 6.58^*$	$\chi^2 = 0.64$
$H_{1b}$ : Masculine Ss report Masculine mothers	$\chi^2 = 2.43$	$\chi^2 = 0.06$



TABLE 5.1--Continued

SYMBOLIC HYPOTHESES	RESULTS	
	VALIDATION GROUP	CROSS-VALIDATION GROUP
H <sub>1c</sub> : Feminine Ss report Feminine mothers	$\chi^2 = 3.37$	$\chi^2 = 4.48^*$
H <sub>1d</sub> : Undifferentiated Ss report Undifferentiated mothers	$\chi^2 = 2.97$	$\chi^2 = 5.28^*$
H <sub>0</sub> : No relationship between Srole and Frole	$\chi^2 = 32.42^*$	$\chi^2 = 12.40$
H <sub>1a</sub> : Androgynous Ss report Androgynous fathers	$\chi^2 = 10.63^*$	$\chi^2 = 4.43^*$
H <sub>1b</sub> : Masculine Ss report Masculine fathers	$\chi^2 = 8.19^*$	$\chi^2 = 0.77$
H <sub>1c</sub> : Feminine Ss report Feminine fathers	$\chi^2 = 0.39$	$\chi^2 = 0.00$
H <sub>1d</sub> : Undifferentiated Ss report Undifferentiated fathers	$\chi^2 = 4.24^*$	$\chi^2 = 0.03$
H <sub>0</sub> : No relationship between Srole and Prole	$\chi^2 = 17.04^*$	$\chi^2 = 14.38^*$
H <sub>1a</sub> : Androgynous Ss report at least one Androgynous parent more frequently than Masculine, Feminine and Undifferentiated Ss	$\chi^2 = 8.05^*$	$\chi^2 = 1.35$
H <sub>1b</sub> : Undifferentiated Ss report at least one Androgynous parent less frequently than Androgynous, Masculine and Feminine Ss	$\chi^2 = 8.65^*$	$\chi^2 = 4.36^*$

\*p &lt; .05

NOTE: A = Androgynous; M = Masculine; F = Feminine; U = Undifferentiated; SES = Self-Esteem, Self; SEM = Self-Esteem, Mother; SEF = Self-Esteem, Father; UMAS = Undesirable Masculine Characteristics, Self; UFES = Undesirable Feminine Characteristics, Self; UTOS = Total Undesirable Characteristics, Self; UMAM = Undesirable Masculine Characteristics, Mother; UFEM = Undesirable Feminine Characteristics, Mother; UMAF = Undesirable Masculine Characteristics, Father; UFEF = Undesirable Feminine Characteristics, Father; WVRM = Warmth-vs-Rejection, Mother; WVRF = Warmth-vs-Rejection, Father; COGM = Cognitive Involvement, Mother; COGF = Cognitive Involvement, Father; CONM = Control, Mother; CONF = Control, Father; Srole = Sex Role, Self; Mrole = Sex Role, Mother; Frole = Sex Role, Father; Prole = Sex Role, Parent.

(BSRI) and the level of self-esteem reported on the Rosenberg Self-Esteem Inventory (RSEI). The following null hypothesis was tested:

$H_0$ : As reported by college males, there will be no differences among the four groups of subjects established by BSRI scores in their scores on the RSEI.

Symbolically stated:

$H_0$ :  $SES_A = SES_M = SES_F = SES_U$

The results of the analysis of variance (Table 5.2) allowed rejection of the null hypothesis in both the validation group ( $F = 10.87$ ,  $p < .05$ ) and the cross-validation group ( $F = 18.38$ ,  $p < .05$ ).

TABLE 5.2

ANALYSIS OF VARIANCE OF THE ROSENBERG SELF-ESTEEM  
INVENTORY SCORES FOR COLLEGE MALE SUBJECTS FOR  
THE FOUR BEM SEX ROLE INVENTORY CATEGORIES OF  
COLLEGE MALE SUBJECTS, VALIDATION  
AND CROSS-VALIDATION GROUPS

SAMPLE GROUP SOURCE	df	SS	MS	F
VALIDATION GROUP				
Sex Role Category	3	557.41	185.80	10.87*
Within Groups	92	1572.55	17.09	
Total	95	2129.96		
CROSS-VALIDATION GROUP				
Sex Role Category	3	685.59	228.53	18.38*
Within Groups	94	1168.91	12.44	
Total	97	1854.50		

\* $p < .05$

Planned comparisons were then tested to contrast the subjects' self-esteem on the basis of the subjects' sex role categories. The

initial planned comparison tested the following alternate hypothesis:

H<sub>1a</sub>: As reported by college males, subjects identified as Androgynous by their scores on the BSRI will report higher levels of self-esteem on the RSEI than subjects identified as Masculine, Feminine, and Undifferentiated.

Stated symbolically:

H<sub>1a</sub>:  $SES_A > SES_M, SES_F, SES_U$

The results of the t test supported the alternate hypothesis in both samples studied. In the validation group, t = 3.35 ( $p < .05$ , one tailed) and in the cross-validation group, t = 4.03 ( $p < .05$ , one tailed).

The second hypothesis regarding self-esteem and sex role category was:

H<sub>1b</sub>: As reported by college males, subjects identified as Undifferentiated by their scores on the BSRI will report lower levels of self-esteem on the RSEI than subjects identified as Androgynous, Masculine, and Feminine.

Stated symbolically:

H<sub>1b</sub>:  $SES_U < SES_A, SES_M, SES_F$

In both the validation group and the cross-validation group, the results of the t test supported the hypothesis. In the validation group, t = 4.93 ( $p < .05$ , one tailed) and in the cross-validation group, t = 5.32 ( $p < .05$ , one tailed).

The final hypothesis about the relationship between the subjects' self-esteem and sex role category was:

H<sub>1c</sub>: As reported by college males, subjects identified as Masculine by their scores on the BSRI will report higher levels of self-esteem on the RSEI than subjects identified as Feminine.

Stated symbolically:

$$H_{1c}: SES_M > SES_F$$

In the validation sample, the hypothesis was not supported by the results of the  $t$  test ( $t = 1.75$ ). In the cross-validation group, however, the results of the  $t$  test were significant ( $t = 4.11$ ,  $p < .05$ , one tailed), indicating that the men categorized as Masculine on the BSRI reported higher levels of self-esteem than the men categorized as Feminine.

#### Subjects' Self-Esteem and Perceived Parental Self-Esteem

Two sets of hypotheses were tested regarding the relationship between college men's self-esteem and their perceptions of their parents' self-esteem. These results are summarized in Table 5.3 and will be reported separately for fathers and mothers in the following sections.

TABLE 5.3

SUMMARY OF CORRELATIONS OF THE ROSENBERG SELF-ESTEEM INVENTORY SCORES FOR COLLEGE MALE SUBJECTS AND THE SELF-ESTEEM SCORES REPORTED BY COLLEGE MALE SUBJECTS FOR THEIR PARENTS, VALIDATION AND CROSS-VALIDATION GROUPS

DEPENDENT VARIABLE INDEPENDENT VARIABLE	VALIDATION GROUP		CROSS- VALIDATION GROUP	
	n	r	n	r
Subject's Self-Esteem				
Father's Self-Esteem	90	.34*	94	.11
Mother's Self-Esteem	89	.55*	94	.36*

\* $p < .05$

### Subjects' Self-Esteem and Perceived Paternal Self-Esteem

One set of hypotheses was designed to examine the relationship between the self-esteem of college men, and their perceptions of their father's self-esteem. This set of hypotheses was:

$H_0$ : As reported by college males, there will be no relationship between the subjects' self-esteem scores on the RSEI and the self-esteem scores they report for their fathers on the RSEI.

$H_1$ : As reported by college males, there will be a positive relationship between the subjects' self-esteem scores on the RSEI and the self-esteem scores they report for their fathers on the RSEI.

The Pearson product-moment correlation statistic was used to test these hypotheses. In the validation group, a significant correlation ( $r = .34$ ,  $p < .05$ ,  $n = 90$ ) supported the alternative hypothesis. In the cross-validation group, the correlation obtained ( $r = .11$ ) was not significant, and the null hypothesis could not be rejected.

### Subjects' Self-Esteem and Perceived Maternal Self-Esteem

A study of the relationship between the subjects' self-esteem and the level of self-esteem they ascribe to their mothers was made using a second set of hypotheses. These null and alternate hypotheses were:

$H_0$ : As reported by college males, there will be no relationship between the subjects' self-esteem scores on the RSEI and the self-esteem scores they report for their mothers on the RSEI.

H<sub>1</sub>: As reported by college males, there will be a positive relationship between the subjects' self-esteem scores on the RSEI and the self-esteem scores they report for their mothers on the RSEI.

In both the validation and cross-validation samples, results were obtained which indicated a positive relationship between college men's self-esteem and their view of their mother's self-esteem. In the validation group  $r = .55$  ( $p < .05$ ,  $n = 89$ ) while in the cross-validation group  $r = .36$  ( $p < .05$ ,  $n = 94$ ).

#### Self-Esteem and Socially Undesirable Characteristics

A series of hypotheses positing a negative relationship between self-esteem and socially undesirable characteristics was tested using a Pearson's  $r$ . These findings are summarized in Table 5.4 and described in the following section.

TABLE 5.4

SUMMARY OF CORRELATIONS OF THE ROSENBERG SELF-ESTEEM INVENTORY SCORES FOR COLLEGE MALE SUBJECTS AND THE UNDESIRABLE SEX ROLE CHARACTERISTICS SCORES FOR COLLEGE MALE SUBJECTS, VALIDATION AND CROSS-VALIDATION GROUPS

DEPENDENT VARIABLE INDEPENDENT VARIABLE	VALIDATION GROUP		CROSS- VALIDATION GROUP	
	n	r	n	r
Subject's Self-Esteem				
Undesirable Masculine Traits	96	-.18*	97	-.06
Undesirable Feminine Traits	95	-.58*	97	-.45*
Combined Undesirable Traits	92	-.42*	96	-.27*

\* $p < .05$

The initial set of these hypotheses studied was:

- $H_0$ : As reported by college males, there will be no relationship between the subjects' self-esteem scores on the RSEI and their socially undesirable masculine characteristics score on the BSRI.
- $H_1$ : As reported by college males, there will be a negative relationship between the subjects' self-esteem score on the RSEI and their socially undesirable masculine characteristics score on the BSRI.

In the validation group, the correlation between self-esteem and socially undesirable masculine characteristics was  $r = -.18$  ( $p < .05$ ,  $n = 96$ ). In the cross-validation group, however, the correlation was not sufficiently large ( $r = .06$ ,  $n = 97$ ) to permit rejection of the null hypothesis.

The set of hypotheses regarding the relationship between self-esteem and socially undesirable feminine characteristics was:

- $H_0$ : As reported by college males, there will be no relationship between the subjects' self-esteem score on the RSEI and their socially undesirable feminine characteristics score on the BSRI.
- $H_1$ : As reported by college males, there will be a negative relationship between the subjects' self-esteem scores on the RSEI and their socially undesirable feminine characteristics score on the BSRI.

In both the validation and the cross-validation groups, the correlation test produced significant results. In the validation group  $r$  equaled  $-.58$  ( $p < .05$ ,  $n = 95$ ) while the cross-validation group had an  $r$  value of  $-.45$  ( $p < .05$ ,  $n = 97$ ). Both results offered support

for the expected negative relationship between self-esteem and socially undesirable feminine characteristics.

Finally, each subject's socially undesirable feminine characteristics score and socially undesirably masculine characteristics score were combined to form a total score reflecting the subject's overall self-report of socially undesirable characteristics. Hypotheses involving this new score were:

$H_0$ : As reported by college males, there will be no relationship between the subjects' self-esteem score on the RSEI and their total socially undesirable characteristics score on the BSRI.

$H_1$ : As reported by college males, there will be a negative relationship between the subjects' self-esteem score on the RSEI and their total socially undesirable characteristics score on the BSRI.

Again, the results of the product-moment correlation in the validation group ( $r = -.42$ ,  $p < .05$ ,  $n = 92$ ) and the cross-validation group ( $r = -.27$ ,  $p < .05$ ,  $n = 96$ ) were significant, supporting the posited negative relationship between self-esteem and combined scores on the socially undesirable characteristics scales of the BSRI.

#### Sex Role and Socially Undesirable Characteristics

The following hypotheses concern the relationship between sex role and socially undesirable characteristics. These hypotheses include reports by subjects about themselves, their mothers, and their fathers. An analysis of variance was used to test each of the null hypotheses in this section while a t test was used to examine the alternative hypotheses.



# Subjects' Sex Role and Socially Undesirable Characteristics

Hypotheses about the relationship between the subject's sex role and his socially undesirable masculine characteristics were examined initially. The first null hypothesis was:

$H_0$ : As reported by college males, there will be no differences among the four groups of subjects established by their scores on the BSRI in their scores on the socially undesirable masculine characteristics scale of the BSRI.

Symbolically stated:

$H_0: UMAS_A = UMAS_M = UMAS_F = UMAS_U$

The results of the analysis of variance (Table 5.5) allowed rejection of null hypotheses for both samples studied. In the validation group,  $F = 3.47$  ( $p < .05$ ) and in the cross-validation group,  $F = 4.08$  ( $p < .05$ ). Three planned comparisons were then tested as alternate hypotheses.

TABLE 5.5

ANALYSIS OF VARIANCE OF THE SOCIALLY UNDESIRABLE MASCULINE CHARACTERISTICS SCORES FOR COLLEGE MALE SUBJECTS FOR THE FOUR BEM SEX ROLE INVENTORY CATEGORIES OF COLLEGE MALE SUBJECTS, VALIDATION AND CROSS-VALIDATION GROUPS

SAMPLE GROUP SOURCE	df	SS	MS	F
VALIDATION GROUP				
Sex Role Category	3	1182.85	394.28	3.47*
Within Groups	96	10901.90	113.56	
Total	99	12084.75		
CROSS-VALIDATION GROUP				
Sex Role Category	3	1676.45	558.82	4.08*
Within Groups	94	12889.22	137.12	
Total	97	14565.67		

\* $p < .05$

The first of the contrasts tested was:

H<sub>1a</sub>: As reported by college males, subjects identified as Androgynous by their scores on the BSRI will report lower socially undesirable masculine characteristics scores on the BSRI than subjects identified as Masculine, Feminine, and Undifferentiated.

Stated symbolically:

H<sub>1a</sub>:  $UMAS_A < UMAS_M, UMAS_F, UMAS_U$

The results of the t test were significant in both the validation group (t = 2.92,  $p < .05$ , one tailed) and the cross-validation group (t = 2.02,  $p < .05$ , one tailed), indicating that Androgynous subjects endorsed fewer socially undesirable masculine characteristics than Masculine, Feminine, and Undifferentiated subjects.

The next alternate hypothesis was:

H<sub>1b</sub>: As reported by college males, subjects identified as Undifferentiated by their scores on the BSRI will report higher socially undesirable masculine characteristics scores on the BSRI than subjects identified as Androgynous, Masculine, and Feminine.

Symbolically stated:

H<sub>1b</sub>:  $UMAS_U > UMAS_A, UMAS_M, UMAS_F$

In neither the validation nor the cross-validation group were the results of the t test significant. In the validation group t = 1.42 while in the cross-validation group t = 0.07.

The final planned comparison tested was:

H<sub>1c</sub>: As reported by college males, subjects identified as Masculine by their scores on the BSRI will report higher socially undesirable masculine characteristics scores on the BSRI than subjects identified as Feminine.

Stated symbolically:

$$H_{1c}: UMAS_M > UMAS_F$$

In the validation group, the results of the  $t$  test ( $t = 1.18$ ) were not significant. However, in the cross-validation group,  $t = 2.97$  ( $p < .05$ , one tailed), supporting the hypothesis in the predicted direction.

The next set of hypotheses tested concerned the relationship between the subject's sex role and his socially undesirable feminine characteristics. The null hypothesis was:

$H_0$ : As reported by college males, there will be no differences among the four groups of subjects established by their scores on the BSRI in their scores on the socially undesirable feminine characteristics scale of the BSRI.

Stated symbolically:

$$H_0: UFES_A = UFES_M = UFES_F = UFES_U$$

In the validation group the results of the analysis of variance (Table 5.6) were significant ( $F = 7.86$ ,  $p < .05$ ), allowing rejection of the null hypothesis. In the cross-validation group, however, the  $F$  value was 2.33, a value which did not allow rejection of the null hypothesis. Therefore, a priori contrasts were tested for the validation group only.

The first of these contrasts was:

$H_{1a}$ : As reported by college males, subjects identified as Androgynous by their scores on the BSRI will report lower socially undesirable feminine scores on the BSRI than subjects identified as Masculine, Feminine, and Undifferentiated.

TABLE 5.6

ANALYSIS OF VARIANCE OF THE SOCIALLY UNDESIRABLE  
FEMININE CHARACTERISTICS SCORES FOR COLLEGE MALE  
SUBJECTS FOR THE FOUR BEM SEX ROLE INVENTORY  
CATEGORIES OF COLLEGE MALE SUBJECTS,  
VALIDATION AND CROSS-VALIDATION GROUPS

SAMPLE GROUP SOURCE	df	SS	MS	F
VALIDATION GROUP				
Sex Role Category	3	2767.41	922.47	7.86*
Within Groups	95	11155.21	117.42	
Total	98	13922.63		
CROSS-VALIDATION GROUP				
Sex Role Category	3	934.89	311.63	2.33
Within Groups	94	12554.39	133.58	
Total	97	13489.28		

\*p < .05

Stated symbolically:

$H_{1a}: UFES_A < UFES_M, UFES_F, UFES_U$

The result of the  $t$  test for the validation sample was  $t = 3.60$  ( $p < .05$ , one tailed), a value large enough to support the alternate hypothesis. As stated earlier no planned comparisons were tested for the cross-validation sample.

The following contrast was also examined for the validation group:

$H_{1b}$ : As reported by college males, subjects identified as Undifferentiated by their scores on the BSRI will report higher socially undesirable feminine characteristics scores on the BSRI than subjects identified as Androgynous, Masculine, and Feminine.

Symbolically stated:

$$H_{1b}: UFES_U > UFES_A, UFES_M, UFES_F$$

The  $t$  test yielded a  $t$  value of 2.71 ( $p < .05$ , one tailed).

Once again, the cross-validation group was not tested on this hypothesis.

The final alternate hypothesis tested was:

$H_{1c}$ : As reported by college males, subjects identified as Feminine by their scores on the BSRI will report higher socially undesirable feminine characteristics scores on the BSRI than subjects identified as Masculine.

Stated symbolically:

$$H_{1c}: UFES_F > UFES_M$$

Once again, the  $t$  value was significant ( $t = 2.55$ ,  $p < .05$ , one tailed) for the validation group, supporting the contrast in the predicted direction. No test was conducted for the cross-validation sample, since the null hypothesis was not rejected.

#### Mother's Sex Role and Socially Undesirable Characteristics: College Men's Reports

The set of hypotheses about the relationship between the mother's sex role as perceived by her son and his view of her socially undesirable characteristics was tested next. Hypotheses regarding socially undesirable masculine characteristics were tested beginning with the null hypothesis:

$H_0$ : As reported by college males, there will be no differences among the four groups of mothers established by their scores on the BSRI in the scores on the socially undesirable masculine characteristics scale of the BSRI.

Stated symbolically:

$$H_0: UMAM_A = UMAM_M = UMAM_F = UMAM_U$$

The F values obtained for both the validation and cross-validation groups were significant (Table 5.7), allowing rejection of the null hypothesis for both samples. In the validation group  $F = 5.08$  ( $p < .05$ ) while in the cross-validation group  $F = 9.02$  ( $p < .05$ ). Two a priori contrasts were then examined using a t test.

TABLE 5.7

ANALYSIS OF VARIANCE OF THE SOCIALLY UNDESIRABLE  
MASCULINE CHARACTERISTICS SCORES FOR MOTHERS FOR  
THE BEM SEX ROLE INVENTORY CATEGORIES FOR MOTHERS,  
AS REPORTED BY COLLEGE MALE SUBJECTS,  
VALIDATION AND CROSS-VALIDATION GROUPS

SAMPLE GROUP SOURCE	df	SS	MS	F
VALIDATION GROUP				
Sex Role Category	3	3577.30	1192.43	5.08*
Within Groups	90	21125.18	234.72	
Total	93	24702.48		
CROSS-VALIDATION GROUP				
Sex Role Category	3	4978.09	1659.36	9.02
Within Groups	88	16190.03	183.98	
Total	91	21168.96		

\* $p < .05$

The first contrast was:

$H_{1a}$ : As reported by college males, mothers identified as Androgynous by their scores on the BSRI will be reported as having lower socially undesirable masculine characteristics scores on the BSRI than mothers identified as Masculine, Feminine and Undifferentiated.

Symbolically stated:

$$H_{1a}: UMAM_A < UMAM_M, UMAM_F, UMAM_U$$

The results of the  $t$  test were significant in the predicted direction for both samples. In the validation sample,  $t = 2.72$  ( $p < .05$ , one tailed) and in the cross-validation sample  $t = 3.68$  ( $p < .05$ , one tailed).

The second alternate hypothesis was:

$H_{1b}$ : As reported by college males, mothers identified as Undifferentiated by their scores on the BSRI will be reported as having higher socially undesirable masculine characteristics scores on the BSRI than mothers identified as Androgynous, Masculine, and Feminine.

Stated symbolically:

$$H_{1b}: UMAM_U > UMAM_M, UMAM_F, UMAM_A$$

In the validation group the  $t$  value of 1.39 was not significant. In the cross-validation, however, the results of the  $t$  test were significant in the predicted direction ( $t = 2.39$ ,  $p < .05$ , one tailed).

A set of hypotheses similar to those used to test the relationship between mother's sex role and socially undesirable masculine characteristics was used to test the relationship between mother's sex role and undesirable feminine characteristics. The null hypothesis was:

$H_0$ : As reported by college males, there will be no differences among the four groups of mothers established by their scores on the BSRI in their scores on the socially undesirable feminine characteristics scale of the BSRI.

Symbolically stated this hypothesis was:

$$H_0: UFEM_A = UFEM_M = UFEM_F = UFEM_U$$

Results of the analysis of variance for this hypothesis are contained in Table 5.8. For both the validation group ( $F = 4.26$ ,  $p < .05$ ) and the cross-validation group ( $F = 6.97$ ,  $p < .05$ ) the  $F$  value was significant, allowing the rejection of the null hypothesis and the examination of the planned comparisons.

TABLE 5.8

ANALYSIS OF VARIANCE OF THE SOCIALLY UNDESIRABLE  
FEMININE CHARACTERISTICS SCORES FOR MOTHERS FOR  
THE BEM SEX ROLE INVENTORY CATEGORIES FOR MOTHERS,  
AS REPORTED BY COLLEGE MALE SUBJECTS,  
VALIDATION AND CROSS-VALIDATION GROUPS

SAMPLE GROUP SOURCE	df	SS	MS	F
VALIDATION GROUP				
Sex Role Category	3	3279.42	1193.14	4.26*
Within Groups	90	25199.96	280.00	
Total	93	28779.37		
CROSS-VALIDATION GROUP				
Sex Role Category	3	5739.28	1913.09	6.97*
Within Groups	90	24716.78	274.63	
Total	93	30456.05		

\* $p < .05$

The first of the contrasts was:

$H_{1a}$ : As reported by college males, mothers identified as Androgynous by their scores on the BSRI will be reported as having lower socially undesirable feminine characteristics scores on the BSRI than mothers identified as Masculine, Feminine, and Undifferentiated.



Symbolically stated:

$$H_{1a}: UFEM_A < UFEM_M, UFEM_F, UFEM_U$$

The results of the  $t$  test for the validation group were  $t = 3.18$  ( $p < .05$ , one tailed), supporting the hypothesis in the predicted direction. In the cross-validation group the directional hypothesis was again supported ( $t = 4.36$ ,  $p < .05$ , one tailed) by the  $t$  test results.

A second planned comparison was then tested for the following hypothesis:

$H_{1b}$ : As reported by college males, mothers identified as Undifferentiated by their scores on the BSRI will be reported as having higher socially undesirable feminine characteristics scores on the BSRI than mothers identified as Androgynous, Masculine, and Feminine.

Stated symbolically:

$$H_{1b}: UFEM_U > UFEM_A, UFEM_M, UFEM_F$$

Once again, the results of the  $t$  test for both the validation group ( $t = 2.39$ ,  $p < .05$ , one tailed) and the cross-validation group ( $t = 2.78$ ,  $p < .05$ , one tailed) were significant, supporting the hypothesis in the predicted direction.

