

THE UNIVERSITY OF MANITOBA

ANDROGYNY AND SEX-TYPING: IMPLICATIONS
FOR EMPATHY AND ATTITUDES TOWARD WOMEN

by

Wanda A. Tomszak

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ABSTRACT

This study was designed to test the hypothesis that androgynous persons would exhibit greater empathetic abilities and espouse more egalitarian attitudes toward women than non-androgynous individuals. A sample of 30 married couples completed the Bem Sex-Role Inventory (BSRI) and the Attitudes Toward Women Scale (AWS). Each spouse assessed his/her own personality characteristics and attitudes as well as those of his/her partner in order to obtain a measure of empathetic ability. The results were unexpected in that masculine individuals, regardless of sex, exhibited the most accuracy in predicting their spouses' self-ratings on the BSRI. Sex rather than sex role was a factor in identifying individuals who had greater accuracy in predicting their spouses' self-ratings on the AWS--males were significantly more accurate in this case, than females. An analysis of the target spouses' sex role revealed that masculine individuals also were the easiest to predict in terms of their self-rated personality characteristics on the BSRI. Undifferentiated individuals showed the least accuracy in their predictions and also were the most difficult to predict on the BSRI. Sex role was a factor in differentiating between individuals with egalitarian and traditional attitudes toward women, but only for females. Masculine, androgynous, and undifferentiated females all had similar egalitarian attitudes, while feminine females had the most traditional attitudes.

The results led to a re-examination of the measure of empathy, as

well as a critical analysis of androgyny as measured by the Bem
Sex-Role Inventory.

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Chapter I

INTRODUCTION

Recently, a number of researchers have challenged the traditional assumptions that masculinity and femininity are opposites and cannot be incorporated into the personality and behavior of any one individual (Bem, 1974, 1975; Constantinople, 1974; Spence, Helmreich & Stapp, 1975; Berzins, Welling & Wetter, 1978). Rather than viewing masculinity and femininity as bi-polar opposites, these researchers have argued that masculinity and femininity should be viewed as independent, uni-polar dimensions. Thus, the concept of androgyny (Bem, 1974)--the integration of masculine and feminine characteristics into one's self-definition of personality and behavior--has been introduced into the study of sex roles.

Besides the introduction of measures of androgyny, the androgyny model challenges the traditional assumptions between "appropriate sex-role typing" and psychological health. Recently androgyny has been proposed as a model for psychological well-being (Bem, 1974). In addition, the androgynous model also provides predictions about the relationship between sex roles and attitudes toward women (Bem, 1974; Spence, Helmreich & Stapp, 1975).

These aspects of the androgyny model have provided the basis for this research study. It was hypothesized that androgynous individuals--because of their presumed ability to manifest greater psychological adjustment and greater intimacy with others than traditionally

sex-typed individuals--would exhibit greater empathy in their marriage relationships than individuals who were non-androgynous. It was also expected that androgynous individuals would espouse more egalitarian attitudes toward women than individuals who were traditionally sex-typed.

Review of Literature

Definition of Terms

There is much confusion in the literature surrounding the conceptual definitions of sex and gender, and their concomitants of identity, role, and stereotype. Since it is beyond the scope of this paper to address all the uses of these terms, the following definitions pertain to terms used throughout this study.

Although sex and gender are sometimes described as different concepts, in the present study these terms will refer to the categories of female and male. Sex role entails characteristics and behaviors of a particular role traditionally associated with males and females (Lips & Colwill, 1978). Gender identity, on the other hand, refers to the awareness of being female or male, and is one of the most basic self-definitions. Sex-role preference refers to characteristics and behavior that one prefers to possess or engage in (Constantinople, 1973). Sex-role typing refers to the actual adoption of traits and behavior traditionally associated with males and females.

To have a masculine sex role is to manifest behaviors and characteristics traditionally associated with males; a feminine sex role encompasses those behaviors and characteristics traditionally associated with females. Masculine males and feminine females are traditionally

sex-typed individuals, while feminine males and masculine females are referred to as cross-sex-typed individuals. Androgynous individuals are those who are capable of integrating both masculine and feminine characteristics and behaviors (Bem, 1974).

Once a person's sex is known, certain assumptions and expectations about personality characteristics and behaviors are assumed. Males are expected to develop a masculine sex-role identity and participate in a masculine sex role, whereas females are expected to be feminine and to engage in a feminine sex role (Rebecca, Hefner & Oleshansky, 1976). Masculinity generally is associated with independence, aggressiveness, activity, and self-confidence; femininity entails dependence, passivity, expressiveness, and nurturance (Jenkin & Vroegh, 1969; Maccoby & Jacklin, 1974). These commonly held beliefs about the particular characteristics of males and females are referred to as sex-role stereotypes. "A stereotype is a set of beliefs about the characteristics of the occupants of a role, not necessarily based on fact or personal experience" (Kessler & McKenna, 1978, p. 12). Although the term "stereotype", by definition, does not include an evaluative component, sex-role stereotypes are usually given differential values based on sex. The feminine stereotype appears to have a more negative connotation, than does the masculine stereotype (see for e.g., Brovermann, Brovermann, Clarkson, Rosenkrantz & Vogel, 1970).

Sex, sex role, gender identity, sex-role preference, and sex-role stereotypes may or may not be closely related. For instance, an individual can be biologically male, feels like he is really a female (female gender identity), yet partake in stereotyped masculine behavior (male sex role).

Sex-Role Development

Traditional Theories

The three major traditional perspectives on sex-role development are: Psychoanalytic theory, social learning, and cognitive development. The psychoanalytic theory of sex-role development contends that one's anatomy is intrinsically connected to one's gender identity (Freud, 1935; cited in Frieze, Parsons, Johnson, Ruble & Zellman, 1978). According to Freud, girls and boys at about age four, during the phallic stage, become aware of genital differentiation. Once this perception occurs, children go through Oedipal conflicts, which, for the boy, are resolved through identification with the father. Girls, however, never fully resolve the Oedipal conflicts, although partial resolution occurs through identification with the mother. Through identification with the same-sex parent, children incorporate the values, characteristics, and behaviors appropriate to their sex. Freud concludes that, due to the different ways in which girls and boys experience the Oedipal conflicts, females are inferior to males, they never fully develop morally and ethically, and that they are devalued by males (Frieze, et al., 1978). The early years are considered extremely important for the development of gender identity and sex roles.

Social learning theory (e.g., Mischel, 1966; 1971) emphasizes the reinforcements, the rewards and punishments, attached to the learning of sex roles. Unlike the psychoanalytic theory which stresses internal mechanisms as providing incentives for learning, social learning theory states that motives for learning come from external sources.

This theory maintains that children learn from their parents and from significant others through modelling and observation. Through the process of differential reinforcement based on sex, children learn what is appropriate or inappropriate for their sex. A female learns the label "girl" and is reinforced to behave like a girl, while a male learns the label "boy" and learns boy-like behaviors. Sex-role related traits and behaviors are learned throughout the life-span, but the early years are considered important for the formation of one's sex role.

The cognitive development view (Kohlberg, 1966) asserts that sex-role behaviors and gender identity develop in accordance with one's level of cognitive development. According to Kohlberg, children become aware of the categories of girl and boy at approximately age three, then establish gender identity. Once a child has developed a gender identity, s/he uses the categories of male and female to provide structure to the social environment. Children observe the behavior patterns of males and females, and then develop frameworks for interpreting what is and what is not expected of the sexes. Once children develop an awareness of sex roles, they must develop a preference for the role attached to their sex. Thus girls are expected to prefer the traditional female sex-role and boys are expected to prefer the traditional male sex-role.

Implicit in these traditional theories is the assumption that females and males are behaviorally and psychologically different, and moreover, that they are expected to be different. Females are expected to be nurturant, passive, sensitive and dependent; males are to be independent, aggressive, rational, and active (Maccoby & Jacklin,

1974). Acquiring an "appropriate" gender identity and sex role (masculine males and feminine females) is stressed as both desirable and necessary for healthy human functioning. Polarization of the sexes is assumed and given emphasis, while similarities between the sexes are either de-emphasized or neglected (Rebecca, Hefner & Oleshansky, 1976). Traditional theories also concentrate on describing males and the development of a masculine identity and masculine roles (Kessler & McKenna, 1978) while reifying the view of female inferiority (Rebecca et al., 1976).

Contemporary Theories

Because some researchers perceived traditional theories as having a limited scope and playing a role in perpetuating sex discrimination (e.g., feminine females are too "fragile" to participate in masculine type occupations such as construction), they have introduced quite radical approaches to the study of gender identity and sex role (Block, 1973; Pleck, 1975; Rebecca et al., 1976). Both Block's and Rebecca, Hefner and Oleshansky's theories are discussed here; the former because it was one of the initial attempts to delineate sex-role development in a non-traditional theory, and the latter for being the most recent non-traditional theory which incorporates Block's views but goes beyond them.

Block (1973) was influenced by Bakan's (1966) ideas on the qualities of "agency" and "communion". Bakan equates masculinity with agency, referring to the self-assertive, active characteristics of an individual, and femininity with communion, delineating the helpful, expressive qualities. According to Bakan, the balance and inte-

gration of the agentic and communal components is a beneficial and necessary development both for the individual and for society. Block employs the concept of balancing femininity and masculinity in her formulations of a developmental stage model of sex-role development.

In stage one of Block's system, the concept of gender has no relevance for the child. The child is characterized by a type of global thinking similar to that of Piaget's (1970) description of the undifferentiated thinking of infants. In stage two, as a result of a complexity of factors, including the child's conceptualization of gender identity, her or his identification with the same-sex parent, and differential socialization practices experienced by boys and girls, the child begins to conform to the rules and roles defined for her or his sex. The development of agentic (masculine) qualities is encouraged in boys, while communion (femininity) is suppressed; communal (feminine) qualities are emphasized in a girl's development and agency (masculinity) is discouraged. Stage three evolves as a result of "a self-conscious process of evaluating oneself relative to one's own internalized values and the prevailing expectations of the culture" (Block, 1973, p. 515). An awareness of the discrepancy between one's values and societal values appears, forcing one to examine both critically, and thus marking the beginning of the development of balancing agency and communion. For Block, the highest developmental stage, which is especially difficult to attain in this society, is the integration of the agentic and communal modes of thinking, feeling, and behaving, an integration she calls androgyny.

Rebecca, Hefner and Oleshansky's (1976) model of sex-role development closely parallels the work of Block, and Pleck, and was

also inspired by the ideas of de Beauvoir (1952), Heilbrun (1973), and Bem (1974). According to this model, sex-role development also proceeds through three stages. Stage one, undifferentiated sex roles, is characterized by the child's global thinking, and an unawareness of culturally imposed restrictions according to sex. In stage two, that of polarized sex roles, the child learns the conventional roles associated with her or his sex, while simultaneously rejecting the role of the opposite sex. Rebecca et al. (1976) argue that society reinforces and idealizes the learning and conformity to "appropriate" sex-role prescriptions. Transition to stage three occurs when an individual is confronted with contradictions with one's values and society's values, with respect to sex roles. Through the process of critically examining values, the individual becomes more androgynous.

According to this model, androgyny is not the final stage of development as it is in Block's model. Stage three is characterized by the concept of sex-role transcendence, which allows an individual to "move freely from situation to situation and behave/feel appropriately and adaptively" (Rebecca et al., 1976, p. 204). Individuals in this stage are free to choose adaptive and personally meaningful ways of acting, rather than to conform to rigid sex-role behavior. Sex-role transcendence implies "flexibility (over time, over situations, and over personal moods), plurality, personal choice, and the development of new or emergent possibilities once individuals and society move away from present oppressor/oppressed sex roles" (Rebecca et al., 1976, p. 204). Sex-role transcendence also goes beyond Bem's (1974, 1975) conception of the androgynous person who is

characterized by a balance of feminine and masculine qualities, and who can be situationally flexible. In the transcendence stage the situation or role itself can be changed to accommodate alternative behaviors, whereas Bem's androgynous individual adapts to the situational demands of a role. The sex-role transcendent stage is not seen in static terms, as a final stage of development, but rather as a dynamic stage, continually producing conflict and conflict resolution. For the transcendent individual, assigned gender is an irrelevant factor for decision-making. Hefner, Rebecca and Oleshansky (1975) also add that most individuals do not even approach sex-role transcendence, particularly because "nearly all institutional structures of our society, demand, reinforce, and imply traditional sex-role stereotypings of 'feminine' and 'masculine' that are polar opposites, negatively correlated, stable traits" (p. 143).

Traditional Measures of Masculinity and Femininity

Traditional measures of masculinity and femininity reflect the assumptions of traditional theories of sex-role development by emphasizing the dichotomous, polar nature of gender. Some examples of these measures are: Strong M-F of the Strong Vocational Interest Blank (SVIB) (1936); Terman-Miles M-F Test (1936); MF of the Minnesota Multiphasic Personality Inventory (MMPI) (Hathaway & McKinley, 1943); Gough Femininity Scale (1952); Guilford Masculinity Scale (1956). Most of the traditional tests measure personality attributes or sex-role stereotypes, rather than one's perception of being male or female (gender identity). In these measures, femininity and masculinity are generally defined as "relatively enduring traits which

are more or less rooted in anatomy, physiology, and early experience, and which generally serve to distinguish males from females in appearance, attitude and behavior" (Constantinople, 1973, p. 390).

In the majority of these measures, definitions of femininity and masculinity were derived from a variety of samples of subjects covering different age and educational levels. Subjects were asked to respond to a large pool of items, the usual item being a statement or characteristic which the subject then responded to as being true or false as applied to her/himself. The only criterion for defining an item as masculine or feminine, was that item's significant discrimination between males and females, meaning that a significantly different proportion of males and females agreed with the item.

The items which discriminated between the sexes compiled the final measure to be distributed to subsequent subjects. One's masculinity or femininity score represents the degree to which one's attributes closely approximate the norm for the original sex group who participated in developing the test. An example of an item which successfully discriminated between males and females is the statement "I prefer a tub bath to a shower" (Gough, 1952). This item was responded to affirmatively by many more females than males; thus it was labelled feminine. Consequently, if one prefers baths to showers, one is apparently participating in a female preference--a feminine act.

Criticisms of masculinity and femininity measures. One of the major criticisms of the traditional tests is focused on the method of item development (Hyde & Rosenberg, 1980). The logic employed to include certain items in the tests is questionable, because

the sole criterion for item selection is whether or not that item discriminated between the sexes. "An item such as 'I prefer a tub bath to a shower' can appear on such tests, not because it reflects anything profound about the essence of masculinity or femininity, but simply because males tend to prefer showers and females tend to prefer tub baths. The implicit assumption, then, is that 'femininity' is the quality of women that differentiates them from men" (Hyde & Rosenberg, 1980, p. 61). The items, therefore, do not present any insight into what femininity and masculinity means.

Another criticism, that which concerns the unidimensional, bi-polar nature of the M-F tests, is found quite frequently in the literature (Bem, 1974; Constantinople, 1973; C.G. Heilbrun, 1973; Rebecca et al., 1976; Spence, Helmreich & Stapp, 1974). The assumption implicit in traditional measures is that masculinity and femininity are defined as opposites. The bi-polarity of masculinity and femininity is reflected in the scoring procedures. For instance, the scoring procedure in the Terman-Miles M-F test entails giving a masculine response a plus and a feminine response a minus; more pluses than minuses indicates masculinity and more minuses than pluses indicates femininity (Constantinople, 1973). In the Strong M-F test different scoring methods are used for males and females. For females a feminine response is scored as a plus and a masculine response is scored as a minus; for males the scoring procedure is reversed. Thus, in the traditional measures bi-polarity is assumed and only one score is obtained--an individual is scored as either masculine or feminine.

Included in the assumption of bi-polarity is the idea that as one becomes more feminine, one necessarily decreases in masculinity,

and as one becomes more masculine, femininity automatically decreases. The traditional tests offer no logical explanation as to why this should occur, other than the assumption that one cannot incorporate (supposedly) opposite traits or behaviors within one's personality. Hyde and Rosenberg (1980) question this assumption with the example: "if a man develops a 'feminine' interest such as cooking, that may increase his femininity, but does it necessarily decrease his masculinity?" (p. 62).

Further criticisms are directed toward the ambiguous definitions of masculinity and femininity. Constantinople (1973) points out that it is sometimes unclear whether a test is measuring sex-role preferences or sex-role adoption. Spence and Helmreich (1978) add that traditional tests are confusing in that it is unclear whether traits or behaviors are being measured.

Androgyny

According to the bi-polar nature of masculinity and femininity found within the traditional measures, if an individual is dominant, a trait considered masculine, that individual cannot be the opposite, namely submissive. This bi-polar assumption has been widely criticized, thus introducing the study of individuals whose personality consists of both masculinity and femininity (Bem, 1974; Constantinople, 1973; C.G. Heilbrun, 1973; Spence et al., 1974). The term identifying individuals who combine both masculine and feminine qualities is "androgyny" (Bem, 1974).

The word androgyny has its origins in the Greek roots: "andro" for male, and "gyn" for female (Kaplan & Sedney, 1980). The word's

origin implies a combination of the masculine and feminine. Although the study of androgyny has been introduced fairly recently, the idea of androgyny has existed in literature throughout history. Images of androgyny appear in the writings of Plato, Shakespeare, Woolf, and ancient Chinese philosophy (Heilbrun, 1973; Kaplan & Sedney, 1980). In their review of androgynous images in the literature, Kaplan and Sedney (1980) examine two recurring androgynous themes. One is the image of the androgynous person whose personal fulfillment is attained once s/he is able to integrate the masculine and feminine within her/himself--fulfillment which is incompatible with a dichotomization of the sexes. The second theme involves the "woman as a tragic hero, who places personal integrity and individual choice above societal sex-role expectations...they are androgynous in part because they encompass both feminine compassion and masculine decisiveness, in part because they insist on maintaining their personal integrity despite social pressures to do otherwise" (Kaplan & Sedney, 1980, p. 75). It is interesting to note that both themes are reflected in the more recent models of androgyny found in social-psychological literature; the former integration image is similar to Bem's (1974) balance model of androgyny, the latter, one of an individual's conflict and strain with societal expectations, is reflected in the writings of Kaplan (1979), Kenworthy (1979), and Rebecca et al. (1976).

Measures of Androgyny

The relatively recent models of measuring masculinity and femininity include the possibility of an individual responding in either a masculine, feminine, or an androgynous way (Bem Sex Role Inventory

(BSRI), Bem, 1974; Berzins, Welling & Wetter's PRF Andro Scale, 1978; Heilbrun's Androgyny measure from the Adjective Check List, 1976; Spence, Helmreich & Stapp's Personal Attributes Questionnaire (PAQ), 1974). Sandra Bem, who was one of the first researchers involved in the study of androgyny, also developed the first scale which purports to measure androgyny.