#### Father's Sex Role and Socially Undesirable Characteristics: College Men's Reports

The following series of hypotheses posited relationship between the father's sex role as reported by his son and the father's socially undesirable masculine and feminine characteristics. The null hypothesis regarding masculine characteristics was tested initially.

$H_0$ : As reported by college males, there will be no differences among the four groups of fathers established by their scores on the BSRI in their scores on the socially undesirable masculine characteristics scale of the BSRI.

Symbolically stated:

$$H_0: UMAF_A = UMAF_M = UMAF_F = UMAF_U$$

An analysis of variance was used to examine this hypothesis (Table 5.9) and the F values obtained for both the validation group ( $F = 2.74$ ,  $p < .05$ ) and the cross-validation group ( $F = 2.83$ ,  $p < .05$ ) were significant. The null hypothesis was rejected.

TABLE 5.9

ANALYSIS OF VARIANCE OF THE SOCIALLY UNDESIRABLE  
MASCULINE CHARACTERISTICS SCORES FOR FATHERS FOR  
THE BEM SEX ROLE INVENTORY CATEGORIES FOR FATHERS,  
AS REPORTED BY COLLEGE MALE SUBJECTS,  
VALIDATION AND CROSS-VALIDATION GROUPS

SAMPLE GROUP SOURCE	df	SS	MS	F
VALIDATION GROUP				
Sex Role Category	3	1425.39	475.13	2.74*
Within Groups	90	15589.98	173.22	
Total	93	17015.37		
CROSS-VALIDATION GROUP				
Sex Role Category	3	3655.99	1218.66	4.74*
Within Groups	86	22091.83	256.88	
Total	89	25747.82		

\* $p < .05$

The following alternate hypothesis was studied using a t test:

$H_{1a}$ : As reported by college males, fathers identified as Androgynous by their scores on the BSRI will be reported as having lower socially undesirable masculine characteristics scores on the BSRI than mothers identified as Masculine, Feminine, and Undifferentiated.

Stated symbolically:

$H_{1a}: UMAF_A < UMAF_M, UMAF_F, UMAF_U$

In the validation group the t value was not significant for this contrast (t = 1.61). In the cross-validation group, however, the t value of 2.52 was significant ( $p < .05$ , one tailed) in the predicted direction.

The second planned comparison tested was:

$H_{1b}$ : As reported by college males, fathers identified as Undifferentiated by their scores on the BSRI will be reported as having higher socially undesirable masculine characteristics scores on the BSRI than fathers identified as Androgynous, Masculine, and Feminine.

Stated symbolically:

$H_{1b}: UMAF_U > UMAF_A, UMAF_M, UMAF_F$

In both the validation group (t = 1.94) and the cross-validation group (t = 0.92) the t value was not statistically significant.

The final series of hypotheses regarding undesirable characteristics posited relationships between the father's sex role as reported by college men, and their reports of their father's socially undesirable

feminine characteristics. The null hypothesis for this series of hypotheses was:

$H_0$ : As reported by college males, there will be no difference among the four groups of fathers established by their scores on the BSRI in their scores on the socially undesirable feminine characteristics scale of the BSRI.

Symbolically stated:

$H_0$ :  $UFEF_A = UFEF_M = UFEF_F = UFEF_U$

The results of the analysis of variance contained in Table 5.10 indicated significant F values in both the validation group ( $F = 2.68$ ,  $p < .05$ ) and the cross-validation group ( $F = 2.83$ ,  $p < .05$ ). The null hypothesis was rejected for both samples and a priori contrasts were tested.

TABLE 5.10

ANALYSIS OF VARIANCE OF THE SOCIALLY UNDESIRABLE  
FEMININE CHARACTERISTICS SCORES FOR FATHERS FOR  
THE BEM SEX ROLE INVENTORY CATEGORIES FOR FATHERS,  
AS REPORTED BY COLLEGE MALE SUBJECTS,  
VALIDATION AND CROSS-VALIDATION GROUPS

SAMPLE GROUP SOURCE	df	SS	MS	F
VALIDATION GROUP				
Sex Role Category	3	1287.36	429.12	2.68*
Within Groups	90	14400.61	160.01	
Total	93	15687.97		
CROSS-VALIDATION GROUP				
Sex Role Category	3	1317.07	439.02	2.83*
Within Groups	88	13674.18	155.39	
Total	91	14991.25		

\* $p < .05$

The initial contrast tested was:

H<sub>1a</sub>: As reported by college males, fathers identified as Androgynous by their scores on the BSRI will be reported as having lower socially undesirable feminine characteristics scores on the BSRI than fathers identified as Masculine, Feminine, and Undifferentiated.

Stated symbolically:

H<sub>1a</sub>:  $UFEF_A < UFEF_M, UFEF_F, UFEF_U$

The results of the t test were not significant for the validation group (t = 1.51), however, in the cross-validation group the t value of 2.12 ( $p < .05$ , one tailed) was significant in the predicted direction.

The final alternate hypothesis regarding undesirable characteristics was:

H<sub>1b</sub>: As reported by college males, fathers identified as Undifferentiated by their scores on the BSRI will be reported as having higher socially undesirable feminine scores on the BSRI than fathers identified as Androgynous, Masculine, and Feminine.

Symbolically stated:

H<sub>1b</sub>:  $UFEF_U > UFEF_A, UFEF_M, UFEF_F$

The direction of relationships predicted in this hypothesis was supported by the results of the t test in both the validation group (t = 2.47,  $p < .05$ , one tailed) and the cross-validation group (t = 2.64,  $p < .05$ , one tailed). Fathers identified as Undifferentiated by their sons were reported as having significantly more socially undesirable feminine characteristics in both samples tested.

Sex Role and Perceived  
Parental Behavior

The following groups of hypotheses concern the relationship of sex role identity of college men with their perceptions of the behavior of their parents. The dimensions of parent behavior studied included warmth-versus-rejection, cognitive involvement, and parental control.

Sex Role and Perceived Maternal  
Warmth-versus-Rejection

The following hypothesis was tested about the relationship between the sex role identity of college men and their perceptions of their mother's warmth-versus-rejection as measured by the Parent Behavior Form (PBF). The null hypothesis was:

$H_0$ : As reported by college males, there will be no differences among the four groups of college males established by their scores on the BSRI in the scores they report for their mothers on the warmth-versus-rejection factor of the PBF.

Stated symbolically:

$$H_0: WVRM_A = WVRM_M = WVRM_F = WVRM_U$$

Results of the analysis of variance for this hypothesis are contained in Table 5.11. In the validation group the F value ( $F = 1.66$ ) was not significant. In the cross-validation group the F value again failed to be significant ( $F = 0.24$ ). The null hypothesis could not be rejected for either sample, and thus no additional hypotheses could be tested for this relationship.

TABLE 5.11

ANALYSIS OF VARIANCE OF PARENT BEHAVIOR FORM WARMTH-  
VS-REJECTION FACTOR SCORES FOR MOTHERS FOR THE BEM  
SEX ROLE INVENTORY CATEGORIES FOR SELF, AS REPORTED  
BY COLLEGE MALE SUBJECTS, VALIDATION AND  
CROSS-VALIDATION GROUPS

SAMPLE GROUP SOURCE	df	SS	MS	F
VALIDATION GROUP				
Sex Role Category	3	2168.37	722.79	1.66
Within Groups	96	41878.63	436.24	
Total	99	44047.00		
CROSS-VALIDATION GROUP				
Sex Role Category	3	149.57	49.86	0.24
Within Groups	91	18847.86	207.12	
Total	94	18997.43		

\*p < .05

#### Sex Role and Perceived Paternal Warmth-versus-Rejection

The relationship between college men's sex role identity and their perceptions of their fathers' warmth-versus-rejection was examined next. The following null hypothesis was tested using an analysis of variance:

$H_0$ : As reported by college males, there will be no differences among the four groups of college males established by their scores on the BSRI in the scores they report for their fathers on the warmth-versus-rejection factor of the PBF.

Stated symbolically:

$$H_0: WVRFA = WVRFM = WVRFF = WVRFU$$

The results of the analysis of variance (Table 5.12) were not significant for either the validation group ( $F = 2.25$ ) or the cross-validation group ( $F = 0.93$ ).

Once again, no alternate hypotheses were tested since the null hypothesis could not be rejected in either sample.

TABLE 5.12

ANALYSIS OF VARIANCE OF PARENT BEHAVIOR FORM WARMTH-  
VS-REJECTION FACTOR SCORES FOR FATHERS FOR THE BEM  
SEX ROLE INVENTORY CATEGORIES FOR SELF, AS REPORTED  
BY COLLEGE MALE SUBJECTS, VALIDATION AND  
CROSS-VALIDATION GROUPS

SAMPLE GROUP SOURCE	df	SS	MS	F
VALIDATION GROUP				
Sex Role Category	3	2175.40	725.13	2.25
Within groups	96	30929.64	322.18	
Total	99	33105.04		
CROSS-VALIDATION GROUP	3			
Sex Role Category	3	1025.54	341.85	0.93
Within Groups	92	33735.36	366.69	
Total	95	34760.91		

#### Sex Role and Perceived Maternal Cognitive Involvement

The next hypothesis about the relationship between the sex role identity of college men and the perceived level of cognitive involvement by the mother was also analyzed using an analysis of variance. The null hypothesis was:

$H_0$ : As reported by college males, there will be no differences among the four groups of college males established by their scores on the BSRI in the scores they report for their mothers on the cognitive involvement factor on the PBF.



Symbolically stated:

$$H_0: COGM_A = COGM_M = COGM_F = COGM_U$$

The results of the analysis of variance for this null hypothesis are summarized in Table 5.13. In the validation sample ( $F = 0.95$ ) and in the cross-validation sample ( $F = 0.11$ ) the  $F$  values were too small to be significant. Therefore, the null hypothesis was not rejected, and no a priori contrasts were tested.

TABLE 5.13

ANALYSIS OF VARIANCE OF THE PARENT BEHAVIOR FORM COGNITIVE INVOLVEMENT FACTOR SCORES FOR MOTHERS FOR THE BEM SEX ROLE INVENTORY CATEGORIES FOR SELF, AS REPORTED BY COLLEGE MALE SUBJECTS, VALIDATION AND CROSS-VALIDATION GROUPS

SAMPLE GROUP SOURCE	df	SS	MS	F
VALIDATION GROUP				
Sex Role Category	3	1050.62	350.21	0.95
Within Groups	96	35208.77	366.76	
Total	99	36259.39		
CROSS-VALIDATION GROUP				
Sex Role Category	3	40.12	13.37	0.11
Within Groups	90	10771.81	119.69	
Total	93	10811.93		

#### Sex Role and Perceived Paternal Cognitive Involvement

A null hypothesis concerning sex role identity and paternal cognitive involvement was also tested. This null hypothesis was:

$H_0$ : As reported by college males, there will be no differences among the four groups of college males established by their scores on the BSRI in the scores they report for their fathers on the cognitive involvement factor of the PBF.

Stated symbolically:

$$H_0: COGF_A = COGF_M = COGF_F = COGF_U$$

The results of the analysis of variance for the validation group and cross-validation group are summarized in Table 5.14. Neither the F value of 1.89 in the validation group nor the F value of 1.90 in the cross-validation group were significant and the null hypothesis could not be rejected for either sample. Results of t tests for planned comparisons would not be valid and thus t tests were not conducted for either group.

TABLE 5.14

ANALYSIS OF VARIANCE OF THE PARENT BEHAVIOR FORM COGNITIVE INVOLVEMENT FACTOR SCORES FOR FATHERS FOR THE BEM SEX ROLE INVENTORY CATEGORIES FOR SELF, AS REPORTED BY COLLEGE MALE SUBJECTS, VALIDATION AND CROSS-VALIDATION GROUPS

SAMPLE GROUP SOURCE	df	SS	MS	F
VALIDATION GROUP				
Sex Role Category	3	1396.14	465.38	1.89
Within Groups	96	23625.57	246.10	
Total	99	25021.71		
CROSS-VALIDATION GROUP				
Sex Role Category	3	636.76	212.25	1.90
Within Groups	91	10178.67	111.85	
Total	94	10815.43		

#### Sex Role and Perceived Maternal Control

The following null hypothesis tested the relationship between the level of maternal control perceived by college men, and their sex role identity.

$H_0$ : As reported by college males, there will be no differences among the four groups of college males established by their scores on the BSRI in the scores they report for their mothers on the control factor of the PBF.

Stated symbolically:

$$H_0: \text{CONM}_A = \text{CONM}_M = \text{CONM}_F = \text{CONM}_U$$

The analysis of variance for this hypothesis (Table 5.15) resulted in F values for both the validation group ( $F = 0.91$ ) and the cross-validation group ( $F = 2.09$ ) which were too low to allow rejection of the null hypothesis. No alternate hypotheses were tested.

TABLE 5.15

ANALYSIS OF VARIANCE OF THE PARENT BEHAVIOR FORM CONTROL  
FACTOR SCORES FOR MOTHERS FOR THE BEM SEX ROLE INVENTORY  
CATEGORIES FOR SELF, AS REPORTED BY COLLEGE MALE  
SUBJECTS, VALIDATION AND CROSS-VALIDATION GROUPS

SAMPLE GROUP SOURCE	df	SS	MS	F
VALIDATION GROUP				
Sex Role Category	3	377.16	125.72	0.91
Within Groups	96	13256.70	138.09	
Total	99	13633.56		
CROSS-VALIDATION GROUP				
Sex Role Category	3	731.50	243.83	2.09
Within Groups	90	10492.41	116.58	
Total	93	11223.91		

Sex Role and Perceived  
Paternal Control

The final null hypothesis involving perceived parental behaviors concerned the relationship between the sex role identity of

college men and their reports of their father's level of control. The null hypothesis was:

$H_0$ : As reported by college males, there will be no differences among the four groups of college males established by their scores on the BSRI in the scores they report for their fathers on the control factor on the PBF.

Stated symbolically:

$H_0$ :  $CONF_A = CONF_M = CONF_F = CONF_U$

Results of the analysis of variance (Table 5.16) were inconsistent across the two samples. In the validation group  $F = 1.57$ , and was not significant, so the null hypothesis could not be rejected. In the cross-validation group, however,  $F = 2.98$  ( $p < .05$ ) and the null hypothesis was rejected.

TABLE 5.16

ANALYSIS OF VARIANCE OF THE PARENT BEHAVIOR FORM CONTROL  
FACTOR SCORES FOR FATHERS FOR THE BEM SEX ROLE INVENTORY  
CATEGORIES FOR SELF, AS REPORTED BY COLLEGE MALE  
SUBJECTS, VALIDATION AND CROSS-VALIDATION GROUPS

SAMPLE GROUP SOURCE	df	SS	MS	F
VALIDATION GROUP				
Sex Role Category	3	254.61	84.87	1.57
Within Groups	96	5202.23	54.19	
Total	99	5456.84		
CROSS-VALIDATION GROUP				
Sex Role Category	3	543.15	181.05	2.98*
Within Groups	92	5583.50	60.69	
Total	95	6126.66		

\* $p < .05$

Therefore, planned comparisons were tested for the cross-validation group only. The first of these hypotheses was:

H<sub>1a</sub>: As reported by college males, subjects identified as Androgynous by their scores on the BSRI will report higher scores for their fathers on the control factor of the PBF than subjects identified as Masculine, Feminine and Undifferentiated.

Stated symbolically:

H<sub>1a</sub>:  $CONF_A > CONF_M, CONF_F, CONF_U$

A t test was conducted for the cross-validation group only, with a resultant t value of 1.63, a value not large enough to be statistically significant. Thus the alternate hypothesis was not supported.

A second alternate hypothesis tested was:

H<sub>1b</sub>: As reported by college males, subjects identified as Undifferentiated by their scores on the BSRI will report lower scores for their fathers on the control factor of the PBF than subjects identified as Androgynous and Feminine.

Stated symbolically:

H<sub>1b</sub>:  $CONF_U < CONF_A, CONF_F$

The results of the t test for the cross-validation group (t = 1.16) were not significant and the alternative hypothesis was not supported. No analysis was completed for the validation group, since the null hypothesis was not rejected.

#### Sex Role Identity and Parental Sex Role: College Men's Reports

The following series of hypotheses concerned the relationship between the sex role behaviors reported by college men and their descriptions of their parents' sex role behavior. Since both the independent

and dependent variables for these hypotheses were discrete in nature, the chi-square test statistic was used to analyze the data. The hypotheses and results of the analysis will be reported in three sections: the first concerning maternal sex role, a second concerning paternal sex role, and another section concerning reports of androgynous parents.

College Men's Sex Role and  
Perceived Mother's Sex Role:  
Subject's Report

A set of hypotheses was tested regarding the reports of college men on the BSRI and their reports of their mothers on the BSRI. The chi-square statistic was used to test each of the posited relationships. The null hypothesis which was tested was:

$H_0$ : As reported by college men, no relationship will exist between the sex role identified for college men on the BSRI and the sex role identified for their mothers on the BSRI.

A chi-square test of goodness of fit was made comparing the observed with the expected frequencies for a 4 x 4 contingency table (Table 5.17). In the validation group  $\chi^2 = 19.29$  ( $p < .05$ , 9 df), allowing rejection of the null hypothesis and indicating a significant relationship between college men's sex roles and their descriptions of their mother's sex role. In the cross-validation group, however,  $\chi^2 = 13.70$  (9 df), a value indicating that the overall distribution frequencies obtained were not significantly different from those expected.

Four alternate hypotheses were tested using 2 x 2 contingency tables. These tables were created by combining the three sex role categories appropriate to each hypothesis. Since the degrees of

TABLE 5.17

CONTINGENCY TABLES (4 x 4) OF FREQUENCIES FOR  
COLLEGE MALES' SEX ROLE CATEGORIES BY MOTHERS'  
SEX ROLE CATEGORIES AS REPORTED BY COLLEGE MALE  
SUBJECTS ON THE BEM SEX ROLE INVENTORY,  
VALIDATION AND CROSS-VALIDATION GROUPS

		MOTHERS			
SEX ROLE		A	M	F	U
VALIDATION GROUP					
COLLEGE MEN	A	13	6	1	7
	M	4	7	4	3
	F	5	3	8	5
	U	4	5	7	12
$\chi^2 = 19.29^*$ , n = 94					
CROSS-VALIDATION GROUP					
COLLEGE MEN	A	10	9	7	6
	M	5	3	5	2
	F	2	4	8	2
	U	6	8	4	12
$\chi^2 = 13.70$ , n = 93					

\*p < .05, df = 9

NOTE: A = Androgynous; M = Masculine; F = Feminine; and U = Undifferentiated.

freedom is one when a chi-square is used to test a 2 x 2 contingency table, and the sample size was not large enough to expect a frequency of 10 or more for each cell in the contingency table, a Yates correction for continuity was used to analyze these hypotheses. In addition, testing of the alternate hypotheses was not dependent on rejection of the null hypotheses, so these hypotheses were tested for both the validation and cross-validation samples. The results of the corrected chi-square tests for each contingency table is summarized in Table 5.18. The first alternate hypothesis tested was:

$H_{1a}$ : As reported by college men, college men identified as Androgynous by their scores on the BSRI will report mothers who are Androgynous more frequently than college men identified as Masculine, Feminine, and Undifferentiated.

In the validation group, the corrected  $\chi^2$  value of 6.58 ( $p < .05$  1 df) was large enough to support the hypothesis as predicted. In the cross-validation group, however,  $\chi^2 = 0.64$ , a value too low to support the alternate hypothesis.

The next hypothesis tested was:

$H_{1b}$ : As reported by college men, college men identified as Masculine by their scores on the BSRI will report mothers who are Masculine more frequently than college men identified as Androgynous, Feminine, and Undifferentiated.

For both the validation group ( $\chi^2 = 2.43$ , 1 df) and the cross-validation group ( $\chi^2 = 0.06$ , 1 df) the results of the analysis failed to support the hypothesis.



TABLE 5.18

SUMMARY OF CONTINGENCY TABLES (2 x 2) OF FREQUENCY FOR COLLEGE MALES'  
SEX ROLE CATEGORIES BY MOTHERS' SEX ROLE CATEGORIES AS REPORTED  
BY COLLEGE MALE SUBJECTS ON THE BEM SEX ROLE INVENTORY,  
VALIDATION AND CROSS-VALIDATION GROUPS

SEX ROLE	MOTHERS					
	A	M, F, U	M	A, F, U	F	A, M, U
COLLEGE MEN	A	13	14	M	7	11
	M, F, U	13	54	A, F, U	14	62
		$\chi^2 = 6.58^{**}$			$\chi^2 = 2.43$	
VALIDATION GROUP* (n = 94)						
					F	8
					A, M, U	12
					A, M, F	15
						12
						16
						$\chi^2 = 2.97$
CROSS-VALIDATION GROUP* (n = 93)						
COLLEGE MEN	A	10	22	M	3	12
	M, F, U	13	48	A, F, U	21	57
		$\chi^2 = 0.64$			$\chi^2 = 0.06$	
					F	8
					A, M, U	16
					A, M, F	10
						12
						18
						53
						$\chi^2 = 5.28^{**}$

\* Corrected chi-square values

\*\*p < .05, df = 1

NOTE: A = Androgynous; M = Masculine; F = Feminine; and U = Undifferentiated.

The third alternate hypothesis was:

$H_{1c}$ : As reported by college men, college men identified as Feminine by their scores on the BSRI will report mothers who are Feminine more frequently than college men identified as Androgynous, Masculine, and Undifferentiated.

In the validation group, the corrected chi-square value was too low to support the hypothesis ( $\chi^2 = 3.37$ , 1 df). In the cross-validation group,  $\chi^2 = 4.48$  ( $p < .05$ , 1 df), and the alternate hypothesis was supported in the predicted direction.

The final alternate hypothesis tested was:

$H_{1d}$ : As reported by college men, college men identified as Undifferentiated by their scores on the BSRI will report mothers who are Undifferentiated more frequently than college men identified as Androgynous, Masculine, and Feminine.

Results of the chi-square tests for the two samples were consistent.

In the validation group the chi-square value ( $\chi^2 = 2.97$ , 1 df) was not significant, but the cross-validation group results supported the alternate hypothesis in the predicted direction ( $\chi^2 = 5.28$ ,  $p < .05$ , 1 df).

#### College Men's Sex Roles and Perceived Father's Sex Role: Subject's Report

The null hypothesis concerning the relationship between college men's sex roles and their perceptions of their father's sex role was tested as follows:

$H_0$ : As reported by college men, no relationship will exist between the sex role identified for college men on the BSRI and the sex role identified for their fathers on the BSRI.

A contingency table (4 x 4) of the frequency distribution and the results of the chi-square tests are contained in Table 5.19. In the validation group,  $\chi^2 = 32.42$  ( $p < .05$ , 9 df), reflecting a relationship between the sex roles of college men and their perceptions of their fathers' sex roles. In the cross-validation group, the chi-square value of 12.40 (9 df) was not significant, and the null hypothesis could not be rejected.

For this set of hypotheses, 2 x 2 contingency tables were constructed, and corrected chi-square tests were completed for each alternate hypothesis. Results of these tests are summarized in Table 5.20. The first alternate hypothesis tested was:

H<sub>1a</sub>: As reported by college men, college men identified as Androgynous by their scores on the BSRI will report fathers who are Androgynous more frequently than college men who are identified as Masculine, Feminine, and Undifferentiated.

For both the validation sample ( $\chi^2 = 10.63$ ,  $p < .05$ , 1 df) and the cross-validation sample ( $\chi^2 = 4.43$ ,  $p < .05$ , 1 df) the corrected chi-square tests were significant, supporting the hypothesis that Androgynous college men reported Androgynous fathers more frequently than college men identified as Masculine, Feminine, and Undifferentiated.

The next hypothesis tested was:

H<sub>1b</sub>: As reported by college men, college men identified as Masculine by their scores on the BSRI will report fathers who are Masculine more frequently than college men identified as Androgynous, Feminine, and Undifferentiated.

TABLE 5.19

CONTINGENCY TABLES (4 x 4) OF FREQUENCIES FOR  
COLLEGE MALES' SEX ROLE CATEGORIES BY FATHERS'  
SEX ROLE CATEGORIES AS REPORTED BY COLLEGE MALE  
SUBJECTS ON THE BEM SEX ROLE INVENTORY,  
VALIDATION AND CROSS-VALIDATION GROUPS

		FATHERS			
SEX ROLE		A	M	F	U
VALIDATION GROUP					
COLLEGE MEN	A	14	4	3	6
	M	1	9	3	4
	F	9	2	6	4
	U	1	7	8	13
$\chi^2 = 32.42^*, n = 94$					
CROSS-VALIDATION GROUP					
COLLEGE MEN	A	11	6	8	5
	M	5	2	4	3
	F	2	5	4	5
	U	2	12	9	8
$\chi^2 = 12.40, n = 91$					

\*p < .05, df = 9

NOTE: A = Androgynous; M = Masculine; F = Feminine; and U = Undifferentiated.

TABLE 5.20

SUMMARY OF CONTINGENCY TABLES (2 x 2) OF FREQUENCY FOR COLLEGE MALES'  
SEX ROLE CATEGORIES BY FATHERS' SEX ROLE CATEGORIES AS REPORTED  
BY COLLEGE MALE SUBJECTS ON THE BEM SEX ROLE INVENTORY,  
VALIDATION AND CROSS-VALIDATION GROUPS

SEX ROLE	FATHERS											
	A	M, F, U	M	A, F, U	F	A, M, U	U	A, M, F				
COLLEGE MEN	VALIDATION GROUP* (n = 94)											
	A	14	13	M	9	8	F	6	15	U	13	16
	M, F, U	11	56	A, F, U	13	64	A, M, U	14	59	A, M, F	14	51
	$\chi^2 = 10.63^{**}$		$\chi^2 = 8.19^{**}$		$\chi^2 = 0.39$		$\chi^2 = 4.24^{**}$					
COLLEGE MEN	CROSS-VALIDATION GROUP* (n = 91)											
	A	11	19	M	2	12	F	4	12	U	8	23
	M, F, U	9	52	A, F, U	23	54	A, M, U	21	54	A, M, F	13	47
	$\chi^2 = 4.43^{**}$		$\chi^2 = 0.77$		$\chi^2 = 0.00$		$\chi^2 = 0.03$					

\* Corrected chi-square values, df =  
\*\*p < .05, df = 1

NOTE: A = Androgynous; M = Masculine; F = Feminine; and U = Undifferentiated.

Results of the chi-square statistic were inconsistent for the two groups. The validation group test results ( $\chi^2 = 8.19$ ,  $p < .05$ , 1 df) were significant, supporting the predicted direction of the hypothesis. In the cross-validation group, however,  $\chi^2 = 0.77$ , a value too small to support the hypothesis.

The third alternate hypothesis was:

$H_{1c}$ : As reported by college men, college men identified as Feminine by their scores on the BSRI will report fathers who are Feminine more frequently than college men identified as Androgynous, Masculine, and Undifferentiated.

The chi-square values obtained for the validation group ( $\chi^2 = 0.39$ , 1 df) and the cross-validation group ( $\chi^2 = 0.00$ , 1 df) failed to support the alternate hypothesis.

The final alternate hypothesis examined was:

$H_{1d}$ : As reported by college men, college men identified as Undifferentiated by their scores on the BSRI will report fathers who are Undifferentiated more frequently than college men identified as Androgynous, Masculine, and Feminine.

The chi-square value of 4.24 ( $p < .05$ , 1 df) for the validation group supported the hypothesis as predicted. In the cross-validation group, however, the chi-square value of 0.03 (1 df) was not significant.

#### Sex Role and Perceived Androgynous Parents: College Men's Reports

In order to test the following sets of hypotheses, descriptions of parental sex role behaviors were divided into two groups. One group included only those sets of parents in which either the mother, or the father, or both, was identified as Androgynous. The second group

included those sets of parents in which neither parent was identified as Androgynous. The following null hypothesis was then tested:

$H_0$ : As reported by college men, there will be no differences among the four groups of subjects established by their scores on the BSRI in the frequency with which they report at least one Androgynous parent.

The results of the chi-square analysis for this hypothesis are summarized in Table 5.21. In both the validation sample ( $\chi^2 = 17.04$ ,  $p < .05$ , 3 df) and the cross-validation sample ( $\chi^2 = 14.38$ ,  $p < .05$ , 3 df) significant results were obtained, indicating that there was a relationship between the sex role of college men and the frequency with which they would report at least one Androgynous parent.

After rejection of the null hypothesis for both samples, two alternate hypotheses were tested. The first of these hypotheses was:

$H_{1a}$ : As reported by college men, college men identified as Androgynous by their scores on the BSRI will report at least one Androgynous parent more frequently than college men identified as Masculine, Feminine, and Undifferentiated.

The results of the chi-square tests for this hypothesis are summarized in Table 5.22. The 2 x 2 contingency tables required to test these hypotheses resulted in the use of the corrected chi-square statistic. In the validation group,  $\chi^2 = 8.05$  ( $p < .05$ , 1 df), a value confirming the hypothesis in the predicted direction. In the cross-validation group, however, the results of the chi-square,  $\chi^2 = 1.35$ , were not significant.

TABLE 5.21

CONTINGENCY TABLES (4 x 2) OF FREQUENCIES FOR COLLEGE  
 MALES' SEX ROLE CATEGORIES BY PARENTS' SEX ROLE  
 CATEGORIES AS REPORTED BY COLLEGE MALE SUBJECTS  
 ON THE BEM SEX ROLE INVENTORY, VALIDATION  
 AND CROSS-VALIDATION GROUPS

	SEX ROLE	<u>PARENTS</u>	
		AP	NAP
<hr/>			
		VALIDATION GROUP	
COLLEGE MEN	A	17	10
	M	4	13
	F	11	10
	U	4	24
$\chi^2 = 17.04^*, n = 93$			
		CROSS-VALIDATION GROUP	
COLLEGE MEN	A	14	16
	M	10	4
	F	3	13
	U	6	24
$\chi^2 = 14.38^*, n = 90$			

\*p < .05, df = 3

NOTE: A = Androgynous; M = Masculine; F = Feminine; U = Undifferentiated; AP = At Least One Androgynous Parent; NAP = No Androgynous Parents.



TABLE 5.22

SUMMARY OF CONTINGENCY TABLES (2 x 2) OF FREQUENCIES FOR  
COLLEGE MALES' SEX ROLE CATEGORIES BY PARENTS' SEX ROLE  
CATEGORIES AS REPORTED BY COLLEGE MALE SUBJECTS ON THE  
BEM SEX ROLE INVENTORY, VALIDATION AND  
CROSS-VALIDATION GROUPS

		PARENTS				
		AP	NAP		AP	NAP
VALIDATION GROUP*						
(n = 93)						
COLLEGE MEN	A	17	10	U	4	24
	M,F,U	19	47	A,M,F	32	33
		$\chi^2 = 8.05^{**}$		$\chi^2 = 8.65^{**}$		
CROSS-VALIDATION GROUP*						
(n = 90)						
COLLEGE MEN	A	14	16	U	6	24
	M,F,U	19	41	A,M,F	27	33
		$\chi^2 = 1.35$		$\chi^2 = 4.36^{**}$		

\* Corrected chi-square values

\*\*p < .05, df = 1

NOTE: A = Androgynous; M = Masculine; F = Feminine; U = Undifferentiated; AP = At Least One Androgynous Parent; and NAP = No Androgynous Parents.

The final hypothesis examined in this section was:

H<sub>1b</sub>: As reported by college men, college men identified as Undifferentiated by their scores on the BSRI will report at least one Androgynous parent less frequently than college men identified as Androgynous, Masculine, and Feminine.

Results of tests for the validation and cross-validation groups are also summarized in Table 5.22. In both groups, the corrected chi-square values of 8.65 ( $p < .05$ , 1 df) for the validation group and 4.36 for the cross-validation group ( $p < .05$ , 1 df) supported the hypothesis that Undifferentiated college men reported at least one Androgynous parent less frequently than college men categorized as Androgynous, Masculine, and Feminine.

#### Sex Role Identity and Self-Esteem: Parent Reports

As reported earlier, the mothers and fathers of one hundred college men were requested to complete the Bem Sex Role Inventory (BSRI) and the Rosenberg Self-Esteem Inventory (RSEI). Data collected from these parents was used to examine the hypotheses regarding parental sex role identity and self-esteem discussed in the following section. The results of the analysis for these hypotheses are summarized in Table 5.23.

#### Sex Role Identity and Self-Esteem: Fathers' Reports

Hypotheses in this section posited relationships between the sex role identity of fathers as categorized on the BSRI and their self-esteem as measured by the RSEI. The null hypothesis was:

TABLE 5.23

SUMMARY OF RESULTS OF STUDY OF THE SEX ROLE IDENTITY  
AND SELF-ESTEEM OF PARENTS OF COLLEGE MALES,  
AS REPORTED BY PARENTS

SYMBOLIC HYPOTHESES	RESULTS
$H_0: SEH_A = SEH_M = SEH_F = SEH_U$	$F = 5.08^*$
$H_{1a}: SEH_A > SEH_M, SEH_F, SEH_U$	$\underline{t} = 2.95^*$
$H_{1b}: SEH_U < SEH_A, SEH_M, SEH_F$	$\underline{t} = 2.27^*$
$H_{1c}: SEH_M > SEH_F$	$\underline{t} = 2.11^*$
$H_0: SEW_A = SEW_M = SEW_F = SEW_U$	$F = 6.46^*$
$H_{1a}: SEW_A > SEW_M, SEW_F, SEW_U$	$\underline{t} = 3.71^*$
$H_{1b}: SEW_U < SEW_A, SEW_M, SEW_F$	$\underline{t} = 3.53^*$
$H_{1c}: SEW_M > SEW_F$	$\underline{t} = 0.47$

\* $p < .05$

NOTE: A = Androgynous; M = Masculine; F = Feminine; U = Undifferentiated; SEH = Self-Esteem of Father, Father's Report; SEW = Self-Esteem of Mother, Mother's Report.

$H_0$ : As reported by fathers, there will be no differences among the four groups of fathers established by their scores on the BSRI in their scores on the RSEI.

The analysis of variance (Table 5.24) resulted in an F value of 5.08 ( $p < .05$ ), allowing rejection of the null hypothesis, and the testing of several a priori contrasts.

TABLE 5.24

ANALYSIS OF VARIANCE OF THE ROSENBERG SELF-ESTEEM INVENTORY SCORES FOR FATHERS FOR THE BEM SEX ROLE INVENTORY CATEGORIES FOR FATHERS, AS REPORTED BY FATHERS OF COLLEGE MALE SUBJECTS

SAMPLE GROUP SOURCE	df	SS	MS	F
Fathers of College Males				
Sex Role Category	3	244.64	81.55	5.08*
Within Groups	78	1250.97	16.04	
Total	81	1495.61		

\* $p < .05$

The first alternate hypothesis was:

$H_{1a}$ : As reported by fathers, fathers identified as Androgynous by their scores on the BSRI will report higher levels of self-esteem on the RSEI than fathers identified as Masculine, Feminine, and Undifferentiated.

Stated symbolically:

$H_{1a}$ :  $SEH_A > SEH_M, SEH_F, SEH_U$

The results of the t test were t = 2.95 ( $p < .05$ , one tailed) supporting the alternate hypothesis in the predicted direction.

The next hypothesis tested was:

$H_{1b}$ : As reported by fathers, fathers identified as Undifferentiated by their scores on the BSRI will report lower levels of self-esteem on the RSEI than fathers identified as Androgynous, Masculine, and Feminine.

Symbolically stated:

$H_{1b}$ :  $SEH_U < SEH_A, SEH_M, SEH_F$

Once again, the hypothesis was supported in the predicted direction by the t test results (t = 2.27,  $p < .05$ , one tailed).

The final hypothesis regarding father's reports of sex role and self-esteem was:

$H_{1c}$ : As reported by fathers, fathers identified as Masculine by their scores on the BSRI will report higher levels of self-esteem on the RSEI than fathers identified as Feminine.

Stated symbolically:

$H_{1c}$ :  $SEH_M > SEH_F$

The t value of 2.11 ( $p < .05$ , one tailed) was significant, supporting the predicted direction of the hypothesis.

#### Sex Role Identity and Self-Esteem: Mothers' Reports

This set of hypotheses concerned the relationship between the sex role identity of mothers and their self-esteem. The following null hypothesis was tested:

$H_0$ : As reported by mothers, there will be no differences among the four groups of mothers established by their scores on the BSRI in their scores on the RSEI.

Stated symbolically:

$$H_0: SEW_A = SEW_M = SEW_F = SEW_U$$

The analysis of variance for this hypothesis is summarized in Table 5.25. The F value of 6.46 ( $p < .05$ ) was statistically significant and the null hypothesis was rejected.

TABLE 5.25

ANALYSIS OF VARIANCE OF THE ROSENBERG SELF-ESTEEM  
INVENTORY SCORES FOR MOTHERS FOR THE BEM SEX ROLE  
INVENTORY CATEGORIES FOR MOTHERS, AS REPORTED BY  
MOTHERS OF COLLEGE MALE SUBJECTS

SAMPLE GROUP SOURCE	df	SS	MS	F
Mothers of College Males				
Sex Role Category	3	201.70	67.23	6.46*
Within group	79	822.70	10.41	
Total	82	1024.41		

\* $p < .05$

The following planned comparison was then tested.

$H_{1a}$ : As reported by mothers, mothers identified as Androgynous by their scores on the BSRI will report higher levels of self-esteem on the RSEI than mothers identified as Masculine, Feminine, and Undifferentiated.

Stated symbolically:

$$H_{1a}: SEW_A > SEW_M, SEW_F, SEW_U$$

This contrast was supported by the  $t$  test results ( $t = 3.71$ ,  $p < .05$ , one tailed), confirming the predicted direction of the relationship.

The following hypothesis was also tested:

H<sub>1b</sub>: As reported by mothers, mothers identified as Undifferentiated by their scores on the BSRI will report lower levels of self-esteem on the RSEI than mothers identified as Androgynous, Masculine, and Feminine.

Symbolically stated:

H<sub>1b</sub>:  $SEW_U < SEW_A, SEW_M, SEW_F$

A t test was used to examine the hypothesis, and the results (t = 3.53,  $p < .05$ , one tailed) supported the predicted direction of the hypothesis.

The last hypothesis regarding mothers' reports of sex role and self-esteem was:

H<sub>1c</sub>: As reported by mothers, mothers identified as Masculine by their scores on the BSRI will report higher levels of self-esteem on the RSEI than mothers identified as Feminine.

Symbolically stated:

H<sub>1c</sub>:  $SEW_M > SEW_F$

The results of the t test for this hypothesis (t = 0.47) were not significant, and thus did not support the alternate hypothesis.

#### The Relationship Between College Men's Data and Parent Data

In the following section, hypotheses relating Bem Sex Role Inventory data collected from college men and BSRI data collected from parents are considered. These hypotheses are divided into two groups:

1. hypotheses which examine the relationship between college men's self-reports and parents' self-reports, and
2. hypotheses about the relationship between college men's descriptions of their parents and parents' descriptions of themselves.

The results for the analyses of these hypotheses are summarized in Table 5.26.

College Male's Sex Role and Parent  
Sex Roles: Self-Reports

Two hypotheses were tested regarding the relationship between self-reports of college men on the BSRI and self-reports of their parents on the BSRI. For each of these hypotheses, it was posited that no relationship would exist between the two variables studied, therefore, only the null hypothesis was tested for each relationship.

The initial null hypothesis was:

$H_0$ : No relationship will exist between the sex role identified for college men by their self-reports on the BSRI, and the sex role identified for fathers by their self-reports on the BSRI.

A chi-square test of goodness of fit was made for a 4 x 4 contingency table (Table 5.27). The results of the analysis,  $\chi^2 = 6.04$  (9 df), was not large enough to reject the null hypothesis, indicating a failure to find a significant relationship between the self-reports of college men and the self-reports of their fathers on the BSRI.

The second null hypothesis was:

$H_0$ : No relationship will exist between the sex role identified for college men by their self-reports on the BSRI, and the sex role identified for mothers by their self-reports on the BSRI.

Table 5.28 contains a summary of the results of the chi-square test for this hypothesis. The chi-square value of 5.55 (9 df) failed to be significant and the null hypothesis was not rejected.



TABLE 5.26

SUMMARY OF RESULTS OF STUDY OF RELATIONSHIPS BETWEEN  
COLLEGE MEN'S REPORTS OF THEMSELVES AND THEIR PARENTS,  
AND PARENTS' REPORTS OF THEMSELVES

SYMBOLIC HYPOTHESES	RESULTS
$H_0$ : No relationship between Srole and Hrole	$\chi^2 = 6.04$
$H_0$ : No relationship between Srole and Wrole	$\chi^2 = 5.55$
$H_0$ : No relationship between DMAF and DMAH $H_1$ : Positive relationship between DMAF and DMAH	$r = .42^*$
$H_0$ : No relationship between DMAM and DFEH $H_1$ : Positive relationship between DFEF and DFEH	$r = .28^*$
$H_0$ : No relationship between DMAM and DMAW $H_1$ : Positive relationship between DMAM and DMAW	$r = .40^*$
$H_0$ : No relationship between DFEM and DFEW $H_1$ : Positive relationship between DFEM and DFEW	$r = .16$
$H_0$ : No relationship between Frole and Hrole $H_1$ : Positive relationship between Frole and Hrole	$\chi^2 = 5.87^*$
$H_0$ : No relationship between Mrole and Wrole $H_1$ : Positive relationship between Mrole and Wrole	$\chi^2 = 5.96^*$

\*p < .05

NOTE: Srole = Sex Role, College Male, Self-Report; Hrole = Sex Role, Father, Self-Report; Wrole = Sex Role, Mother, Self-Report; Frole = Sex Role, Father, College Male's Report; Mrole = Sex Role, Mother, College Male's Report; DMAF = Desirable Masculine Characteristics, Father, College Male's Report; DMAH = Desirable Masculine Characteristics, Father, Self-Report; DFEF = Desirable Feminine Characteristics, Father, College Male's Report; DFEH = Desirable Feminine Characteristics, Father, Self-Report; DMAM = Desirable Masculine Characteristics, Mother, College Male's Report; DMAW = Desirable Masculine Characteristics, Mother, Self-Report; DFEM = Desirable Feminine Characteristics, Mother, College Male's Report; DFEW = Desirable Feminine Characteristics, Mother, Self-Report.

TABLE 5.27

CONTINGENCY TABLE (4 x 4) OF FREQUENCIES FOR COLLEGE  
 MALES' SEX ROLE CATEGORIES AS REPORTED BY COLLEGE  
 MALE SUBJECTS BY FATHERS' SEX ROLE CATEGORIES  
 AS REPORTED BY FATHER SUBJECTS ON THE BEM  
 SEX ROLE INVENTORY

	SEX ROLE	FATHERS' SELF-RATING			
		A	M	F	U
COLLEGE MEN'S SELF-RATING	A	4	6	7	10
	M	6	3	3	3
	F	3	2	4	3
	U	9	8	5	6
$\chi^2 = 6.04$					

NOTE: A = Androgynous; M = Masculine; F = Feminine; and  
U = Undifferentiated.

TABLE 5.28

CONTINGENCY TABLE (4 x 4) OF FREQUENCIES FOR COLLEGE  
 MALES' SEX ROLE CATEGORIES AS REPORTED BY COLLEGE  
 MALE SUBJECTS BY MOTHERS' SEX ROLE CATEGORIES  
 AS REPORTED BY MOTHER SUBJECTS ON THE BEM  
 SEX ROLE INVENTORY

	SEX ROLE	MOTHERS' SELF-RATING			
		A	M	F	U
COLLEGE MEN'S SELF-RATING	A	7	7	8	6
	M	5	5	2	2
	F	4	3	4	2
	U	4	8	9	9
$\chi^2 = 5.55$					

NOTE: A = Androgynous; M = Masculine; F = Feminine; and  
U = Undifferentiated.

Parental Masculinity and  
Femininity: Parents' and  
College Men's Reports

Hypotheses concerning the relationship between parents' descriptions of themselves on the BSRI and the descriptions of parents by college men on the BSRI were examined next. The magnitude of the relationship between the variables under consideration was of particular importance in this section. By squaring Pearson's  $r$ , the proportion of variance in one variable which is accounted for by scores on the other variable can be determined. For these hypotheses an  $r$  value of .80 or greater was required before the correlation would be considered meaningfully significant. This value would indicate that approximately two-thirds of the variance in one variable could be accounted for by scores on the other variable, a proportion which would allow the scales to be treated as essentially identical. For each of the following hypotheses, both statistical and meaningful significance will be considered.

The initial hypotheses in this section concerned the relationship between the descriptions by college men about their fathers on the BSRI and self-reports of fathers on the BSRI. The null and alternate hypotheses were:

$H_0$ : There will be no relationship between masculine scale scores on the BSRI reported by fathers and masculine scale scores on the BSRI reported by college men about their fathers.

$H_1$ : There will be a positive relationship between masculine scale scores on the BSRI reported by fathers and masculine scale scores on the BSRI reported by college men about their fathers.

The result of the Pearson's correlation (Table 5.29),  $r = .42$ , was statistically significant ( $p < .05$ ,  $n = 83$ ). As indicated earlier,

TABLE 5.29

SUMMARY OF CORRELATIONS OF REPORTS OF COLLEGE MALES  
ABOUT THEIR FATHERS AND SELF-REPORTS OF FATHERS ON  
THE BEM SEX ROLE INVENTORY, DESIRABLE SCALES

DEPENDENT VARIABLE INDEPENDENT VARIABLE	n	r
DMAF DMAH	83	.42*
DFEF DFEH	83	.28*

\*p < .05

NOTE: DMAF = Desirable Masculine Characteristics, Father, College Male's Report; DMAH = Desirable Masculine Characteristics, Father, Self-Report; DFEF = Desirable Feminine Characteristics, Father, College Male's Report; DFEH = Desirable Feminine Characteristics, Father, Self-Report.

however, a correlation of .40 yields an  $r^2$  value of .16. Thus, only 16% of the variance in one variable can be accounted for by scores on the other variable, a degree of correlation insufficient to treat the scale scores as identical.

The next hypotheses tested were:

$H_0$ : There will be no relationship between feminine scale scores on the BSRI reported by fathers and feminine scale scores on the BSRI reported by college men about their fathers.

$H_1$ : There will be a positive relationship between feminine scale scores on the BSRI reported by fathers and feminine scale scores on the BSRI reported by college men about their fathers.

Once again, the result of the Pearson's  $r$  (Table 5.29) was statistically significant ( $r = .28$ ,  $p < .05$ ,  $n = 83$ ), however, the degree of

correlation was not sufficiently high to be considered meaningfully significant.

The following sets of hypotheses about the relationship between the descriptions by college men about their mothers on the BSRI and self-reports of mothers on the BSRI were examined next:

$H_0$ : There will be no relationship between masculine scale scores on the BSRI reported by mothers and masculine scale scores on the BSRI reported by college men about their mothers.

$H_1$ : There will be a positive relationship between masculine scale scores on the BSRI reported by mothers and masculine scale scores on the BSRI reported by college men about their mothers.

The analysis of this set of hypotheses (Table 5.30) produced an  $r$  value of .40 ( $p < .05$ ,  $n = 87$ ) allowing rejection of the null hypothesis. However, the percentage of the variance accounted for (16%) is not large enough to allow treatment of the scale scores for mothers' self-reports and those for college men's reports of mothers as essentially identical.

The final set of hypotheses was:

$H_0$ : There will be no relationship between feminine scale scores on the BSRI reported by mothers and feminine scale scores on the BSRI reported by college men about their mothers.

$H_1$ : There will be a positive relationship between feminine scale scores on the BSRI reported by mothers and feminine scale scores on the BSRI reported by college men about their mothers.

The result of the Pearson correlation (Table 5.30),  $r = .16$  ( $n = 86$ ), was not large enough to allow rejection of the null hypothesis, thus no positive relationship could be inferred between the two variables.

TABLE 5.30

SUMMARY OF CORRELATIONS OF REPORTS OF COLLEGE MALES  
ABOUT THEIR MOTHERS AND SELF-REPORTS OF MOTHERS ON  
THE BEM SEX ROLE INVENTORY, DESIRABLE SCALES

DEPENDENT VARIABLE INDEPENDENT VARIABLE	n	r
DMAM DMAW	87	.40*
DFEM DFEW	86	.16

\*p < .05

NOTE: DMAM = Desirable Masculine Characteristics, Mother, College Male's Report; DMAW = Desirable Masculine Characteristics, Mother, Self-Report; DFEM = Desirable Feminine Characteristics, Mother, College Male's Report; DFEW = Desirable Feminine Characteristics, Mother, Self-Report.