Bem began by questioning the assumptions inherent in traditional measures of masculinity and femininity. She maintains that the conception of bi-polar sex-role related traits has obscured two plausible hypotheses:

first, that many individuals might be both masculine and feminine, both yielding and assertive, both instrumental and expressive--depending on the situational appropriateness of the various behaviors, and conversely that strong sex-typed individuals might be seriously limited in the range of behavior available to them as they move from situation to situation (Bem, 1974, p. 155).

Bem proposed a plausible alternative to the bi-polar view of personality by developing a scale that would measure and view masculinity and femininity as two orthogonal, unipolar dimensions.

Bem Sex-Role Inventory

The Bem Sex-Role Inventory (BSRI) (Bem, 1974) differs markedly from the traditional measures in three major aspects. First, it includes a masculinity and femininity scale, both of which are unipolar and orthogonal. Essentially this means that an individual can be both feminine and masculine simultaneously; in the traditional tests if one were feminine, one could not also be masculine. The second distinguishable feature concerns the method of item selection. Bem's inventory was "founded on a conception of the sex-typed person as

^M someone who has internalized society's sex-typed standards of desirable behavior for men and women" (1974, p. 155), thus characteristics qualified as masculine or feminine depending on a differential judgement of social desirability based on sex. The third non-traditional feature is the ability of the BSRI to characterize an individual as masculine, feminine, or androgynous according to the difference between her or his endorsement of masculine and feminine characteristics. Although the BSRI appears to be an improvement over traditional measures of masculinity and femininity, it does contain some limitations which will be addressed later.

BSRI scale development. Two hundred personality characteristics, judged by Bem and several of her students to be "positive in value and either masculine or feminine in tone", comprised the original pool from which final items were selected (Bem, 1974, p. 156). In addition to these, 200 characteristics, half positively valued and half negatively valued, and believed to be "neutral" in tone (neither masculine or feminine), were chosen to form a social desirability scale.

Fifty male and fifty female undergraduate students, served as the judges for the final item selection. Each judge was asked to rate each personality characteristic according to its desirability for one sex or the other. Judges were given a question such as: "In American society, how desirable is it for a man to be truthful?" or "In American society, how desirable is it for a woman to be sincere?". Each judge rated the 400 characteristics using a 7-point scale ranging from 1 ("Not at all desirable") to 7 ("Extremely

desirable") (Bem, 1974, p. 157). Judges rated items either "for a man" or "for a woman", not for both. Unlike the item-selection procedures found within traditional measures, in which masculine and feminine items were chosen on the basis of differential endorsement by males and females, the BSRI items were chosen on the basis of social desirability. If an item were independently judged by both males and females to be significantly more desirable for a man than for a woman, it was defined as masculine. If an item were judged by both sexes as significantly more desirable for a woman, that item was considered to be feminine. From those items that qualified, 20 were selected to form the masculinity scale, and 20 formed the femininity scale. The 20 items selected for the social desirability scale were independently judged by both sexes to be no more desirable for one sex or the other, as well as not receiving significantly different overall desirability ratings from male and female judges. Originally, Bem included this scale to ensure that the inventory was not eliciting a tendency for subjects to respond in a socially desirable direction regardless of their personal inclinations. The scale presently is used mainly in order to provide a neutral context for the masculine and feminine scales.

Scoring. Each of the 60 items in the BSRI is accompanied by a 7-point scale ranging from 1 ("Never or almost never true") to 7 ("Always or almost always true"). Subjects are requested to state how well each personality characteristic is descriptive of themselves. A masculine score is the mean self-rating for masculine items endorsed; a feminine

score is the mean self-rating for the feminine items endorsed.

Because the inventory allows an individual to endorse both masculine and feminine items, an androgynous score can be computed.

The androgyny score indicates the degree to which an individual differs in her or his endorsement of masculine and feminine traits. This score is derived by computing the difference between an individual's masculinity and femininity scores normalized with respect to the standard deviations of her or his masculinity and femininity scores. This is equivalent to the subject's t-ratio for the difference between masculinity and femininity. In order to score as masculine, an individual must endorse a majority of masculine characteristics while rejecting a majority of feminine ones; a femininity score reflects the endorsement of a majority of feminine characteristics while rejecting a majority of masculine ones; and an androgynous score is obtained if an individual equally endorses both masculine and feminine characteristics.

A social desirability score is obtained by reversing the individual's ratings for the ten undesirable characteristics, and then computing the mean self-ratings for the twenty items. Possible scores range from 1 (reflecting a strong tendency to endorse socially undesirable characteristics) to 7 (reflecting a strong tendency to endorse socially desirable characteristics).

The BSRI was subsequently administered to two samples of undergraduate students; the first group consisting of 279 females and 444 males, the second group consisting of 77 females and 117 males.

Psychometric analysis. The masculinity and femininity scales of the BSRI were designed to be logically independent, and analyses within both samples of students resulted in support for empirical independence. The findings indicated that an individual's femininity score is not dependent on her or his masculinity score; the reverse holds true for masculinity.

Reliability was shown to be high, both in analysis of internal consistency, and test-retest ability. All three subscales--Masculine, Feminine, and Social Desirability--evidenced high reliability (.75-.86) in both samples of students. The BSRI was administered again for test-retest analyses to 28 females and 28 males of the first sample. Over a four week period all four scores resulted in high reliability (Masculinity $r=.90$; Femininity $r=.90$; Androgyny $r=.93$; Social Desirability $r=.89$).

Correlations computed between the social desirability score and the masculinity, femininity, and androgyny scores indicated that social desirability correlated with masculinity and femininity, but not with androgyny. Thus Bem concludes that the androgyny score does not reflect a tendency to respond in a socially desirable way, but a tendency to follow the sex-typed standards of desirable behavior for men and women (Bem, 1974).

A comparison of traditional measures of masculinity and femininity, namely the M-F scale of the California Psychological Inventory and the Guilford Zimmerman Temperament Survey, and the BSRI resulted in moderate correlations between the CPI and the three scales of the BSRI, but no correlation between the Guilford Zimmerman and the BSRI. Bem is not surprised by these results; "the fact that none of the

correlations is particularly high indicates that the BSRI is measuring an aspect of sex roles which is not directly tapped by either of these two scales" (Bem, 1974, p. 160). Considering the different method of item development and the unipolar treatment of masculinity and femininity in the BSRI, these results are not unexpected.

Modifications on scoring the BSRI. Bem's use of the t-ratio as a procedure for scoring androgyny has been criticized by Spence et al., (1975) due to its tendency to obscure the distinction between those high in masculinity and femininity (the "truly androgynous") and those low in masculinity and femininity. An alternative method using the median-split technique was proposed and subsequently adopted by Bem (1977). According to this scoring procedure, the femininity and masculinity scores for all subjects participating in the test are listed from highest to lowest, with the median score acting as a cut-off point. This method yields four groups: (i) Masculine--those above the median on masculinity and below on femininity; (ii) Feminine--those above the median on femininity and below on masculinity; (iii) Androgynous--those above the median on both masculine and feminine scales; and (iv) Undifferentiated--those below the median on both masculine and feminine scales.

The major problem associated with the median-split technique is that classification is not based on significant differences between one's femininity and masculinity score (A.B. Heilbrun, 1981). An individual could be very slightly above the median on femininity and very slightly below the median on masculinity and be classified as

feminine, even though the scores on both scales are relatively balanced. One method suggested by Heilbrun to alleviate this problem is to simply disregard individuals who fall close to the median. The other possibility is to score individuals along a single continuum of androgyny, from very high androgynous to very low. The disadvantage, however, is that masculine and feminine individuals (sex-typed) are not differentiated. Currently the median-split technique appears to be the most viable alternative; however large representative samples should be employed since an individual's score is relative to the group taking the test (Heilbrun, 1981; Spence, Helmreich & Stapp, 1975).

Downing (1979) offers another approach to scoring, one that incorporates both the difference score procedure and the median-split technique. To score as androgynous, an individual must be between plus and minus .43 (the cut-off obtained by transforming Bem's t-ratio cut-off to the difference score procedure) as well as above the median for the individual's sex on both scales. Downing states that this approach is more refined, but that it also is beset with problems: "it fails to assess the integration of masculine and feminine characteristics; it requires that a greater number of subjects be tested in order to obtain sufficiently large groups; and it lacks an absolute definition of the androgynous individual because its medians are still defined relative to the samples used" (1979, p. 292).

Comparing scoring methods. Bem (1977) administered the BSRI to a sample of 290 females and 375 males and compared the results with the two scoring methods. She found that the two scoring methods employed yielded similar categorizations of

individuals for the masculine and feminine scales: 88% of the females and 80% of the males who were classified as feminine according to the median split were also classified as feminine or near-feminine using the t-ratio. Eighty-seven percent of the females and 96% of the males classified as masculine using the median split were also classified as masculine or near-masculine using the t-ratio. The two methods, however, yielded different classifications for androgyny. Of those subjects classified as androgynous according to the median split, half of the males and one-quarter of the females failed to be classified as androgynous using the t-ratio. Furthermore, of those subjects categorized as undifferentiated by the median split, over one-half of the males and two-thirds of the females were classified as androgynous using the t-ratio. Spence et al. (1975) also reported discrepancies between the two scoring methods. Over half of their subjects categorized as androgynous using the median split failed to be categorized as androgynous using the t-ratio. In reviewing the literature that compares the two methods, Kelly and Worell (1977) point out that there is general agreement among researchers supporting the median split technique, primarily for its ability to differentiate between high masculine-feminine and low masculine-feminine.

Comparing Androgynous Measures. The BSRI has been compared to other androgynous measures and was found to be highly correlated to these measures. Moderate to high correlations have been reported between the BSRI masculine and feminine scales and those of the Personal Attributes Questionnaire (.57 - .75,

Spence & Helmreich, 1978); the PRF Andro Scale (.50-.65, Berzins, Welling & Wetter, 1978); and the Adjective Check List (.73-.87, Wiggins & Holzmueller, 1978). The moderate to high correlations between the masculine and feminine scales indicate substantial similarities between the underlying constants of the scales. However, the scales do not appear to be interchangeable. Kelly, Furman and Young (1978) compared all four of these measures and found that they were in fact tapping similar dimensions. They added however, that when scores were treated as continuous variables rather than dichotomized by the median split, the categorizations of subjects were more similar.

Sex Roles and Psychological Well-Being

Traditionally, the definition of positive mental health has included the development of the individual's "appropriate" sex role and gender identity (see Kagan, 1964). Masculine males and feminine females were considered both desirable and healthy. A healthy personality for the female included the characteristics of passivity, dependence, nurturance, and emotional responsiveness. These stereotyped feminine traits were thought to be "best suited" for the "expressive" domain (Parsons & Bales, 1955)--the mother/wife/housekeeper roles. Masculinity for males included independence, aggressiveness, competitiveness, and rationality; traits thought to be "best suited" for the "instrumental domain" of the workplace (Parsons & Bales, 1955).

Two major findings emerge from the literature on gender and psychological well-being: (i) femininity is often viewed as detrimental

to psychological health, and (ii) femininity is less valued in society than masculinity (Kaplan & Sedney, 1980; Sherman, 1976).

Femininity

High femininity has been demonstrated to correlate positively with high anxiety, low self-esteem, and low social acceptance (Gall, 1969; Gray, 1957; Sears, 1970; Spence, Helmreich & Stapp, 1975; Webb, 1963). In a review of literature on femininity and competence in such areas as sexuality, motherhood, marriage, and intellectual development, Sherman (1976) concluded that meeting the ideal of stereotypic femininity is detrimental to psychological functioning. Kaplan and Sedney (1980) concluded that feminine characteristics limit one's power to deal with life stress, and consequently lead to poor psychological functioning.

Feminine characteristics are also viewed as less desirable and less socially valued than masculine traits. In a review of the literature and in their studies, Broverman, Vogel, Broverman, Clarkson and Rosenkrantz (1972) found that masculine characteristics were more highly valued than feminine characteristics, among both professional and lay persons. In a study investigating sex-role stereotypes and judgements of mental health (Broverman, Broverman, Clarkson, Rosenkrantz & Vogel, 1970), clinicians of both sexes were asked to rate, on a set of bi-polar descriptors, a hypothetical healthy adult male, a healthy adult female, and a healthy adult whose sex was unspecified. Both female and male clinicians made similar ratings for each of the three hypothetical cases. The characteristics and behaviors descriptive of the healthy adult male were essentially the same as those designating

the adult. The healthy adult female, however, was significantly different than the healthy adult in that she was presented as more submissive, less independent, less adventurous, less objective, more easily influenced, less aggressive, less competitive, more excitable in minor crises, more emotional, more concerned about her appearance and more easily hurt. Whereas a healthy male was equivalent to a healthy adult, a "healthy" female was considered to be an unhealthy adult. Essentially this means that a "double-standard" of mental health for the sexes (Broverman et al., 1972) or a "catch-22" situation for females (Kimball, 1975). Women have the choice of being competent while risking censure for not being appropriately feminine, or of being feminine while simultaneously giving up competence. The idea of the double standard has existed in feminist literature long before it found support in psychological research. For example, de Beauvoir (1952) stated that the definition of man includes that of being human; humanness, however, is excluded from the definition of woman.

Masculinity

Research on psychological health and masculinity is often inconsistent and contradictory. High masculinity in males has been associated with high anxiety, high neuroticism and low self-acceptance (Harford, Willis & Deabler, 1967; Mussen, 1962). Mussen (1962), however, stated that this finding did not hold true for adolescent males. In his longitudinal study (Mussen, 1961) found that high masculinity in adolescent males was positively related to a positive self-concept and high self-confidence, whereas later in life these males showed feelings of inadequacy, were lacking in dominance and

were less self-accepting. Adolescent males who expressed feminine interests were insecure and had feelings of inadequacy; but as adults, these males were more self-accepting, self-confident and expressed more leadership characteristics. Mussen suggests that in adolescence, a highly sex-differentiated period, high masculinity elicits status, but that later in life highly masculine males have not developed the skills necessary for a positive self-concept.

Masculinity is also seen as positive, and is perceived as a key factor in the development of self-esteem (Antill & Cunningham, 1979; A.B. Heilbrun, 1981; Kelly & Worrell, 1977; Spence et al., 1975). In Heilbrun's studies and in his review of the literature (1965, 1968, 1981) masculinity was associated with positive mental health in males, but femininity was not necessarily related to positive mental health in females. In a study of gender and stress (Hatzenbuchler & Joe, 1981), males with high masculinity reported fewer health problems and endorsed fewer stress events than did less masculine males. The researchers suggest, however, that this tendency could be due to the masculine male's perception that admittance of stress or health problems is unmasculine.

Androgyny and Psychological Well-Being

In light of the evidence which states that femininity, and to a lesser extent masculinity, has negative consequences for psychological well-being, some researchers have been motivated to re-examine the assumption that traditional sex-typing is beneficial for men and women. Recently, androgyny is being proposed as a model for psychological well-being (Bem, 1975). The rigid, limiting nature of

stereotypic sex-roles has been perceived as detrimental for both sexes (Bem, 1974, 1975; Block, 1973; C.G. Heilbrun, 1973; Pleck, 1975).

According to Block (1973)

the present American cultural emphasis on masculine machismo and feminine docility appears to impede the development of mature ego functioning. Because children are socialized early into culturally defined sex-appropriate roles, introspection and self-evaluation, which appears to be essential catalysts for psychological growth, are discouraged (p. 522).

These conclusions were made primarily on the basis of Block's own studies of adolescents (1973), in which individual subjects' self-descriptions were examined at differing levels of ego maturity. Block found that individuals of both sexes functioning at the lowest level of ego maturity (impulsive, self-protective) endorsed adjectives descriptive of agentic qualities (masculinity) while rejecting aspects of interpersonal functioning (femininity). Males operating at the highest level of ego maturity (conscientious) differed from their counterparts in the lower levels by also endorsing adjectives descriptive of communion or femininity (e.g., idealistic, sensitive, sympathetic). Females at the highest level tended to endorse both agentic qualities (e.g., self-centered, effective, restless) and communal qualities (sensitive, altruistic), thus illustrating an integration of agency and communion; in other words, androgyny. Block concluded that greater maturity was accompanied by more androgynous, less sex-typed definitions of self.

Bem's studies of behavioral flexibility. One of the major features of the androgynous construct is the belief that androgynous individuals exhibit more flexibility in their behavioral

repertoires than traditionally sex-typed individuals. In a series of studies (Bem, 1975; Bem & Lenney, 1976; Bem, Martyna & Watson, 1976) Bem's general hypothesis that "a non-androgynous sex-role can seriously restrict the range of behaviors available to an individual as he or she moves from situation to situation" (Bem, 1975, p. 634) has gained considerable support.

In her first study, Bem (1975) examined the hypothesis that androgynous individuals are more flexible, and can adjust to the situation, regardless of the particular stereotypic gender characteristics of that situation. Subjects in this study were requested to rate the funniness of a series of cartoons. They first listened to confederates who pretended to rate both humorous and unhumorous cartoons as funny. This task called for the masculine trait of independence, or the ability to resist peer pressure and not conform. The results indicated that masculine and androgynous subjects did not differ significantly, and that they conformed less to peer pressure than did feminine subjects. In the second part of the study, subjects were placed alone in a room with a kitten, and were judged on the feminine trait of nurturance, or the extent to which they interacted with the kitten. As predicted, both feminine and androgynous males played with the kitten more than did masculine males. The findings for females however, were contrary to Bem's expectations: feminine and androgynous females were not more responsive than masculine females, and furthermore, feminine females were less responsive than androgynous females. The ability to exhibit a trait of femininity--nurturance--was illustrated in the cases of feminine and androgynous males, but not in the case of feminine

females. Although this was an unexpected finding, Bem explains that it is consistent with the literature which indicates that femininity is associated with high anxiety and poor social adjustment.

In a following study, Bem, Martyna and Watson (1976) attempted to replicate the finding of low nurturance in masculine males and also to clarify the finding of low nurturance in feminine females. In the first part of the study, subjects were left alone with an infant, and nurturance was defined as the extent to which subjects interacted with an infant. Results were as expected: both feminine and androgynous subjects did not differ significantly, although they were significantly more nurturant than masculine subjects. Bem suggests that the low nurturance of the feminine females in the previous study only applied to interaction with an animal, whereas with a human being, feminine females were more nurturant than masculine females. Interaction with an infant may have been perceived as a more salient situational demand than interaction with an animal.

The second part of this study was designed to elicit sympathetic and supportive listening from subjects. Male and female subjects were placed alone in a room with a same-sex confederate who portrayed a lonely student. As expected, feminine and androgynous females and males responded with more nurturance than masculine subjects. Subjects also reported their feelings immediately following interaction with the confederate. The only significant difference emerging from these self-reports was that feminine females described themselves as feeling more nurturant than did androgynous females,

In all these situations, the subject's sex did not affect any behavioral differences, whereas sex role did. Bem concludes these

findings suggest that an androgynous individual can adapt to a specific situation, be it one that calls for a masculine or feminine trait, while the non-androgynous individual can only behave in a gender-appropriate manner.

In a following study (Bem & Lenney, 1976) examined the idea that not only are non-androgynous individuals restricted in the range of behaviors available, but that they actively avoid situations that call for cross-sex activities--behavior viewed as sex inappropriate. Subjects selected one activity from each of thirty pairs of tasks, previously judged to be stereotypically masculine (e.g., nailing two boards together), stereotypically feminine (e.g., ironing a cloth napkin) and neutral to sex (e.g., playing with a yo-yo). From those selected, subjects were asked to perform nine activities (three masculine, three feminine and three neutral). Each activity was given a monetary value; higher values (6¢) were attached to cross-sex-typed tasks and lower values (2¢) were given to sex-appropriate tasks. Results indicated that males, compared to females, tended to avoid the sex-inappropriate tasks. This finding is consistent with the literature suggesting that boys are discouraged more than girls for behaving in cross-sex-typed behavior (Hartley, 1958). Traditionally sex-typed individuals, as compared to androgynous or sex-reversed individuals, tended to prefer an activity because of its self-stereotype as sex appropriate. In addition, they also described themselves as feeling worse and experienced more discomfort after performing cross-sex activities, than did androgynous or cross-sex-typed individuals. These results support the hypothesis that "cross-sex behavior is motivationally problematic for sex-typed individuals and that they actively

avoid it as a result" (Bem & Lenney, 1976, p. 48).

Bem's contention that androgyny has positive implications for psychological well-being has gained considerable support from subsequent research. Most notable is the relationship between androgyny and self-esteem, behavioral flexibility, and cognitive functioning.

Self-esteem. In Spence et al.'s study (1975), androgynous subjects scored the highest in measures of self-esteem and undifferentiated subjects scored the lowest. Traditionally sex-typed individuals had intermediate scores while masculine-typed individuals were significantly higher in self-esteem than feminine individuals. Bem (1977) also found similar results: androgynous and masculine-typed individuals were highest in self-esteem and feminine and undifferentiated ones were lowest. A different pattern, however, emerged between males and females in Bem's study. For males, masculinity was significantly related to self-esteem while femininity was not; for females, both femininity and masculinity were related to self-esteem--females who scored high on both feminine and masculine scales were the highest in self-esteem. This finding suggests that masculinity and femininity may have different connotations for males and females. Femininity may be of less value, for males, than masculinity in terms of self-esteem. For females, the presence of both masculine and feminine characteristics appears to have positive consequences in terms of self-esteem. Or, put in other terms, traditional sex-typing may yield some psychological benefits for males but not for females.

This positive relationship between androgyny, masculinity and

self-esteem has also been reported by Heilbrun (1981). Self-esteem was measured according to a subject's self-report of satisfaction in and importance of the stereotypic masculine instrumental domain (achievement in pursuit of academic and career goals), in the stereotypically feminine expressive domain (successful personal relationships) and in non-specific areas unrelated to sex role. Results indicated that androgynous males and females were the most competent in all three areas of self-esteem, and that high masculine males and females had higher overall levels of self-esteem than their low masculine counterparts. Further analyses within each area of competence revealed that for females, no significant difference emerged between sex role and self-esteem in the expressive domain, while androgynous females reported higher instrumental self-esteem than feminine, masculine or undifferentiated females. For males, no significant difference emerged for instrumental self-esteem, while high femininity was associated with high expressive self-esteem. This last finding is inconsistent with literature which states that femininity in males is often associated with inner tension and stress (Jones, Chernovetz & Hansson, 1978; Spence et al., 1975). With specific measures of self-esteem, such as the expressive self-esteem used in Heilbrun's study, femininity in males may result as a more positive quality.

Behavioral flexibility. The results from two studies (Babladelis, 1978; Falbo, 1977) show that androgynous persons may have a broader repertoire of behaviors and to behave in a more flexible manner than traditionally sex-typed persons. Androgynous persons reported more flexibility in their approaches to various interpersonal interactions on both

feeling and behaving levels (Babladelis, 1978). Consistent with this are the results from Falbo's study (1977) which examined individuals' influence strategies (how to get influence and how to resist influence). Falbo found that sex role rather than sex accounted for the variance, with androgynous persons reporting the largest number of influence strategies.

Cognitive skills. Bem's (1979) most recent view is that individuals differ, not primarily in terms of masculine and feminine traits and behaviors, but more fundamentally "(a) in the context of their beliefs about what the two sexes are like and (b) in their cognitive schemata for processing gender-related information, and hence in the perceptual salience and cognitive availability of gender and gender-related concepts as dimensions for processing incoming information" (1979, p. 1053). There is some evidence which suggests that there are different cognitive processes operating within androgynous and traditionally sex-typed persons. In a study examining gender role and cognitive schemas among women, Tunnel (1981) tested the hypothesis that gender has less salience for androgynous women. Feminine and androgynous females described how 18 pairs of acquaintances (half of whom were women, half of whom were men) were similar or different. The results indicated that feminine females used more feminine adjectives in describing others and in self-description, while androgynous females employed an equivalent number of masculine and feminine adjectives. Females who endorse feminine but not masculine items on the BSRI may perceive feminine characteristics as more salient on their descriptions of others. Tunnel (1981) suggests

that "what critical behaviors are drawn out in others may in part be determined by the dimensions important to the self" (p. 1135).

Heilbrun (1981) hypothesized that androgynous persons would possess the cognitive skills that would foster effective social behavior. Two indicators of social understanding were examined: "intraception"---"the extent to which individuals reflect upon the meaning of the behavior of others, the motives behind an action rather than the action itself" (Heilbrun, 1981, p. 172) and "social insight" or "the ability to recognize in any situation the psychological dynamics underlying a behavior and the solution necessary to resolve the situation and to bring it to a constructive solution" (p. 173). For males, the data revealed that high feminine males were higher in intraception than low feminine males, and high masculine males showed more social insight than low masculine males. Androgynous males were high on both cognitive variables. The only significant finding for females was that androgynous females scored highest on intraception. The cognitive skills of intraception and social insight are considered by Heilbrun to lead to effective deployment of sex-role behaviors across situations, and to the extent that this is accurate, androgynous males would possibly be the most competent in selecting effective social options in varying situations. The androgynous female, however, did not emerge as most competent. These findings support to some extent the androgynous model of psychological well-being, as well as Bem's contention that androgyny may have different implications for males and females.

Further indices of psychological well-being. Various other researchers have indicated that androgynous individuals report more

overall adjustment than traditionally sex-typed individuals. In a study of nurses, White (1979) describes the high androgynous group (as opposed to the low androgynous group) as more responsible, dominant, dependable, caring, assertive and inner-directed. Both androgynous and masculine women in Harris and Reiko's study (1979) scored higher on measures suggesting better personal and social adjustment than feminine or undifferentiated women.

In a study examining the concept of "fear of success" (Horner, 1970) among women, women who scored as androgynous or cross-sex-typed showed less fear of success than traditionally sex-typed or undifferentiated women (Gayton, Hanu, Barnes, Ozman & Bassett, 1978). The researchers suggest that psychological androgyny may be associated with maximizing the anxiety from the perceived negative consequences of success among women. It should be noted that this reflects a social interpretation of fear of success, since it suggests that success is traditionally perceived as a masculine activity and thus women who fear success may be fearing social rejection for being unfeminine (see Condry & Dyer, 1976). This differs from Horner's (1970) original conception that fear of success was a stable internal motive experienced only by women. Gayton et al.'s (1978) finding that androgynous women reported less fear of success is consistent with Bem and Lenney's (1976) contention that androgynous individuals are expected to be more comfortable with cross-sex-typed activities.

As well as showing evidence of positive psychological and social adjustment, androgynous individuals are also rated more positively than sex-typed individuals. Bridges (1981) reports that subjects who were given bogus profiles of traditionally sex-typed and androgynous persons

rated the latter as more likeable in terms of general attractiveness, overall impression and desire to date. In terms of physical attractiveness, only feminine women rated the traditionally sex-typed person as more attractive. Falbo (1977) reported similar results; masculine and androgynous persons received more positive peer evaluations than feminine persons.

In summary, the androgynous individual appears to manifest the skills necessary for positive psychological functioning--high self-esteem, behavioral flexibility, and the cognitive skills necessary for effective social behavior. Masculine individuals are also comparable to androgynous in some cases, i.e., masculine and androgynous individuals do not differ markedly in many of these studies. Feminine individuals appear to experience the most negative consequences associated with psychological well-being.

Criticisms of Androgyny Research

Bem has been criticized for her method of scale construction, particularly for the stereotypic masculine and feminine traits she uses to construct an androgynous score (Eichler, 1980; Kenworthy, 1979; Locksley & Colten, 1979; Pyke, 1980). The concept of androgyny thus is viewed as contradictory by these critics, because it presupposes the concepts of stereotypic masculinity and femininity. According to Eichler (1980) one of the major problems underlying the scale's construction is its contribution to "the reification of sex role stereotypes. The stereotype takes on a life of its own, becomes normative, and empirical reality is measured and evaluated against this norm" (p. 64). Bem (1979) herself recognizes this "inner contradiction"

of the BSRI and explains that:

to the extent that the androgynous message is absorbed by the culture, the concepts of femininity and masculinity will cease to have such content and the distinctions to which they refer will blur into invisibility. Thus when androgyny becomes a reality, the concept of androgyny will have been transcended (p. 1053).

Locksley and Colten (1979) question the validity of the scales, by suggesting that the traits used in the construction of the BSRI may be linked to male and female family and work roles rather than to sex per se. What the scale purports to measure is unclear. Further, validity is also at stake since self-ratings necessarily imply comparisons, and the degree of masculinity and femininity are relative. There is no possible way of knowing how each subject rates him/herself and relative to whom. McGee and Wells (1982) also raise the issue of validity by stating that the items of the scale may not have any salience or meaning for the subjects taking the test. They suggest that measurement of this sort be phenomenologically oriented, in order that the subjects' evaluation of the traits can be recorded.

Although Bem states that only socially desirable items are included in the scale, Pedhazur and Tetenbaum (1979) question whether all items are perceived as desirable. They replicated the construction of the BSRI on 164 students, and found that certain feminine items were sometimes perceived as undesirable, namely the traits shy, gullible, and childlike.

Criticisms are also directed toward the concept of androgyny as a model for psychological well-being. Jones et al. (1978) suggest that well-being may be more a function of masculinity than androgyny. In their study, androgynous males did not score as "more adaptable" in

a variety of scales measuring psychological well-being, than did masculine males. In the case of females, there was greater support for Bem's formulations, since androgynous women scored in a more adaptable manner than did feminine women. Masculine women, nevertheless, emerged as the most adaptive, competent and secure. The researchers conclude that flexibility and adjustment are generally associated with masculinity in both males and females. It is necessary to point out however, that although androgyny did not emerge as the most adaptive orientation, neither did it have any significant relationship with poor psychological health.

Masculinity as compared to androgyny is perceived as a key factor in the development of self-esteem according to Kelly and Worell (1977) and Antill and Cunningham (1979). Antill and Cunningham (1979) state that their findings contradict the concept of androgyny as ideal for both sexes. Although they found no significant differences in self-esteem between androgynous and masculine subjects, masculine subjects were significantly higher in self-esteem than feminine subjects. These findings suggest that perhaps androgyny is beneficial for some individuals--in terms of self-esteem--while masculinity is beneficial for others.

Some researchers agree that while androgyny may have some benefits, it may not be psychologically healthy for all individuals. In a study of psychotherapy clients, Kaplan (1979) found that the majority of clients scored as androgynous. Jordon-Viola, Faasberg and Viola (1976) report a positive relationship between androgyny and anxiety for college students and employed women. These findings are not contradictory if one realizes that the androgynous person is somewhat

of an anomaly within a culture that still holds differential expectations for males and females. As Kaplan and Sedney (1980) explain, there may be inherent tensions and conflicts between the androgynous individual who is developing toward transcendence.

Finally the predictive validity of the BSRI is questioned by Zeldow (1976) who found feminine males (cross-sex-typed) more conservative in their attitudes toward women than either androgynous or masculine males. Evidence supporting the relationship between androgyny and less conventional attitudes however, appears to be more abundant and will be addressed later.

Major Hypotheses

The present study is primarily designed to test whether androgynous persons manifest greater empathetic abilities than traditionally sex-typed persons. Such a finding would add support to the proposition that androgyny is a more valid model of psychological well-being. In addition, the hypothesis that androgyny is associated with egalitarian attitudes toward women is tested in order to assess the predictive validity of the BSRI.

Hypotheses

1. The ability to empathize, indicative of psychological intimacy, among married couples will be positively associated with androgyny.
2. (i) Highly feminine females will exhibit higher empathetic scores than will highly masculine males.
(ii) Androgynous females will exhibit similar empathy scores

to androgynous males.

3. Androgynous males and females will exhibit more egalitarian attitudes toward women than will non-androgynous males and females.

Hypothesis I: Among married couples, the ability to empathize will be positively associated with androgyny.

Masculine males and feminine females occupy separate psychological spaces and thus have difficulty in breaking traditional sex-role boundaries--boundaries which hinder mutually fulfilling relationships between the sexes. "The more gender-polarized they are, in fact, in terms of him being 'all man' and her being 'all woman', the less of a psychological basis they have for relating to each other, because they are opposite sides of a coin" (Goldberg, 1979, p. 87). The traditionally sex-typed, occupants of divergent realities (Berg, 1975), experience difficulties in forming intimate relationships with one another, and thus will evidence a lack of understanding of others. Richardson's historical analysis of human sexuality and consciousness (1971) is discussed here in order to illuminate the thesis that empathy will be less evident in the traditionally sex-typed than in the androgynous due to the former's difficulty in attaining "psychological intimacy".

In Nun, Witch and Playmate, Richardson (1971) explains that friendship between the sexes seldom occurred in pre-modern times. Previously, women and men thought of themselves exclusively in terms of biological functions, and sexual union was the only means of becoming a complete person. "A personal voluntary friendship between a man and a

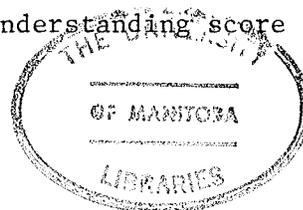
woman was impossible.....(because).....men and women were assumed to be different kinds of beings" (Richardson, 1971, p. 34). Friendship, however, "presupposes full equality and likeness of humanity" in each person (Richardson, 1971, p. 34). In modern times, love becomes, for the first time, the experience of psychological intimacy, fostered by a heightened self-consciousness and created by "conversation" (Richardson, 1971, p. 57).

Through personal conversation, states Richardson, each individual exposes her/his innermost feelings to one another, and thus becomes capable of sharing in each other's psychological lives. This type of intimate conversation has the effect of changing the definitions of male and female identity. "Through psychologically revelatory conversation, therefore, men become more feminine and women become more masculine" (Richardson, 1971, p. 57). Each individual, through this process of identifying with qualities in the other, tends to become psychologically bisexual. "Women become more 'masculinely feminine' [androgynous] and men become more 'femininely masculine' [androgynous]" (Richardson, 1971, p. 57).

Androgynous individuals seem more likely to manifest the heightened self-consciousness, which according to Richardson fosters intimacy, than do individuals adhering to polarized gender roles, in which part of the self is denied expression. Furthermore, prior to intimacy with others, there needs to be intimacy with the self. This necessitates exploring and experiencing a fuller range of human potentialities than what is offered within the limits of traditional sex roles (Goldberg, 1979). The androgynous person is thus assumed to have a greater potential for intimacy than does the traditionally

sex-typed person. Because of the emphasis on communication and sharing within an intimate relationship, empathy and intimacy naturally would occur simultaneously.

To date, only one study directly examines the relationship between empathy and sex roles within a marital relationship (Indvik & Fitzpatrick, 1982). The results of this study offer partial support for the positive relationship between empathy and androgyny. Subjects were 224 couples categorized individually as masculine, feminine, androgynous or undifferentiated according to the BSRI. Empathy (Indvik & Fitzpatrick use the term "understanding") was defined as the accuracy of an individual's description of her/his spouse using the BSRI traits as descriptors. An analysis of the effect of an individual's sex role on understanding revealed only one significant difference among the four sex-role groups, namely between androgynous and undifferentiated individuals. Androgynous persons were significantly more accurate in their perceptions of their spouses than were undifferentiated individuals. Androgynous persons, however, were similar to traditionally sex-typed persons; both were equally able to predict their spouses' responses. At the couple level of analysis, results revealed that the sex role of both the perceiver and the target influenced the perceiver's accuracy. Wives displayed more understanding than husbands in couples where both partners were traditionally sex-typed or androgynous. In mixed-couple types, wives were more understanding if their husbands were sex-typed than if they were undifferentiated. In couples where one spouse was traditionally sex-typed and the other was androgynous, the androgynous spouse was more accurate in predicting her/his spouse; the highest understanding score



in this group was exhibited by the androgynous husband married to a sex-typed wife.

Thus, in Indvik and Fitzpatrick's study (1982), there were no significant differences in understanding between androgynous and sex-typed persons at the individual level. At the couple level of analysis, however, when the target was traditionally sex-typed, the perceiver's understanding was greater than that of her/his partner. When both spouses were sex-typed, understanding was high. The researchers suggest that "the stereotypic attributes associated with a traditionally sex-typed individual may actually enhance the degree to which he/she may be understood by his/her mate" (Indvik & Fitzpatrick, 1982, p. 49). In couples with an androgynous target, sex-typed perceivers were less accurate than their spouses. Understanding was high when both spouses were androgynous. Traditionally sex-typed persons thus displayed difficulty in perceiving their androgynous spouses possibly because the androgynous do not conform to sex-role prescription thus greater sensitivity is required to accurately perceive androgynous spouses (Indvik & Fitzpatrick, 1982).