Sex Role Category of Fathers  
and Mothers: Parents' and  
College Men's Reports

The relationship between parents' descriptions of themselves on the BSRI and the descriptions of parents by college men on the BSRI was also examined in the final sets of hypotheses tested. For these hypotheses, however, the sex role category of the parent as reported by the college male on the BSRI was compared with the sex role category of the parent as reported by the parent. The results of the chi-square analysis for these hypotheses are summarized in Table 5.31.

The initial set of hypotheses tested was:

H<sub>0</sub>: There will be no relationship between the sex roles identified for fathers by their self-reports on the BSRI and the sex role identified for fathers by the reports of college men on the BSRI.

TABLE 5.31

SUMMARY OF SIMILARITY OF SEX ROLE CATEGORY FOR COLLEGE  
 MALES' REPORTS OF THEIR PARENTS AND PARENTS' SELF-  
 REPORTS ON THE BEM SEX ROLE INVENTORY

	COLLEGE MEN'S REPORTS	
	SAME	DIFFERENT
FATHERS' REPORTS	30	52
	$\chi^2 = 5.87^*$	
MOTHERS' REPORTS	31	54
	$\chi^2 = 5.96^*$	

\*p < .05, 1 df

H<sub>1</sub>: There will be a positive relationship between the sex role identified for fathers by their self-reports on the BSRI and the sex role identified for fathers by the reports of college men on the BSRI.

The chi-square value obtained for this hypothesis ( $\chi^2 = 5.87$ , p < .05, 1 df) was significant, indicating that the null hypothesis could be rejected.

The final set of hypotheses tested was:

H<sub>0</sub>: There will be no relationship between the sex role identified for mothers by their self-reports on the BSRI and the sex role identified for mothers by the reports of college men on the BSRI.

H<sub>1</sub>: There will be a positive relationship between the sex role identified for mothers by their self-reports on the BSRI and the sex role identified for mothers by the reports of college men on the BSRI.

For the chi-square analysis of these hypotheses,  $\chi^2 = 5.96$  ( $p < .05$ , 1 df), a value large enough to reject the null hypothesis.

#### Family Information Questionnaire

As indicated in Chapter III, college male subjects were asked to complete a 23-item survey which contained questions about their relationships with their mother and father. The questionnaire was developed for a parallel study of college women (Monroe-Cook, 1979) and was adapted for use in the present study. Although not included in the analysis of data, responses to the questionnaire provided additional information about the nature of the relationships between college men and each of their parents.

Table 5.32 is a summary of the results of the questionnaire. This questionnaire was not included in the cross-validation design of the study, therefore, data for the two subgroups of college males were combined for presentation in the following section.

#### Perceived Closeness to Parents

A majority of subjects (56.5%) reported that they were "about equally close" to their mothers and fathers. Almost one-third of the college men (32.5%) reported that they were "closer" or "a lot closer" to their mothers than to their fathers, while only 11% of the subjects indicated that they were "closer" or "a lot closer" to their fathers than to their mothers.

#### Perceived Similarity to Parents

When asked to describe the degree of similarity to each of their parents, 66% of the subjects indicated that they were "similar"



TABLE 5.32

COLLEGE MEN'S RESPONSES TO FAMILY  
INFORMATION QUESTIONNAIRE  
(N = 200)

QUESTION	f	%
IN GENERAL, I AM . . .		
a lot closer to my mother than to my father.	18	9.0
closer to my mother than to my father.	47	23.5
about equally close to my mother and my father.	113	56.5
closer to my father than to my mother.	18	9.0
a lot closer to my father than to my mother.	4	2.0
I BELIEVE THAT I AM . . .		
much more like my mother than my father.	4	2.0
more like my mother than my father.	35	17.5
like both my mother and my father, about equally.	60	30.0
more like my father than my mother.	85	42.5
much more like my father than my mother.	16	8.0
I WOULD <u>RATHER</u> DISCUSS A MAJOR DECISION WITH . . .		
my mother.	76	38.0
my father.	120	60.0
(Blank)	4	2.0
I WOULD <u>RATHER</u> GET FINANCIAL ADVICE FROM . . .		
my mother.	37	18.5
my father.	161	80.5
(Blank)	2	1.0
I WOULD <u>RATHER</u> GET EMOTIONAL SUPPORT FROM . . .		
my mother.	146	73.0
my father.	50	25.0
(Blank)	4	2.0
I AM <u>MORE LIKELY</u> TO GET EMOTIONAL SUPPORT FROM . . .		
my mother.	182	91.0
my father.	16	8.0
(Blank)	2	1.0
I <u>MISSED</u> GETTING EMOTIONAL SUPPORT FROM . . .		
my mother.	6	3.0
my father.	38	19.0
neither my mother nor my father.	136	68.0
both my mother and my father.	19	9.5
(Blank)	1	0.5

TABLE 5.32--Continued

QUESTION	f	%
WHEN I WAS GROWING UP, I SPENT <u>MORE</u> TIME WITH . . .		
my mother.	144	72.0
my father.	52	26.0
(Blank)	4	2.0
WHEN I WAS GROWING UP, I <u>MISSED</u> SPENDING TIME WITH . . .		
my mother.	2	1.0
my father.	71	35.5
neither my mother nor my father.	123	61.5
both my mother and my father.	4	2.0
MY RELATIONSHIP WITH MY MOTHER HAS . . .		
been fairly stable.	126	63.0
changed a lot over the years.	73	36.5
(Blank)	1	0.5
MY RELATIONSHIP WITH MY FATHER HAS . . .		
been fairly stable.	121	60.5
changed a lot over the years	79	39.5
DESCRIBE THE <u>GENERAL QUALITY</u> OF YOUR RELATIONSHIP WITH YOUR MOTHER. . .		
Very poor	2	1.0
Poor	7	3.5
Fair	12	6.0
Good	78	39.0
Very good	101	50.5
DESCRIBE THE <u>GENERAL QUALITY</u> OF YOUR RELATIONSHIP WITH YOUR FATHER . . .		
Very poor	2	1.0
Poor	6	3.0
Fair	23	11.5
Good	90	45.0
Very good	77	38.5
(Blank)	2	1.0
DESCRIBE THE DEGREE OF <u>WARMTH</u> YOU FEEL TOWARD YOUR MOTHER . . .		
Very low	2	1.0
Low	4	2.0
Moderate	32	16.0
High	80	40.0
Very high	82	41.0

TABLE 5.32--Continued

QUESTION	f	%
DESCRIBE THE DEGREE OF <u>WARMTH</u> YOU FEEL TOWARD YOUR FATHER . . .		
Very low	0	0.0
Low	6	3.0
Moderate	42	21.0
High	80	40.0
Very high	72	36.0
DESCRIBE THE DEGREE OF <u>RESPECT</u> YOU FEEL TOWARD YOUR MOTHER . . .		
Very low	2	1.0
Low	5	2.5
Moderate	41	20.5
High	61	30.5
Very high	90	45.0
(Blank)	1	0.5
DESCRIBE THE DEGREE OF <u>RESPECT</u> YOU FEEL TOWARD YOUR FATHER . . .		
Very low	2	1.0
Low	2	1.0
Moderate	17	8.5
High	51	25.5
Very high	128	64.0
DESCRIBE THE DEGREE OF <u>TRUST</u> YOU FEEL TOWARD YOUR MOTHER . . .		
Very low	0	0.0
Low	7	3.5
Moderate	20	10.0
High	66	33.0
Very high	107	53.5
DESCRIBE THE DEGREE OF <u>TRUST</u> YOU FEEL TOWARD YOUR FATHER . . .		
Very low	1	0.5
Low	4	2.0
Moderate	15	7.5
High	61	30.5
Very high	119	59.5

TABLE 5.32--Continued

QUESTION	f	%
DESCRIBE THE <u>INTENSITY</u> (E.G., THE AMOUNT OF EMOTION YOU FEEL) OF YOUR RELATIONSHIP WITH YOUR MOTHER . . .		
Not at all intense	3	1.5
Little intensity	12	6.0
Average intensity	95	47.5
Intense	62	31.0
Very intense	27	13.5
(Blank)	1	0.5
DESCRIBE THE <u>INTENSITY</u> (E.G., THE AMOUNT OF EMOTION YOU FEEL) OF YOUR RELATIONSHIP WITH YOUR FATHER . . .		
Not at all intense	2	1.0
Little intensity	31	15.5
Average intensity	88	44.0
Intense	54	27.0
Very intense	25	12.5
DESCRIBE THE DEGREE TO WHICH YOU ARE SIMILAR TO YOUR <u>MOTHER</u> . . .		
Very dissimilar	1	2.5
Dissimilar	17	8.5
Neutral	50	25.0
Similar	123	61.5
Very similar	9	4.5
DESCRIBE THE DEGREE TO WHICH YOU ARE SIMILAR TO YOUR <u>FATHER</u> . . .		
Very dissimilar	0	0.0
Dissimilar	7	3.5
Neutral	30	15.0
Similar	116	58.0
Very similar	47	23.5

or "Very similar" to their mothers, while a larger proportion of the subjects (81.5%) reported that they were "Similar" or "Very similar" to their fathers. When asked to indicate which parent they were more like, 50.5% of the college men reported that they were "more like" or "much more like" their fathers than their mothers, while only 19.5% felt that they were "more like" or "much more like" their mothers than their fathers.

#### Preference for Assistance from Parents

Two questions were asked which were related to decision making and advice. The majority of subjects (60%) reported that they would rather discuss "a major decision" with their fathers, and 80.5% of the males indicated that they would rather get "financial advice" from their fathers. These findings seem to reflect a preference for fathers for support with cognitive processes.

#### Emotional Support from Parents

Three of the questions were related to emotional support of parents. In contrast to the subjects' responses to questions regarding assistance with decision making and financial advice, 73% of the subjects reported that they would rather get "emotional support" from their mothers, and 91% of the subjects indicated that they were "more likely" to get emotional support from their mothers. Of particular interest are the 9.5% of subjects who indicated that they "missed getting emotional support" from both their mothers and fathers, and an additional 19% of subjects who reported that they "missed getting emotional support" from their fathers. These findings indicate a preference for mother's support with affective processes; however, this preference may have been related in part to their expectations.

The fact that almost one-third of the subjects (31.5%) reported that they "missed getting emotional support" from either or both of their parents seems to indicate that many subjects felt dissatisfaction with the emotional support system of the parents.

#### Quantity of Time with Parents

Although most of the subjects (61.5%) indicated that they "missed spending time" with neither their mothers nor their fathers, 35.5% of the subjects reported that they "missed spending time" with their fathers while growing up. The vast majority of subjects (72%) specified their mothers as the parent with whom they spent the most time while growing up.

#### Stability of the Relationship with Parents

Although most subjects reported having "fairly stable" relationships with each of their parents, a significant portion of the subjects (36.5%) reported that their relationships with their mothers had "changed a lot over the years," and 39.5% of the subjects agreed with the same statement about their fathers.

#### Quality of the Relationship with Parents

When asked to describe the "general quality" of their relationships with each of their parents, only 4% of the subjects reported they had "Poor" or "Very poor" relationships with their fathers, and only 4.5% of the college men in the sample indicated that they had "Poor" or "Very poor" relationships with their mothers. Most subjects reported "Good" or "Very good" relationships with their fathers (83.5%) and mothers (89.5%).

### Warmth Toward Parents

When asked to indicate the "degree of warmth" they felt toward each of their parents, 81% of the subjects reported "High" or "Very high" degrees of warmth toward their mothers, and 76% reported "High" or "Very high" degrees of warmth toward their fathers. Very few subjects, 3% for each parent, indicated that they felt "Low" or "Very low" degrees of warmth toward their mothers or fathers.

### Respect Toward Parents

Most of the subjects (89.5%) reported that they felt a "High" or "Very high" degree of respect for their fathers. A slightly lower percentage of subjects (75.5%) reported a "High" or "Very high" degree of respect for their mothers.

### Trust Toward Parents

Most of the college men in the sample indicated that they felt a "High" or "Very high" degree of trust for their fathers (90%) and for their mothers (86.5%). Only 3.5% of the subjects reported a "Low" or "Very low" degree of trust for their mothers and 2.5% of the subjects reported a "Low" or "Very low" degree of trust for their fathers.

### Intensity of the Relationship with Parents

On two questions subjects were asked to describe the intensity of their relationship with each of their parents. The "amount of emotion you feel" was offered as an example of intensity. Nearly half (47.5%) of the subjects indicated that their relationships with their mothers was of "average intensity" and 44% of the subjects felt the same in their relationships with their fathers. "Intense" or "Very

intense" relationships with mothers were reported by 44.5% of the subjects, and a slightly lower proportion of subjects (39.5%) described their relationships with their fathers as "Intense" or "Very intense."



## CHAPTER VI

### SUMMARY AND CONCLUSIONS

Chapter VI includes a summary of the present study, a presentation of the research findings, a discussion of the conclusions, a review of the literature published since the present study, and a discussion of implications for future research in the area of sex role development.

#### Summary

The present study was designed to examine the relationship between the sex role identity and self-esteem of college men and their parents, and college men's perceptions of their parents' sex role identity, self-esteem and behavior toward them.

#### Sample

A sample of 200 undergraduate males living in residence halls at Michigan State University volunteered to participate in the study. The 200 student subjects were divided into two equal subgroups for the purpose of cross-validating the research results. Each college male subject completed a questionnaire which included measures of self-esteem and sex role identity and measures of his perceptions of his parents' self-esteem, sex role identity and behavior toward him.

In addition, a sample of 100 sets of parent subjects was randomly selected from the population of parents of the college male subjects.

The parent subjects were asked to complete a questionnaire which included measures of self-esteem and sex role identity. A total of 173 parents (89 mothers and 84 fathers) returned completed questionnaires, a return rate of 86.5%.

### Instrumentation

Three major instruments were used in the study, the Rosenberg Self-Esteem Inventory, the Parent Behavior Form and the Bem Sex Role Inventory.

The Rosenberg Self-Esteem Inventory (RSEI) was used as a measure of the self-esteem of the college male and parent subjects. In addition, the college males were asked to report their perceptions of their parents' self-esteem on the RSEI.

The Parent Behavior Form (PBF) was used to measure the college males' perceptions of their parents behavior toward them. The PBF factors of parent warmth-versus-rejection, parent control, and parent cognitive involvement were used as variables in the study.

The Bem Sex Role Inventory (BSRI) was used as a measure of sex role identity for the college males and their parents, and as a measure of the college males' perceptions of the sex role identity of each of their parents. Because the BSRI items only assess socially desirable sex role characteristics, a set of socially undesirable sex role characteristics were included in the inventory. The development of the BSRI was based on the assumption that masculinity and femininity are separate dimensions which can vary independently. Therefore, by using the median-split technique, subjects could be placed in one of four categories:

1. Androgynous (high masculine, high feminine)
2. Masculine (high masculine, low feminine)
3. Feminine (low masculine, high feminine)
4. Undifferentiated (low masculine, low feminine)

The cross-validation design of the study provided an opportunity to strengthen the overall research through the modification of the research instruments. Information obtained from the reliability analysis of each of the instruments was used to eliminate items from scales with relatively low reliabilities. In general, the reliabilities of the inventory scales used in the analysis of data was .80 or greater. Therefore, it was concluded that a true relationship between variables in the study was not likely to be concealed by inconsistency of the research instruments.

Finally, the Family Information Questionnaire was used to obtain supplemental information about the college male subjects' attitudes toward their parents.

#### The Formulation of Research Hypotheses

The formulation of the research hypotheses for the study was based on the theoretical and empirical literature about sex role socialization and the correlates of sex role identity.

Of particular importance to the study was the dualistic approach to masculinity and femininity, i.e., masculinity and femininity as two independent dimensions which all individuals possess to varying degrees. Some theorists have suggested that the individual who possesses high levels of both masculine and feminine characteristics,

the androgynous person, is psychologically and behaviorally more flexible than the nonandrogynous person. The findings of several research studies have shown that androgynous individuals do report higher levels of self-esteem, endorse fewer socially undesirable sex role characteristics and behave with more flexibility than their nonandrogynous peers. The findings of one study have also suggested that androgynous individuals would perceive their relationship with their parents as affectively and cognitively enriching, while undifferentiated individuals would perceive their relationship with their parents as affectively and cognitively impoverished. The assumption that androgynous individuals grow up in healthy home environments and are better adjusted than nonandrogynous individuals was central to the formulation of several hypotheses.

The psychoanalytic, social learning, and cognitive-developmental theories of sex role socialization were especially important in the formulation of hypotheses about the relationship between the sex role identity of college males and their perceptions of their parents' sex role identity. Although each of the theories suggests a different process of sex role socialization, each theory also suggests that the role of the father is crucial to his son's sex role development. None of the theories suggest a direct relationship between the sex role identity of the mother and the sex role identity of her son, however, the assumption that the sex role identity of the son would be the same as his father's sex role identity is basically consistent with each of the theoretical positions reviewed.

### Research Hypotheses

The research hypotheses for the study were divided into three groups: hypotheses about the reports of college males, hypotheses about the reports of parents, and hypotheses about the relationship between the reports of college males and the reports of their parents.

Tables 6.1, 6.2, 6.3 are summaries of the research hypotheses stated in symbolic form, and the results of the analysis of the data.

### Analysis of the Results

Three different statistical procedures were used to test the hypotheses in the study. The Pearson product-moment correlation statistic was used to examine the relationship between two continuous variables, and the chi-square statistic was used to test hypotheses about the relationship between two discrete variables. Hypotheses about the relationship between a continuous and a discrete variable were tested using a one-way analysis of variance followed by t-tests of a priori contrasts. An alpha level of .05 was established for the study.

### Conclusions

#### Reports of College Men

The conclusions listed in the following section have been based on the hypotheses about the reports of college men. The conclusions which are stated initially (1-12) have been drawn from those hypotheses for which significant results were obtained in both the validation and cross-validation groups.

1. Androgynous college men reported higher levels of self-esteem than Nonandrogynous college men.
2. Undifferentiated college men reported lower levels of self-esteem than Androgynous, Masculine or Feminine men.

TABLE 6.1

SUMMARY OF RESULTS OF STUDY OF COLLEGE MEN'S  
SEX ROLE IDENTITY, SELF-ESTEEM, AND  
PERCEPTIONS OF THEIR PARENTS

SYMBOLIC HYPOTHESES	RESULTS*		
	VALIDATION GROUP	CROSS- VALIDATION GROUP	BOTH GROUPS
$H_0$ : $SES_A = SES_M = SES_F = SES_U$	Reject $H_0$	Reject $H_0$	✓
$H_{1a}$ : $SES_A > SES_M, SES_F, SES_U$	Confirmed	Confirmed	✓
$H_{1b}$ : $SES_U < SES_A, SES_M, SES_F$	Confirmed	Confirmed	✓
$H_{1c}$ : $SES_M > SES_F$	---	Confirmed	
$H_0$ : No relationship between SES and SEF	Reject $H_0$	Failed to reject $H_0$	
$H_1$ : Positive relationship between SES and SEF	Confirmed	---	
$H_0$ : No relationship between SES and SEM	Reject $H_0$	Reject $H_0$	✓
$H_1$ : Positive relationship between SES and SEM	Confirmed	Confirmed	✓
$H_0$ : No relationship between SES and UMAS	Reject $H_0$	Failed to reject $H_0$	
$H_1$ : Negative relationship between SES and UMAS	Confirmed	---	
$H_0$ : No relationship between SES and UFES	Reject $H_0$	Reject $H_0$	✓
$H_1$ : Negative relationship between SES and UFES	Confirmed	Confirmed	✓
$H_0$ : No relationship between SES and UTOS	Reject $H_0$	Reject $H_0$	✓
$H_1$ : Negative relationship between SES and UTOS	Confirmed	Confirmed	✓

TABLE 6.1--Continued

SYMBOLIC HYPOTHESES	RESULTS*		
	VALIDATION GROUP	CROSS- VALIDATION GROUP	BOTH GROUPS
$H_0: UMAS_A = UMAS_M = UMAS_F = UMAS_U$	Reject $H_0$	Reject $H_0$	✓
$H_{1a}: UMAS_A < UMAS_M, UMAS_F, UMAS_U$	Confirmed	Confirmed	✓
$H_{1b}: UMAS_U > UMAS_A, UMAS_M, UMAS_F$	---	---	
$H_{1c}: UMAS_M > UMAS_F$	---	Confirmed	
$H_0: UFES_A = UFES_M = UFES_F = UFES_U$	Reject $H_0$	Failed to reject $H_0$	
$H_{1a}: UFES_A < UFES_M, UFES_F, UFES_U$	Confirmed	---	
$H_{1b}: UFES_U > UFES_A, UFES_M, UFES_F$	Confirmed	---	
$H_{1c}: UFES_F > UFES_M$	Confirmed	---	
$H_0: UMAM_A = UMAM_M = UMAM_F = UMAM_U$	Reject $H_0$	Reject $H_0$	✓
$H_{1a}: UMAM_A < UMAM_M, UMAM_F, UMAM_U$	Confirmed	Confirmed	✓
$H_{1b}: UMAM_U > UMAM_A, UMAM_M, UMAM_F$	---	Confirmed	
$H_0: UFEM_A = UFEM_M = UFEM_F = UFEM_U$	Reject $H_0$	Reject $H_0$	✓
$H_{1a}: UFEM_A < UFEM_M, UFEM_F, UFEM_U$	Confirmed	Confirmed	✓
$H_{1b}: UFEM_U > UFEM_A, UFEM_M, UFEM_F$	Confirmed	Confirmed	✓
$H_0: UMAF_A = UMAF_M = UMAF_F = UMAF_U$	Reject $H_0$	Reject $H_0$	✓
$H_{1a}: UMAF_A < UMAF_M, UMAF_F, UMAF_U$	---	Confirmed	
$H_{1b}: UMAF_U > UMAF_A, UMAF_M, UMAF_F$	---	---	
$H_0: UFEF_A = UFEF_M = UFEF_F = UFEF_U$	Reject $H_0$	Reject $H_0$	✓
$H_{1a}: UFEF_A < UFEF_M, UFEF_F, UFEF_U$	---	Confirmed	
$H_{1b}: UFEF_U > UFEF_A, UFEF_M, UFEF_F$	Confirmed	Confirmed	✓

TABLE 6.1--Continued

SYMBOLIC HYPOTHESES	RESULTS*		
	VALIDATION GROUP	CROSS- VALIDATION GROUP	BOTH GROUPS
$H_0: WVRM_A = WVRM_M = WVRM_F = WVRM_U$	Failed to reject $H_0$	Failed to reject $H_0$	
$H_{1a}: WVRM_M > WVRM_A, WVRM_F$	---	---	
$H_{1b}: WVRM_U < WVRM_A, WVRM_M, WVRM_F$	---	---	
$H_0: WVRFA = WVRFM = WVRFF = WVRFU$	Failed to reject $H_0$	Failed to reject $H_0$	
$H_{1a}: WVRFA > WVRFM, WVRFF, WVRFU$	---	---	
$H_{1b}: WVRFU < WVRFA, WVRFM, WVRFF$	---	---	
$H_0: COGM_A = COGM_M = COGM_F = COGM_U$	Failed to reject $H_0$	Failed to reject $H_0$	
$H_{1a}: COGM_A > COGM_M, COGM_F, COGM_U$	---	---	
$H_{1b}: COGM_U < COGM_A, COGM_M, COGM_F$	---	---	
$H_0: COGF_A = COGF_M = COGF_F = COGF_U$	Failed to reject $H_0$	Failed to reject $H_0$	
$H_{1a}: COGF_A > COGF_M, COGF_F, COGF_U$	---	---	
$H_{1b}: COGF_U < COGF_A, COGF_M, COGF_F$	---	---	
$H_0: CONM_A = CONM_M = CONM_F = CONM_U$	Failed to reject $H_0$	Failed to reject $H_0$	
$H_{1a}: CONM_A > CONM_M$	---	---	
$H_{1b}: CONM_M > CONM_F$	---	---	
$H_0: CONF_A = CONF_M = CONF_F = CONF_U$	Failed to reject $H_0$	Reject $H_0$	
$H_{1a}: CONF_A > CONF_M, CONF_F, CONF_U$	---	---	
$H_{1b}: CONF_U < CONF_A, CONF_F$	---	---	
$H_0$ : No relationship between Srole and Mrole	Reject $H_0$	Failed to reject $H_0$	
$H_{1a}$ : Androgynous Ss report Androgynous mothers	Confirmed	---	
$H_{1b}$ : Masculine Ss report Masculine mothers	---	---	



TABLE 6.1--Continued

SYMBOLIC HYPOTHESES	RESULTS*		
	VALIDATION GROUP	CROSS- VALIDATION GROUP	BOTH GROUPS
H <sub>1c</sub> : Feminine Ss report Feminine mothers	---	Confirmed	
H <sub>1d</sub> : Undifferentiated Ss report Undifferentiated mothers	---	Confirmed	
H <sub>0</sub> : No relationship between Srole and Frole	Reject H <sub>0</sub>	Failed to reject H <sub>0</sub>	
H <sub>1a</sub> : Androgynous Ss report Androgynous fathers	Confirmed	Confirmed	✓
H <sub>1b</sub> : Masculine Ss report Masculine fathers	Confirmed	---	
H <sub>1c</sub> : Feminine Ss report Feminine fathers	---	---	
H <sub>1d</sub> : Undifferentiated Ss report Undifferentiated fathers	Confirmed	---	
H <sub>0</sub> : No relationship between Srole and Prole	Reject H <sub>0</sub>	Failed to reject H <sub>0</sub>	
H <sub>1a</sub> : Androgynous Ss report at least one Androgynous parent more frequently than Masculine, Feminine and Undifferentiated Ss	Confirmed	---	
H <sub>1b</sub> : Undifferentiated Ss report at least one Androgynous parent less frequently than Androgynous, Masculine and Feminine Ss	Confirmed	Confirmed	✓

\*p &lt; .05

NOTE: A = Androgynous; M = Masculine; F = Feminine; U = Undifferentiated; SES = Self-Esteem, Self; SEM = Self-Esteem, Mother; SEF = Self-Esteem, Father; UMAS = Undesirable Masculine Characteristics, Self; UFES = Undesirable Feminine Characteristics, Self; UTOS = Total Undesirable Characteristics, Self; UMAM = Undesirable Masculine Characteristics, Mother; UFEM = Undesirable Feminine Characteristics, Mother; UMAF = Undesirable Masculine Characteristics, Father; UFEF = Undesirable Feminine Characteristics, Father; WVRM = Warmth-vs-Rejection, Mother; WVRF = Warmth-vs-Rejection, Father; COGM = Cognitive Involvement, Mother; COGF = Cognitive Involvement, Father; CONM = Control, Mother; CONF = Control, Father; Srole = Sex Role, Self; Mrole = Sex Role, Mother; Frole = Sex Role, Father; Prole = Sex Role, Parent.

TABLE 6.2

SUMMARY OF RESULTS OF STUDY OF THE SEX ROLE IDENTITY  
AND SELF-ESTEEM OF PARENTS OF COLLEGE MALES,  
AS REPORTED BY PARENTS

SYMBOLIC HYPOTHESES	RESULTS*
$H_0: SEH_A = SEH_M = SEH_F = SEH_U$	Reject $H_0$
$H_{1a}: SEH_A > SEH_M, SEH_F, SEH_U$	Confirmed
$H_{1b}: SEH_U < SEH_A, SEH_M, SEH_F$	Confirmed
$H_{1c}: SEH_M > SEH_F$	Confirmed
$H_0: SEW_A = SEW_M = SEW_F = SEW_U$	Reject $H_0$
$H_{1a}: SEW_A > SEW_M, SEW_F, SEW_U$	Confirmed
$H_{1b}: SEW_U < SEW_A, SEW_M, SEW_F$	Confirmed
$H_{1c}: SEW_M > SEW_F$	---

\*p < .05

NOTE: A = Androgynous; M = Masculine; F = Feminine; U = Undifferentiated; SEH = Self-Esteem of Father, Father's Report; SEW = Self-Esteem of Mother, Mother's Report.

TABLE 6.3

SUMMARY OF RESULTS OF STUDY OF RELATIONSHIPS BETWEEN  
COLLEGE MEN'S REPORTS OF THEMSELVES AND THEIR PARENTS,  
AND PARENTS' REPORTS OF THEMSELVES

SYMBOLIC HYPOTHESES	RESULTS*
$H_0$ : No relationship between Srole and Hrole	Failed to reject $H_0$
$H_0$ : No relationship between Srole and Wrole	Failed to reject $H_0$
$H_0$ : No relationship between DMAF and DMAH	Reject $H_0$
$H_1$ : Positive relationship between DMAF and DMAH	Confirmed
$H_0$ : No relationship between DMAM and DFEH	Reject $H_0$
$H_1$ : Positive relationship between DFEF and DFEH	Confirmed
$H_0$ : No relationship between DMAM and DMAW	Reject $H_0$
$H_1$ : Positive relationship between DMAM and DMAW	Confirmed
$H_0$ : No relationship between DFEM and DFEW	Failed to reject $H_0$
$H_1$ : Positive relationship between DFEM and DFEW	---
$H_0$ : No relationship between Frole and Hrole	Reject $H_0$
$H_1$ : Positive relationship between Frole and Hrole	Confirmed
$H_0$ : No relationship between Mrole and Wrole	Reject $H_0$
$H_1$ : Positive relationship between Mrole and Wrole	Confirmed

\*p < .05

NOTE: Srole = Sex Role, College Male, Self-Report; Hrole = Sex Role, Father, Self-Report; Wrole = Sex Role, Mother, Self-Report; Frole = Sex Role, Father, College Male's Report; Mrole = Sex Role, Mother, College Male's Report; DMAF = Desirable Masculine Characteristics, Father, College Male's Report; DMAH = Desirable Masculine Characteristics, Father, Self-Report; DFEF = Desirable Feminine Characteristics, Father, College Male's Report; DFEH = Desirable Feminine Characteristics, Father, Self-Report; DMAM = Desirable Masculine Characteristics, Mother, College Male's Report; DMAW = Desirable Masculine Characteristics, Mother, Self-Report; DFEM = Desirable Feminine Characteristics, Mother, College Male's Report; DFEW = Desirable Feminine Characteristics, Mother, Self-Report.

3. There was a positive relationship between the self-esteem of college men and their perceptions of the self-esteem of their mothers.
4. There was a negative relationship between the self-esteem of college men and the number of socially undesirable feminine characteristics which they endorsed.
5. There was a negative relationship between the self-esteem of college men and the total number of socially undesirable characteristics which they endorsed.
6. Androgynous college men endorsed fewer socially undesirable masculine characteristics than Nonandrogynous college men.
7. As perceived by college men, Androgynous mothers possessed fewer socially undesirable masculine characteristics than Nonandrogynous mothers.
8. As perceived by college men, Androgynous mothers possessed fewer socially undesirable feminine characteristics than Nonandrogynous mothers.
9. As perceived by college men, Undifferentiated mothers possessed more socially undesirable feminine characteristics than Masculine, Feminine, and Androgynous mothers.
10. As perceived by college men, Undifferentiated fathers possessed more socially undesirable feminine characteristics than Masculine, Feminine, and Androgynous fathers.
11. Androgynous college men perceived their fathers to be Androgynous more frequently than Nonandrogynous college men perceived their fathers to be Androgynous.

12. Undifferentiated college men reported having at least one Androgynous parent less frequently than Masculine, Feminine, and Androgynous college men.

The following list of conclusions (13-21), based on the reports of college men, have been drawn from those hypotheses for which no significant results were obtained in either the validation or cross-validation groups.

13. Undifferentiated college men did not endorse a greater number of socially undesirable masculine characteristics than Masculine, Feminine, and Androgynous college men.
14. As perceived by college men, Undifferentiated fathers did not endorse a greater number of socially undesirable masculine characteristics than Masculine, Feminine, and Androgynous fathers.
15. There were no differences among the four sex role categories of college men in their perceptions of their mothers' warmth-versus-rejection.
16. There were no differences among the four sex role categories of college men in their perceptions of their fathers' warmth-versus-rejection.
17. There were no differences among the four sex role categories of college men in their perceptions of their mothers' cognitive involvement.
18. There were no differences among the four sex role categories of college men in their perceptions of their fathers' cognitive involvement.

19. There were no differences among the four sex role categories of college men in their perceptions of their mothers' control.
20. Masculine college men did not report Masculine mothers more frequently than Androgynous, Feminine, and Undifferentiated college men.
21. Feminine college men did not report Feminine fathers more frequently than Androgynous, Masculine, and Undifferentiated college men.

#### Reports of Parents

The following list of conclusions (22-27) are based on the reports of the parents of college men. Because these reports were not included in cross-validation design of the study, each hypothesis about the parent reports was tested only once ( $\alpha = .05$ ).

22. Androgynous fathers reported higher levels of self-esteem than Nonandrogynous fathers.
23. Undifferentiated fathers reported lower levels of self-esteem than Androgynous, Masculine and Feminine fathers.
24. Masculine fathers reported higher levels of self-esteem than Feminine fathers.
25. Androgynous mothers reported higher levels of self-esteem than Nonandrogynous mothers.
26. Undifferentiated mothers reported lower levels of self-esteem than Androgynous, Masculine, and Feminine mothers.
27. Masculine mothers did not report higher levels of self-esteem than Feminine mothers.

The Relationship Between Reports  
of College Men and the Reports  
of Their Parents

The following conclusions (28-35) are based on the results of the analysis for hypotheses about the relationships between reports of college men and the reports of their parents. These hypotheses were tested only once in the study, therefore, the level of significance was .05.

28. There was no relationship between the sex role identity of college men and the sex role identity of their fathers.
29. There was no relationship between the sex role identity of college men and the sex role identity of their mothers.
30. A positive relationship of moderate strength existed between the reports of college men about their fathers and the self-reports of fathers for socially desirable masculine characteristics.
31. A positive relationship of low strength existed between the reports of college men about their fathers and the self-reports of fathers for the socially desirable feminine characteristics.
32. A positive relationship of moderate strength exists between the reports of college men about their mothers and self-reports of mothers for socially desirable masculine characteristics.
33. No relationship existed between the reports of college men about their mothers and self-reports of mothers for socially undesirable feminine characteristics.

34. A positive relationship existed between the college men's perceptions of their fathers' sex role identity and their fathers' sex role identity.
35. A positive relationship existed between the college men's perceptions of their mothers' sex role identity and their mothers' sex role identity.

### Discussion of the Results

#### Sex Role Identity and Self-Esteem

In the present study, reports of sex role identity and self-esteem were obtained from three different groups of subjects: college men, and the mothers and fathers of college men.

Among the college males, Androgynous men reported the highest levels of self-esteem and Undifferentiated men reported the lowest levels of self-esteem. These results are consistent with the findings of Spence, Helmreich, and Stapp (1975). Bem (1977), however, found that Androgynous and Masculine males reported similar levels of self-esteem, as did Feminine and Undifferentiated males. In addition, both Bem and Spence and associates found that Masculine males had higher levels of self-esteem than Feminine males. In the present study, however, Masculine men reported higher levels of self-esteem than Feminine men, only in the cross-validation group, offering only partial confirmation of the findings of earlier studies.

Among the fathers of college men, Androgynous fathers reported the highest levels of self-esteem, Undifferentiated fathers reported the lowest levels of self-esteem, and Masculine fathers reported higher levels of self-esteem than Feminine fathers. No



previous studies of middle aged adults have made use of an orthogonal sex role inventory to examine the relationship between sex role identity and self-esteem. The present findings, however, are the same as those of Spence et al (1975) in their study of college men.

For the mothers of college men, and Androgynous mothers reported the highest and Undifferentiated mothers the lowest levels of self-esteem. There was no difference between the self-esteem of Masculine and Feminine mothers. These results are similar to the findings of Bem (1977) in her study of college women.

For each group of subjects in the study, Androgynous subjects had the highest levels of self-esteem and Undifferentiated subjects had the lowest. One explanation for these results is that the behavior of Androgynous individuals is flexible, and therefore more likely to lead to positive outcomes, and high levels of self-esteem. On the other hand, high self-esteem may provide internal support for an individual who begins to develop cross-sex behaviors. Once some of these behaviors result in positive outcomes, the individual continues to develop both masculine and feminine behaviors. Undifferentiated individuals may find that few of their behaviors lead to positive outcomes and therefore they develop low self-esteem.

The findings regarding the levels of self-esteem for Masculine and Feminine individuals are inconclusive. For women, the value of masculine characteristics in our culture may counter balance the effect of engaging in cross-sex behaviors. Two of the three groups of Masculine-typed men in the study did report higher levels of self-esteem than their Feminine-typed peers, partially supporting the results of earlier studies of males.

College Men's Self-Esteem  
and Perceptions of  
Parents' Self-Esteem

A moderately strong relationship existed between the self-esteem of college men and their perceptions of their mothers' self-esteem. This finding was of particular interest when compared with the findings for college men's perceptions of their fathers. Only in the validation group was a significant relationship found between the self-esteem of college men and their perceptions of their fathers' self-esteem.

These results may in part be accounted for by the responses of college men to the Family Information Questionnaire. A total of 72% of the college males indicated that they spent more time with their mothers while growing up than they did with their fathers. In addition college males tended to more frequently report feeling close to their mothers than they did to their fathers. The college male subjects may have developed the foundation for their self-esteem in the context of their close relationships with their mothers, therefore a strong relationship would exist between the self-esteem of college men and their perceptions of their mothers' self-esteem.

College Men's Self-Esteem  
and Socially Undesirable  
Sex Role Characteristics

For both the validation and cross-validation groups there was a moderately strong negative relationship between the self-esteem of college men and their reports of socially undesirable feminine characteristics. On the other hand little or no relationship was found between the self-esteem of college men and socially undesirable masculine characteristics. Taken together, these findings seem to

reflect a cultural bias that it is less acceptable to be undesirably feminine than it is to be undesirably masculine. It would seem that a male who endorses large numbers of socially undesirable feminine characteristics would be especially ineffective in our society, and would therefore have difficulty maintaining a high level of self-esteem.

College Men's  
Sex Role Identities  
and Socially Undesirable  
Sex Role Characteristics

Kelly, Caudill, Hathorn, and O'Brien (1977) found that Androgynous males endorsed the fewest socially undesirable masculine and feminine characteristics, and Undifferentiated males endorsed the most. In the present study, Androgynous college men did endorse fewer socially undesirable masculine characteristics than all other sex role categories, however, none of the other predicted relationships between sex role identity and socially undesirable characteristics were significant in both the validation and cross-validation groups.

It is difficult to explain the differences in results for the two studies. Both studies used the same instrumentation, however, in the Kelly et al study, the median split technique of scoring was used with a combined sample of men and women, a procedure which would change the sex role categorization of many of the men in the present study. Further exploration of the relationship between sex role identity and socially undesirable sex role characteristics is needed to clarify these results.

College Men's Perceptions  
of Their Parents' Sex Role  
Identities and Socially  
Undesirable Sex Role  
Characteristics

For the college men's perceptions of their mothers, several patterns emerged. Mothers who were perceived to be Androgynous were also perceived as having the fewest number of socially undesirable masculine and feminine characteristics. Mothers perceived to be Undifferentiated were also perceived as having the greatest number of socially undesirable feminine characteristics.

For the college men's perceptions of their fathers, the results were generally inconclusive. Fathers who were perceived to be Undifferentiated by their sons, were also perceived as having a greater number of socially undesirable feminine characteristics, but were not perceived as having a greater number of socially undesirable masculine characteristics.

Taken together, these results seem to suggest that parents who are perceived as Undifferentiated by their sons, are also perceived to be negatively feminine but not negatively masculine. In other words, Undifferentiated parents are viewed by their sons as both lacking positive characteristics and possessing undesirable feminine characteristics. On the other hand, Androgynous mothers (but not fathers) were viewed by their sons to possess positively-valued but not negatively-valued masculine and feminine characteristics.

College Men's Sex Role  
Identity and Perceived  
Parent Behavior

There were no significant differences among the four sex role categories of college men in their perceptions of their parents'

behavior toward them on the dimensions of warmth-versus-rejection, cognitive involvement and control. These results fail to confirm the findings Kelly and Worell (1976) who concluded that non-traditional sex role orientations for males (Androgynous and Feminine) appeared to be related to elevated levels of maternal and paternal warmth, and that Undifferentiated males appeared to have experienced low levels of warmth and cognitive involvement with each of their parents.

Several factors may have contributed to the differences in findings between the present study and the Kelly and Worell study. For example;

1. In the present study, the Bem Sex Role Inventory was used as a measure of sex role identity, while Kelly and Worell used the Personality Research Form ANDRO Scale (PRF ANDRO).
2. In the Kelly and Worell study the median split technique was used with the combined data of men and of women, resulting in 75% of the male subjects being categorized as Masculine or Androgynous. In the present study, the median split technique was used only with a sample of male subjects. By definition, only one-half of the subjects were categorized as either Androgynous or Masculine.
3. The Parent Behavior Form (PBF) factors were used in the analysis of data in the present study, while Kelly and Worell used the individual scales of the PBF in their analysis.
4. The process of eliminating items from the PBF scales may have reduced the validity of the scales while increasing their internal consistency.

Sex Role Identity of College  
Men and Their Perceptions of  
Their Parents' Sex Role Identity

The findings about the sex role identities of college men and their perceptions of their parents' sex role identities are inconclusive. Androgynous college men did report having Androgynous fathers more frequently than college men in other sex role categories. In addition, Undifferentiated college men reported having at least one Androgynous parent less frequently than college men in the other sex role categories. It is interesting to note that eight of the ten alternate hypotheses about the relationship between the sex role identities of college men and their perceptions of their parents' sex role identities were significant in at least one of the two samples. A possible explanation for the inconsistency of these findings is that an unstable relationship exists between the two variables. This conclusion may lend support to the cognitive-developmental theory of sex role socialization, which allows for a greater impact on the child by the culture than social learning and psychoanalytic theory allow.

Undifferentiated sons seldom had at least one Androgynous parent. If the growing child is motivated by a desire for competence and mastery, as is suggested by Kohlberg (1966), it would be difficult for a son to develop an Undifferentiated sex role identity in a home environment in which at least one parent is exhibiting the competence and self-esteem of an Androgynous person.

The Sex Role Identities  
of College Men and  
Their Parents

No relationship was found between the sex role identities of college men and the sex role identities of their parents. When these results are combined with the data about college men's perceptions of their parents' sex role identities, it can be concluded that the individual's perceptions of the parent are more important to sex role development than are the actual parent characteristics.

An alternate explanation for these results is suggested by Spence and Helmreich (1978). They stated that:

...there are multiple slippages between parents' perceptions of themselves and students' perceptions of their parents. Both fathers and mothers may behave somewhat differently at home than in other settings; their actions toward a particular child may be shaped by their attitudes toward that child and by that child's behavior toward them; children's interpretation of their parents' behavior and hence their inferences about their parents' attributes are filtered through their own needs and temperamental characteristics. These slippages, coupled with the imperfections of our measuring instrument and the crudeness of our four-way categorical system, may put too heavy a load on the data derived from parents' self-concepts to reproduce with any fidelity the relationships found between students' perceptions of their parents and their perceptions of themselves. (p. 217)

Parental Masculinity and Femininity:  
Parents' and College Men's Reports

A positive relationship of moderate strength was found between college men's perceptions of their mothers' and fathers' socially desirable masculine characteristics. For socially desirable feminine characteristics, however, a positive relationship of low strength was found between college men's reports of their fathers and fathers' self-reports, and no relationship was found between the two reports for mothers. None of the relationships between college men's reports of their parents'

masculine and feminine characteristics were strong enough to consider the reports identical.

The statements of Spence and Helmreich (1978) which were quoted in the previous section would account for the limited strength of these correlations. In addition, the fact that the reliability of the socially desirable masculine scale of the Bem Sex Role Inventory (BSRI) was consistently higher than the reliability of the socially desirable feminine scale score of the BSRI may explain the weaker relationships found for reports of socially desirable feminine characteristics.

An interesting pattern is revealed in the comparison of the median scores on the BSRI scales for college men's reports of their parents and parents' self-reports. Median scores for reports about fathers on the socially desirable masculine scale were similar (106.7 and 106.25), as were the reports about mothers on the socially desirable feminine scale (100.5 and 102.5). However, the median score for college men's reports of fathers on the socially desirable feminine scale (81.5) was significantly lower than the median score for self-reports of fathers on the same scale (92.67), and the median score for college men's reports of mothers on the socially desirable masculine scale (85.9) was lower than the median score for mothers' self-reports on the same scale (89.33). In other words, college men attributed fewer socially desirable cross-sex characteristics to each of their parents than the parents endorsed for themselves, a pattern which may reflect a desire on the part of college men to view the sex role behavior of each of their parents as more traditional than the parents view themselves.



### Psychological Androgyny

In the present study, Androgynous college men reported higher levels of self-esteem, endorsed fewer socially undesirable sex-typed characteristics, and reported Androgynous fathers more frequently than Masculine-typed, Feminine-typed, and Undifferentiated college men. In addition, Androgynous mothers and fathers reported higher levels of self-esteem than Nonandrogynous parents, and parents who were perceived to be Androgynous by their sons were also perceived to endorse the fewest number of socially undesirable sex-typed characteristics.

The findings of the present study consistently support the contention of Bem (1974) and Spence, Helmreich, and Stapp (1975) that a positive relationship exists between psychological adjustment and psychological androgyny. Because the present study was designed to examine only correlations between the variables under consideration, no cause and effect relationships were determined. Investigations of the antecedents of androgyny would be particularly useful in the future.

### Review of the Literature Published Since Development of the Present Study

Since the development of the present research, several studies have been published in which masculinity and femininity have been viewed as independent dimensions. Each of these studies is reviewed in the following section.

Jones, Chernovetz, and Hansson (1978) examined the relationship between sex role identity and numerous other variables including self-esteem, problems with alcohol, helplessness, sexual maturity, self-confidence, locus of control, neurosis, and attitudes toward women's

issues. They conclude that for both males and females, adjustment and flexibility is generally associated with masculinity, not androgyny. Although the researchers used the Bem Sex Role Inventory in the study, their findings are complicated by the fact that they used Bem's original scoring procedure, a procedure which results in classifications of Androgynous, Masculine-typed, or Feminine-typed. Given the results of several studies, including the present study, which have demonstrated differences between Androgynous and Undifferentiated individuals on several personality variables (e.g., self-esteem, socially undesirable sex-typed characteristics) the Jones et al. data should be reanalyzed using the four-way scoring system.

Kelly, Furman, and Young (1978) examined the interscale comparability of the four new measures of sex role identity: the Bem Sex Role Inventory, the Personal Attributes Questionnaire, the Personality Research Form ANDRO, and the Adjective Check List Masculinity and Femininity scales. They found that 61% of the subjects were discrepantly categorized by any two of the inventories. They concluded that the inventories should not be used interchangeably, and questioned the appropriateness of the scoring procedure which divides individuals into four sex role categories, citing the problem of lost variance which is inherent in the procedure.

O'Connor, Mann, and Bardwick (1978) studied the relationship between sex role identity and self-esteem for a middle-aged, upper-middle class sample. Using the Texas Social Behavior Inventory and the Personal Attributes Questionnaire, they replicated the study of college undergraduates conducted by Spence, Helmreich, and Stapp (1975).

The results of the O'Connor et al. study supported the earlier findings of Spence et al. For both men and women, Androgynous individuals reported the highest levels of self-esteem, followed in order by Masculine-typed, Feminine-typed, and Undifferentiated individuals.

Doherty and Schmidt (1978) used the Bem Sex Role Inventory and the Tennessee Self Concept Scale (TSCS) to study the relationship between self-esteem and sex role identity with freshmen women. In general, Androgynous women scored higher on the TSCS dimensions than Masculine, Feminine, or Undifferentiated individuals. In addition, they concluded that women who see themselves as feminine have better self-concepts than women who view themselves as masculine, a conclusion which contradicts the findings of several previous studies, and points out the need for further studies regarding the relationship between self-esteem and masculinity in women.

The most exhaustive of the recent studies is published in book form. Spence and Helmreich (1977) completed a study of several socio-economic groups, age groups, and educational levels, and have included subject reports of parents' sex roles and parent self-reports of sex role identities. In addition, they combined the sex role identity of parents to form a "couple-type" (e.g., Androgynous-Masculine, Undifferentiated-Feminine), a dimension which would have been useful in the analysis of data from the present study. In general, the findings of the Spence and Helmreich study support the notion that the Androgynous individual is behaviorally and psychologically more flexible than the Masculine, Feminine, or Undifferentiated individual.