Although direct support for the proposed relationship between androgyny and empathy appears to be lacking in the literature, there is support for the contention that androgyny represents a model of well-being which enhances effective interpersonal relationships. The findings from Heilbrun's study (1981), previously mentioned, suggest that the androgynous person manifests the cognitive skills of social understanding and insight that foster effective interpersonal behavior. Androgynous individuals also exhibit high social competence (Berzins, Welling & Wetter, 1978) and highly effective social skills

(Kelly & Worell, 1977), Bem and Lenney (1976) have also shown that androgynous persons respond to situational and interaction cues rather than to sex-role expectations, which implies that they have greater sensitivity and may demonstrate greater empathy than traditionally sex-typed persons.

Measures

Empathy is defined as: "feeling yourself into, or participating in, the inner world of another while remaining yourself" (Benjamin, 1974, p. 47). The empathetic individual tries to see the world through the other's eyes, while remaining her/his own self. Empathy differs from sympathy in that the latter focuses more on "feeling" for another (which may range from pity to compassion) yet not really knowing or understanding the world of the other.

Empathetic ability is measured by one's accuracy in perceiving how one's partner (spouse) will respond on measures of androgyny and attitudes toward women. Rather than asking a respondent to describe her/his spouse (the method employed in Indvik & Fitzpatrick's study (1982)), s/he is asked to answer the questionnaire as her/his spouse would have answered. Responding as the spouse would have responded requires greater sensitivity and understanding than merely describing the spouse.

Bem Sex-Role Inventory (BSRI). The BSRI (Bem, 1974) will be used to measure androgyny, masculinity and femininity. The Bem's scale has been the most widely used measure of androgyny, and more is known about its psychometric properties than any other androgyny scales.

Hypothesis II: (i) Highly feminine females will exhibit higher empathetic scores than highly masculine males.

(ii) Androgynous females will have similar empathy scores to androgynous males.

Traditional sex stereotypes depict women as being more expressive and understanding than men (Broverman et al., 1972). Femininity is associated with emotionality, affection, and compassion; masculinity is perceived as the opposite. Compared to females, males have been found to be lower self-disclosers (Jourard, 1971) and less expressive of feelings (Balswick & Avert, 1977). Much of the literature on the male role suggests that this lack of expressiveness is a risk to full self-development, maturity, and intimate relationships (Balswick & Peek, 1971; Goldberg, 1979; Pleck, 1976). Women, on the other hand, apparently possess greater sensitivity and empathy (Dymond, 1949; Indvik & Fitzpatrick, 1982).

Within androgynous measures such as the BSRI, the expressive dimension is associated with femininity. Because males can also endorse the feminine traits, expressiveness is thus associated with sex role and not necessarily with biological sex. High empathetic abilities therefore are perceived as correlating with high femininity regardless of the subject's sex. Similarly, high masculinity in either sex is expected to yield lower empathetic scores. Androgynous individuals endorse both the feminine expressive qualities and the masculine instrumental qualities, and thus regardless of sex, these individuals are expected to have similar empathy scores.

Hypothesis III: Androgynous males and females will display more

egalitarian attitudes toward women than non-androgynous males and females.

According to the androgynous model, traditionally sex-typed individuals are expected to espouse more traditional attitudes toward the sexes than are androgynous individuals. Pleck states that "traditional attitudes should be related to femininity because feminine women should have a psychological investment in the traditional sex-role norms according to which they are highly valued" (1978, p. 623). Similarly, masculinity in males should be related to traditional attitudes.

This expectation is supported by the findings of Spence et al. (1978) and Orlofsky (1981) in which highly masculine males and highly feminine females endorsed more traditional attitudes toward women than less conventionally sex-typed. Moreover, traditionally sex-typed persons perceived larger differences between the sexes (Spence et al., 1978). Jones et al. (1978) also found that androgynous women were less conventional and less constrained by sex roles than traditionally sex-typed women. Other studies report that cross-sex-typing (feminine males and masculine females) is associated with egalitarian attitudes (Bem, 1977; A.B. Heilbrun, 1976; Tarr, 1978). In Heilbrun's study, the relationship between cross-sex-typing and egalitarianism was found only in females; Bem found support for the relationship among males only. The findings of Jordon-Viola et al.'s study (1976) also support the relationship between androgyny and egalitarian attitudes, as well as add to the predictive validity of the BSRI. Among the subjects of their study--feminists, students, employed women, and homemakers--the greatest number of androgynous persons were found in the feminist group.

By using psychological intimacy as a framework for discussion, it can also be argued that androgyny should be related to more liberal attitudes toward the sexes. Intimacy (as does androgyny) presupposes equality between the sexes (Goldberg, 1980; Richardson, 1971). The traditional sex role of dominance and submission are barriers to openly shared feelings found within intimacy. In a traditional marriage of rigidly structured roles, characteristics and behaviors of each partner are seen as complementary. A traditional view of women and women's roles presupposes that there are major differences between the sexes, and that each sex should occupy a particular space in society. The traditional argument states that women, because of their feminine characteristics, belong to the private sphere of the family, whereas men belong to the public sphere. This premise would be inconsistent with individuals experiencing intimate friendships, because intimacy requires equality. Likewise, androgynous individuals would denounce the bi-polar view of masculinity and femininity and its corollary of masculine/feminine roles since they themselves are able to integrate both feminine and masculine qualities,

Measure

Egalitarian attitudes toward the sexes will be measured by the short version of the Attitudes Toward Women Scale (AWS, Spence, Helmreich & Stapp, 1973). This scale contains 25 statements about the rights and roles of women in such areas as vocational, educational, and intellectual activities; dating behavior and etiquette; sexual behavior; and marital relationships. Respondents are requested to indicate their agreement or disagreement with each statement. Each statement is scored according to a 4-point scale ranging from 0 (agree strongly) to 3 (disagree strongly). High scores indicate pro-feminist, egalitarian attitudes.

The original 55-item and the 25-item AWS were found to be unifactorial, with the first factor, Puritan Ethic, accounting for about 68 percent of the variance (Spence et al., 1973). The short version scale scores correlated highly with the full 55-item scale scores for a sample of 241 female college students (.969), for 286 male college students (.969), for 292 mothers of college students (.956) and for 232 fathers of college students (.963) (Spence et al., 1973). These researchers also reported item-total correlations for the short version ranging from .31 to .73 (college students) and .14 to .70 (parents).

Stanley, Boots and Johnson (1975) reported that AWS scores differentiated between selected samples of women. They also examined the internal consistency of the scale for three groups--99 teenage girls, 72 women, and 150 students (62 female and 88 male)--and concluded that the AWS had moderate reliability.

Chapter II

METHOD

Description of Sample

The sample consisted of 30 married couples residing in the city of Winnipeg. Ages ranged from 22 to 45 years for females, with a mean of 32. For males, ages ranged from 23 to 51 with a mean of 34. The number of years a couple had been married ranged from one to 23 with a mean of nine years. All but two of the males (93%) were employed full-time in the labour force and almost half (47%) of the females were full-time employees. The sample consisted of a variety of workers, such as sales and clerical workers, professionals, administrators, and homemakers (see Appendix A for demographic information).

Due to the nature of the research, one of generating ideas rather than generalizing findings, a nonrandom sample was believed to be appropriate for this study. Thus, solicited volunteer subjects participated in the study. Two criteria were necessary for subject selection: couples were to be married and residing together.

Instruments

The Bem Sex-Role Inventory (BSRI) (Bem, 1974) was employed to yield a femininity, masculinity, and androgyny score. The Attitudes Toward Women Scale (AWS) (Spence, Helmreich & Stapp, 1973) was used to measure attitudes concerning the rights and roles of women. A more detailed description of these measures is found in the literature

review. Subjects also rated themselves on how feminine and masculine they thought they were on two 9-point scales ranging from 1--not at all feminine (masculine), to 9--highly feminine (masculine). A 9-point scale was also used to elicit subjects' evaluations of their marriages. Subjects were asked to rate their marital satisfaction from 1--highly dissatisfied, to 9--highly satisfied. These scales have no known reliability or validity.

Questionnaire design. Each questionnaire contained two major parts. Part I included the BSRI and the AWS, as well as basic informational questions such as age and number of years married. Part II also included the BSRI and the AWS; the instructions, however, differed (Appendix B). In Part II, each subject was required to complete the BSRI and the AWS as they perceived their spouses would have completed the measures. It was emphasized that subjects were not to describe their spouses, but rather, respond in a manner that they believed their spouses would have responded. The accuracy of the spouses' perceptions formed the basis for their empathy scores. The 9-point femininity, masculinity, and marital satisfaction scales were also included in Part II. In addition to completing these measures, subjects were also asked to respond to the scales in a manner that they perceived their spouses would have responded.

Data Collection Procedure

Letters were sent to community groups and churches in south Winnipeg and to marriage encounter groups throughout the city, asking married couples to participate in a study on sex roles. Only one

couple replied and agreed to participate. Six groups of couples replied but denied the researcher access to the groups' meetings. The data, as a result, were collected through acquaintances of the researcher. Couples who completed the study were asked to provide the researcher with contacts to other married couples.

Each couple was initially contacted by telephone, at which time they received a brief description of the research. If the couple agreed to participate, arrangements were made to meet the couple in their home and to administer the questionnaires. Instructions were given verbally and in writing (Appendix B). Subjects had no prior knowledge of the details of the research. Each couple received a more detailed explanation of the study after they had completed the questionnaires. The mean questionnaire completion time was 30 minutes.

Data Analysis

Categorization of Subjects

BSRI. The BSRI yields a femininity and a masculinity score. The femininity score ranges from 1 to 7 and is the mean of the 20 feminine items; the masculinity score is the mean of the 20 masculine items. Once these scores are calculated, subjects can be classified as feminine, masculine, androgynous, or undifferentiated using the median-split technique of categorization (Spence et al., 1975; Bem, 1977). The median-split technique is employed because it has been widely used and is capable of discriminating between those individuals who score high on both the feminine and masculine scales (androgynous) and those

who score low on both scales (undifferentiated).

Bem recommends using the medians from her sample of 816 Stanford students (Bem, 1978) as cut-off points if one's own sample is not representative or very large. Although the sample in this research is relatively small and lacks representativeness, the feminine and masculine medians closely parallel Bem's medians as seen in Table 1.

Table 1

Femininity and Masculinity Medians for Sexes Combined

	Femininity	Masculinity	
Winnipeg Couples	4.82	5.10	(N=60)
Bem	4.90	4.95	(N=816)

*Based on Bem's normative sample of Stanford students (1978)

In order to score as feminine, an individual's femininity score should be higher than the feminine median of 4.90 and his or her masculinity score should be lower than the masculine median of 4.95. A total of 14 subjects--13 females and 1 male--scored as feminine. In order to be classified as masculine, an individual's masculinity score should be above the masculine median, and his or her feminine score should be below the feminine median. A total of 19 subjects--4 females and 15 males--met the criteria for the masculine sex role. Those individuals whose femininity and masculinity scores exceeded the medians for both the feminine and masculine scales were classified as androgynous. The remaining 13 subjects--5 females and 8 males--scored below the femininity and masculinity medians and thus were classified as undifferentiated (Table 2), (See Appendix C for a comparison of

Bem's (1978) categories to the Winnipeg sample.)

Table 2
Number and Percentage of Subjects by Sex Role and Sex

Sex	Sex Role				Total
	Fem	Mas	Andro	Undif	
Females	13 (43) (93)	4 (13) (21)	8 (27) (57)	5 (7) (38)	N=30 (100)
Males	1 (3) (7)	15 (50) (79)	6 (20) (43)	8 (27) (62)	N=30 (100)
Both Sexes	14 (23)	19 (32)	14 (23)	13 (22)	N=60
Total	(100)	(100)	(100)	(100)	

Fem = Feminine, Mas = Masculine, Andro = Androgynous, Undif = Undifferentiated, () = Percent

Attitudes Toward Women (AWS). The AWS yields a possible score ranging from 0 to 75. High scores reflect an egalitarian attitude toward women and low scores indicate a traditional attitude. The range in scores for females was from 48 to 73 with a mean score of 65.93. The range for males was from 46 to 75 with a mean score of 59.93 (see Table 4 for AWS mean scores by sex and sex role). The AWS scores were treated as continuous variables (see Appendix D for a comparison of AWS mean scores between this sample and Spence, Helmreich & Stapp's 1973 sample).

Empathy scores. Empathy scores were calculated by measuring subjects' accuracy in predicting their spouses' self-ratings on the BSRI and the AWS measures. Accuracy in prediction has been scored in two major ways in previous research: by correlations and by discrepancy scores (Tiggle, Peters, Kelly & Vincent, 1982). A correlational index is computed by calculating the correlation between subjects' self-ratings and their partners' predicted ratings across all items in a given measure. A discrepancy index is computed by calculating the difference between subjects' self-ratings and their partners' estimates for each item or summed over several items. The discrepancy index can also be calculated algebraically (noting the direction of difference) or absolutely (without regard to direction).

In this study, an absolute item-by-item discrepancy index was used. This score was obtained by calculating the difference between subjects' self-ratings and their partners' predictions for each item in a measure. The differences were summed without regard to direction in order to obtain one score for the BSRI and one for the AWS. This method was assumed to be a more accurate indicator of understanding because it notes the difference for each item of a measure rather than computing the difference over a sum of items. It is more difficult for a subject to accurately predict his or her partner's response for each item than it is to obtain an average estimate across several items. Moreover, this method does not distinguish overestimates from underestimates. The absolute method is more often used in research (Tiggle et al., 1982) and appears to be superior to the algebraic method.

The following hypothetical case illustrates the benefits of using

the absolute method over the algebraic. In the BSRI there are 40 items that subjects are required to estimate for their spouses. If an algebraic method of computation is employed, an individual could possibly obtain a perfect empathy score even though s/he overestimates the spouse by 3 points on 20 items and underestimates the spouse by 3 points on the remaining 20 items. The subject is inaccurate in predictions yet obtains a perfect score of zero. The absolute method, however, does not distinguish overestimates from underestimates, and thus this hypothetical subject would obtain a score of 120. In this case, 20 items were overestimated by 3 (a score of 60) and 20 items were underestimated by 3 (a score of 60), making a total discrepancy score of 120. The score of 120 is more appropriate than a score of 0, because it reflects the subject's inability to accurately predict the partner.

The term empathy/discrepancy score will be used to refer to the subject's accuracy in predicting his or her spouse's self-ratings. Two scores were calculated for each subject--one for the BSRI and one for the AWS. The range in empathy/discrepancy scores for the BSRI was from 18 to 68 with a mean score of 42.52 (see Table 3 for mean scores by sex and sex role). Empathy/discrepancy scores on the AWS ranged from 3 to 26 with a mean score of 14.70 (Table 4). Low scores indicate more accuracy in predictive ability than high scores. Because the BSRI contains 40 items (the 20 social desirability items are not included in the calculation of empathy/discrepancy scores) with a range from 1 to 7 for each item, and the AWS contains 25 items with a range from 1 to 4, empathy/discrepancy scores will naturally be higher for the BSRI.

Table 3

Mean BSRI Empathy/Discrepancy Scores by Sex and Sex Role

Sex	Sex Role				Total
	Fem	Mas	Andro	Undif	
Females	41.76	34.25	40.88	51.40	42.13
Males	56.00	39.53	41.00	48.62	42.90
Both Sexes	42.78	38.58	40.92	49.69	42.52

Note: Low scores indicate more accuracy in prediction than high scores.

Table 4

Mean AWS Empathy/Discrepancy Scores by Sex and Sex Role

Sex	Sex Role				Total
	Fem	Mas	Andro	Undif	
Females	17.23	19.50	14.63	16.20	16.67
Males	22.00	10.67	15.17	13.63	12.73
Both Sexes	17.43	12.53	14.86	14.62	14.70

Note: Low scores indicate more accuracy in predictions than high scores.

Statistical Analyses

Nonparametric tests were employed in order to avoid having to make some of the assumptions associated with parametric tests. The Mann-Whitney U, a two-sample test, is one of the most powerful of the nonparametric tests, and is an appropriate alternative to the parametric t-test. The Mann-Whitney U was used to test Hypothesis II and

in further analyses which examined differences between the sexes. The U test combines the scores from both samples, ranks them, and then determines the sum of ranks for each group. A two-tailed test which predicts a difference but does not state direction was used. The Kruskal-Wallis One-Way Analysis of Variance was employed to test Hypotheses II and III. The Kruskal-Wallis is similar to the U test in that it employs the sum of ranks of scores. It differs from the U test in that it is used for more than two groups. In further exploratory analyses in which correlational analyses were necessary, Spearman r was employed. In all cases where the observed level of significance was less than .05, the null hypothesis was rejected.

Summary

The sample consisted of 30 married couples. Subjects completed the BSRI and the AWS for themselves and for their spouses. The median-split technique was used to categorize the subjects into feminine, masculine, androgynous, and undifferentiated groups. This method yielded 14 feminine, 19 masculine, 14 androgynous, and 13 undifferentiated subjects. The Mann-Whitney U, the Kruskal-Wallis, and Spearman r , all nonparametric tests, were used to analyze the data.

Chapter III

RESULTS

Results from this study are reported in two major sections. The first deals with specific hypotheses, the second consists of further exploratory analyses. For the purposes of statistical analysis, all hypotheses are stated in the null form.

Major Hypotheses

Hypothesis I

H₀ There will be no difference in empathy/discrepancy scores between feminine, masculine, androgynous, and undifferentiated individuals.

Kruskal-Wallis One-Way Analysis of Variance was used to test whether the four sex-role groups differed on either the BSRI empathy/discrepancy scores or the AWS empathy/discrepancy scores. The results were significant for the BSRI, $p=.016$, (Table 5). The masculine group had the lowest empathy/discrepancy score with a mean of 38.58, followed by the androgynous ($\bar{X}=40.93$) and the feminine ($\bar{X}=42.79$). The undifferentiated group had the highest mean empathy/discrepancy score of 49.69. Low scores indicate a greater ability to accurately predict a partner while high scores reflect a poorer predictive ability. Masculine subjects thus were the most accurate in their ratings of their spouses on the BSRI. The null hypothesis was rejected in the

Table 5

Mean and Mean Rank BSRI Empathy/Discrepancy Scores by Sex Role

	Sex Role				χ^2	p
	Fem (n = 14)	Mas (n = 19)	Andro (n = 14)	Undif (n = 13)		
Mean	42.79	38.58	40.93	49.69	10.313	.016*
(Mean Rank)	(30.64)	(23.42)	(28.14)	(43.23)		

Fem = Feminine, Mas = Masculine, Andro = Androgynous, Undif = Undifferentiated

case of the BSRI empathy/discrepancy scores, although the predicted direction was in error.

For the AWS empathy/discrepancy scores no significant difference occurred between the four sex-role groups (Table 6).

Table 6

Mean and Mean Rank AWS Empathy/Discrepancy Scores by Sex Role

	Sex Role				χ^2	p
	Fem (n = 14)	Mas (n = 19)	Andro (n = 14)	Undif (n = 13)		
Mean	17.43	12.53	14.86	14.62	4.784	.188
(Mean Rank)	(38.21)	(24.82)	(30.14)	(30.88)		

The Mann-Whitney U was used to test for any differences in BSRI empathy/discrepancy scores between any two sex-role groups. Significant differences occurred between the feminine and the undifferentiated

groups, $p=.0464$, the masculine and the undifferentiated groups, $p=.0031$, and the androgynous and undifferentiated groups, $p=.0211$. In all cases, the undifferentiated groups had the highest empathy/discrepancy scores, indicating the poorest ability to accurately predict their spouses' self-ratings on the BSRI (Table 7).

Table 7

Mean Ranks of BSRI Empathy/Discrepancy Scores by Sex Role

Sex Role and Mean Rank				Mann-Whitney U	two-tailed p
Fem	19.54	Mas	15.13	97.5	.1947
Fem	15.04	Andro	13.96	90.5	.7298
Fem	11.07	Undif	17.15	50.0	.0464*
Mas	15.84	Andro	18.57	111.0	.4219
Mas	12.45	Undif	22.42	46.5	.0031*
Andro	10.61	Undif	17.65	43.5	.0211*

Hypothesis II (i)

H_0 There will be no difference in empathy/discrepancy scores between feminine females and masculine males.

Mann-Whitney U was used to test whether or not feminine females and masculine males differed with respect to empathy/discrepancy scores. In the case of the BSRI, results were not significant, $p=.6115$, (Table 8). For the AWS, results were significant, $p=.0102$, (Table 8),

Table 8
 Mean and Mean Rank Empathy/Discrepancy Scores for
 Feminine Females and Masculine Males

		Fem Females (n = 13)	Mas Males (n = 15)	Mann-Whitney U	Two-Tailed p
BSRI	Mean	41.77	39.53	86.5	.6115
	Mean Rank	(15.35)	(13.77)		
AWS	Mean	17.23	10.67	42.0	.0102*
	Mean Rank	(18.77)	(10.80)		

Masculine males had significantly lower empathy/discrepancy scores ($\bar{X}=10.67$) than feminine females ($\bar{X}=17.23$), indicating that masculine males were more accurate in their predictions of their spouses' AWS self-ratings than were feminine females. The hypothesis received limited support because the results were contradictory--significant difference in empathy/discrepancy scores occurred between feminine females and masculine males when subjects predicted their spouses' self-ratings on the AWS but not on the BSRI. The direction of difference in AWS empathy/discrepancy scores which occurred was, however, in error since masculine males exhibited greater accuracy in their predictions than feminine females.

Analyses were also performed to see if differences in empathy/discrepancy scores occurred when femininity and masculinity scores were treated as continuous variables. Spearman r was used to test whether or not subjects' femininity or masculinity scores were associated with their empathy/discrepancy scores. There was no correlation

between femininity and the BSRI empathy/discrepancy scores, $\underline{r} = -.0208$, $\underline{p} = .437$, nor between masculinity and the BSRI empathy/discrepancy scores $\underline{r} = -.2065$, $\underline{p} = .057$. For the AWS, there was no correlation between masculinity and empathy/discrepancy scores, $\underline{r} = -.2031$, $\underline{p} = .060$, but there was between femininity and the empathy/discrepancy scores, $\underline{r} = .2738$, $\underline{p} = .016$. Femininity was positively associated with empathy/discrepancy scores, i.e., negatively associated with predictive ability (Table 9).

Table 9

Spearman Correlations for BSRI and AWS Empathy/Discrepancy Scores and Femininity and Masculinity Scores

Empathy/Discrepancy Score		Spearman \underline{r}	\underline{p}
BSRI	Femininity	-.0208	.437
	Masculinity	-.2065	.057
AWS	Femininity	.2783	.016*
	Masculinity	-.2031	.060

Hypothesis II (ii)

H_0 There will be no difference in empathy/discrepancy scores between androgynous females and androgynous males.

Mann-Whitney U analysis revealed no significant differences between androgynous females and androgynous males on the BSRI, $\underline{p} = .5636$, and the AWS, $\underline{p} = .9302$, empathy/discrepancy scores. The null hypothesis was therefore not rejected (Table 10).

Table 10
 Comparison of BSRI and AWS Empathy/Discrepancy Scores
 between Androgynous Females and Androgynous Males

	Andro Females (n = 8)	Andro Males (n = 6)	Mann- Whitney U	Two- Tailed p
BSRI Mean	40,88	49,20		
Mean Rank	(7.88)	(7,00)	21,0	.6982
AWS Mean	14,12	18,20		
Mean Rank	(7.19)	(7.92)	21,5	.7453

Hypothesis III

H₀ There will be no difference in AWS scores between androgynous and non-androgynous individuals.

The Mann-Whitney U was employed to compare androgynous and non-androgynous individuals respective to their AWS scores. The results were not significant, $p = .1747$, (Table 11).

Table 11
 Mean Ranks of AWS Scores
 of Androgynous and Non-Androgynous Subjects

	Andro (n = 14)	Non-Andro (n = 46)	Mann- Whitney U	Two- Tailed p
Mean Ranks of AWS	36,04	28,82	244,5	.1747

Further analyses were performed to test whether or not differences occurred between the four sex-role groups. No significant differences occurred (Table 12). The null hypothesis was therefore not rejected.

Table 12
Mean and Mean Ranks of AWS Scores by Sex Role

	Sex Role				χ^2	p
	Fem (n = 14)	Mas (n = 19)	Andro (n = 14)	Undif (n = 13)		
Mean	61.29	62.26	65.57	62.85		
(Mean Rank)	(26.25)	(30.03)	(36.04)	(29.81)	2.279	.517

Although androgynous individuals had the highest mean AWS scores, indicating the most egalitarian attitudes toward women, a significant difference in AWS scores did not occur between the four sex roles.

Further Exploratory Analyses

Further analyses were performed to test for sex differences, within-sex differences, differences in empathy/discrepancy scores when the sex role of the target spouse was examined, and differences that may have occurred due to factors such as age and years of marriage.

Sex Differences

Empathy/Discrepancy scores. The Mann-Whitney U was employed for a comparison between the males' empathy/discrepancy scores and the females' empathy/discrepancy scores. No significant differences

occurred between the females' BSRI empathy/discrepancy scores ($\bar{X} = 42.13$) and the males' ($\bar{X} = 42.90$). The results were significant for the AWS empathy/discrepancy scores, $p = .0207$. Males, regardless of sex role, had significantly lower scores ($\bar{X} = 12.73$) than females ($\bar{X} = 16.67$). This indicates that husbands tended to have more accuracy in predicting their wives' self-ratings on the AWS than vice versa (Table 13).

Table 13
Comparison of Empathy/Discrepancy Scores
between Females and Males

		Females (n = 30)	Males (n = 30)	Mann- Whitney U	Two- Tailed p
BSRI	Mean	42.13	42.90		
	Mean Rank	(30.08)	(30.92)	437.5	.8532
AWS	Mean	16.67	12.73		
	Mean Rank	(35.70)	(25.30)	294.0	.0207*

Attitudes toward women. The Mann-Whitney U was used to test whether any differences occurred in AWS scores between females and males. The results were significant, $p = .0049$. Females had significantly higher AWS scores ($\bar{X} = 65.93$) than males ($\bar{X} = 59.93$). The higher scores found among females indicate a more egalitarian attitude toward women than the lower scores found among men (Table 14).

Table 14

Mean and Mean Rank AWS Scores for Females and Males

	Females (n = 30)	Males (n = 30)	Mann- Whitney U	Two- Tailed p
Mean	65.93	59.93		
(Mean Rank)	(36.83)	(24.17)	260.0	0049*

Within-sex differences

Empathy/Discrepancy scores. Kruskal-Wallis was used to test for any differences in empathy/discrepancy scores between the four sex-role groups within a particular sex. For both the BSRI and AWS no significant differences occurred for either females, BSRI, $p = .062$; AWS, $p = .355$, (Table 15) or for males, BSRI, $p = .124$; AWS, $p = .158$, (Table 15).

Differences in BSRI empathy/discrepancy scores between any two sex-role groups within a particular sex were tested for with the Mann-Whitney U. Significant differences occurred only between the masculine and the undifferentiated for females, $p = .0275$, as well as for males, $p = .0452$, (Table 16). Masculine females and males exhibited greater predictive abilities than undifferentiated females and males.

Table 15
 Mean and Mean Rank of BSRI and AWS Empathy/Discrepancy Scores
 by Sex Role for Females and Males

	Sex Role				χ^2	p
	Fem	Mas	Andro	Undif		
Female	(n = 13)	(n = 4)	(n = 8)	(n = 5)		
BSRI						
Mean	41.76	34.25	40.88	51.40		
Mean Rank	(15.00)	(7.38)	(15.56)	(23.20)	7.333	.062
AWS						
Mean	17.23	19.50	14.63	16.20		
Mean Rank	(16.91)	(20.63)	(11.25)	(16.40)	3.391	.335
Male	(n = 1)	(n = 15)	(n = 6)	(n = 8)		
BSRI						
Mean	56.00	39.53	41.00	48.62		
Mean Rank	(26.50)	(13.17)	(12.83)	(20.50)	5.756	.124
AWS						
Mean	22.00	10.67	15.17	13.63		
Mean Rank	(29.00)	(12.60)	(19.25)	(16.44)	5.190	.158

Table 16
 Mean Ranks of BSRI Empathy/Discrepancy Scores for
 Females and for Males by Sex Role

Sex		Sex Role		Mann-Whitney U	Two-Tailed p
Female	Fem	(10.15)	Mas (5.25)	11.0	.0879
	Fem	(10.73)	Andro (11.44)	48.5	.7989
	Fem	(8.12)	Undif (13.10)	14.5	.0753
	Mas	(4.38)	Andro (7.56)	7.5	.1453
	Mas	(2.75)	Undif (6.80)	1.0	.0275*
	Andro	(5.56)	Undif (9.30)	8.5	.0914
Male	Fem	(16.00)	Mas (8.00)	0.0	.1032
	Fem	(6.50)	Andro (3.58)	.5	.2072
	Fem	(6.00)	Undif (4.88)	3.0	.6973
	Mas	(11.23)	Andro (10.42)	41.5	.7848
	Mas	(9.93)	Undif (15.88)	29.0	.0452*
	Andro	(5.83)	Undif (8.75)	14.0	.1962

Spearman correlations were used to test whether femininity or masculinity when treated as continuous variables, was associated with empathy/discrepancy scores for females and for males. A relationship only occurred for males as a group. For males, masculinity was negatively associated with the BSRI empathy/discrepancy score, $r = -.3653$, $p = .024$. In other words, as a male's masculinity score increased, his predictive ability increased (Table 17). No relationships emerged for the AWS empathy/discrepancy scores and masculinity or

femininity for either females or males (Table 18).

Table 17

Spearman Correlations for BSRI Empathy/Discrepancy Scores
and Femininity and Masculinity for Females and for Males

	Females (n = 30)	Males (n = 30)
Femininity	.0408 ($\underline{p}=.415$)	-.0650 ($\underline{p}=.366$)
Masculinity	-.0338 ($\underline{p}=.430$)	-.3653 ($\underline{p}=.024^*$)

Table 18

Spearman Correlations for AWS Empathy/Discrepancy Scores and
Femininity and Masculinity for Females and Males

	Females (n = 30)	Males (n = 30)
Femininity	.0006 ($\underline{p}=.499$)	.2672 ($\underline{p}=.077$)
Masculinity	-.1308 ($\underline{p}=.245$)	.0872 ($\underline{p}=.323$)

Attitudes toward women. Further analyses were performed using the Kruskal-Wallis, to test for any differences between the four sex roles within females and within males. No significant differences emerged for males, $\underline{p} = .432$. For females, however, significant differences in attitudes toward women were found between the four sex roles, $\underline{p} = .047$, (Table 19).

Table 19

Mean and Mean Rank of AWS Scores by Sex and Sex Role

Sex	Sex Role				χ^2	p
	Fem	Mas	Andro	Undif		
Female	(n = 13)	(n = 4)	(n = 8)	(n = 5)		
Mean	62.46	69.50	68.75	67.60		
Mean Rank	(10.42)	(20.75)	(19.75)	(17.70)	7.974	.047*
Male	(n = 1)	(n = 15)	(n = 6)	(n = 8)		
Mean	46.00	60.33	61.33	59.88		
Mean Rank	(1.50)	(15.70)	(17.08)	(15.69)	2.747	.432

Note: High scores indicate more egalitarian attitudes; low scores indicate more traditional attitudes.

As seen in Table 19, masculine females had the highest AWS scores ($\bar{X} = 69.50$); androgynous females ($\bar{X} = 67.60$) and undifferentiated females ($\bar{X} = 67.60$) followed closely. Feminine females had the lowest AWS scores ($\bar{X} = 62.46$). Masculine females thus espoused the most egalitarian attitudes toward women while feminine females had the most traditional attitudes toward women.

Spearman correlations were used to test whether a subject's femininity or masculinity (as a continuous score) was associated with attitudes toward women. For males, no correlations occurred between masculinity and the AWS, $r_s = -.0233$, $p = .451$, or between femininity and the AWS, $r_s = .1357$, $p = .237$. For females, femininity was negatively associated with the AWS, $r_s = -.3777$, $p = .020$, indicating that an increase in the femininity score was accompanied by a decrease in egalitarian attitudes toward women. Masculinity for females was

positively associated with the AWS, $r = .5533$, $p = .001$. indicating that an increase in the masculine score was accompanied by an increase in egalitarian attitudes toward women (Table 20).

Table 20
Spearman Correlations for Femininity and Masculinity
and AWS Scores for Females and Males

	Females (n = 30)	Males (n = 30)
Femininity	-.3777 ($p = .020^*$)	.1357 ($p = .237$)
Masculinity	.5533 ($p = .001^*$)	-.0233 ($p = .451$)

Sex Role of the Target Spouse and Empathy/Discrepancy Scores

Analyses were also performed with the Kruskal-Wallis to see whether differences in empathy/discrepancy scores occurred when the sex role of the spouse being predicted (target spouse) was examined. Results were significant for the BSRI empathy/discrepancy scores, $p = .032$. Regardless of the perceiver's sex role, when the target spouse was undifferentiated, perceivers had the most difficulty in predicting their spouses' self-ratings of the BSRI. When the target spouse was undifferentiated, the predicting spouses' mean empathy/discrepancy score was 50.46, significantly higher than when the target spouse was masculine, feminine, or androgynous (Table 21). When the target spouse was masculine, perceivers had the lowest mean empathy/discrepancy score. Thus, subjects had the most accuracy in predicting a masculine spouse, regardless of sex, and the least accuracy in predicting an undifferentiated spouse.

Table 21

Perceivers' Mean and Mean Rank BSRI Empathy/Discrepancy Scores by Targets' Sex Role and Sex

	FEM		MAS		ANDRO		UNDIF		χ^2	p
	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>		
Female		46.00		40.40		39.17		47.12		
Perceivers		(22.00)		(14.40)		(11.92)		(19.25)	3.210	.360
Male	40.15		38.00		41.38		55.80			
Perceivers	(13.08)		(12.60)		(14.75)		(25.40)		7.845	.049*
Female & Male	40.57		39.89		40.43		50.46			
Perceivers	(26.39)		(27.50)		(26.89)		(43.19)		8.922	.032*

F = Female Target

M = Male Target

() = Mean Rank

Note: Low scores indicate more accuracy in predictions.

Within-sex differences. The Kruskal-Wallis was employed to analyze males and females separately. When the males were the target, no significant differences were found between the four sex roles and the females' BSRI empathy/discrepancy scores. In other words, the sex role of the husband was not related to the wife's ability to predict. When the females were the target, significant differences occurred between the sex-role groups and the males' ability to predict, $p = .049$. Masculine females were the easiest to predict (males' mean empathy/discrepancy score = 38.00) followed by feminine females and androgynous females. When the females were undifferentiated, males displayed the least accuracy in predicting them on the BSRI ($\bar{X} = 55.80$) (Table 21).

In all cases, there were no significant differences for the AWS empathy/discrepancy scores (Table 22).

Age and Sex Role

Analyses were performed to see whether subjects' ages were associated with a particular sex role. Kruskal-Wallis for age by sex role revealed a significant difference, $p = .011$. Undifferentiated individuals had the highest mean age ($\bar{X} = 37.46$) followed by masculine ($\bar{X} = 34.89$), androgynous ($\bar{X} = 30.57$), and feminine ($\bar{X} = 29.57$). When the sexes were analyzed separately, no significant differences occurred for females, $p = .149$, but there was a significant difference in age between sex roles for males, $p = .042$. The one feminine male appeared to account for the difference and thus an analysis was performed to test for differences among the remaining three sex-role groups. No significant differences were found when the feminine

Table 22

Perceivers' Mean and Mean Rank AWS Empathy/Discrepancy Scores by Targets' Sex Role and Sex

	FEM		MAS		ANDRO		UNDIF		χ^2	p
	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>		
Female Perceivers		20.00 (24.50)		15.47 (13.10)		17.17 (15.50)		18.12 (18.88)	3.373	.338
Male Perceivers	16.23 (20.46)		9.50 (10.63)		9.50 (11.19)		11.40 (13.40)		7.606	.055
Female & Male Perceivers		16.50 (36.50)		14.21 (28.61)		12.78 (24.14)		15.54 (33.65)	4.179	.243

F = Female Target

M = Male Target

() = Mean Rank

Note: Low scores indicate more accuracy in predictions.

male was removed from analysis, $p=.053$, (Table 23).

Table 23

Mean and Mean Rank of Subjects' Ages by Sex Role and Sex

Sex	Sex Role				χ^2	p
	Fem	Mas	Andro	Undif		
Females (n = 30)						
M	30.08	35.75	30.57	37.46		
MR	(12.92)	(20.50)	(15.63)	(18.00)	2.817	.419
Males (n = 30)						
M	23.00	34.67	28.82	39.00		
MR	(1.50)	(16.23)	(9.33)	(20.50)	8.191	.042*
Males (n = 29)						
M	----	34.67	28.83	39.00		
MR	----	(15.23)	(8.42)	(19.50)	5.857	.053
Females & Males (n = 60)						
M	29.57	34.89	30.57	37.46		
MR	(20.82)	(36.00)	(24.61)	(39.23)	11.071	.011*

M = Mean

MR = Mean Rank

Years of Marriage and Empathy/Discrepancy Scores

Since the number of years married may have influenced a spouse's ability to predict his or her spouse, this variable was examined. Spearman correlation was computed to see whether there was an association between years of marriage and the BSRI empathy/discrepancy scores. No relationship was found, $r = .1335$, $p = .155$.