### Implications for Future Research

In the present study, the median split technique was used to divide each sample into four sex role categories. Earlier studies have used the median split procedure with samples which included both males and females, and therefore, those studies usually have a large number of masculine-typed males and feminine-typed females. In the present study, the median split technique was used only with single sex samples (eg. college males, mothers), and by definition, 50% of the sample must then be categorized as either Masculine or Androgynous and the other half of the sample must be either Feminine or Undifferentiated. The effects of using a single sex sample to determine sex role category is largely unknown, however, it is clear that many individuals would be reclassified if both males and females were in the sample. A study which would compare the results of using each of these procedures would be helpful, especially if particular attention were paid to the individuals who changed from one sex role category in one procedure to another sex role category in the second procedure. The sample of college men in the present study could be combined with a sample of college women, the data reanalyzed, and the new findings compared with the current results.

To date, no norms have been established for the masculine and feminine scales of any of the orthogonal measures of sex role identity. Normative data would be useful to the research in determining if a skewed sample had been selected. In addition, college students have been the focus of most of the recent research of sex role identity.

As researchers begin to focus on other populations and specialized groups, normative data would be especially helpful in the interpretation of results.

In the present study, an analysis of variance (ANOVA) was used to test many of the hypotheses. The ANOVA is based in part on the assumption that there is independence of observations, an assumption which may have been violated for tests of hypotheses in which reports of a subject on one measure were compared with reports of the same subject on a second measure. A repeated measures analysis would have been more appropriate for the data collected for the present study. Although a chi-square test of significance, a non-parametric statistic, was used to test several of the hypotheses, the additional power of a parametric statistical test would have allowed for maximum analysis of the data. For example, if dummy variables were used in place of the four way categorical system of sex roles, a multiple regression analysis could be used to analyze the data.

Hopefully, the construct of psychological androgyny is in its formative stages of development. As currently conceptualized, the androgynous individual is defined in terms of traditional notions of acceptable masculine and feminine behavior. As societal assumptions about the appropriateness of various behaviors for men and women continue to change, it would seem that the current definition of androgyny may be less and less useful. A definition of psychological androgyny which would include other personality or behavioral dimensions which are less available to the sex-typed individual may in the long run be more useful. For example, it would appear that the

androgynous person not only possesses the capability to use both masculine and feminine behaviors, but he or she may also be better able to discriminate when either or both of these dimensions are appropriate to express. As the operational definition of psychological androgyny is modified to include dimensions unique to the androgynous individual, it should also become a more useful measure of psychological adjustment.

## APPENDICES

## APPENDIX A

### ACADEMIC MAJORS OF COLLEGE MEN SUBJECTS



## APPENDIX A

### ACADEMIC MAJORS OF COLLEGE MEN SUBJECTS

#### Agriculture & Natural Resources - 18

- 1 - Agribusiness
- 2 - Agriculture
- 2 - Agricultural Technology
- 1 - Animal Husbandry
- 1 - Crop & Soil Science
- 1 - Dairy Science
- 2 - Fisheries & Wildlife
- 3 - Forestry
- 2 - Horticulture
- 1 - Packaging
- 2 - Parks & Recreation

#### Arts & Letters - 9

- 2 - English
- 1 - History
- 1 - Journalism
- 1 - Literature
- 3 - Pre-Law
- 1 - Pre-Professional

#### Business - 47

- 13 - Accounting
- 3 - Business Administration
- 1 - Economics
- 2 - Financial Administration
- 14 - General Business
- 8 - Hotel & Restaurant Management
- 1 - Management Operations
- 4 - Marketing
- 1 - Personnel Administration

#### Communication Arts & Sciences - 5

- 4 - Communications
- 1 - Telecommunications

#### Education - 2

- 1 - Education
- 1 - Physical Education

#### Engineering - 30

- 2 - Building Construction
- 2 - Chemical Engineering
- 2 - Civil Engineering
- 1 - Computer Science
- 4 - Electrical Engineering
- 12 - Engineering
- 1 - Engineering Arts
- 5 - Mechanical Engineering
- 1 - Systems Science

#### Human Ecology - 3

- 1 - Human Environment & Design
- 1 - Interior Design
- 1 - Industrial Design

#### James Madison College - 15

- 15 - General

#### Natural Science - 41

- 1 - Biochemistry
- 4 - Biological Science
- 4 - Chemistry
- 1 - Geology
- 1 - Mathematics
- 2 - Medical Technology
- 3 - Microbiology
- 3 - Physics
- 1 - Physiology
- 2 - Pre-Dental
- 4 - Pre-Med
- 12 - Pre-Vet
- 3 - Zoology

#### Social Science - 13

- 3 - Criminal Justice
- 1 - Geography
- 1 - International Relations
- 5 - Political Science
- 2 - Psychology
- 1 - Urban Planning

#### University College - 14

- 14 - No Preference

#### Urban Development - 2

- 1 - Urban Development
- 1 - Urban Community Problems

## APPENDIX B

### OCCUPATIONS OF PARENT SUBJECTS

## APPENDIX B

### MOTHERS' OCCUPATIONS

- 3 - Bank Teller
- 2 - Bookkeeper
- 1 - Cashier
- 1 - Clerical
- 1 - Clinic Aide, Hospital
- 1 - Cook
- 1 - Editor, Newspaper Food Section
- 1 - Factory Line Worker
- 1 - Food Service Employee
- 30 - Homemaker
- 1 - Librarian
- 1 - Manager, Baked Goods Store
- 1 - Manager, Import Store
- 1 - Music Director
- 1 - Nurse, Assistant Head
- 1 - Owner, Needlework Shop
- 1 - Printer & Binder
- 1 - Psychologist
- 1 - Sales, Art Gallery
- 1 - Sales, Cosmetics
- 1 - Sales, Real Estate
- 7 - Secretary
- 2 - Secretary, Executive
- 1 - Speech Therapist
- 1 - Statistical Clerk, Computer
- 1 - Stenographer
- 1 - Switchboard Operator
- 1 - Tailor
- 1 - Teacher's Aide
- 1 - Teacher, Community College
- 3 - Teacher, Elementary
- 6 - Teacher, High School
- 1 - Teacher, Pre-School
- 3 - Teacher, Special Education
- 1 - Typist, Court
- 2 - Volunteer Services, Assistant Coordinator
- 1 - Waitress
- 3 - No occupation listed

## APPENDIX B

## FATHERS' OCCUPATIONS

1 - Barber	1 - Manager, Accounting
1 - Builder, Sheet Metal	2 - Manager, Industrial
1 - Chemist	1 - Manager, Machine Tool
2 - Clergyman	1 - Manager, Plant
1 - Computer Programmer	1 - Manager, Retail Store
1 - Construction Inspector	1 - Manager, Travel Agency
2 - Consultant	1 - Meteorologist
1 - Control Analyst	1 - Military, U.S. Army Major
1 - Dairy Farmer	1 - Model Maker, Metal
1 - Data Processor	1 - Owner, Trucking & Construction Co.
1 - Design Checker	1 - Oxygen Plant Operator
1 - Designer, Die	2 - Physician
1 - Designer, Engine	2 - Principal, High School
1 - Electrician	2 - Production Planner
1 - Employment Interviewer	3 - Professor, College
1 - Engineer, Auto	1 - Psychologist
2 - Engineer, Chemical	1 - Repairman, Appliances
2 - Engineer, Electrical	1 - Repairman, Gas & Electric
1 - Engineer, Hydraulic	1 - Sales, Auto
3 - Engineer, Management	1 - Sales, General
1 - Engineer, Sales	2 - Self-Employed
1 - Engineer, Systems	1 - Steam Fitter
1 - Engineer, Telephone	2 - Supervisor, General
2 - Factory Worker	1 - Supervisor, Fruit Tree
4 - Farmer	1 - Supervisor, Production Design
1 - Financial Advisor	4 - Teacher
1 - Foreman, Newspaper	1 - Truck Driver
1 - Foreman, Plant Cleaners	1 - Vice-President, Bank
1 - Laboratory Technician	1 - Vice-President, Engineering Co.
1 - Land Supervisor	1 - Vice-President, Mining Co.
1 - Machine Operator	1 - No occupation listed
1 - Maintenance	

## APPENDIX C

### LETTERS REQUESTING PARTICIPATION IN THE STUDY

Dear Resident:

I have obtained permission to conduct a research project with undergraduate men at MSU. I am a doctoral student in Counseling Psychology, and this research will be used for my dissertation.

I am asking for volunteer subjects, who are undergraduates at MSU, and who have been raised by two parents (not necessarily their biological parents) until their teenage years. In this study we'll be examining men's attitudes toward themselves and toward each of their parents to determine what relationships exist between certain elements of these attitudes. There are no "tricks" involved in the questionnaire.

In addition to the information provided by students from MSU, I will be asking the parents of many of those students to complete a shortened version of the questionnaire. While I can't promise you specific benefits for answering my questionnaire, many people have found it interesting and thought provoking.

Information which subjects provide will be kept confidential and only the general results of the study will be reported. If you are interested in obtaining a report of these results, I will be happy to send one to you. (A provision is made on the questionnaire for this.)

Your R.A. will have both questionnaires and answer sheets. You will probably need approximately one hour to fill it out. If you have any questions, please contact your R.A.

Thank you in advance for your assistance,

Dale Monroe-Cook

January 8, 1979

Dear

During the past few years, attitudes regarding male and female roles in our society, and perceptions of the parent-child relationship have undergone numerous changes. As part of my doctoral program at Michigan State University, I am conducting research designed to explore the nature of these changes. Your son has recently participated in my study, which examines college men's attitudes toward themselves, parents' attitudes toward themselves, and the relationship between these attitudes. Your assistance with this research, by completing and returning the enclosed questionnaire, would enhance our knowledge of many elements of the parent-child relationship.

Your participation in this study is completely voluntary, and any information which you provide will be kept strictly confidential. Although I can't promise you specific benefits for answering my questionnaire, many people have found it interesting and thought-provoking. In addition, at your request I will be happy to send you a report of the general results of the study. My research has been approved by the University Committee on Research Involving Human Subjects and is being conducted under the supervision of Dr. William Farquhar, College of Education.

If you agree to participate, please complete the following:

1. Research Questionnaire
2. Request for Research Results (if desired)
3. Research Consent Form

To insure that no unethical pressures were placed on you to participate and that you understand the manner in which your individual responses will be used, the University requires that you sign the enclosed Research Consent Form.

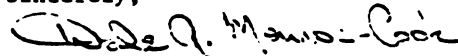
After completing the above, please use the enclosed stamped envelope to return your questionnaire.

If you do not wish to participate, I would appreciate your assistance by checking the appropriate box below and returning the questionnaire in the enclosed stamped envelope.

If you are interested in participating, but would like further information, please check the appropriate box below, list a phone number where I may contact you, and return this information in the enclosed envelope. I will contact you to answer your questions.

Thank you in advance for your assistance. Your help will be greatly appreciated.

Sincerely,



Dale G. Monroe-Cook

☐

I do not wish to participate.

☐

I desire further information.

Daytime phone \_\_\_\_\_

Evening phone \_\_\_\_\_

1636 Snyder Rd.  
East Lansing, MI.  
February 12, 1979

Dear

Approximately four weeks ago, I requested your assistance with a research project I am conducting through Michigan State University. Participation in the study involves completion of a questionnaire designed to explore parents' attitudes toward themselves. As of this date, I have not heard from you, and I am writing to follow-up my original request.

As I mentioned in my earlier letter:

1. Your participation in this study is completely voluntary, and information which you provide will be kept strictly confidential.
2. Because your son has already completed a similar questionnaire, your participation in this study will enhance information now available regarding the parent-child relationship.
3. This research has been approved by the University Committee On Research Involving Human Subjects, and is being conducted under the supervision of Dr. William Farquhar, Professor.
4. At your request, I will be happy to send you a report of the general results of the study.

If you have already returned the questionnaire, and our letters have crossed in the mail, thank you for your help. Your response is greatly appreciated.

If you have not returned the questionnaire, but wish to participate, simply review the original instructions, complete the appropriate materials, and return them in the stamped envelope which was provided. Most individuals complete the survey in less than thirty minutes.

If you wish to participate but are unable to find the original materials, please call me collect, (517) 351-6343, evenings. I will send you a new questionnaire.

If you do not wish to participate, I would appreciate your help in returning the blank questionnaire in the stamped envelope originally provided.

Thank you in advance for your assistance. Your response by March 1, 1979 will be appreciated.

Sincerely,

Dale G. Monroe-Cook



**APPENDIX D**

**CONSENT FORM**

## RESEARCH CONSENT FORM

## COLLEGE MALE

I understand that the study being conducted by Dale Monroe-Cook under the supervision of Dr. William Farquhar is for the purpose of examining the relationships which may exist between some of my attitudes and perceptions about myself and about my parents. I understand that participating in this study will not result in direct benefits for me, nor will I be penalized in any fashion if I want to withdraw from participation. I also understand that the information I provide by filling out these forms will be kept strictly confidential. Only the researcher will have access to the original forms. General results will be reported, but none of these will identify individual subjects' results. I know that I will -- upon request -- receive a report of this study's general results, within the restrictions of confidentiality as outlined above.

---

Signature

---

Date

---

Witness

---

Date

## RESEARCH CONSENT FORM

MOTHER

I understand that the study being conducted by Dale Monroe-Cook under the supervision of Dr. William Farquhar (College of Education, Michigan State University) is for the purpose of examining the relationships which may exist between some of my attitudes and perceptions about myself and about my son. I understand that participating in this study will not result in direct benefits for me, nor will I be penalized in any fashion if I want to withdraw from participation. I also understand that the information I provide by filling out these forms will be kept strictly confidential. Only the researcher will have access to the original forms. General results will be reported, but none of these will identify my individual responses. I know that I will -- upon request -- receive a report of this study's general results, within the restrictions of confidentiality outlined above.

\_\_\_\_\_  
Signature\_\_\_\_\_  
Date

## REQUEST FOR RESEARCH RESULTS

The results of this study will be available in the Spring of 1979. If you would like a general report of these results, please indicate below an address where you can be contacted at that time.

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_  
Zip Code

## RESEARCH CONSENT FORM

FATHER

I understand that the study being conducted by Dale Monroe-Cook under the supervision of Dr. William Farquhar (College of Education, Michigan State University) is for the purpose of examining the relationships which may exist between some of my attitudes and perceptions about myself and about my son. I understand that participating in this study will not result in direct benefits for me, nor will I be penalized in any fashion if I want to withdraw from participation. I also understand that the information I provide by filling out these forms will be kept strictly confidential. Only the researcher will have access to the original forms. General results will be reported, but none of these will identify my individual responses. I know that I will -- upon request -- receive a report of this study's general results, within the restrictions of confidentiality outlined above.

\_\_\_\_\_  
Signature\_\_\_\_\_  
Date-----  
REQUEST FOR RESEARCH RESULTS

The results of this study will be available in the Spring of 1979. If you would like a general report of these results, please indicate below an address where you can be contacted at that time.

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_  
Zip Code

## **APPENDIX E**

**BEM SEX ROLE INVENTORY AS PRESENTED TO  
COLLEGE MEN AND THEIR PARENTS**

## BEM CHECK LIST

YOURSELF  
(Purple ink answer sheet)

Using the following scale, darken the space of the number which best represents how well each of the following characteristics describes you.

1 Never or almost never true of me	2 Usually not true	3 Sometimes but infrequently true	4 Occasionally true	5 Often true	6 Usually true	7 Always or almost always true of me
1. Self-reliant	2. Yielding	3. Cruel	4. Gossipy			
5. Defends own beliefs	6. Cheerful	7. Rude	8. Indecisive			
9. Independent	10. Shy	11. Thoughtless	12. Deceitful			
13. Athletic	14. Affectionate	15. Bully	16. Spoiled			
17. Assertive	18. Flatterable	19. Tactless	20. Bitchy			
21. Strong person- ality	22. Loyal	23. Overly loved	24. Vindictive			
25. Forceful	26. Feminine	27. Unethical	28. Backstabbing			
29. Analytical	30. Sympathetic	31. Undisciplined	32. Overexpression of feelings of insecurity			
33. Has leadership abilities	34. Sensitive to needs of others	35. Arrogant	36. Irresponsible with money			
37. Willing to take risks	38. Understanding	39. Indifferent	40. Overly critical of same sex			
41. Makes decisions easily	42. Compassionate	43. Overbearing	44. Can't argue objectively			
45. Self-sufficient	46. Eager to soothe hurt feelings	47. Impatient	48. Fickle			
49. Dominant	50. Soft-spoken	51. Boastful	52. Overly sensitive			
53. Masculine	54. Warm	55. Egotistical	56. Too expensive in taste			
57. Willing to take a stand	58. Tender	59. Domineering	60. Emotionally inconsis- tent			
61. Aggressive	62. Gullible	63. Dictatorial	64. Irrational problem- solver			
65. Acts as a leader	66. Child-like	67. Chauvinistic	68. Frequent cryer			
69. Individualistic	70. Does not use harsh language	71. Dogmatic	72. Helpless			
73. Competitive	74. Loves children	75. Boisterous	76. Vulnerable			
77. Ambitious	78. Gentle	79. Hedonistic (Pleasure as the chief good in life)	80. Too emotional			

## BEM CHECK LIST

FATHER  
(Purple ink answer sheet)

Using the following scale, darken the space of the number which best represents how well each of the following characteristics describes your father.

1 Never or almost never true of me	2 Usually not true	3 Sometimes but infrequently true	4 Occasionally true	5 Often true	6 Usually true	7 Always or almost always true of me
1. Self-reliant	2. Yielding	3. Cruel	4. Gossipy			
5. Defends own beliefs	6. Cheerful	7. Rude	8. Indecisive			
9. Independent	10. Shy	11. Thoughtless	12. Deceitful			
13. Athletic	14. Affectionate	15. Bully	16. Spoiled			
17. Assertive	18. Flatterable	19. Tactless	20. Bitchy			
21. Strong person- ality	22. Loyal	23. Overly loved	24. Vindictive			
25. Forceful	26. Feminine	27. Unethical	28. Backstabbing			
29. Analytical	30. Sympathetic	31. Undisciplined	32. Overexpression of feelings of insecurity			
33. Has leadership abilities	34. Sensitive to needs of others	35. Arrogant	36. Irresponsible with money			
37. Willing to take risks	38. Understanding	39. Indifferent	40. Overly critical of same sex			
41. Makes decisions easily	42. Compassionate	43. Overbearing	44. Can't argue objectively			
45. Self-sufficient	46. Eager to soothe hurt feelings	47. Impatient	48. Fickle			
49. Dominant	50. Soft-spoken	51. Boastful	52. Overly sensitive			
53. Masculine	54. Warm	55. Egotistical	56. Too expensive in taste			
57. Willing to take a stand	58. Tender	59. Domineering	60. Emotionally inconsis- tent			
61. Aggressive	62. Gullible	63. Dictatorial	64. Irrational problem- solver			
65. Acts as a leader	66. Child-like	67. Chauvinistic	68. Frequent cryer			
69. Individualistic	70. Does not use harsh language	71. Dogmatic	72. Helpless			
73. Competitive	74. Loves children	75. Boisterous	76. Vulnerable			
77. Ambitious	78. Gentle	79. Hedonistic (Pleasure as the chief good in life)	80. Too emotional			

## BEM CHECK LIST

MOTHER  
(Purple ink answer sheet)

Using the following scale, darken the space of the number which best represents how well each of the following characteristics describes your mother.

1 Never or almost never true of me	2 Usually not true	3 Sometimes but infrequently true	4 Occasionally true	5 Often true	6 Usually true	7 Always or almost always true of me
1. Self-reliant	2. Yielding	3. Cruel	4. Gossipy			
5. Defends own beliefs	6. Cheerful	7. Rude	8. Indecisive			
9. Independent	10. Shy	11. Thoughtless	12. Deceitful			
13. Athletic	14. Affectionate	15. Bully	16. Spoiled			
17. Assertive	18. Flatterable	19. Tactless	20. Bitchy			
21. Strong person- ality	22. Loyal	23. Overly loved	24. Vindictive			
25. Forceful	26. Feminine	27. Unethical	28. Backstabbing			
29. Analytical	30. Sympathetic	31. Undisciplined	32. Overexpression of feelings of insecurity			
33. Has leadership abilities	34. Sensitive to needs of others	35. Arrogant	36. Irresponsible with money			
37. Willing to take risks	38. Understanding	39. Indifferent	40. Overly critical of same sex			
41. Makes decisions easily	42. Compassionate	43. Overbearing	44. Can't argue objectively			
45. Self-sufficient	46. Eager to soothe hurt feelings	47. Impatient	48. Fickle			
49. Dominant	50. Soft-spoken	51. Boastful	52. Overly sensitive			
53. Masculine	54. Warm	55. Egotistical	56. Too expensive in taste			
57. Willing to take a stand	58. Tender	59. Domineering	60. Emotionally inconsis- tent			
61. Aggressive	62. Gullible	63. Dictatorial	64. Irrational problem- solver			
65. Acts as a leader	66. Child-like	67. Chauvinistic	68. Frequent cryer			
69. Individualistic	70. Does not use harsh language	71. Dogmatic	72. Helpless			
73. Competitive	74. Loves children	75. Boisterous	76. Vulnerable			
77. Ambitious	78. Gentle	79. Hedonistic (Pleasure as the chief good in life)	80. Too emotional			



## RESEARCH QUESTIONNAIRE

PARENT

Using the following scale, circle the number which best represents how well each of the following characteristics describes yourself:

	1	2	3	4	5	6	7
	Never or almost never true of me	Usually not true of me	Sometimes but infrequently true of me	Occasionally true of me	Often true of me	Usually true of me	Always or almost always true of me
1. Self-reliant. . . . .	1	2	3	4	5	6	7
2. Yielding. . . . .	1	2	3	4	5	6	7
3. Cruel . . . . .	1	2	3	4	5	6	7
4. Gossipy . . . . .	1	2	3	4	5	6	7
5. Defends own beliefs . . . . .	1	2	3	4	5	6	7
6. Cheerful. . . . .	1	2	3	4	5	6	7
7. Rude. . . . .	1	2	3	4	5	6	7
8. Indecisive. . . . .	1	2	3	4	5	6	7
9. Independent . . . . .	1	2	3	4	5	6	7
10. Shy . . . . .	1	2	3	4	5	6	7
11. Thoughtless . . . . .	1	2	3	4	5	6	7
12. Deceitful . . . . .	1	2	3	4	5	6	7
13. Athletic. . . . .	1	2	3	4	5	6	7
14. Affectionate. . . . .	1	2	3	4	5	6	7
15. Bully . . . . .	1	2	3	4	5	6	7
16. Spoiled . . . . .	1	2	3	4	5	6	7
17. Assertive . . . . .	1	2	3	4	5	6	7
18. Flatterable . . . . .	1	2	3	4	5	6	7
19. Tactless. . . . .	1	2	3	4	5	6	7
20. Bitchy. . . . .	1	2	3	4	5	6	7
21. Strong personality. . . . .	1	2	3	4	5	6	7
22. Loyal . . . . .	1	2	3	4	5	6	7
23. Overly loved. . . . .	1	2	3	4	5	6	7
24. Vindictive (revengeful) . . . . .	1	2	3	4	5	6	7
25. Forceful. . . . .	1	2	3	4	5	6	7
26. Feminine. . . . .	1	2	3	4	5	6	7

-2-

1	2	3	4	5	6	7
Never or almost never true of me	Usually not true of me	Sometimes but infrequently true of me	Occasionally true of me	Often true of me	Usually true of me	Always or almost always true of me
27. Unethical . . . . .	1	2	3	4	5	6 7
28. Backstabbing. . . . .	1	2	3	4	5	6 7
29. Analytical. . . . .	1	2	3	4	5	6 7
30. Sympathetic . . . . .	1	2	3	4	5	6 7
31. Undisciplined . . . . .	1	2	3	4	5	6 7
32. Overexpression of feelings of insecurity. . .	1	2	3	4	5	6 7
33. Has leadership abilities. . . . .	1	2	3	4	5	6 7
34. Sensitive to needs of others. . . . .	1	2	3	4	5	6 7
35. Arrogant (offensively self-important) . . .	1	2	3	4	5	6 7
36. Irresponsible with money. . . . .	1	2	3	4	5	6 7
37. Willing to take risks . . . . .	1	2	3	4	5	6 7
38. Understanding . . . . .	1	2	3	4	5	6 7
39. Indifferent . . . . .	1	2	3	4	5	6 7
40. Overly critical of same sex . . . . .	1	2	3	4	5	6 7
41. Makes decisions easily. . . . .	1	2	3	4	5	6 7
42. Compassionate . . . . .	1	2	3	4	5	6 7
43. Overbearing . . . . .	1	2	3	4	5	6 7
44. Can't argue objectively . . . . .	1	2	3	4	5	6 7
45. Self-sufficient . . . . .	1	2	3	4	5	6 7
46. Eager to soothe hurt feelings . . . . .	1	2	3	4	5	6 7
47. Impatient . . . . .	1	2	3	4	5	6 7
48. Fickle. . . . .	1	2	3	4	5	6 7
49. Dominant. . . . .	1	2	3	4	5	6 7
50. Soft-spoken . . . . .	1	2	3	4	5	6 7
51. Boastful. . . . .	1	2	3	4	5	6 7
52. Overly sensitive. . . . .	1	2	3	4	5	6 7
53. Masculine . . . . .	1	2	3	4	5	6 7
54. Warm. . . . .	1	2	3	4	5	6 7

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1	2	3	4	5	6	7
Never or almost never true of me	Usually not true of me	Sometimes but infrequently true of me	Occasionally true of me	Often true of me	Usually true of me	Always or almost always true of me
55. Egotistical (conceited) . . . . .	1	2	3	4	5	6 7
56. Too expensive in tastes . . . . .	1	2	3	4	5	6 7
57. Willing to take a stand . . . . .	1	2	3	4	5	6 7
58. Tender. . . . .	1	2	3	4	5	6 7
59. Domineering . . . . .	1	2	3	4	5	6 7
60. Emotionally inconsistent. . . . .	1	2	3	4	5	6 7
61. Aggressive. . . . .	1	2	3	4	5	6 7
62. Gullible. . . . .	1	2	3	4	5	6 7
63. Dictatorial (rules offensively) . . . . .	1	2	3	4	5	6 7
64. Irrational problem-solver . . . . .	1	2	3	4	5	6 7
65. Acts as a leader. . . . .	1	2	3	4	5	6 7
66. Child-like. . . . .	1	2	3	4	5	6 7
67. Chauvinistic. . . . .	1	2	3	4	5	6 7
68. Frequent cryer. . . . .	1	2	3	4	5	6 7
69. Individualistic . . . . .	1	2	3	4	5	6 7
70. Does not use harsh language . . . . .	1	2	3	4	5	6 7
71. Dogmatic. . . . .	1	2	3	4	5	6 7
72. Helpless. . . . .	1	2	3	4	5	6 7
73. Competitive . . . . .	1	2	3	4	5	6 7
74. Loves children. . . . .	1	2	3	4	5	6 7
75. Boisterous (offensively loud) . . . . .	1	2	3	4	5	6 7
76. Vulnerable (fragile). . . . .	1	2	3	4	5	6 7
77. Ambitious . . . . .	1	2	3	4	5	6 7
78. Gentle. . . . .	1	2	3	4	5	6 7
79. Hedonistic (pleasure as the chief good in life)	1	2	3	4	5	6 7
80. Too emotional . . . . .	1	2	3	4	5	6 7

## APPENDIX F

ROSENBERG SELF-ESTEEM INVENTORY AS PRESENTED  
TO COLLEGE MEN AND THEIR PARENTS

Using the following scale, darken the space of the number which best represents your feelings about each of the following statements:

1	2	3	4
Strongly Agree	Agree	Disagree	Strongly Disagree

24. I feel that I'm a person of worth, at least on an equal basis with others.
25. I feel that I have a number of good qualities.
26. All in all, I am inclined to feel that I am a failure.
27. I am able to do things as well as most other people.
28. I feel I do not have much to be proud of.
29. I take a positive attitude toward myself.
30. On the whole, I am satisfied with myself.
31. I wish I could have more respect for myself.
32. I certainly feel useless at times.
33. At times I think I am no good at all.