Chapter IV

DISCUSSION

The major objective of this study was to test the hypotheses that androgynous individuals had greater empathetic abilities and espoused more egalitarian attitudes toward women than traditionally sex-typed individuals. This section includes a discussion of the results, limitations of the study, and suggestions for further research.

Hypothesis I

The findings revealed that sex role was a differentiating variable with respect to empathetic abilities. The results, however, were unexpected in that masculine individuals rather than androgynous individuals tended to manifest greater accuracy in predicting their spouses' scores on the Bem Sex-Role Inventory (BSRI) (Bem, 1974). Androgynous individuals were the second most accurate, feminine individuals were third, while the undifferentiated were the least accurate in their predictions. Although masculine individuals were the most accurate, there were no significant differences in predictive abilities between masculine and androgynous individuals, or between masculine and feminine individuals. When any two sex-role groups were analyzed, significant differences emerged between feminine and undifferentiated individuals, masculine and undifferentiated individuals, and androgynous and undifferentiated individuals. In all cases subjects who were categorized as undifferentiated exhibited the least accurate

predictions of their spouses' ratings on the BSRI. In comparison to the undifferentiated group therefore, all three remaining sex-role groups were superior in empathetic abilities. The masculine group, however, emerged as superior when all four sex roles were compared.

The reasons for the unexpected finding that masculine individuals demonstrated the most accuracy in their predictions could be due to:

(i) the mode of operationalizing empathy; (ii) likely inadequacies of the BSRI; (iii) the situational expressiveness of masculine males.

Predictive Ability

Predicting one's spouse on a series of characteristics may not be an adequate measure of empathy. Rather, it may be more appropriately defined as perceptive or predictive ability, which may not necessarily entail a degree of understanding or empathy. If predicting or perceiving the other is what actually is being measured, then masculine individuals may indeed have an advantage over others in predicting abilities.

Some of the characteristics associated with the masculine sex role may foster the ability to predict others. Masculinity has been associated with strong self-definitions and clear boundaries between the self and other (Bardwick, 1979), and also with competitiveness in interpersonal relations (Harris & Reiko, 1979). These qualities may enhance predictive abilities among masculine individuals. Other masculine stereotypes such as objectivity, rationality, intellectualism, and ambitiousness, may also foster the ability to "know" the other. Knowing or intellectualism has traditionally been associated with masculinity while feeling and emotionalism has traditionally been

associated with femininity (Bardwick, 1974; Lips & Colwill, 1978). Being masculine therefore, may enhance the ability to know or to predict the other, while being feminine may foster "feeling for" the other.

Support for the idea that masculinity is positively associated with predictive ability is found in some of the literature on decoding (interpreting) and encoding (sending) messages. Hall and Halberstadt (1981) reported a weak tendency for masculinity to be positively correlated with the decoding of nonverbal messages. They also suggest that femininity may be detrimental for an individual's decoding ability. Similarly, Rosenthal and De Paulo (1979) found a tendency for individuals who espoused a task-oriented style of leadership (masculine) to be better decoders than those with a more socio-emotional style of leadership (feminine). Hall and Halberstadt (1981) conclude that "the goals of the more 'masculine' person may involve interpersonal effectiveness--accomplishing joint tasks, being a good leader, winning in competition--and this kind of effectiveness may require more developed ability to judge others' feelings and moods" (p. 284).

Limitations of the Bem Sex-Role Inventory

The tendency for masculinity to be positively related to predictive ability may be explained by certain inadequacies in the BSRI. Although Bem (1974) claims that both the masculine and feminine items of the BSRI are socially desirable, some of the items, particularly those in the feminine scale, do not appear to meet the criterion of social desirability. Characteristics such as "gullible", "child-like", and "flatterable" are questionable with respect to desirability (Silvern & Ryan, 1979). To the extent that relatively undesirable

items are included in the femininity scale, while more positive, desirable items are found in the masculine scale, feminine individuals may be at a disadvantage in terms of predictive ability. A person who is gullible and childlike may have more difficulty in predicting others, than one who is independent and analytical. Gullibility is probably negatively associated with predictive ability. The BSRI thus appears to have some inadequacies, in that the femininity scale includes negative, socially undesirable traits, which, if endorsed, may hamper an individual's ability to accurately predict others.

Situational Expressiveness of Males

Because 15 of the 19 masculine subjects in this study were male, some of the literature on the "inexpressive male" (Balswick & Peek, 1971) may offer an explanation of the masculine males' ability to accurately predict their wives' answers on the BSRI. Balswick and Peek (1971) describe how males may learn to become situationally expressive rather than totally inexpressive. Although inexpressiveness is an expectation attached to the male sex role, in certain situations, particularly within marriage, open communication and expressiveness is encouraged (Balswick & Peek, 1971). Within a marriage or at home, males may learn to be understanding, nurturant, and expressive, and thus may develop a good understanding of their wives. Balswick and Peek (1971) also suggest that the strong, salient, inexpressive male is on the decline, and that expressiveness is increasingly being encouraged and expected in males, especially in a marriage. The idea of situational expressiveness by no means fully explains the results of the study, but nonetheless is an

interesting concept to consider, particularly because of its social-psychological emphasis

Undifferentiated Individuals

It was not unexpected that undifferentiated individuals would be the least accurate in their predictions of their spouses' self-ratings. Indvik and Fitzpatrick (1981) found similar results in their study.

Lips and Colwill (1978) suggest the possibility that the BSRI may be measuring something broader than sex typing which may entail: "a general ability and willingness to deal with complexity and to transcend narrow definitions of what is appropriate behavior for certain categories of people" (p. 142). Viewing Bem's research in terms of cognitive complexity rather than androgyny, implies that the undifferentiated are the least complex individuals. Being less complex presumably would hinder one's ability to perceive a variety of personality traits which is more likely found in the cognitively complex individual. The least complex individual may perceive others in simplistic terms and thus have difficulty in discriminating between degrees of a personality characteristic--a task which is required in the BSRI scales. As Lips and Colwill (1978) point out, this idea is speculative and to date has received no empirical support.

Another factor which may account for the poor predictive ability exhibited by undifferentiated individuals may be low self-esteem. Studies investigating the relation between self-esteem and sex role have consistently found low self-esteem among undifferentiated individuals (Bem, 1977; Spence et al., 1975). Individuals who have little

regard for themselves or who have not developed a sense of identity or strength may tend to idolize the loved person (see Fromm, 1956, p. 83 for a discussion of "pseudo-love"). Undifferentiated individuals, thus, may rate their partners high on the BSRI items, regardless of their partner's self-ratings. Due to the type of empathy-discrepancy score--absolute item-by-item discrepancy index--used in this study, the direction of difference (high versus low rating) was not noted, thus this concept was not examined.

Hypothesis II (i)

BSRI Empathy/Discrepancy

The results revealed that there were no significant differences between feminine females and masculine males in their BSRI empathy/discrepancy scores. This result was contrary to the expected finding that feminine females, because of their expressive, nurturant and understanding role, would be more accurate in their perceptions of their spouses than masculine males. The finding of no difference tends to support the claim of some researchers (e.g., Kirkpatrick & Hobart, 1954; Maccoby & Jacklin, 1974) which states that women are not more interpersonal or more intuitive than men.

AWS Empathy/Discrepancy

A comparison of AWS empathy/discrepancy scores showed that masculine males were more accurate in predicting their partners on the AWS than were feminine females. Although this is contrary to what was initially predicted, the significant difference was found only with the AWS and not the BSRI. It was suspected, therefore, that an explanation

for this finding may lie in the context of the items being predicted.

The fact that the AWS contains statements about the rights and roles of women raises the possibility that women are more vocal in this area than are men. Assuming that this is valid, then it follows that husbands, who are the recipients of their wives' feelings on the AWS would have more ease in predicting their wives' responses. Although inconsistent, there is some literature which suggests that women, compared to men, are more expressive of feeling statements, and intimate topics (Balswick & Avert, 1977; Jourard, 1971; Sermat & Smyth, 1973). Men, on the other hand, have been reported to have more difficulty in expressing "feeling" statements (Balswick & Peck, 1971; Goldberg, 1977; Lewis, 1978) and thus their wives may have difficulty in perceiving their husbands' views on the AWS.

This finding also may offer partial support for "the case of the well-meaning liberal male" (Gackenbach & Auerbach, 1975). Based on their findings, Gackenbach and Auerbach (1975) state that "a certain duplicity exists among a substantial number of males who verbalize or intellectualize liberal sex-role attitudes, but who do not differ from their sexist counterparts in emotional response to stimuli seemingly incongruent with their verbalized attitudes" (p.632). In other words, some males may verbalize non-sexist attitudes because of a perceived social desirability to do so. In actuality, however, these males may not differ from their sexist counterparts. If "the case of the well-meaning liberal male" is applied to the findings of this study, it could explain why wives were inaccurate in their ratings of their husbands on the AWS. Perhaps some males are inflating their pro-egalitarian views on paper, while simultaneously sending messages to

their wives which indicate a more traditional viewpoint. A further examination of the predicted ratings on the AWS revealed that wives generally underestimated their husbands on the AWS. Essentially this means that 77% of the wives rated their husbands as more traditional than husbands perceived themselves to be. In comparison, 60% of husbands perceived their wives as more traditional than indicated by the wives' self-ratings.

While the case of the well-meaning liberal male can be a persuasive argument for explaining why women were less accurate than men in their perceptions of their partners' AWS self-ratings, as of yet, it has not received much empirical support. Other researchers, however, have raised similar issues in their studies (Komarovsky, 1973; Tavis, 1973). Komarovsky (1973) points to a similar phenomenon in her study of cultural contradictions and the male sex role. Within her sample of college males, Komarovsky (1973) found that while support for the belief in sex-role differentiation was weakening, these males remained attached to traditional attitudes and behaviors. Tavis (1973) calls this same phenomenon "the case of the unliberated Liberals" (p. 175). In a survey intended to explore the experiences and beliefs that contribute to an individual's support of or opposition to the women's liberation movement, Tavis found that a large majority of men endorsed attitudes which fell between the extreme traditionalists and egalitarians. She states that the males' attitudes may be egalitarian but their behavior is traditional. For example, 73% of married men approved of equality in housekeeping and child care (Tavis refers to this as a "good-liberal issue"), yet only 15% of them actually shared these responsibilities (Tavis, 1973, p. 196).

In applying the arguments of the "well-meaning liberal male" to this study, one issue which should be raised is the validity of questioning the males' self-ratings on the AWS while simultaneously "believing" the females' self-ratings. Women as well are experiencing contradictions within the feminine sex role and some may be exhibiting similar inconsistencies between values and behavior. If a similar phenomenon is operating among women, then men should be no more accurate than women in predicting their partners' self-ratings in the AWS. Although the results showed that masculine males displayed more accurately than feminine females, and this lends support to "the case of the well-meaning liberal male"--this finding cannot allow one to judge which subjects' responses are 'valid' and which are not.

Hypothesis II (ii)

The results, supportive of the hypothesis, showed that there were no significant differences between androgynous females and androgynous males with respect to their empathy/discrepancy scores. Both were similar in their abilities to predict the responses of their partners. This finding tends to support the contention that sex role rather than sex is a differentiating variable. This finding, however, is not strong considering that there were only eight androgynous females and six androgynous males.

Hypothesis III

There were no significant differences in AWS scores between androgynous and non-androgynous individuals. Furthermore, no significant differences were found between androgynous and traditionally sex-typed individuals. It was originally expected that androgynous

individuals would be more likely to espouse egalitarian attitudes, whereas sex-typed individuals would be more likely to hold traditional attitudes. This was not supported by the findings.

One reason why sex role was not predictive of AWS scores could be due to the relatively narrow range of scores (from 46-75). Even at the lowest score of 46 a subject could be classified as relatively egalitarian. The extreme in scores occurs only at one end (score of 75) indicating the highest egalitarian score possible. Thus, extremely traditional attitudes are not reflected in this sample. Compared to Spence, Helmreich and Stapp's 1973 sample, mean scores in this sample are quite high, i.e., reflecting egalitarian attitudes (Appendix D). The relatively high scores found in this sample of subjects indicate that these subjects are quite egalitarian in their attitudes or, alternatively, that attitudes toward women have changed since 1973.

Sex Differences

Although sex role rather than sex was predicted as a major discriminating variable, analyses by sex were performed to determine whether or not sex differences did exist.

Results from the comparison of female empathy/discrepancy scores to male scores revealed no sex difference in the BSRI empathy/discrepancy scores. Males, however, did emerge as significantly more accurate than females in their predictions of their spouses on the AWS. Although not directly hypothesized, it was expected that if there was a difference in empathy/discrepancy scores between females and males, then it would be females who would exhibit greater predictive abilities. As discussed previously, because a difference only emerged with the

AWS empathy/discrepancy scores the result may be due to the content of items in the AWS.

In comparing females to males on their attitudes toward women, females were found to espouse more egalitarian, pro-feminist attitudes. This was an expected finding. It is presumed that women have more to gain economically and socially, by supporting feminist issues and thus would subscribe more strongly to egalitarian attitudes. Some males on the other hand, are likely to perceive themselves as losing some of their rights if equality between the sexes was the norm. Thus these males may not support the pro-feminist statements in the AWS as strongly as women do.

Within-Sex Differences

In examining within-sex differences, subjects are categorized by sex and sex roles, and thus the numbers in each group are considerably smaller than when both females and males are treated as a group. The findings in this section therefore should be treated as having less strength than previous findings.

Empathy/Discrepancy Scores

No significant differences in the BSRI and the AWS empathy/discrepancy scores occurred between the four sex roles within a particular sex. This was contrary to what was expected, since many of the findings from previous studies support a sex role effect even within a particular sex (for e.g., Spence et al., 1975; Harris & Reiko, 1979). When any two sex-role groups were compared, however, significant differences in BSRI empathy/discrepancy scores did occur. Both for females and for males, significant differences occurred between the masculine

group and the undifferentiated group. Masculine females had greater predictive abilities than undifferentiated females; masculine males had greater predictive abilities than undifferentiated males. The finding is consistent with the results from Hypothesis I in which masculine individuals emerged with greater predictive abilities than undifferentiated individuals. The consistency in findings for both females and males tends to support the hypothesis that sex role, more so than sex, is related to predictive abilities.

When femininity and masculinity were treated as continuous variables, a relationship between predictive abilities and masculinity and femininity emerged only for males and only with masculinity. The higher a male's masculinity score on the BSRI, the greater was his predictive ability. Perhaps what is operating here is similar to the phenomenon that has previously been found in the literature--that masculinity and femininity may have different meanings for females and males (Jones et al., 1978). Masculinity, in this case, had power to predict perceptive abilities for males only, but not for females. Another factor that may be affecting the results is the way in which masculinity and femininity on the BSRI are treated. Kelly, Furman and Young (1978) have already suggested that different/inconsistent results could be due to which method is used with respect to subjects' scores on the BSRI--categorizing subjects by their scores or treating scores as continuous variables,

Just as no significant differences were found between the four sex-role groups and their empathy/discrepancy scores on the AWS, so also did no difference emerge when femininity and masculinity were

treated as continuous variables. Neither femininity nor masculinity correlated with predictive abilities on the AWS for females or for males.

Attitudes Toward Women

Sex-role comparisons within each sex with respect to attitudes toward women were also performed. Sex role was not a differentiating variable for males' attitudes, but was a factor in females' attitudes. Females who were categorized as masculine, androgynous, and undifferentiated had similar high scores on the AWS indicating more egalitarian attitudes toward women than feminine females. Masculine females reflected the most egalitarian attitudes. This finding is consistent with the literature which suggests that masculine women are more feminist than feminine women (for e.g., Jones et al., 1978; Hoffman & Fiddel, 1979). Jones et al. (1978) also found that masculine females were more feminist in their attitudes than were androgynous women. Although masculine and androgynous females in this study has very similar mean AWS scores, masculine females were slightly higher in AWS scores. It is not surprising that masculine females would espouse egalitarian attitudes, since their personality characteristics are nontraditional, thus their attitudes may similarly coincide with their characteristics. Similarly, females who manifest stereotypically feminine characteristics would presumably espouse attitudes which are more traditional.

It is interesting to note that these findings are contrary to Bem's (1974). Bem (1974) found a significant difference between attitudes based on the AWS and sex role for males, but not for females. Feminine males, in her sample, tended to have egalitarian attitudes

toward women, while masculine males tended to have more traditional attitudes. The difference in findings may be explained by the differences in sample size in each sex-role category. In this study, there was only one feminine male; the lack of an adequate number of males in each sex-role category could explain why sex role was not a differentiating factor in males' attitudes toward women.

When femininity and masculinity were treated as continuous variables, correlations with both and AWS scores were found for females but not for males. Femininity was negatively related to egalitarian attitudes and masculinity was positively related to egalitarian attitudes for females.

Thus, when femininity and masculinity scores are treated as continuous variables, some findings emerge which are similar to those when subjects are categorized by their BSRI scores. Regardless of sex, individuals categorized as masculine tend to have the most accurate predictions of their spouses' responses on the BSRI. Although there are some similar findings, when feminine and masculine are treated as continuous variables, significant differences tend to appear either for females alone or for males alone. Retaining subjects' BSRI scores in a continuous form rather than categorizing them appears to add some knowledge which may be valuable to the researcher. Without categorization, masculinity tends to be positively related to this predictive ability, but only for males. With the AWS, females categorized as masculine have greatest egalitarian attitudes, and feminine females have the most traditional attitudes. Similarly, masculinity for females was positively associated with egalitarian attitudes and femininity was negatively associated with egalitarian attitudes.

Sex Role of the Target Spouse and Empathy/Discrepancy Scores

When the sex role of the target spouse was examined, analyses revealed that the target's sex role did affect the perceiver's ability to predict only on the BSRI, not on the AWS. When the target spouse was undifferentiated, perceivers (both females and males) experienced the most difficulty in accurately predicting their spouses' responses on the BSRI, than when the target spouse was masculine, feminine, or androgynous. These findings are consistent with the results of Indvik and Fitzpatrick's (1982) study of understanding in the marital dyad.

Several factors may be responsible for the spouses' difficulty in perceiving their undifferentiated partner. Undifferentiated individuals may experience problems with communicating successfully with their spouses. Just as they were inaccurate in predicting their spouses, the undifferentiated similarly may lack an ability to communicate their self-definitions. Alternately, undifferentiated individuals may be communicating sufficiently with their spouses, but their spouses may not be accepting the negative self-definitions of the undifferentiated (Indvik & Fitzpatrick, 1982). This, Indvik and Fitzpatrick (1982) explain, could be due to a "positivity bias" in which spouses rate their partners as positive, regardless of that partner's negative or low opinion of him/herself. Another reason could be individuals find it more difficult to perceive someone who lacks both the instrumental and expressive characteristics than someone who manifests one or the other or both of these characteristics.

Masculine, feminine, and androgynous targets were similarly easier to perceive than undifferentiated targets. Spouses, however, had the

lowest empathy/discrepancy scores when their target partners were categorized as masculine. Because these findings result from an exploratory investigation, they neither refute or support a hypothesis. Nevertheless, it was somewhat surprising that masculine individuals were the easiest to predict, since it was intuitively expected that because of their assumed lack of expressiveness, their partners would have difficulty in interpreting their responses.

The reasons put forward in explaining why masculine subjects were accurate in their perceptive abilities (Hypothesis I) similarly are appropriate in explaining why masculine targets were most accurately perceived by their spouses. High self-esteem, self-confidence, and strong self-definitions found within masculine individuals, may foster their ability to send clear messages to their spouses. Therefore, perceivers may be able to understand these individuals better than individuals who lack clear self-definitions and have low self-esteem.

Within-Sex Differences

When husbands were the target, their sex roles tended not to be a factor in the wives' ability to predict. The wives' sex role, however, did appear to affect the husbands' ability to predict. When the target female was undifferentiated, males had the most difficulty in perceiving their characteristics on the BSRI, than when the female was either masculine, feminine, or androgynous. A pattern similar to the previous one when both sexes were analyzed, emerged when the female was the target. Although the trends are consistent, it was expected that feminine females would be the most easiest to perceive, since they are thought to be superior in the expressive domain, and

are stereotyped as being predictable to others (Bardwick, 1979).

Perceivers of masculine females had the lowest empathy/discrepancy scores. Because it is generally unexpected for women to manifest stereotypically masculine characteristics, the very fact that these women define themselves as masculine according to the BSRI, may make their characteristics more noticeable to others. Such traits as competitiveness and aggressiveness are probably more clearly seen in women than in men. The tendency for masculine females to be accurately perceived by others, is somewhat weak, considering that only four women were classified as masculine. Clearly, more research with larger samples should be performed before any conclusive arguments are made.

In all cases, the sex role of the target tended not to have an impact on the AWS empathy/discrepancy scores. As mentioned previously, the difference in content between the BSRI and the AWS may be a factor in affecting predictive abilities.

Age and Sex Role

The age of the subject tended to be related to the subject's sex-role classification. Older persons tended to be undifferentiated and masculine, while younger persons tended to be androgynous and feminine. An analysis by sex revealed no significant correlations between the females and age and males and age and sex role. This finding is contrary to the assumptions within the theories of sex-role transcendence (Rebecca et al., 1976) in which individuals go through stages beginning with the global stage (lack of sex-typing) followed by appropriate sex-typing, the androgynous stage and then transcending sex roles. According to this theory, androgynous individuals would

be more likely to be older than sex-typed or undifferentiated individuals. Each individual, however, may be experiencing these stages at different times. Perhaps the younger androgynous individuals in this sample have already passed through the stage of rigid sex roles, whereas the older masculine and undifferentiated individuals have not yet reached, or may not reach the androgynous stage. These findings thus, neither strongly support nor refute the theory of sex-role transcendence.

Years of Marriage and Empathy/Discrepancy Scores

A relationship was not found between years of marriage and empathy/discrepancy scores. Although it is often assumed that there is a correlation between length of a relationship and perceptual accuracy, there does not appear to be much empirical support for this relationship (Cook, 1979).

Self-Rated Masculinity, Femininity, Marital Satisfaction, and Attitudes Toward Women

Spearman correlational analyses were used to analyze scores from the self-ratings and perceived partners' self-ratings measuring femininity, masculinity, and marital satisfaction. Some trends that have been identified will be discussed (Table 24). All correlations that were found were strong (.83 or over).

Subjects' scores were analyzed separately for females only and for males only, as well as for both females and males. In all analyses no significant correlations occurred for females alone or for males alone. Significant relationships were found only when both sexes were treated as a group.

For the sexes combined, self-rated femininity was negatively

related to self-rated masculinity. This implies that individuals generally tend to describe themselves as feminine or masculine but not as both. It is suspected that females equate femininity with being biologically female, and males equate masculinity with being biologically male. Self-rated femininity and masculinity in this case appear to be the individual's gender identity, as opposed to sex role which is tapped by the BSRI. It was expected that the two--gender identity and sex role--would not necessarily coincide. Although assumptions of the BSRI are that individuals can be both feminine and masculine, individuals in this sample still define themselves as either feminine or masculine. Similarly, an individual's self-rated femininity was negatively related to that person's perception of the spouses' femininity score, and positively related to that person's perception of their spouses' masculinity score. Likewise, self-rated masculinity was negatively related to the perception of the spouses' masculinity score, and positively related to the perception of the spouses' femininity score. Essentially, this means that both husbands and wives rate their spouse as feminine if they themselves are masculine and vice versa. The trend that emerges is that individuals perceive masculinity and femininity as opposites, at least in terms of self-definition or gender identity.

Attitudes Toward Women

Self-rated femininity, for the sexes combined, was positively related to egalitarian attitudes on the AWS; self-rated masculinity was negatively related to egalitarian attitudes (Table 24). The reason for this finding could be that the women in this sample

Table 24

Spearman Correlations for Both Sexes Combined

	FSC	MSC	SPFSC	SPMSC	MARST	SPMARST	AWS
FSC		-.8345 (.001*)	-.8766 (.001*)	.9151 (.001*)	-.1383 (.146)	.1224 (.176)	.3726 (.002*)
MSC			.9070 (.001*)	-.8442 (.001*)	.0605 (.323)	-.1569 (.116)	-.2734 (.017*)
SPFSC				-.9088 (.001*)	.1049 (.142)	-.0623 (.318)	-.3367 (.004*)
SPMSC					-.0784 (.276)	.1216 (.177)	.4036 (.001*)
MARST						.7290 (.001*)	-.2222 (.044*)
SPMARST							-.0301 (.410)

FSC = Self-Rated Femininity Score

MSC = Self-Rated Masculinity Score

SPFSC = Prediction of Spouse's Self-Rated Femininity

SPMSC = Prediction of Spouse's Self-Rated Masculinity

MARST = Self-Rated Marital Satisfaction Score

SPMARST = Prediction of Spouse's Self-Rated Marital Satisfaction

AWS = Attitudes Toward Women

() = p value

had more egalitarian attitudes than men. Since the women generally rated themselves as highly feminine and the men generally rated themselves as highly masculine, self-rated femininity thus would be positively related to egalitarian attitudes. No significant correlations occurred, however, for females as a group, or for males as a group (Table 25). Because variations in self-rated femininity

Table 25
Spearman Correlations for Self-Rated Femininity,
Self-Rated Masculinity,
and Attitudes Toward Women for Females and Males

	Females		Males	
	<u>r</u>	<u>p</u>	<u>r</u>	<u>p</u>
Self-Rated Femininity and AWS	-.0472	(.402)	.2584	(.084)
Self-Rated Masculinity and AWS	.1526	(.210)	.0473	(.402)
Self-Rated Femininity and Self-Rated Masculinity	-.2213	(.120)	-.5192	(.002*)

were minimal (all moderately high) (range) and variations in self-rated masculinity were minimal (all moderately high) a relationship between scores and self-rated femininity and masculinity within each sex was probably more difficult to detect (Table 26).

Marital Satisfaction

Self-rated marital satisfaction scores were correlated with all other self-rated scales (Table 24). Only two relationships

Table 26
 Mean and Range of Self-Rated Marital Satisfaction,
 Femininity, and Masculinity

	Females		Males	
	Mean	Range	Mean	Range
Self-Rated Femininity	6.90	5 - 9	2.09	1 - 5
Self-Rated Masculinity	2.57	1 - 8	7.60	5 - 9
Self-Rated Marital Satisfaction	7.57	5 - 9	7.67	4 - 9

occurred and only when females' and males' scores were combined. An individual's self-rated marital satisfaction was positively related to the perception of their spouses' marital satisfaction ($r = .73$). This relationship appears plausible; if an individual rates his/her marriage as highly satisfactory then it is expected they would perceive their spouse to rate themselves similarly. A negative correlation ($r = -.22$), although somewhat weak, was found between self-rated marital satisfaction and egalitarian attitudes toward women. Most individuals, however, rated their marital satisfaction as moderate to high; the lack of variation in scores and the weak relationship makes it difficult to adequately comment on this relationship.

Conclusions

This study was designed to investigate whether androgyny, among married couples, was positively associated with empathetic abilities and egalitarian attitudes toward women. Due to the limited number of couples in the sample, analyses were performed at the individual level

of analysis rather than the couple level of analysis.

An argument for the relationship between androgyny and empathy was developed using Richardson's (1971) discussions of psychological intimacy as well as studies examining relationships between sex role and psychological well-being. Basically, Richardson (1971) argues that communication, shared feelings, and intimacy are hindered in traditionally sex-typed relationships (masculine males and feminine females) while enhanced in androgynous relationships. With heightened intimacy, androgynous individuals would manifest greater empathetic abilities. Many studies on sex roles support the notion that androgynous individuals compared to traditionally sex-typed individuals, are more likely to exhibit indicators of psychological well-being, such as behavioral flexibility, high self-esteem, and effective interpersonal skills. It was argued that these factors would foster the androgynous individual's ability to empathize.

It was also proposed that androgynous individuals, who presumably reject the bi-polar view of masculinity-femininity, and who are less constrained by sex roles than traditionally sex-typed individuals, would espouse egalitarian attitudes toward women.

Three major hypotheses emerged from the discussion: (1) androgyny would be positively associated with empathetic abilities; (2) feminine females would exhibit greater empathetic abilities than masculine males; androgynous females and androgynous males would be similar in their empathetic abilities; (3) androgyny would be positively associated with empathetic abilities.

Summary of Findings

While recognizing that these results are not conclusive, and should not be generalized to populations outside this sample, it is worthy to note some of the emergent trends.

Generally, the findings did not support the hypothesis that androgynous individuals would exhibit greater empathetic abilities than non-androgynous individuals. Sex role, however, was a differentiating factor. Masculinity, unexpectedly, tended to be positively related to empathetic ability as measured in this study. Masculine individuals significantly demonstrated greater perception of their spouses' self-ratings on the BSRI, than undifferentiated individuals, but they did not differ significantly from androgynous or feminine individuals. A similar pattern emerged for females and for males. Masculine females, and masculine males, demonstrated greater perceptive abilities than undifferentiated females and males. Masculinity, when treated as a continuous score also correlated positively with empathetic abilities, but only for males. These unexpected findings--that masculinity was associated with greater predictive abilities--led to a re-examination of the mode of operationalizing empathy. It was suspected that defining empathy as individuals' accuracy in predicting their spouses' self-ratings, may be misleading since feelings or emotion for the target person need not be present. Thus, it was argued that perceptive or predictive abilities may be a more accurate conceptualization of the variable measured.

Although androgynous individuals did not emerge as significantly more accurate in their perceptions, they did consistently emerge as

second to masculine individuals in predictive abilities. If perceptive ability or accurately predicting one's spouse on a self-rating personality scale is an indicator of psychological well-being than masculinity, as opposed to the androgyny, appears to be a differentiating variable.

It is interesting to note that sex role did not emerge as a differentiating factor when comparing individuals on their empathy/discrepancy scores for the AWS. The difference in findings between empathy/discrepancy scores on the BSRI and the AWS leads one to suspect that perceptive accuracy may also be affected by the context of the items being predicted. Significant differences that did occur for the AWS empathy/discrepancy scores revealed that masculine males tended to have greater perceptive abilities than feminine females, and that males generally tended to have greater perceptive abilities than did females. Because these differences did not emerge with the BSRI empathy/discrepancy scores, it was argued that women generally were more vocal than men about the statements contained in the AWS. In addition it was speculated that males may be exaggerating their egalitarian attitudes on paper, but in actuality may not be as liberal in their attitudes as they claimed to be--thus, giving partial support for the concept of the "case of the well-meaning liberal male".

The findings did support the expectation that there would be no differences in predictive abilities between androgynous females and androgynous males.

In examining attitudes toward women, some mixed findings occur. The findings did not support the hypothesis that sex role would be able to discriminate between egalitarian and traditional attitudes

toward women. Partial support for this hypothesis was found for females, but not for males. Masculine, androgynous, and undifferentiated females had similarly higher egalitarian attitudes than did feminine females. This confirms earlier results which showed that masculine and androgynous females had more egalitarian attitudes than did traditionally sex-typed females. Masculinity, as a continuous variable, correlated positively with egalitarianism and femininity correlated negatively with egalitarian attitudes. Thus there was a significant effect for sex role on the AWS for females but not for males.

When the sex role of the target was examined significant differences emerged with the BSRI but not with the AWS. Masculine individuals were the easiest to predict and undifferentiated individuals were the most difficult to predict. Thus, masculine individuals were not only the most accurate perceivers but were also the easiest to perceive. Undifferentiated similarly were the least accurate perceivers, as well as the hardest to perceive. Similar results occurred for females, but not for males. Masculine females were the easiest to predict, while undifferentiated females were the most difficult. Similarly, masculine females were more accurate in their predictions than were undifferentiated females.

Despite some of these negative findings, it does appear that sex role as categorized by the BSRI is a differentiating factor with respect to predictive abilities on the BSRI,

Limitations of the Study and Suggestions for Further Research

One of the major limitations of this study is the relatively small sample of subjects. Originally it was hoped that there would be a sufficient number of "couple types" in order to examine sex role and predictive abilities in relationships where couples were traditionally sex-typed (feminine wives/masculine husbands) and compare them to couples in which both spouses were androgynous. Because the BSRI yields four categories, the number of possible combinations resulting from sex and sex role are sixteen. It was recognized early that the numbers in each couple type would be too low to permit any type of couple analysis. Thus, analyses were performed at the individual level rather than the couple level. Although the sex role of the target spouse was examined, the analyses were also at the individual level since the sex role of both the perceiver and the target could not be examined. In the future, it would be worth performing more studies that examine the dyadic relationship, taking into account the sex role of each spouse.

The small sample in this study results in low subject numbers in each category. This limitation is primarily found when subjects are categorized by sex and sex role. The groups that were particularly small were masculine females (4), undifferentiated females (5) and feminine males (1). If cell numbers are small, the retention of masculinity and femininity scores in their continuous form in analyses would add some valuable information to analyses performed when subject's scores are categorized.

Another methodological limitation evolves around the measurement of empathy. In previous research the terms predictive empathy,

accuracy, predictive ability, perceptual competence and understanding are used interchangeably in order to define an individual's accuracy in rating another (Indvik & Fitzpatrick, 1982). There exists a need for a more refined measure, or more caution needs to be taken in defining what actually is being measured. Empathy and understanding are particularly difficult concepts to measure and although accuracy in ratings of other have been used in previous research, this needs to be re-examined.

Although the AWS has been commonly used in previous research and appears to have validity and reliability, the scale does contain some limitations which may have influenced the findings. One of the criticisms of the AWS is that some of the statements contained in the scales refer to more than one issue (Beere, 1979). One example is the statement: "Women should worry less about their rights and more about becoming good wives and mothers" (Spence, Helmreich & Stapp, 1973). In this example the two ideas may be conflicting, thus confusing the respondent. An individual may feel that women should equally be concerned about their rights and about being good wives and mothers. An affirmative response to the stated example would be indicative of traditional attitudes toward women; yet is that necessarily so? The wording of the statement is confusing and responses may be misleading.

Another criticism is that it is unknown whether individuals are responding to an expectation (what women's rights and roles ought to be) or to a perception of what is "statistically true" (Tayris, 1973, p. 186). Although most of the statements contain the word "should" indicating an expected right or role, a few statements are

worded in such a way that allows for the misinterpretation of a response. For example, the following statement not only contains two ideas, but also may be misinterpreted: "It is ridiculous for a woman to run a locomotive and for a man to darn socks," An individual, even a feminist, could respond affirmatively (perhaps because it is odd to see women and men participating in these tasks) while simultaneously believing that women and men should have the choice to perform non-traditional activities. The belief in choice is probably the more salient issue. This kind of statement makes it difficult to objectively score an individual's response.

It was argued in this study that a reason for women being less accurate than men in predicting their spouses' responses on the AWS, was possibly due to the "case of the well-meaning liberal male". Further research using the AWS should include how individuals feel about women's rights and roles in general, as well as how they feel about their wives (for males), mothers, daughters, and/or significant others. Obtaining this type of information may add some valuable insights into the way individuals, particularly males, discriminate between women in general and significant others.

Another limitation of this study concerns the range of subjects' scores on the AWS. The range in scores for both sexes was from 46-75. It is conceivable that even at a score of 46 an individual could have fairly egalitarian attitudes toward women. Relative to other subjects in this sample, this individual was described as traditional,

Androgyny

The limitations of the Bem Sex-Role Inventory may have affected

the results somewhat. A problem that was observed during the administration of the questionnaire was that some individuals were not sure whether to respond in a way that was characteristic of themselves in a work/business setting or in a home/family setting. If situational appropriateness is one of the major characteristics of androgynous individuals, a scale which purports to measure androgyny should entail a way of responding based on situational contingencies. Androgynous individuals may for instance, be very aggressive at work, but not aggressive with family members. Thus a more phenomenologically oriented measure may prove useful, as subjects can be asked for their own interpretations of a particular characteristic. Moreover, the salience attached to certain characteristics and sex-role related behavior is also an important factor to address. Some individuals may not find aggressiveness particularly meaningful or advantageous in any situation and thus may not exhibit that trait. This androgynous individual may consistently rate him/herself on a scale from 1-7 as 4, indicating that sometimes the trait is characteristic of her/him and sometimes it is not. However, in order to score as androgynous, according to the median-split procedure, one needs to have an average score of 5 on both the feminine and the masculine scales. Is the BSRI thus discriminating between androgynous and non-androgynous individuals?

Another way in which the BSRI may not be discriminating between the "truly" androgynous and non-androgynous individual could be due to the terminology contained within the measure. Rather than being 'both' aggressive and yielding, androgynous individuals may be assertive. Androgynous individuals may be neither independent nor dependent but interdependent. A move away from the traditionally stereotyped

characteristics of masculinity and femininity, may make it easier to identify individuals who, supposedly transcend sex-role stereotypes.