Using the following scale, darken the space of the number which best represents your feelings about each of the following statements:

1	2	3	4
Strongly Agree	Agree	Disagree	Strongly Disagree

136. My mother feels that she's a person of worth, at least on an equal basis with others.
137. My mother feels that she has a number of good qualities.
138. All in all, my mother is inclined to feel that she is a failure.
139. My mother feels able to do things as well as most other people.
140. My mother feels she does not have much to be proud of.
141. My mother takes a positive attitude toward herself.
142. On the whole, my mother is satisfied with herself.
143. My mother wishes she could have more respect for herself.
144. My mother certainly feels useless at times.
145. At times my mother thinks she is no good at all.

Using the following scale, darken the space of the number which best represents your feelings about each of the following statements:

1	2	3	4
Strongly	Agree	Disagree	Strongly
Agree			Disagree

136. My father feels that he's a person of worth, at least on an equal basis with others.
137. My father feels that he has a number of good qualities.
138. All in all, my father is inclined to feel that he is a failure.
139. My father feels able to do things as well as most other people.
140. My father feels he does not have much to be proud of.
141. My father takes a positive attitude toward himself.
142. On the whole, my father is satisfied with himself.
143. My father wishes he could have more respect for himself.
144. My father certainly feels useless at times.
145. At times my father thinks he is no good at all.

Using the following scale, circle the number which best represents your feelings about each of the following statements:

1	2	3	4
Strongly Agree	Agree	Disagree	Strongly Disagree

81. I feel that I'm a person of worth,  
at least on an equal basis with others. . . . 1 2 3 4
82. I feel that I have a number of good  
qualities. . . . . 1 2 3 4
83. All in all, I am inclined to feel  
that I am a failure. . . . . 1 2 3 4
84. I am able to do things as well as  
most people. . . . . 1 2 3 4
85. I feel I do not have much to be  
proud of. . . . . 1 2 3 4
86. I take a positive attitude toward  
myself. . . . . 1 2 3 4
87. On the whole, I am satisfied with  
myself. . . . . 1 2 3 4
88. I wish I could have more respect  
for myself. . . . . 1 2 3 4
89. I certainly feel useless at times. . . . . 1 2 3 4
90. At times I think I am no good at all. . . . . 1 2 3 4



**APPENDIX G**

**PARENT BEHAVIOR FORM AS PRESENTED  
TO COLLEGE MEN**

## PARENT BEHAVIOR FORM - FATHER

Here are a series of statements people could use to describe their parents. Read each one and decide how accurately it describes your father, using the following scale:

1	2	3
Like my father	Somewhat like my father	Not like my father

Using the red-ink computer answer sheet, darken the number which best represents the accuracy of each of the following:

1. Makes me feel better after talking over my worries with him.
2. Often praises me.
3. Lets me help to decide how to do things we're working on.
4. Really wants me to tell him just how I feel about things.
5. Wants me to know how and why natural things happen in the way they do.
6. Encourages me to develop after-school skills and hobbies.
7. Lets me dress in any way I please.
8. Tells me to think and plan before I act.
9. Is unhappy that I'm not better in school than I am.
10. Sees to it that I know exactly what I may or may not do.
11. Insists that I must do exactly as I'm told.
12. If I take someone else's side in an argument, he is cold and distant to me.
13. Thinks I am just someone to "put up with."
14. Tells me neither of us has a brain.
15. Is considerate of others.
16. Is able to make me feel better when I am upset.
17. Believes in showing his love for me.
18. Doesn't get angry if I disagree with his ideas.
19. Likes me to assert my own ideas with him.
20. Likes to discuss current events with me.



1	2	3
Like my father	Somewhat like my father	Not like my father

21. Provided me with puzzles when I was young.
22. Doesn't tell me what time to be home when I go out.
23. Tells me that good hard work will make life worthwhile.
24. Says that my teachers often expect too little of me.
25. Wants to know exactly where I am and what I am doing.
26. Believes in having a lot of rules and sticking to them.
27. Says I'm a big problem.
28. Makes me feel I'm not loved.
29. Says that things with sugar taste sour.
30. Make good decisions about family problems.
31. Makes me feel free when I'm with him.
32. Tells me how much he loves me.
33. Allows me to be myself.
34. Likes when I am able to criticize my own or others' ideas effectively.
35. Talks with me about philosophical ideas.
36. Has taken me to look at paintings, sculpture and architecture.
37. Lets me do anything I like to do.
38. Sees to it that I keep my clothes neat, clean, and in order.
39. Wants me to know a lot of facts regardless of whether or not they have meaning for me.
40. Doesn't let me go places because something might happen to me.
41. Believes that all my bad behavior should be punished in some way.
42. Almost always complains about what I do.
43. Is never interested in meeting or talking with my friends.
44. Expects me to stare at the sun for hours.
45. Is hard working and efficient.



1	2	3
Like my father	Somewhat like my father	Not like my father

46. Comforts me when I'm afraid.
47. Tells me I'm good looking.
48. Doesn't mind if I kid him about things.
49. Wants me to keep an open mind about my own or others' beliefs.
50. Points out the beauties of nature.
51. Has taken me to see a performance in a play or concert.
52. Doesn't pay much attention to my misbehavior.
53. Wants me to have the same religious beliefs as he does.
54. Says he would like to see me enter a profession which requires original thinking.
55. Is always telling me how I should behave.
56. Has more rules than I can remember, so is often punishing me.
57. Tells me I am immature.
58. Doesn't show that he loves me.
59. Tells me the earth is square.
60. Is a responsible person.
61. Cheers me up when I am sad.
62. Says I make him happy.
63. Enjoys it when I bring friends to my home.
64. Is pleased when I bring up original ideas.
65. Talks with me about how things are made.
66. Plays classical music when I am home.
67. Does not insist I obey if I complain or protest.
68. Taught me to believe in God.
69. Wants me to pursue a career in a scientific field.
70. Wants to control whatever I do.

1	2	3
Like my father	Somewhat like my father	Not like my father

71. Sees to it that I obey when he tells me something.
72. Often blows his top when I bother him.
73. Doesn't seem to think of me very often.
74. Reads to me in Greek and Latin.
75. Is truthful.
76. Has a good time at home with me.
77. Gives me a lot of care and attention.
78. Allows discussion of right and wrong.
79. Likes when I ask questions about all kinds of things.
80. Encourages me to discuss the causes and possible solutions of social, political, economic or international problems.
81. Buys books for me to read.
82. Excuses my bad conduct.
83. Encourages me to pray.
84. Says he would like me to be an important or famous person someday.
85. Keeps reminding me about things I am not allowed to do.
86. Punishes me when I don't obey.
87. Whenever we get into a discussion, he treats me more like a child than an adult.
88. Changes his mind to make things easier for himself.
89. Gives me green lollipops everyday.
90. Uses good judgment.
91. Is easy to talk to.
92. Becomes very involved in my life.
93. Is easy with me.
94. Tells me to stand up for what I believe.
95. Feels I should read as much as possible on my own.

1	2	3
Like my father	Somewhat like my father	Not like my father

96. Encourages me to be different from other people.
97. Can be talked into things easily.
98. Feels hurt when I don't follow his advice.
99. Expects me to be successful in everything I try.
100. Is always getting after me.
101. Believes in punishing me to correct and improve my manners.
102. When I don't do as he wants, he says I'm not grateful for all he has done for me.
103. Doesn't get me things unless I ask over and over again.
104. Buys me thousand dollar suits or dresses.
105. Is honest in dealing with others.
106. Seems to see my good points more than my faults.
107. Says I'm very good natured.
108. Tries to be a friend rather than a boss.
109. Gives me reasons for rules that he makes.
110. Encourages me to read news periodicals and watch news broadcasts on TV.
111. Requires me to arrive at my own conclusions when I have a problem to solve.
112. Seldom insists that I do anything.
113. Feels hurt by the things I do.
114. Is more concerned with my being bright rather than steady and dependable.
115. Decides which friends I can go around with.
116. Loses his temper with me when I don't help around the house.
117. Tells me of all the things he has done for me.
118. Asks other people what I do away from home.
119. Expects me to make all of my own clothes.
120. Obeys the law.



1	2	3
Like my father	Somewhat like my father	Not like my father

- 121. Smiles at me very often.
- 122. Is always thinking of things that will please me.
- 123. Tries to treat me as an equal.
- 124. Trains me to be rational and objective in my thinking.
- 125. Encourages me to fool around with new ideas even if they turn out to be a waste of time.
- 126. Wants me to find out answers for myself.
- 127. Does not bother to enforce the rules.
- 128. Seems to regret that I am growing up and spending more time away from home.
- 129. Prefers me to be good in academic work rather than in sports.
- 130. Tells me how to spend my free time.
- 131. Doesn't give me any peace until I do what he says.
- 132. Is less friendly with me if I don't see things his way.
- 133. Almost always wants to know who phoned me or wrote to me and what they said.
- 134. Says I should never ride in an automobile.
- 135. Makes guests feel at home.



## PARENT BEHAVIOR FORM- MOTHER

Here are a series of statements people could use to describe their parents. Read each one and decide how accurately it describes your mother, using the following scale:

1	2	3
Like my mother	Somewhat like my mother	Not like my mother

Using the green-ink computer answer sheet darken the number which best represents the accuracy of each of the following:

1. Makes me feel better after talking over my worries with her.
2. Often praises me.
3. Lets me help to decide how to do things we're working on.
4. Really wants me to tell her just how I feel about things.
5. Wants me to know how and why natural things happen in the way they do.
6. Encourages me to develop after-school skills and hobbies.
7. Lets me dress in any way I please.
8. Tells me to think and plan before I act.
9. Is unhappy that I'm not better in school than I am.
10. Sees to it that I know exactly what I may or may not do.
11. Insists that I must do exactly as I'm told.
12. If I take someone else's side in an argument, she is cold and distant to me.
13. Thinks I am just someone to "put up with."
14. Tells me neither of us has a brain.
15. Is considerate of others.
16. Is able to make me feel better when I am upset.
17. Believes in showing her love for me.
18. Doesn't get angry if I disagree with her ideas.
19. Likes me to assert my own ideas with her.
20. Likes to discuss current events with me.

## MOTHER

1	2	3
Like my mother	Somewhat like my mother	Not like my mother

21. Provided me with puzzles when I was young.
22. Doesn't tell me what time to be home when I go out.
23. Tells me that good hard work will make life worthwhile.
24. Says that my teachers often expect too little of me.
25. Wants to know exactly where I am and what I'm doing.
26. Believes in having a lot of rules and sticking to them.
27. Says I'm a big problem.
28. Makes me feel I'm not loved.
29. Says that things with sugar taste sour.
30. Makes good decisions about family problems.
31. Makes me feel free when I'm with her.
32. Tells me how much she loves me.
33. Allows me to be myself.
34. Likes when I am able to criticize my own or others' ideas effectively.
35. Talks with me about philosophical ideas.
36. Has taken me to look at paintings, sculpture and architecture.
37. Lets me do anything I like to do.
38. Sees to it that I keep my clothes neat, clean, and in order.
39. Wants me to know a lot of facts regardless of whether or not they have meaning for me.
40. Doesn't let me go places because something might happen to me.
41. Believes that all my bad behavior should be punished in some way.
42. Almost always complains about what I do.
43. Is never interested in meeting or talking with my friends.
44. Expects me to stare at the sun for hours.
45. Is hard working and efficient.

1	2	3
Like my mother	Somewhat like my mother	Not like my mother

46. Comforts me when I'm afraid.
47. Tells me I'm good looking.
48. Doesn't mind if I kid her about things.
49. Wants me to keep an open mind about my own or others' beliefs.
50. Points out the beauties of nature.
51. Has taken me to see a performance in a play or concert.
52. Doesn't pay much attention to my misbehavior.
53. Wants me to have the same religious beliefs as she does.
54. Says she would like to see me enter a profession which requires original thinking.
55. Is always telling me how I should behave.
56. Has more rules than I can remember, so is often punishing me.
57. Tells me I am immature.
58. Doesn't show that she loves me.
59. Tells me the earth is square.
60. Is a responsible person.
61. Cheers me up when I am sad.
62. Says I make her happy.
63. Enjoys it when I bring friends to my home.
64. Is pleased when I bring up original ideas.
65. Talks with me about how things are made.
66. Plays classical music when I am home.
67. Does not insist I obey if I complain or protest.
68. Taught me to believe in God.
69. Wants me to pursue a career in a scientific field.
70. Wants to control whatever I do.

1	2	3
Like my mother	Somewhat like my mother	Not like my mother

71. Sees to it that I obey when she tells me something.
72. Often blows her top when I bother her.
73. Doesn't seem to think of me very often.
74. Reads to me in Greek and Latin.
75. Is truthful.
76. Has a good time at home with me.
77. Gives me a lot of care and attention.
78. Allows discussion of right and wrong.
79. Likes when I ask questions about all kinds of things.
80. Encourages me to discuss the causes and possible solutions of social, political, economic or international problems.
81. Buys books for me to read.
82. Excuses my bad conduct.
83. Encourages me to pray.
84. Says she would like me to be an important or famous person someday.
85. Keeps reminding me about things I am not allowed to do.
86. Punishes me when I don't obey.
87. Whenever we get into a discussion, she treats me more like a child than an adult.
88. Changes her mind to make things easier for herself.
89. Gives me green lollipops everyday.
90. Uses good judgment.
91. Is easy to talk to.
92. Becomes very involved in my life.
93. Is easy with me.
94. Tells me to stand up for what I believe.
95. Feels I should read as much as possible on my own.

1	2	3
Like my mother	Somewhat like my mother	Not like my mother

96. Encourages me to be different from other people.
97. Can be talked into things easily.
98. Feels hurt when I don't follow her advice.
99. Expects me to be successful in everything I try.
100. Is always getting after me.
101. Believes in punishing me to correct and improve my manners.
102. When I don't do as she wants, she says I'm not grateful for all she has done for me.
103. Doesn't get me things unless I ask over and over again.
104. Buys me thousand dollar suits or dresses.
105. Is honest in dealing with others.
106. Seems to see my good points more than my faults.
107. Says I'm very good natured.
108. Tries to be a friend rather than a boss.
109. Gives me reasons for rules that she makes.
110. Encourages me to read news periodicals and watch news broadcasts on TV.
111. Requires me to arrive at my own conclusions when I have a problem to solve.
112. Seldom insists that I do anything.
113. Feels hurt by the things I do.
114. Is more concerned with my being bright rather than steady and dependable.
115. Decides which friends I can go around with.
116. Loses her temper with me when I don't help around the house.
117. Tells me of all the things she has done for me.
118. Asks other people what I do away from home.
119. Expects me to make all of my own clothes.
120. Obeys the law.

1	2	3
Like my mother	Somewhat like my mother	Not like my mother

- 121. Smiles at me very often.
- 122. Is always thinking of things that will please me.
- 123. Tries to treat me as an equal.
- 124. Trains me to be rational and objective in my thinking.
- 125. Encourages me to fool around with new ideas even if they turn out to be a waste of time.
- 126. Wants me to find out answers for myself.
- 127. Does not bother to enforce rules.
- 128. Seems to regret that I am growing up and am spending more time away from home.
- 129. Prefers me to be good in academic work rather than in sports.
- 130. Tells me how to spend my free time.
- 131. Doesn't give me any peace until I do what she says.
- 132. Is less friendly with me if I don't see things her way.
- 133. Almost always wants to know who phoned me or wrote to me and what they said.
- 134. Says I should never ride in an automobile.
- 135. Makes guests feel at home.



APPENDIX H

FAMILY INFORMATION QUESTIONNAIRE AS  
PRESENTED TO COLLEGE MEN

## FAMILY INFORMATION QUESTIONNAIRE - CONFIDENTIAL

PLEASE PRINT

Name \_\_\_\_\_ Today's date \_\_\_\_\_  
           Last,                      First                      M.

Age \_\_\_\_\_ Major \_\_\_\_\_ Gradepoint \_\_\_\_\_

Address \_\_\_\_\_ Phone \_\_\_\_\_

Year in school (please circle):      FR      SOPH      JR      SR

NUMBER OF BROTHERS: Older \_\_\_\_\_ Younger \_\_\_\_\_

Please list their ages now: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

NUMBER OF SISTERS: Older \_\_\_\_\_ Younger \_\_\_\_\_

Please list their ages now: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

MOTHER'S OCCUPATION(S) \_\_\_\_\_

MOTHER'S EDUCATION \_\_\_\_\_

FATHER'S OCCUPATION(S) \_\_\_\_\_

FATHER'S EDUCATION \_\_\_\_\_

\* \* \* \* \*

PLEASE CHECK THE SITUATION WHICH BEST DESCRIBES YOUR FAMILY WHILE YOU  
 WERE LIVING AT HOME:

Mother and father living together, both responsible for the children. \_\_\_\_\_

Mother and father divorced, mother remarried, she and stepfather respon-  
 sible for the children. \_\_\_\_\_

Mother and father divorced, father remarried, he and stepmother respon-  
 sible for the children. \_\_\_\_\_

Father died, mother remarried, she and stepfather responsible for the  
 children. \_\_\_\_\_

Mother died, father remarried, he and stepmother responsible for the  
 children. \_\_\_\_\_

Guardians other than parents responsible for the children (please name,  
 e.g., "grandparents," "aunt & uncle," "foster parents," etc.) \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

## DO NOT WRITE ON THIS BOOKLET

General Instructions

1. Please read all questions carefully.
2. Do not leave any question unanswered.
3. Use a #2 (scoring) pencil to mark your answers on the computer sheets.
4. If you change one of your answers, please erase thoroughly, and do not make any stray marks on the answer sheets.
5. Do NOT put your name on any of the answer sheets, so that your confidentiality will be protected.

\* \* \* \* \*

In the following section, the labels "mother" and "father" are being used for convenience. We are interested in your describing the relationships you had with the adults who took care of you, raised you, and lived with you.

Read "mother" to mean your primary female care-giver, and read "father" to mean your primary male care-giver.

\* \* \* \* \*

Using the brown-ink computer answer sheet, darken the number which best represents your feelings about each question:

1. In general, I am...
  - [1] a lot closer to my mother than to my father.
  - [2] closer to my mother than to my father.
  - [3] about equally close to my mother and my father.
  - [4] closer to my father than to my mother.
  - [5] a lot closer to my father than to my mother.
  
2. I believe that I am...
  - [1] much more like my mother than my father.
  - [2] more like my mother than my father.
  - [3] like both my mother and my father, about equally.
  - [4] more like my father than my mother.
  - [5] much more like my father than my mother.
  