For these reasons, I would concur with Lenney's (1979a, 1979b) criticisms and suggestions for further research involving the concept of androgyny. Clearly there is a need for a scale which is broader than traditional sex-role stereotypes, accounts for situational categories, and perhaps is more phenomenologically oriented. Lenney's tentative model is a starting point for researchers interested in the further development of androgyny research. As she has stated, more attention needs to be paid to not only an individual's global self-descriptions--masculine, feminine, androgynous--but also to the "general types of person variables--cognitive, affective, and motivational--assessment and consideration of which may significantly enhance the predictive ability of the individual's sex-role self-concept" (Lenney, 1979b, p. 717).

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APPENDIX A
Demographic Information

Number and Percentage of Subjects by Employment Status and Sex

Sex	Employment Status							
	Full Time		Part Time		Unemployed		Total	
	%	n	%	n	%	n	%	n
Female	47	(14)	20	(6)	33	(10)	100	(30)
Male	93	(28)	--	---	7	(2)	100	(30)

Number and Percentage of Subjects by Last Level
of Education Completed

Sex	Education									
	Junior High		Senior High		University/ Technical College		Post Graduate		Total	
	%	n	%	n	%	n	%	n	%	n
Female	3	(1)	23	(7)	63	(19)	10	(3)	99	(30)
Male	--	--	17	(5)	60	(18)	23	(7)	100	(30)

Number and Percentage of Couples by Number of Children

Number of Children	Couples	
	%	n
0	37	(11)
1	20	(6)
2	23	(7)
3	10	(4)
Total*	90	(28)

*In two couples, husbands and wives reported differing numbers of children: couple 1 = female had 1 child, male had 3; couple 2 = female had 3, male had 5.

Age of Subject by Sex

Age	Females (n = 30) n	Males (n = 30) n
22	1	
23	4	2
24		2
25	1	2
26	1	1
27	1	
28		
29	2	1
30	1	
31	3	2
32	2	1
33		1
34	2	2
35	4	1
36	1	3
37	2	3
38	1	2
39		1
40		
41	2	1
42		
43		3
44	1	1
45	1	
46		
47		
48		
49		
50		
51		1
	Mean $\bar{X} = 32$	Mean $\bar{X} = 34$

Number of Couples by Years of Marriage

Years Married	Couples n
1	4
2	3
3	3
4	1
5	1

6	2
7	1
8	1
9	1
10	1

11	
12	3
13	2
14	1
15	1

16	
17	1
18	
19	
20	1

21	1
22	1
23	1

Mean = 9 years	

APPENDIX B

Questionnaire and Instructions to Subjects

INSTRUCTIONS

Thank you very much for your assistance in this research.

The purpose of this research is to examine personality characteristics of individuals. The questionnaires are divided into two parts. After you have completed the first section, please proceed to section two. Section I consists of: questions eliciting basic information regarding sex, age, etc.; a list of adjectives that describe personality characteristics, of which you are asked how well the adjectives describe yourself; and a list of statements which require you to respond by either agreeing or disagreeing with the statements. Section II is similar in form to Section I. The instructions, however, are different, and will be explained upon completion of Section I.

Your name is not needed, therefore you will be assured of complete anonymity. Due to the nature of this research however, you and your spouse only need to be identified as belonging to one another. Each husband and wife pair is therefore asked to choose one identification code that is identical for both spouses. The code should consist of any five letters arranged in any order. For example: DAHRS.

Please print your identification code here: _____

Use only this code whenever you are asked for identification.

The instructions on the top of each page should be self-explanatory. If you have any questions please feel free to ask. Please answer all questions as honestly as possible,

* Please do not look at Section II before you complete Section I.

** Please do not discuss the questionnaire while participants are completing it.

THANK YOU ONCE AGAIN FOR YOUR ASSISTANCE

THE FOLLOWING INFORMATION IS REQUIRED BY THE RESEARCH DESIGN

1. Sex: _____ Female _____ Male
2. Age: _____
3. Number of years married: _____
4. Years of education completed:
 - _____ elementary
 - _____ junior high
 - _____ high school
 - _____ university, technical college
 - _____ post graduate
5. What is your occupation? _____
6. Are you presently employed? _____ Yes, full time
 - _____ Yes, part time
 - _____ No
7. What are the ages and sexes of your children?

_____ Age	_____ Sex	_____ Age	_____ Sex
_____ Age	_____ Sex	_____ Age	_____ Sex
_____ Age	_____ Sex	_____ Age	_____ Sex
_____ Age	_____ Sex	_____ Age	_____ Sex

Instructions: Using the scale provided, please indicate with a check () how well each of the following items describes you.

- | | |
|-------------------------------------|----------------------------------|
| 1 = never or almost never true | 4 = occasionally true |
| 2 = usually not true | 5 = often true |
| 3 = sometimes but infrequently true | 6 = usually true |
| | 7 = always or almost always true |

	never or almost never true			always or almost always true			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
SELF-RELIANT	—	—	—	—	—	—	—
YIELDING	—	—	—	—	—	—	—
HELPFUL	—	—	—	—	—	—	—
DEFEND MY OWN BELIEFS	—	—	—	—	—	—	—
CHEERFUL	—	—	—	—	—	—	—
MOODY	—	—	—	—	—	—	—
INDEPENDENT	—	—	—	—	—	—	—
SHY	—	—	—	—	—	—	—
CONSCIENTIOUS	—	—	—	—	—	—	—
ATHLETIC	—	—	—	—	—	—	—
AFFECTIONATE	—	—	—	—	—	—	—
THEATRICAL	—	—	—	—	—	—	—
ASSERTIVE	—	—	—	—	—	—	—
FLATTERABLE	—	—	—	—	—	—	—
HAPPY	—	—	—	—	—	—	—
STRONG PERSONALITY	—	—	—	—	—	—	—
LOYAL	—	—	—	—	—	—	—
UNPREDICTABLE	—	—	—	—	—	—	—
FORCEFUL	—	—	—	—	—	—	—
FEMININE	—	—	—	—	—	—	—
RELIABLE	—	—	—	—	—	—	—
ANALYTICAL	—	—	—	—	—	—	—
SYMPATHETIC	—	—	—	—	—	—	—
JEALOUS	—	—	—	—	—	—	—
HAVE LEADERSHIP ABILITIES	—	—	—	—	—	—	—
SENSITIVE TO NEEDS OF OTHERS	—	—	—	—	—	—	—
TRUTHFUL	—	—	—	—	—	—	—
WILLING TO TAKE RISKS	—	—	—	—	—	—	—

1 = never or almost never true
 2 = usually not true
 3 = sometimes but infrequently true

4 = occasionally true
 5 = often true
 6 = usually true
 7 = always or almost always true

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
UNDERSTANDING	—	—	—	—	—	—	—
SECRETIVE	—	—	—	—	—	—	—
MAKE DECISIONS EASILY	—	—	—	—	—	—	—
COMPASSIONATE	—	—	—	—	—	—	—
SINCERE	—	—	—	—	—	—	—
SELF-SUFFICIENT	—	—	—	—	—	—	—
EAGER TO SOOTHE HURT FEELINGS	—	—	—	—	—	—	—
CONCEITED	—	—	—	—	—	—	—
DOMINANT	—	—	—	—	—	—	—
SOFT SPOKEN	—	—	—	—	—	—	—
LIKABLE	—	—	—	—	—	—	—
MASCULINE	—	—	—	—	—	—	—
WARM	—	—	—	—	—	—	—
SOLEMN	—	—	—	—	—	—	—
WILLING TO TAKE A STAND	—	—	—	—	—	—	—
TENDER	—	—	—	—	—	—	—
FRIENDLY	—	—	—	—	—	—	—
AGGRESSIVE	—	—	—	—	—	—	—
GULLIBLE	—	—	—	—	—	—	—
INEFFICIENT	—	—	—	—	—	—	—
ACT AS A LEADER	—	—	—	—	—	—	—
CHILDLIKE	—	—	—	—	—	—	—
ADAPTABLE	—	—	—	—	—	—	—
INDIVIDUALISTIC	—	—	—	—	—	—	—
DO NOT USE HARSH LANGUAGE	—	—	—	—	—	—	—
UNSYSTEMATIC	—	—	—	—	—	—	—
COMPETITIVE	—	—	—	—	—	—	—
LOVE CHILDREN	—	—	—	—	—	—	—
TACTFUL	—	—	—	—	—	—	—
AMBITIOUS	—	—	—	—	—	—	—
GENTLE	—	—	—	—	—	—	—
CONVENTIONAL	—	—	—	—	—	—	—

The statements listed below describe attitudes toward the role of women in society that different people have. There are no right or wrong answers, only opinions. You are asked to express your feelings about each statement by indicating whether you: (circle your answer)

AS = Agree
Strongly

AM = Agree
Mildly

DM = Disagree
Mildly

DS = Disagree
Strongly

- | | | | | |
|---|----|----|----|----|
| 1. Swearing and obscenity are more repulsive in the speech of a woman than of a man. | AS | AM | DM | DS |
| 2. Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day. | AS | AM | DM | DS |
| 3. Both husband and wife should be allowed the same grounds for divorce. | AS | AM | DM | DS |
| 4. Telling dirty jokes should be mostly a masculine prerogative. | AS | AM | DM | DS |
| 5. Intoxication among women is worse than intoxication among men. | AS | AM | DM | DS |
| 6. Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing the dishes and doing the laundry. | AS | AM | DM | DS |
| 7. It is insulting to women to have the "obey" clause remain in the marriage. | AS | AM | DM | DS |
| 8. There should be a strict merit system in job appointment and promotion without regard to sex. | AS | AM | DM | DS |
| 9. A woman should be as free as a man to propose marriage. | AS | AM | DM | DS |
| 10. Women should worry less about their rights and more about becoming good wives and mothers. | AS | AM | DM | DS |
| 11. Women earning as much as their dates should bear equally the expense when they go out together. | AS | AM | DM | DS |
| 12. Women should assume their rightful place in business and all the professions along with men. | AS | AM | DM | DS |
| 13. A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man. | AS | AM | DM | DS |

AS = Agree Strongly

AM = Agree Mildly

DM = Disagree Mildly

DS = Disagree Strongly

14. Sons in a family should be given more encouragement to go to college than daughters, AS AM DM DS
15. It is ridiculous for a woman to run a locomotive and for a man to darn socks, AS AM DM DS
16. In general, the father should have greater authority than the mother in the bringing up of children. AS AM DM DS
17. Women should be encouraged not to become sexually intimate with anyone before marriage, even their fiances. AS AM DM DS
18. The husband should not be favoured by law over the wife in the disposal of family property or income. AS AM DM DS
19. Women should be concerned with their duties of childbearing and house tending, rather than with desires for professional and business careers. AS AM DM DS
20. The intellectual leadership of a community should be largely in the hands of a man. AS AM DM DS
21. Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set up by men. AS AM DM DS
22. On the average, women should be regarded as less capable of contributing to economic production than are men. AS AM DM DS
23. There are many jobs in which men should be given preference over women in being hired or promoted. AS AM DM DS
24. Women should be given equal opportunity with men for apprenticeship in the various trades. AS AM DM DS
25. The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy. AS AM DM DS

SECTION II

YOUR IDENTIFICATION CODE IS: _____

INSTRUCTIONS

The first two questionnaires in this section are identical to the ones you have just completed. Complete these questionnaires as you think your spouse would have completed them. Please do not describe your spouse; respond in the way you think he/she would have responded.

The last page of Section II consists of six questions, all self-explanatory.

Instructions: Please complete the questionnaire as you think your spouse would have completed it. Do not describe your spouse; respond in the way you think he/she would have responded.

- | | |
|-------------------------------------|----------------------------------|
| 1 = never or almost never true | 4 = occasionally true |
| 2 = usually not true | 5 = often true |
| 3 = sometimes but infrequently true | 6 = usually true |
| | 7 = always or almost always true |

	never or almost never true			always or almost always true			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
SELF-RELIANT	—	—	—	—	—	—	—
YIELDING	—	—	—	—	—	—	—
HELPFUL	—	—	—	—	—	—	—
DEFEND MY OWN BELIEFS	—	—	—	—	—	—	—
CHEERFUL	—	—	—	—	—	—	—
MOODY	—	—	—	—	—	—	—
INDEPENDENT	—	—	—	—	—	—	—
SHY	—	—	—	—	—	—	—
CONSCIENTIOUS	—	—	—	—	—	—	—
ATHLETIC	—	—	—	—	—	—	—
AFFECTIONATE	—	—	—	—	—	—	—
THEATRICAL	—	—	—	—	—	—	—
ASSERTIVE	—	—	—	—	—	—	—
FLATTERABLE	—	—	—	—	—	—	—
HAPPY	—	—	—	—	—	—	—
STRONG PERSONALITY	—	—	—	—	—	—	—
LOYAL	—	—	—	—	—	—	—
UNPREDICTABLE	—	—	—	—	—	—	—
FORCEFUL	—	—	—	—	—	—	—
FEMININE	—	—	—	—	—	—	—
RELIABLE	—	—	—	—	—	—	—
ANALYTICAL	—	—	—	—	—	—	—
SYMPATHETIC	—	—	—	—	—	—	—
JEALOUS	—	—	—	—	—	—	—
HAVE LEADERSHIP ABILITIES	—	—	—	—	—	—	—
SENSITIVE TO NEEDS OF OTHERS	—	—	—	—	—	—	—
TRUTHFUL	—	—	—	—	—	—	—
WILLING TO TAKE RISKS	—	—	—	—	—	—	—

Please complete the following as you think your spouse would have completed it. Circle the response that you think your spouse would have circled.

AS = Agree
Strongly

AM = Agree
Mildly

DM = Disagree
Mildly

DS = Disagree
Strongly

- | | | | | |
|---|----|----|----|----|
| 1. Swearing and obscenity are more repulsive in the speech of a woman than of a man. | AS | AM | DM | DS |
| 2. Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day. | AS | AM | DM | DS |
| 3. Both husband and wife should be allowed the same grounds for divorce. | AS | AM | DM | DS |
| 4. Telling dirty jokes should be mostly a masculine prerogative. | AS | AM | DM | DS |
| 5. Intoxication among women is worse than intoxication among men. | AS | AM | DM | DS |
| 6. Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing the dishes and doing the laundry. | AS | AM | DM | DS |
| 7. It is insulting to women to have the "obey" clause remain in the marriage. | AS | AM | DM | DS |
| 8. There should be a strict merit system in job appointment and promotion without regard to sex. | AS | AM | DM | DS |
| 9. A woman should be as free as a man to propose marriage. | AS | AM | DM | DS |
| 10. Women should worry less about their rights and more about becoming good wives and mothers. | AS | AM | DM | DS |
| 11. Women earning as much as their dates should bear equally the expense when they go out together. | AS | AM | DM | DS |
| 12. Women should assume their rightful place in business and all the professions along with men. | AS | AM | DM | DS |
| 13. A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man. | AS | AM | DM | DS |

AS = Agree Strongly

AM = Agree Mildly

DM = Disagree Mildly

DS = Disagree Strongly

- | | | | | | |
|-----|--|----|----|----|----|
| 14. | Sons in a family should be given more encourage-
ment to go to college than daughters. | AS | AM | DM | DS |
| 15. | It is ridiculous for a woman to run a locomotive
and for a man to darn socks. | AS | AM | DM | DS |
| 16. | In general, the father should have greater autho-
rity than the mother in the bringing up of children. | AS | AM | DM | DS |
| 17. | Women should be encouraged not to become sexually
intimate with anyone before marriage, even their
fiances. | AS | AM | DM | DS |
| 18. | The husband should not be favoured by law over
the wife in the disposal of family property or
income. | AS | AM | DM | DS |
| 19. | Women should be concerned with their duties of
childbearing and house tending, rather than
with desires for professional and business careers. | AS | AM | DM | DS |
| 20. | The intellectual leadership of a community should
be largely in the hands of a man. | AS | AM | DM | DS |
| 21. | Economic and social freedom is worth far more to
women than acceptance of the ideal of femininity
which has been set up by men. | AS | AM | DM | DS |
| 22. | On the average, women should be regarded as less
capable of contributing to economic production
than are men. | AS | AM | DM | DS |
| 23. | There are many jobs in which men should be given
preference over women in being hired or promoted. | AS | AM | DM | DS |
| 24. | Women should be given equal opportunity with men
for apprenticeship in the various trades. | AS | AM | DM | DS |
| 25. | The modern girl is entitled to the same freedom
from regulation and control that is given to
the modern boy. | AS | AM | DM | DS |

Please check the appropriate category.

1. Regardless of whether you are male or female, how feminine do you think you are?

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
not at all							highly	
feminine							feminine	

2. Regardless of whether you are male or female, how masculine do you think you are?

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
not at all							highly	
masculine							masculine	

3. How do you think your spouse would have rated him/herself on the feminine scale? Check the category that you think your spouse would have checked.

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
not at all							highly	
feminine							feminine	

4. How do you think your spouse would have rated him/herself on the masculine scale? Check the category that you think your spouse would have checked.

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
not at all							highly	
masculine							masculine	

5. On a scale of 1 to 9, with "9" as "highly satisfied" and "1" as "highly dissatisfied", where would you place yourself in terms of your own marriage?

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
highly							highly	
dissatisfied							satisfied	

6. How do you think your spouse would have rated his/her marriage?

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
highly							highly	
dissatisfied							satisfied	

APPENDIX C
Percentage of Subjects in each Sex-Role Category Compared
to Bem's Normative Sample

Percentage of Subjects by Sex Role and Sex Compared
to Bem's Normative Sample (1978)

Sex	Sex Role							
	Fem		Mas		Andro		Undif	
	Wpg	Bem	Wpg	Bem	Wpg	Bem	Wpg	Bem
Female	43	39,4	13	12.4	27	30,3	7	17.9
Male	3	11.6	50	42	20	19.5	27	26.9

Wpg = sample used in the study

APPENDIX D

Mean and Range in AWS Scores Compared to Spence,
Helmreich, and Stapp's 1973 Sample

Comparison of Mean and Range in AWS Scores

to Spence et al., 's 1973 sample.

	Wpg. Sample		College Students		Parents of College Students	
	Females (n = 30)	Males (n = 30)	Females (n = 241)	Males (n = 286)	Females (n = 292)	Males (n = 232)
Mean	65.93	59.93	50.26	44.80	41.86	39.22
Range	48 - 73	46 - 75	20 - 75	17 - 74	13 - 73	10 - 69