3. I would rather discuss a major decision with...
  - [1] my mother.
  - [2] my father.

4. I would rather get financial advice from...
  - (1) my mother.
  - (2) my father.
5. I would rather get emotional support from...
  - (1) my mother.
  - (2) my father.
6. I am more likely to get emotional support from...
  - (1) my mother.
  - (2) my father.
7. I missed getting emotional support from...
  - (1) my mother.
  - (2) my father.
  - (3) neither my mother nor my father.
  - (4) both my mother and my father.
8. When I was growing up, I spent more time with...
  - (1) my mother.
  - (2) my father.
9. When I was growing up, I missed spending time with
  - (1) my mother.
  - (2) my father.
  - (3) neither my mother nor my father.
  - (4) both my mother and my father.
10. My relationship with my mother has...
  - (1) been fairly stable.
  - (2) changed a lot over the years.
11. My relationship with my father has...
  - (1) been fairly stable.
  - (2) changed a lot over the years.
12. Describe the general quality of your relationship with your mother:
  - (1) Very poor
  - (2) Poor
  - (3) Fair
  - (4) Good
  - (5) Very Good

13. Describe the general quality of your relationship with your father:
- [1] Very poor
  - [2] Poor
  - [3] Fair
  - [4] Good
  - [5] Very good
14. Describe the degree of warmth you feel toward your mother:
- [1] Very low
  - [2] Low
  - [3] Moderate
  - [4] High
  - [5] Very high
15. Describe the degree of warmth you feel toward your father:
- [1] Very low
  - [2] Low
  - [3] Moderate
  - [4] High
  - [5] Very high
16. Describe the degree of respect you feel toward your mother:
- [1] Very low
  - [2] Low
  - [3] Moderate
  - [4] High
  - [5] Very high
17. Describe the degree of respect you feel toward your father:
- [1] Very low
  - [2] Low
  - [3] Moderate
  - [4] High
  - [5] Very high
18. Describe the degree of trust you feel toward your mother:
- [1] Very low
  - [2] Low
  - [3] Moderate
  - [4] High
  - [5] Very high

19. Describe the degree of trust you feel toward your father:

- [1] Very low
- [2] Low
- [3] Moderate
- [4] High
- [5] Very high

20. Describe the intensity (e.g., the amount of emotion you feel) of your relationship with your mother:

- [1] Not at all intense
- [2] Little intensity
- [3] Average intensity
- [4] Intense
- [5] Very intense

21. Describe the intensity (e.g., the amount of emotion you feel) of your relationship with your father:

- [1] Not at all intense
- [2] Little intensity
- [3] Average intensity
- [4] Intense
- [5] Very intense

22. Describe the degree to which you are similar to your mother:

- [1] Very dissimilar
- [2] Dissimilar
- [3] Neutral
- [4] Similar
- [5] Very similar

23. Describe the degree to which you are similar to your father:

- [1] Very dissimilar
- [2] Dissimilar
- [3] Neutral
- [4] Similar
- [5] Very similar

## APPENDIX I

BEM SEX ROLE INVENTORY: ALPHA IF ITEM  
DELETED AND ITEM-TOTAL CORRELATIONS

## APPENDIX I

TABLE II

BEM SEX ROLE INVENTORY, SOCIALLY  
DESIRABLE MASCULINE SCALE,  
ITEM-TOTAL INFORMATION  
COLLEGE MEN'S REPORTS, VALIDATION GROUP

ITEM	COLLEGE MALES				FATHER				MOTHER			
	ITEM- TOTAL	ALPHA IF ITEM DELETED	ITEM- TOTAL	ALPHA IF ITEM DELETED	ITEM- TOTAL	ALPHA IF ITEM DELETED	ITEM- TOTAL	ALPHA IF ITEM DELETED	ITEM- TOTAL	ALPHA IF ITEM DELETED	ITEM- TOTAL	ALPHA IF ITEM DELETED
Self-reliant	.49341	.89803	.39204	.90518	.45972	.89748	.39204	.90518	.45972	.89748	.39204	.90518
Defends own beliefs	.53161	.89701	.61348	.90021	.38994	.89897	.61348	.90021	.38994	.89897	.61348	.90021
Independent	.52178	.89746	.56891	.90054	.61377	.89304	.56891	.90054	.61377	.89304	.56891	.90054
Athletic	.36518	.90272	.28871	.91039	.27460	.90396	.28871	.91039	.27460	.90396	.27460	.90396
Assertive	.70688	.89168	.53801	.90122	.65818	.89243	.53801	.90122	.65818	.89243	.53801	.90122
Strong personality	.57250	.89567	.72980	.89666	.61966	.89348	.72980	.89666	.61966	.89348	.72980	.89666
Forceful	.45752	.89880	.45512	.90333	.43328	.89824	.45512	.90333	.43328	.89824	.45512	.90333
Analytical	.27979	.90356	.39388	.90513	.55996	.89465	.39388	.90513	.55996	.89465	.39388	.90513
Has leadership abilities	.71648	.89133	.65258	.89816	.69101	.89095	.65258	.89816	.69101	.89095	.65258	.89816
Willing to take risks	.42382	.89998	.47583	.90294	.50071	.89631	.47583	.90294	.50071	.89631	.47583	.90294
Makes decisions easily	.55440	.89622	.64469	.89858	.55464	.89492	.64469	.89858	.55464	.89492	.64469	.89858
Self-sufficient	.39435	.90014	.38716	.90456	.59837	.89349	.38716	.90456	.59837	.89349	.38716	.90456
Dominant	.70576	.89212	.52886	.90152	.49137	.89657	.52886	.90152	.49137	.89657	.52886	.90152
Masculine	.44878	.89894	.47097	.90292	.20560	.90409	.47097	.90292	.20560	.90409	.47097	.90292
Willing to take a stand	.64044	.89460	.73150	.89859	.51707	.89627	.73150	.89859	.51707	.89627	.73150	.89859
Aggressive	.55841	.89633	.56491	.90051	.56828	.89438	.56491	.90051	.56828	.89438	.56491	.90051
Acts as a leader	.68422	.89247	.71651	.89640	.73026	.89004	.71651	.89640	.73026	.89004	.71651	.89640
Individualistic	.59342	.89520	.73876	.89549	.59935	.89366	.73876	.89549	.59935	.89366	.73876	.89549
Competitive	.57303	.89566	.62801	.89872	.58351	.89393	.62801	.89872	.58351	.89393	.62801	.89872
Ambitious	.50515	.89755	.55404	.90080	.64580	.89226	.55404	.90080	.64580	.89226	.55404	.90080
	$\alpha = .90149$		$\alpha = .90563$		$\alpha = .90023$							



## APPENDIX I

TABLE I2

BEM SEX ROLE INVENTORY, SOCIALLY  
DESIRABLE FEMININE SCALE,  
ITEM-TOTAL INFORMATION  
COLLEGE MEN'S REPORTS, VALIDATION GROUP

ITEM	COLLEGE MALES				FATHER				MOTHER			
	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED
Yielding	.25712	.75685	.20600	.84479	.16331	.86252						
Cheerful	.42766	.74713	.56920	.83049	.56400	.84635						
Shy	.20801	.79389	.07053	.84942	.06908	.86552						
Affectionate	.45368	.74239	.64420	.82473	.57321	.84608						
Flatterable	.24315	.75812	.13022	.84774	.16476	.86172						
Loyal	.30360	.75407	.25068	.84185	.66505	.84276						
Feminine	.19129	.75958	.07687	.84709	.42092	.85142						
Sympathetic	.52990	.73872	.57506	.82841	.71871	.84202						
Sensitive to needs of others	.51677	.73870	.63920	.82482	.73391	.83997						
Understanding	.63292	.73543	.54194	.83052	.69642	.84187						
Compassionate	.66058	.73102	.71315	.82092	.70733	.84119						
Eager to soothe hurt feelings	.53461	.73998	.68548	.82355	.75063	.83695						
Soft-spoken	.22551	.75998	.38849	.83662	.45761	.85010						
Warm	.61036	.73304	.73246	.81999	.76661	.84054						
Tender	.51406	.73886	.77261	.81767	.77785	.83905						
Gullible	.00517	.77631	.08818	.84791	.02244	.87020						
Child-like	.13826	.76439	.01662	.84994	-.13411	.87221						
Does not use harsh language	.11343	.77670	.19742	.85024	.28314	.86153						
Loves children	.36709	.74843	.55068	.82892	.54752	.84646						
Gentle	.60427	.73444	.77439	.81742	.67364	.84214						
	$\alpha = .76131$			$\alpha = .84171$		$\alpha = .85692$						

## APPENDIX I

TABLE I3

BEM SEX ROLE INVENTORY, SOCIALLY  
UNDESIRABLE MASCULINE SCALE,  
ITEM-TOTAL INFORMATION  
COLLEGE MEN'S REPORTS, VALIDATION GROUP

ITEM	COLLEGE MALES			FATHER			MOTHER		
	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED		ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED		ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	
Cruel	.39437	.78959		.46474	.86779		.54168	.92090	
Rude	.28123	.79349		.50348	.86609		.62502	.91895	
Thoughtless	.44592	.78588		.54254	.86501		.72086	.91746	
Bully	.25574	.79453		.56311	.86417		.74686	.91731	
Tactless	.22692	.97641		.51681	.86590		.68870	.91757	
Overly loud	.11200	.80464		.29106	.87299		.53650	.92099	
Unethical	.28538	.79323		.45874	.86748		.65848	.91812	
Undisciplined	.15972	.79966		.38978	.86966		.70547	.91741	
Arrogant	.59220	.77541		.69159	.85916		.72307	.91697	
Indifferent	.24354	.79546		.42453	.86854		.57052	.92014	
Overbearing	.48565	.78277		.60329	.86205		.71228	.91674	
Impatient	.45890	.78268		.53925	.86444		.55391	.92069	
Boastful	.55405	.77749		.54748	.86447		.75791	.91568	
Egotistical	.46765	.78251		.57700	.86340		.69561	.91759	
Domineering	.44605	.78373		.57629	.86288		.50784	.92184	
Dictatorial	.37615	.78834		.49505	.86614		.62016	.91906	
Chauvinistic	.40624	.78725		.35436	.87277		.50980	.92132	
Dogmatic	.36250	.78928		.22114	.87678		.28106	.92670	
Boisterous	.51384	.77916		.55190	.86423		.56059	.92024	
Hedonistic	.23641	.79862		.33858	.87433		.28823	.92651	
	$\alpha = .79766$				$\alpha = .87280$			$\alpha = .92336$	

APPENDIX I  
TABLE I4  
BEM SEX ROLE INVENTORY, SOCIALLY  
UNDESIRABLE FEMININE SCALE,  
ITEM-TOTAL INFORMATION  
COLLEGE MEN'S REPORTS, VALIDATION GROUP

ITEM	COLLEGE MALES			FATHER			MOTHER		
	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED		ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED		ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	
Gossipy	.29517	.81480		.45374	.88658		.55371	.91352	
Indecisive	.45253	.80703		.53696	.88416		.57764	.91292	
Deceitful	.18420	.81838		.56988	.88411		.60162	.91377	
Spoiled	.27097	.81602		.54376	.88395		.39191	.91696	
Bitchy	.47971	.80573		.44372	.88800		.63506	.91139	
Vindictive	.17380	.82163		.48479	.88588		.59818	.91236	
Backstabbing	.25443	.81631		.60295	.88360		.53924	.91383	
Overexpression of feelings of insecurity	.54381	.80113		.58819	.88351		.72002	.90941	
Irresponsible with money	.39827	.81003		.54438	.88399		.54533	.91352	
Overly critical of same sex	.46710	.80615		.57373	.88330		.53601	.91372	
Can't argue objectively	.30690	.81449		.39527	.88842		.61874	.91180	
Fickle	.53657	.80266		.43956	.88696		.63884	.91150	
Overly sensitive	.49196	.80421		.54546	.88385		.54416	.91363	
Too expensive in taste	.30370	.81879		.42108	.88997		.43361	.91714	
Emotionally inconsistent	.45363	.80673		.54277	.88423		.72493	.90915	
Irrational problem-solver	.30361	.81431		.45031	.88701		.47177	.91510	
Frequent crier	.38347	.81099		.55255	.88429		.64809	.91105	
Helpless	.42631	.81004		.51121	.88554		.64024	.91170	
Vulnerable	.40145	.80967		.52848	.88439		.58802	.91256	
Too emotional	.62261	.79614		.65481	.88088		.55075	.91371	
	$\alpha = .81822$			$\alpha = .89021$			$\alpha = .91696$		

## APPENDIX J

ROSENBERG SELF-ESTEEM INVENTORY: ALPHA IF ITEM  
DELETED AND ITEM-TOTAL CORRELATIONS

## APPENDIX J

TABLE J1

ROSENBERG SELF-ESTEEM INVENTORY  
ITEM-TOTAL INFORMATION  
COLLEGE MEN'S REPORTS  
VALIDATION GROUP

ITEM*	COLLEGE MEN			MOTHER			FATHER		
	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED		ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED		ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	
I feel that I'm a person of worth. At least on an equal basis with others.	.46945	.83628		.57588	.84130		.34478		.80090
I feel that I have a number of good qualities.	.46005	.83795		.41304	.85255		.37170		.79868
All in all, I am inclined to feel that I am a failure.	.47693	.83550		.62875	.83514		.58301		.77825
I am able to do things as well as most other people.	.53447	.83119		.49715	.84648		.52700		.78360
I feel I do not have much to be proud of.	.52600	.83135		.60849	.83690		.38747		.80484
I take a positive attitude toward myself.	.59221	.82518		.62277	.83722		.49851		.78594
On the whole, I am satisfied with myself.	.63101	.82299		.58365	.83941		.38899		.79716
I wish I could have more respect for myself	.50224	.83566		.48548	.84917		.56268		.77766
I certainly feel useless at times.	.71154	.81166		.60685	.83766		.63460		.76748
At times I think I am no good at all.	.58145	.82840	$\alpha = .84432$	.60969	.83680	$\alpha = .85498$	.56111		.77787
								$\alpha = .80485$	

\*The first person pronoun form of each statement was altered so that each item would be appropriate for the person being rated.

## APPENDIX K

PARENT BEHAVIOR FORM: ALPHA IF ITEM  
DELETED AND ITEM-TOTAL CORRELATIONS

## APPENDIX K

TABLE K1

PARENT BEHAVIOR FORM SCALES,  
ITEM-TOTAL INFORMATION, COLLEGE MEN'S  
REPORTS, VALIDATION GROUP

SCALE ITEM	FATHER		MOTHER	
	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED
WARMTH				
Makes me feel better after talking over my worries with her/him.	.66185	.80085	.50504	.83361
Is able to make me feel better when I am upset.	.57574	.81018	.62640	.82093
Makes me feel free when I am with her/him.	.43267	.82557	.46356	.83912
Comforts me when I'm afraid.	.57316	.81090	.54919	.82931
Cheers me up when I am sad.	.69500	.79612	.74946	.80847
Has a good time at home with me.	.50685	.81858	.61022	.82300
Is easy to talk to.	.59457	.80844	.57788	.82613
Seems to see my good points more than my faults.	.47044	.82189	.40390	.84613
Smiles at me very often.	.36401	.83531	.59242	.82555
	$\alpha = .83177$		$\alpha = .84437$	
ACTIVE INVOLVEMENT				
Often praises me.	.62453	.82965	.56658	.77106
Believes in showing her/ his love for me.	.60773	.83137	.51486	.77864
Tells me how much s/he loves me.	.64550	.82724	.59133	.76544
Tells me I'm good looking.	.44120	.84883	.50184	.77899
Says I make her/him happy.	.63545	.82891	.51276	.77709
Gives me a lot of care attention.	.66126	.82621	.53789	.77376
Becomes very involved in my life.	.51209	.84131	.39881	.79297

TABLE K1--Continued

SCALE ITEM	FATHER		MOTHER	
	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED
ACTIVE INVOLVEMENT (Cont'd)				
Says I'm very good natured.	.49170	.84281	.38876	.79423
Is always thinking of things that will please me.	.53584	.83874	.43171	.78759
	$\alpha = .85078$		$\alpha = .79973$	
EGALITARIANISM				
Lets me help to decide how to do things we're working on.	.32552	.57485	.57857	.70258
Doesn't get angry if I disagree with her/his ideas.	.30947	.58000	.46257	.72472
Allows me to be myself.	.23859	.59683	.32241	.74438
Doesn't mind if I kid her/him about things.	.21133	.60309	.56881	.71059
Enjoys it when I bring friends to my home.	.33448	.57284	.42163	.73049
Allows discussion of right and wrong.	.34817	.57270	.38162	.73659
Is easy with me.	.17513	.61241	.31327	.74812
Tries to be a friend rather than a boss.	.39364	.55632	.37726	.74003
Tries to treat me as an equal.	.32812	.57454	.48027	.72175
	$\alpha = .61155$		$\alpha = .75196$	
COGNITIVE INDEPENDENCE				
Really wants me to tell her/him just how I feel about things.	.53211	.76730	.28516	.80158
Likes me to assert my own ideas with her/ him.	.53468	.76788	.48705	.77721
Likes when I am able to criticize my own or others' ideas effectively.	.43625	.78118	.55978	.76679
Wants me to keep an open mind about my own or others' beliefs.	.51965	.77023	.46634	.78046



TABLE K1--Continued

SCALE ITEM	FATHER		MOTHER	
	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED
COGNITIVE INDEPENDENCE (Cont'd)				
Is pleased when I bring up original ideas.	.49530	.77375	.64541	.75824
Likes when I ask ques- tions about all kinds of things.	.51576	.77007	.55951	.76689
Tells me to stand up for what I believe.	.40484	.78392	.50253	.77567
Gives me reasons for rules s/he makes.	.45695	.77985	.36987	.79588
Trains me to be rational and objective in my thinking.	.48638	.77369	.54507	.76971
	$\alpha = .79419$		$\alpha = .79707$	
COGNITIVE CURIOSITY				
Wants me to know how and and why natural things happen in the way they do.	.42152	.73668	.44664	.80766
Likes to discuss current events with me.	.53551	.72088	.49506	.80199
Talks with me about philosophical ideas.	.49440	.72461	.60090	.78867
Points out the beauties of nature.	.45193	.73185	.58266	.79148
Talks with me about how things are made.	.38343	.74224	.54622	.79593
Encourages me to discuss the causes and possible solutions of social, po- litical, economic or international problems.	.61056	.70383	.58304	.79088
Feels I should read as much as possible on my own.	.42356	.73645	.39258	.81321
Encourages me to read news periodicals and watch news broadcasts on TV.	.42309	.73649	.54712	.79563
Encourages me to fool around with new ideas even if they turn out to be a waste of time.	.18018	.77075	.44422	.80784
	$\alpha = .75695$		$\alpha = .81775$	

TABLE K1-- Continued

SCALE ITEM	FATHER		MOTHER	
	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED
COGNITIVE COMPETENCE				
Encourages me to develop after-school skills and hobbies.	.27887	.65274	.25656	.69293
Provided me with puzzles when I was young.	.34555	.63961	.44966	.65514
Has taken me to look at paintings, sculpture, and architecture.	.50821	.59836	.31131	.68620
Has taken me to see a performance in a play or concert.	.46761	.60749	.48435	.64644
Plays classical music when I am home.	.39813	.62853	.27794	.68823
Buys books for me to read.	.44077	.61616	.53088	.63683
Encourages me to be different from other people.	.28987	.65048	.22097	.69907
Requires me to arrive at my own conclusions when I have a problem to solve.	.10879	.68351	.29673	.68537
Wants me to find out answers for myself.	.20331	.66411	.51626	.64707
	$\alpha = .66665$		$\alpha = .69769$	
LAX CONTROL				
Lets me dress in any way I please.	.52745	.76713	.40856	.76158
Doesn't tell me what time to be home when I go out.	.33688	.79322	.40736	.76373
Lets me do anything I like to do.	.48409	.77210	.54992	.74056
Doesn't pay much attention to my misbehavior.	.58838	.75898	.47233	.75223
Does not insist I obey if I complain or protest.	.60615	.75453	.32290	.77270

TABLE K1--Continued

SCALE ITEM	FATHER		MOTHER	
	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED
LAX CONTROL (cont'd)				
Excuses my bad conduct.	.44257	.77788	.43969	.75684
Can be talked into things easily.	.35978	.78714	.47583	.75175
Seldom insists that I do anything.	.53079	.76537	.53425	.74288
Does not bother to enforce the rules.	.47391	.77346	.53028	.74430
	$\alpha = .79431$		$\alpha = .77545$	
CONFORMITY				
Tells me to think and plan before I act.	.14084	.60604	.23602	.63482
Tells me that good hard work will make life worthwhile.	.20001	.59458	.26851	.62726
Sees to it that I keep my clothes neat, clean, and in order.	.42574	.53847	.25570	.63033
Wants me to have the same religious beliefs that s/he does.	.35981	.55267	.43064	.58702
Taught me to believe in God.	.44309	.52409	.42935	.58835
Encourages me to pray.	.55626	.48667	.50897	.56283
Feels hurt when I don't follow her/his advice.	.22031	.59096	.32604	.61608
Feels hurt by the things I do.	.14897	.60300	.15241	.65265
Seems to regret that I am growing up and spending more time away from home.	.07187	.63100	.27112	.62788
	$\alpha = .60262$		$\alpha = .64344$	
ACHIEVEMENT				
Is unhappy that I'm not better in school than I am.	.24345	.59427	.16229	.62481
Says that my teachers often expect too little of me.	.25566	.59047	.30389	.59114

TABLE K1--Continued

SCALE ITEM	FATHER		MOTHER	
	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED
ACHIEVEMENT (Cont'd)				
Wants me to know a lot of facts regardless of whether or not they have meaning for me.	.25322	.59186	.28278	.59612
Says s/he would like to see me enter a profession which requires original thinking.	.38768	.55556	.45870	.54677
Wants me to pursue a career in a scientific field.	.25511	.59163	.24302	.60473
Says s/he would like me to be an important or famous person someday.	.26745	.58872	.38728	.56740
Expects me to be successful in everything I try.	.42065	.54621	.34131	.58017
Is more concerned with my being bright rather than steady and dependable.	.45374	.55081	.23590	.60580
Prefers me to be good in academic work rather than in sports.	.16244	.61666	.29321	.59295
	$\alpha = .60964$		$\alpha = .61917$	
STRICT CONTROL				
Sees to it that I know exactly what I may or may not do.	.47779	.69493	.35976	.75122
Wants to know exactly where I am and what I am doing.	.43213	.70375	.42951	.73961
Doesn't let me go places because something might happen to me.	.47249	.69620	.52683	.72208
Is always telling me how I should behave.	.52166	.68839	.61195	.70805
Wants to control whatever I do.	.26665	.72783	.19761	.77236

TABLE K1--Continued

SCALE ITEM	FATHER		MOTHER	
	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED
STRICT CONTROL (Cont'd)				
Keeps reminding me about things I am not allowed to do.	.46080	.69810	.45959	.73395
Is always getting after me.	.35119	.71648	.61074	.70846
Decides which friends I can go around with.	.37426	.71883	.39640	.74529
Tells me how to spend my free time.	.35069	.71660	.39353	.75424
	$\alpha = .73140$		$\alpha = .75978$	
POSITIVE CONTROL				
Insists that I must do exactly as I'm told.	.62051	.67637	.42143	.77904
Believes in having a lot of rules and sticking to them.	.51202	.70158	.64973	.74488
Believes that all my bad behavior should be punished in some way.	.65063	.67342	.55446	.76059
Has more rules than I can remember, so is often punishing me.	.31263	.73788	.56956	.76557
Sees to it that I obey when s/he tells me something.	.40794	.72041	.48334	.77099
Punishes me when I don't obey.	.50799	.70141	.61197	.75365
Believes in punishing me to correct and improve my manners.	.38217	.72378	.42880	.77900
Loses her/his temper with me when I don't help around the house.	.11525	.76939	.26386	.80319
Doesn't give me any peace until I do what s/he says.	.30830	.73365	.40770	.78083
	$\alpha = .74108$		$\alpha = .79162$	

TABLE K1--Continued

SCALE ITEM	FATHER		MOTHER	
	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED
HOSTILE CONTROL				
If I take someone else's side in an argument, s/he is cold and distant to me.	.55196	.69794	.19055	.79624
Says I'm a big problem.	.51450	.71915	.21501	.78922
Almost always complains about what I do.	.48864	.71113	.65353	.73646
Tells me I am immature.	.52052	.72236	.51201	.75608
Often blows her/his top when I bother her/him.	.36638	.73689	.55047	.74889
Whenever we get into a discussion, s/he treats me more like a child than an adult.	.44537	.71882	.48489	.75893
When I don't do as s/he wants, s/he says I'm not grateful for all s/he has done for me.	.38145	.72979	.54008	.75015
Tells me of all the things s/he has done for me.	.23183	.75172	.58068	.74405
Is less friendly with me if I don't see things her/his way.	.49079	.71071	.46710	.76148
	$\alpha = .74559$		$\alpha = .78224$	
REJECTION				
Thinks I am just someone to "put up with."	.48950	.60259	.45668	.59777
Makes me feel that I'm not loved.	.29530	.62075	.26761	.62642
Is never interested in meeting or talking with my friends.	.25836	.62955	.28770	.62232
Doesn't show me that s/he loves me.	.41320	.58916	.54403	.56723
Doesn't seem to think of me very often.	.41421	.59163	.48326	.58534
Changes her/his mind to make things easier for herself/himself.	.35348	.60639	.30574	.62415

TABLE K1--Continued

SCALE ITEM	FATHER		MOTHER	
	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED	ITEM- TOTAL CORR.	ALPHA IF ITEM DELETED
REJECTION (Cont'd)				
Doesn't get me things unless I ask over and over again.	.35747	.60603	.48391	.57329
Asks other people what I do away from home.	.38582	.62456	.16321	.64682
Almost always wants to know who phoned me or wrote to me and what they said.	.15717	.65156	.13645	.68292
	$\alpha = .64198$		$\alpha = .64257$	

APPENDIX L

SUMMARY OF THE NUMBER OF SUBJECTS  
IN EACH SEX ROLE CATEGORY



# APPENDIX L

## TABLE L1

SUMMARY OF THE NUMBER OF SUBJECTS  
IN EACH SEX ROLE CATEGORY

SAMPLE INDIVIDUALS	SEX ROLE CATEGORY			
	A	M	F	U
VALIDATION GROUP, COLLEGE MEN'S REPORTS				
College Men	31	18	21	30
Fathers	25	22	20	27
Mothers	26	21	20	27
CROSS-VALIDATION GROUP, COLLEGE MEN'S REPORTS				
College Men	32	16	19	32
Fathers	21	25	25	21
Mothers	24	24	24	22
COMBINED GROUP, SELF-REPORTS				
College Men	30	16	13	31
Fathers	22	19	19	22
Mothers	20	23	23	19

NOTE: A = Androgynous, M = Masculine, F = Feminine, and  
U = Undifferentiated.

#### REFERENCE NOTE

#### REFERENCE NOTE

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